THE COMPLETE GUIDE TO FINANCE & ACCOUNTING FOR NONFINANCIAL MANAGERS

SHARPEN YOUR FINANCIAL DECISION-MAKING SKILLS

STEVEN A. FINKLER, Ph.D., CPA
THE WHARTON SCHOOL,
UNIVERSITY OF PENNSYLVANIA

The Complete Guide to
FINANCE & ACCOUNTING
for Nonfinancial Managers

Steven A. Finkler, Ph.D., CPA
The Wharton School
University of Pennsylvania

A SPECTRUM BOOK

Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632

Library of Congress Cataloging in Publication Data

FINKLER, STEVEN A. (date)
The complete guide to finance and accounting for nonfinancial managers.

"A Spectrum Book."
Bibliography: p. 215
Includes index.
1. Accounting. 2. Business enterprises—Finance.
I. Title.
HF5635.F534 1983 658.1'5 82-23185
ISBN 0-13-160531-3
ISBN 0-13-160523-2 (pbk.)

This book is available at a special discount when ordered in large quantities. Contact Prentice-Hall, Inc., General Publishing Division, Special Sales, Englewood Cliffs, N.J. 07632.

Production/editorial supervision: Suse L. Cioffi
Cover design by Jeannette Jacobs
Manufacturing buyer: Patrick Mahoney

A SPECTRUM BOOK

ISBN 0-13-160531-3

ISBN 0-13-160523-2 {PBK.}

10 9 8 7 6 5 4 3 2 1

Printed in the United States of America

PRENTICE-HALL INTERNATIONAL, INC., *London*
PRENTICE-HALL OF AUSTRALIA PTY. LIMITED, *Sydney*
PRENTICE-HALL OF CANADA INC., *Toronto*
PRENTICE-HALL OF INDIA PRIVATE LIMITED, *New Delhi*
PRENTICE-HALL OF JAPAN, INC., *Tokyo*
PRENTICE-HALL OF SOUTHEAST ASIA PTE. LTD., *Singapore*
WHITEHALL BOOKS LIMITED, *Wellington, New Zealand*
EDITORA PRENTICE-HALL DO BRASIL LTDA., *Rio de Janeiro*

Preface

There was a time when controllers and treasurers served a clear staff function of providing information and support for line managers. Today it often seems to nonfinancial managers that the financial officers are the tail wagging the dog. It seems as if there's more money to be made by buying someone else's tax loss than by producing and selling the firm's own product or service.

Financial officers may often appear to be more preoccupied with their own ever-increasing empires than with the provision of timely, useful, understandable information for running the firm efficiently. They certainly don't seem to have the time to translate the information they do generate into a form comprehensible to the average nonfinancial manager.

Yet the nonfinancial manager can no longer avoid financial information. Profit statements, operating budgets, and project analyses are a constant part of the manager's day. This book is an introduction to the world of financial management. However, its intent is not to make the reader a financial manager. This is *not* a course in accounting. It is *not* a course in finance. Rather, it is an attempt to familiarize the nonfinancial manager with what accounting and finance are all about. This book concentrates on providing a working vocabulary for communication, so that the reader can develop an ability to ask the right questions and interpret the jargon-laden answers. Any accountant can bury any nonaccountant in debits and credits. But once you understand a few basics you can fight back and demand information that is both useful and usefully explained.

In addition to vocabulary, this book describes a variety of methods, processes, and tools of accounting and finance. They are not described in sufficient detail for the reader to fire the treasurer or controller and take over the job (how many of you really want to do that?). Instead, there is sufficient detail so that the reader can say, "So that's what LIFO–FIFO is all about? I always wondered why we changed our inventory system," or perhaps, "Hey, we never thought about those advantages of leasing rather than buying; maybe we should give leasing a closer look!"

How many managers are rewarded on the basis of return on investment (ROI) without understanding the difference between ROI and ROE (return on equity) and ROA (return on assets), not to mention RONA (return on net assets)? (See Chapter 18.) There's no escaping the fact that all managers are affected by the financial decisions that every firm makes. This book clarifies in the reader's mind what questions are important to the firm's financial management and why.

Who are the nonfinancial managers this book is aimed at? They are presidents and vice-presidents and all other managers except for the accountants and other financial experts in the firm. This includes all the engineers, sales personnel, and production people who have moved up within their firm to the point at which they need more financial lingo to follow what's going on in their communications with the financial officers. They are people who have shifted career paths or who have simply grown with the firm and been promoted to more responsible positions. Sometimes managers need this book simply because the growth of their firm has been so fast that the financial complexity has increased at a more rapid rate than they have been able to keep up with.

Most of the readers of this book will not have attended business school. Surprisingly, however, many business school graduates will pick this book up as an excellent refresher. Frequently, business school graduates who majored in fields such as management, marketing, and industrial organization have commented years later that they would have paid far more attention to their accounting and finance coursework had they realized how valuable that background is to those in responsible positions in industry.

Essentially, this book is for any manager who comes into contact with elements of the financial process and feels a need for a better understanding of what's going on.

One final note. This is not a text. The structure of this book is such that the reader can sit down and read it in whole or in part. Although it is not a novel, the material is presented in a prose that should eliminate the need for intensive studying to understand the main points. A once-through reading should provide the reader with a substantial gain in knowledge. As specific financial questions come before the reader at times in the future, the book will serve as a good reference to brush up on general questions in a particular area. And, when more depth is required on any topic, the list of references following the last chapter should serve as a good source for as much detailed information as is needed.

Contents

I
INTRODUCTION

1

An Introduction to Financial Management

WHAT IS FINANCIAL MANAGEMENT?

The firm exists in order to increase the wealth of its owners. General management of the firm is concerned with knowing what products are needed and having an ability to produce and distribute those products. The area of financial management is concerned with the financial decisions that must be made in order to achieve a maximization of wealth for the owners of the firm.

This book focuses on the accounting and finance areas of financial management. *Accounting* is a system for providing financial information. It is generally broken down into two principal divisions: financial accounting and managerial accounting. *Finance* has traditionally been thought of as the area of financial management that supervises the acquisition and disposition of the firm's resources, especially cash.

The *financial accounting* aspect of accounting is a formalized system designed to record the financial history of the firm. The financial accountant is simply a historian who uses dollar signs. An integral part of the financial accountant's job is to report the firm's history from time to time to interested individuals, usually through the firm's annual and quarterly reports.

The managerial accountant looks forward whereas the financial accountant looks backward. Instead of reporting on what has happened, the *managerial accountant* provides financial information that might be used for making improved decisions regarding the future. Providing financial information for virtually any decision that could be improved by a forecast or by an analysis is the responsibility of the managerial accountant. In many firms the same individual is responsible for providing both financial and managerial accounting information.

Finance has expanded significantly from the function of borrowing funds and investing the excess cash resources of the firm. In its broader sense the finance function involves providing financial analyses to improve decisions that will impact on the wealth of the firm's owners. Whereas the managerial accountant will provide the information for use in the analyses, the finance officer often will perform the actual analyses.

THE GOALS OF FINANCIAL MANAGEMENT

At first thought, we might simply say that the goal of financial management is to aid in the maximization of owner wealth, or more simply, maximization of the firm's profits. Profits are, after all, the bottom line. That's true, but as all managers know, the corporate environment has many other goals—maximization of sales, maximization of market share, maximization of the growth rate of sales, and maximization of the market price of the firm's stock, for example.

On a more personal level, managers are concerned with maximization of salary and perks. Such maximization is often tied in with the maximization of return on investments (ROI), return on equity (ROE), return on assets (ROA), or return on net assets (RONA). (See Chapter 18 for a discussion of these terms.) The list of goals within the organization is relatively endless, and our intention is to narrow the range rather than broaden it.

From the perspective of financial management there are two overriding goals: profitability and viability. The firm wants to be profitable, and it wants to continue in business. It is possible to be profitable and yet fail to continue in business. Both goals require some clarification and additional discussion because they surface time and time again throughout this book.

Profitability

In maximizing profits there is always a tradeoff with risk. The greater the risk we must incur, the greater the anticipated profit we demand. Certainly, given two equally risky projects we would always choose to undertake the one with a greater anticipated return. More often than not, however, our situation revolves around whether the return on a specific investment is great enough to justify the risk involved.

Consider keeping funds in a passbook account insured by the Federal Depositors Insurance Corporation (FDIC). You will earn a profit or return (in nominal terms—we'll talk about inflation later) of about 5½%. The return is low, but so is the risk. Alternatively, you could put your money in a moneymarket fund where the return would be considerably higher. However, the investment would not be insured by the FDIC. The risk is clearly greater. Or you could put your money into the stock market. In general, do we expect our stocks to do better or worse than a moneymarket fund? Well, the risks inherent in the stock market are significantly higher than in a moneymarket fund. If the expected return weren't higher, would anyone invest in the stock market?

That doesn't mean that everyone will choose to accept the same level of risk. Some people keep all their money in bank accounts, and others choose the most speculative of stocks. Some firms will be more willing than others to accept a high risk in order to achieve a high potential profit. The key here is that in numerous business decisions the firm is faced with a tradeoff—risk vs. return. Throughout this book, when decisions are considered, the question that will arise is, "Are the extra profits worth the risk?" It is, I hope, a question that you will be somewhat more comfortable answering before you've reached the end of this book.

Viability

Firms have no desire to go bankrupt, so it is no surprise that one of the crucial goals of financial management is ensuring financial viability. This goal is often measured in terms of *liquidity* and *solvency*.

Liquidity is simply a measure of the amount of resources a firm has that are cash or are convertible to cash in the *near-term*, to meet the obligations the firm has that are coming due in the near term. Accountants use the phrases "near-term," "short-term," and "current" interchangeably. Generally the near-term means one year or less. Thus a firm is liquid if it has enough near-term resources to meet its near-term obligations as they become due for payment.

Solvency is simply the same concept from a long-term perspective. *Long-term* simply means more than one year. Does the firm have enough cash generation potential over the next three, five, and ten years to meet the major cash needs that will occur over those periods? A firm must plan for adequate solvency well in advance because the potentially large amounts of cash involved may take a long period of planning to generate. The roots of liquidity crises that put firms out of business often are buried in inadequate long-term solvency planning in early years.

So a good strategy is maximization of your firm's liquidity and solvency, right? No, wrong. The treasurer has a complex problem with respect to liquidity. Every dollar kept in a liquid form (such as cash, treasury bills, or moneymarket funds) is a dollar that could have been invested by the firm in some longer-term, higher yielding project or investment. There is a tradeoff in the area of viability and profitability. The more profitable the treasurer attempts to make the firm by keeping it fully invested, the lower the liquidity and the greater the possibility of a liquidity crisis and even bankruptcy. The more liquid the firm is kept, the lower the profits. Essentially this is just a special case of the tradeoff between risk and profitability discussed earlier.

We mentioned that profitability and viability are not synonymous. A firm can be profitable every year of its existence, yet go bankrupt anyway. How can this happen? Frequently it is the result of rapid growth and poor financial planning. Consider a firm whose sales are so good that inventory is constantly being substantially expanded. Such expansion requires cash payments to suppliers well in advance of ultimate cash receipt.

Consider the hypothetical firm, Growth Company, which starts the year with $40,000 in cash and receivables of $80,000. It also has 10,000 units of inventory. Its units are sold for $10 each and they have a cost of $8, yielding a profit of $2 on each unit sold. During January it collects all of its outstanding receivables (no bad debts!), thus increasing available cash to $120,000. January sales are 10,000 units, up 2,000 from the 8,000 units sold last December.

Due to increased sales, Growth decides to expand inventory to 12,000 units. Of the $120,000 available, it spends $96,000 on replacement and expansion of inventory (12,000 units acquired @ $8). This leaves a January month-end cash balance of $24,000.

During February all $100,000 of January's sales (10,000 units @ $10) are collected, increasing the available cash to $124,000. In February the entire 12,000 units on hand are sold and are replaced in stock with an expanded total inventory of 15,000 units. Everyone at Growth is overjoyed. They are making $2 on each unit sold. They are collecting 100% of their sales on a timely basis. There appears to be unlimited growth potential for increasing sales and profits. The reader may suspect that we are going to pull the rug out from under Growth by having sales drop or customers stop paying. Not at all.

In March, Growth collects $120,000 from its February sales. This is added to the $4,000 cash balance from the end of February (the beginning balance in February was $24,000, they collected $100,000 during February, but they spent $120,000 to buy 15,000 more units). They have an available cash balance of $124,000 in March. During March, all 15,000 units in inventory are sold and inventory is replaced and expanded to 20,000 units. Times have never been better. Except for one problem. Growth only has $124,000, but the bill for their March purchases is $160,000 (i.e., 20,000 units @ $8). They are $36,000 short in terms of cash needed to meet current needs. Depending on the attitude of their supplier and their banker, Growth may be bankrupt.

Two key factors make this kind of scenario common. The first is that growth implies outlay of substantial amounts of cash for the increased inventory levels needed to handle a growing sales volume. The second is that growth is often accompanied by an expansion of plant and equipment, again well in advance of the ultimate receipt of cash from customers.

Do growing companies have to go bankrupt? Obviously not. But they do need to plan their solvency along with their growth. The key is to focus on the long-term plans for cash. It is often said that banks prefer to lend to those who don't need the money. Certainly banks don't like to lend to firms like Growth, who are desperate for the money. A more sensible approach for Growth than going to a bank in March would be to lay out a long-term plan for how much they expect to grow and what the cash needs are for that amount of growth. The money can then be obtained from the issuing of bonds and additional shares of stock. Or, orderly bank financing can be anticipated and approved well in advance.

Apparently, even in a profitable environment the finance officer's constant demand for cash flow projections are a real concern. Liquidity and solvency are crucial to the firm's viability. Throughout the book, therefore, we will constantly return to this issue as well as that of profitability. In fact, the reader will become aware that a substantial amount of emphasis in financial accounting is placed on providing the user of financial information with indications of the firm's liquidity and solvency.

Part II of this book provides a framework for accounting. It assumes that the reader has relatively little formal financial background. Many readers will find most of it to be new information. Others may find it a good review of material with which they are already generally familiar. Some readers may even find it rather elementary. For those more advanced readers, it might be appropriate to skip Part II and proceed directly to Parts III and IV.

Part III discusses specific areas of interest for financial decision making. It gets into the various choices for inventory and depreciation methods, including a discussion of tax implications. It also discusses leasing, leverage (both operating and financial), cost accounting, and long-term investment decision making. These topics should be of interest to all readers.

Part IV of the book concentrates on the financial statement as the key to financial analysis. Emphasis is placed on the use of ratio analysis and on understanding the notes to the financial statements. The impact of inflation on accounting data and the accountant's response to the problem of inflation are also discussed in that section.

KEY CONCEPTS

Financial management—management of the finances of the firm in order to maximize the wealth of the firm's owners.

Accounting—the provision of financial information.

a. Financial accounting—provision of retrospective information regarding the financial position of the firm and the results of its operations.
b. Managerial accounting—provision of prospective information for making improved managerial decisions.

Finance—provision of analyses concerning the acquisition and disposition of the firm's resources.

Goals of Financial Management

a. Profitability—a tradeoff always exists between maximization of expected profits and the acceptable level of risk. Undertaking greater risk requires greater anticipated returns.
b. Viability—a tradeoff always exists between viability and profitability. Greater liquidity results in more safety, but lower profits.