Introduction to Financial Management

Lawrence D. Schall and Charles W. Haley

Introduction to Financial Management

Second Edition

Lawrence D. Schall / Charles W. Haley
Professors of Finance, University of Washington

McGraw-Hill Book Company
New York St. Louis San Francisco Auckland Bogotá
Hamburg Johannesburg London Madrid Mexico Montreal
New Delhi Panama Paris São Paulo Singapore Sydney
Tokyo Toronto

INTRODUCTION TO FINANCIAL MANAGEMENT

3 4 5 6 7 8 9 0 DODO 8 9 8 7 6 5 4 3 2 1

This book was set in Times Roman by Progressive Typographers. The editors were Bonnie E. Lieberman, Marjorie Singer, and Elisa Adams; the design was done by Caliber Design Planning; the production supervisor was Dominick Petrellese.
New drawings were done by J&R Services, Inc.
R. R. Donnelley & Sons Company was printer and binder.

Library of Congress Cataloging in Publication Data

Schall, Lawrence D
Introduction to financial management.

(McGraw-Hill series in finance)
Bibliography: p.
Includes index.
1. Corporations—Finance. I. Haley, Charles W., joint author. II. Title.
HG4011.S33 1980 658.1'5 79-21761
ISBN 0-07-055100-6

Introduction to Financial Management

McGRAW-HILL SERIES IN FINANCE

Professor Charles A. D'Ambrosio
University of Washington
Consulting Editor

Christy and Clendenin Introduction to Investments
Coates Investment Strategy
Committe Managerial Finance for the Seventies
Curran Principles of Financial Management
Dobrovolsky The Economics of Corporation Finance
Edmister Financial Institutions: Markets and Management
Francis Investments: Analysis and Management
Haley and Schall The Theory of Financial Decisions
Hastings and Mietus Personal Finance
Henning, Pigott, and Scott International Financial Management
Lang and Gillespie Strategy for Personal Finance
Robinson and Wrightsman Financial Markets: The Accumulation and Allocation of Wealth
Schall and Haley Introduction to Financial Management
Sharpe Portfolio Theory and Capital Markets
Stevenson Fundamentals of Finance
Troelstrup and Hall The Consumer in American Society: Personal and Family Finance

PREFACE

In this second edition our primary goal is again to provide students with a thorough foundation in finance. For many students the introductory course is the only exposure to finance, and we cover all the material that we believe is essential to a comprehensive understanding of financial management. Although the text covers a wide range of topics and issues, we have treated the material at an introductory level in all cases. Our method has been to explain the main issues very carefully in order to provide the student with an intuitive understanding of finance concepts and an appreciation of the way those concepts are applied in practice.

The text does not neglect students who will be taking additional courses in finance. Basic principles, techniques, and institutional aspects needed for effective analysis of business finance cases are well covered. A foundation for more advanced theoretical courses is provided in the chapter appendixes and in the more difficult problems, and we have tried to ensure that our approach here is consistent with current theory. Students completing a course of study using this book should be well prepared for courses in investments because of our stress on risk and return in the financial markets and our coverage of the basic characteristics of securities and markets.

The book is designed for undergraduate one-quarter or one-semester courses. If supplemented by cases and readings, however, it will be suitable as the primary text for courses extending two quarters or more. Instructors using this text for an introductory course for MBA students will find that the appendixes to Chapters 5 through 9 enable them to approach basic finance on a more advanced level.

We have made a special effort to provide an integrated discussion of the topics covered. Nevertheless, the book has been designed to offer great flexibility in choosing the order of presentation of most chapters. Furthermore, many chapters have one or more sections that can be deleted without any loss of continuity. Appendixes in several chapters explore major concepts in greater depth. These are intended as supplements to the basic coverage in the text and are designed for use by well-prepared undergraduate and beginning graduate students.

The first five chapters provide an introduction to the book and an introduction to finance in general. In Part 1 we examine the general nature of financial management, the financial system, taxes, the choice of business organization, compound-interest calculations, risk, and the principles of market valuation.

Parts 2 through 4 cover the basic concepts and techniques of financial management. Part 2 is concerned with long-term decisions involving investments and financing, including dividend policy. Part 3 explores techniques of financial analysis, including ratio analysis, funds flow, break-even analysis, and forecasting. Part 4 deals with the problems of managing the firm's current assets and current liabilities. The discussion in Part 4 is unusual in that the firm's working capital decisions are explicitly linked to the discussion of long-term investment and financing decisions in Part 2.

Parts 5 and 6 provide supplementary material that is often not covered in an introductory course. Part 5 offers a detailed discussion of the characteristics of the different securities issued by business firms and the procedures for issuing securities. Part 6 covers special topics including mergers and acquisitions, international financial management, and business bankruptcy.

CHANGES IN THE SECOND EDITION

This edition reflects several improvements over the first edition. They include:

1. *An increase in clarity and additions of new explanatory material.* The entire text was examined and changes were made to increase clarity of presentation. Treatment of existing topics was expanded and new sections were added wherever we felt that they would significantly further the student's understanding of the subject. Major changes have been made in Chapters 3, 5, 7, 9, 10, 11, 12, and 13.
2. *Revised problems.* Many new problems were added, especially problems of intermediate difficulty.
3. *New interchapter essays.* About half the essays are new to this edition and most of the remaining ones have been revised.
4. *General updating.* The text reflects more recent data, laws, and management practices.
5. *A substantial revision of the section on working capital management.* This section is now organized as a separate part, with a new chapter providing an overview and summary of the problems of working capital management. The discussion of cash management in Chapter 14 has been significantly expanded.

TEXT ORGANIZATION AND SUPPLEMENTARY MATERIALS

Although this book has been written to offer substantial latitude in selecting which chapters to cover and their order of presentation, we suggest that certain chapters be taught in a given order. Chapters 4, 5, 6, 7, 9, 11, 13, and 14 are prerequisites for certain other chapters. Specifically, Chapter 4 should precede Chapter 5, and Chapters 4 and 5 should precede all of Part 2 (Chapters 6 through 10). We recommend that the chapters in Part 2 be taught in sequence. However, these chapters can be rearranged to suit the needs of the individual instructor. A complete discussion of the possibilities for alternative sequences is included in the *Instructor's Manual* for the text. Many instructors may choose to assign Chapters 11, 12, and

13—which cover financial statement analysis, break-even analysis, and forecasting, respectively—early in the course. This can be done with no difficulty, although the discussion of financial leverage in Chapter 12 is most effectively taught if it is presented after Chapter 9. A sequence that we find quite workable in one quarter consists of Chapters 1 through 9, 11, 13 through 16, and one or more of Chapters 17, 18, and 22; other chapters can be intermingled with these.

Students come to the basic finance course with a wide range of prior preparation in accounting, mathematics, and economics. We have assumed minimal background in these areas, but we do expect that students have had at least one quarter of accounting shortly before taking the class. Able students should be capable of mastering the material almost without regard to their previous formal course work. We have tried to make the book as self-contained as possible and, through extensive use of examples, to make it suitable for self-study.

As an aid to students, many instructors recommend a study guide when such is available. The *Study Guide* written by Thomas E. Stitzel serves as an excellent review and supplement to this book. It contains additional solved problems as well as questions in a programmed learning format. We believe that many students will find this supplement helpful.

The *Instructor's Manual* includes a substantial amount of supplementary teaching material, as well as recommended course outlines, a test bank, transparency masters, and answers to text questions and problems.

ACKNOWLEDGMENTS

Many people have aided us in this project. Our students provided us with numerous comments that have resulted in substantial improvements over earlier versions of the text. Colleagues at the University of Washington and elsewhere have reviewed drafts of the manuscript, and we are very grateful for their help. Our thanks go to Henry H. Barker of Purdue University; William J. Bertin of Kent State University; Stephen G. Buell of Lehigh University; Jess Chua of Oklahoma State University; Eugene F. Drzycimski of the University of Wisconsin; James F. Feller of the University of South Florida; John K. Ford of Northeastern University; John H. Hand of Auburn University; George W. Hettenhouse of Indiana University; Lee Hoover of Iowa State University; Michael H. Hopewell of the University of Oregon; James Hugon of Portland State University; F. Lee Hull of California State University, Fresno; Gene Laber of the University of Vermont; John B. Major of California State University, Hayward; Rita M. Maldonado-Bear of New York University; Robert McGee of Babson College; Allen Michel of Boston University; Donald A. Nast of Florida State University; Robert T. Patton of Western Washington State University; Gerald W. Perritt of Florida International University; Michael Rice of the University of North Carolina; Ralph Ringgenberg of the University of Colorado; William L. Scott of the University of Texas, San Antonio; Bernard A. Shinkel of Wayne State University; Donald G. Simonson of the University of New Mexico; Timothy Sullivan of Baruch College; James A. Verbrugge of the University of Georgia; Ernest W. Walker of the Univerity of Texas, Austin; Francis Yeager of the University of Houston; and J. Kenton Zumwalt of the University of Illinois, Urbana. We are indebted to Charles D'Ambrosio, who provided us encouragement and advice throughout the development of the book and helped us at numerous junctures. Charles Henning gave us special assistance with the international finance materials and provided us with an initial draft of Chapter 22. Betty Ross provided us important advice and assistance in the preparation of the new Chapter 24 material. Jean-Claude Bosch, Gregg Brauer, Susan Doolittle, Keith Hauschulz, Charles Lapp, John Settle, and Kaj Svarrer developed many of the end-of-chapter questions and problems and provided us with helpful suggestions for the text material. We would also like to thank Anne Delger and David Dubofsky for proofreading a major portion of the final manuscript.

The editorial staff at McGraw-Hill has been a critical resource for us. Marjorie Singer carefully read the entire manuscript and made numerous suggestions for improving the clarity of the text. We owe her a tremendous debt for the increase in quality that resulted from her advice and prodding, in both the first and the second editions of the book. Bonnie Lieberman and Elisa Adams also contributed in important ways to this effort. Finally, the book could not have been written without the support of Anne Haley.

LAWRENCE D. SCHALL
CHARLES W. HALEY

CONTENTS

PART 3

Financial Analysis and Forecasting

PART 4

Working Capital Management

PART 5

Sources of Long-Term Capital