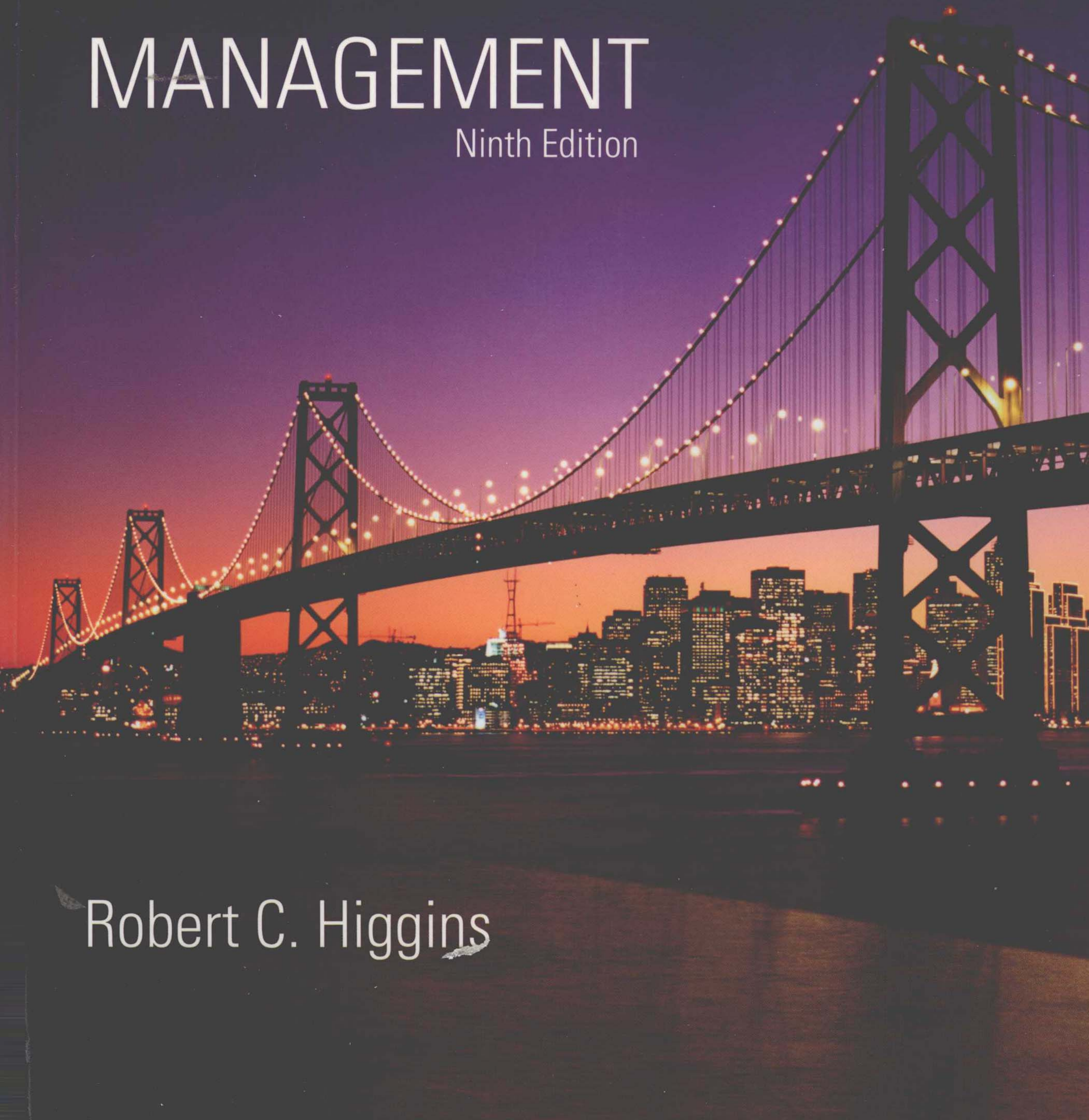
ANALYSIS FOR FINANCIAL MANAGEMENT

Ninth Edition



Robert C. Higgins

Analysis for Financial Management

Ninth Edition

ROBERT C. HIGGINS
Marguerite Reimers Professor of Finance
The University of Washington

McGraw-Hill Irwin

Boston Burr Ridge, IL Dubuque, IA New York San Francisco St. Louis
Bangkok Bogotá Caracas Kuala Lumpur Lisbon London Madrid Mexico City
Milan Montreal New Delhi Santiago Seoul Singapore Sydney Taipei Toronto

The McGraw·Hill Companies

McGraw-Hill Irwin

ANALYSIS FOR FINANCIAL MANAGEMENT
Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY, 10020.

This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 0 FGR/FGR 0 9 8

ISBN 978-0-07-338231-9
MHID 0-07-338231-0

Vice president and editor-in-chief: *Brent Gordon*
Publisher: *Douglas Reiner*
Executive editor: *Michele Janicek*
Editorial assistant: *Meg Maloney*
Marketing manager: *Ashley Smith*
Project manager: *Kathryn D. Mikulic*
Full service project manager: *Michael Ryder, ICC Macmillan Inc.*
Production supervisor: *Gina Hangos*
Design coordinator: *Joanne Mennemeier*
Media project manager: *Balaji Sundararaman, Hurix Private Ltd.*
Cover designer: *Brittany Skwierczynski*
Cover image: *© Veer*
Typeface: *10.5/13 Janson*
Compositor: *ICC Macmillan Inc.*
Printer: *Quebecor World Fairfield Inc.*

Library of Congress Cataloging-in-Publication Data

Higgins, Robert C.
Analysis for financial management / Robert C. Higgins.—9th ed.
p. cm.—(The McGraw-Hill/Irwin series in finance, insurance and real estate)
Includes index.
ISBN-13: 978-0-07-338231-9 (alk. paper)
ISBN-10: 0-07-338231-0 (alk. paper)
1. Corporations—Finance. I. Title.

HG4026.H496 2009
658.15'1—dc22 2008042972

www.mhhe.com

In memory of my son

STEVEN HIGGINS

1970–2007

Preface

Like its predecessors, the ninth edition of *Analysis for Financial Management* is for nonfinancial executives and business students interested in the practice of financial management. It introduces standard techniques and recent advances in a practical, intuitive way. The book assumes no prior background beyond a rudimentary and perhaps rusty familiarity with financial statements—although a healthy curiosity about what makes business tick is also useful. Emphasis throughout is on the managerial implications of financial analysis.

Analysis for Financial Management should prove valuable to individuals interested in sharpening their managerial skills and to executive program participants. The book has also found a home in university classrooms as the sole text in Executive MBA and applied finance courses, as a companion text in case-oriented courses, and as a supplementary reading in more theoretical finance courses.

Analysis for Financial Management is my attempt to translate into another medium the enjoyment and stimulation I have received over the past three decades working with executives and college students. This experience has convinced me that financial techniques and concepts need not be abstract or obtuse; that recent advances in the field such as agency theory, market signaling, market efficiency, and capital asset pricing are important to practitioners; and that finance has much to say about the broader aspects of company management. I also believe that any activity in which so much money changes hands so quickly cannot fail to be interesting.

Part One looks at the management of existing resources, including the use of financial statements and ratio analysis to assess a company's financial health, its strengths, weaknesses, recent performance, and future prospects. Emphasis throughout is on the ties between a company's operating activities and its financial performance. A recurring theme is that a business must be viewed as an integrated whole and that effective financial management is possible only within the context of a company's broader operating characteristics and strategies.

The rest of the book deals with the acquisition and management of new resources. Part Two examines financial forecasting and planning with particular emphasis on managing growth and decline. Part Three considers the financing of company operations, including a review of the principal security types, the markets in which they trade, and the proper choice of security type by the issuing company. The latter requires a close look at financial leverage and its effects on the firm and its shareholders.

Part Four addresses the use of discounted cash flow techniques, such as the net present value and the internal rate of return, to evaluate investment opportunities. It also deals with the difficult task of incorporating risk into investment appraisal. The book concludes with an examination of business valuation and company restructuring within the context of the ongoing debate over the proper roles of shareholders, boards of directors, and incumbent managers in governing America's public corporations.

An extensive glossary of financial terms and suggested answers to odd-numbered, end-of-chapter problems follow the last chapter.

Changes in the Ninth Edition

Readers familiar with earlier editions of *Analysis for Financial Management* will note several changes and refinements in this edition, including

- Use of suburban lawn care maven Scotts Miracle-Gro Company as the extended example throughout the book with particular emphasis on analyzing their bold leveraged recapitalization in 2007.
- Examination of KKR's leveraged acquisition of First Data Corporation, including problems encountered in completing financing in the midst of the credit meltdown of 2007.
- Expanded treatment of activist investors including Carl Icahn's efforts to force Yahoo to reconsider Microsoft's buyout offer.
- Discussion of cannibalization in investment appraisal and of the "lemons problem" in issuing new securities.
- More on private placements and the rapid growth of shelf-registered equity issues.

As in earlier editions, you will continue to find annotated Web site references at the end of each chapter. Also available is an *Analysis for Financial Management* Web site containing the following:

- Spreadsheet problems and suggested answers.
- An instructor's page with suggested answers to even numbered problems.
- Standard & Poor's Market Insight problems and suggested answers.
- Supplementary end-of-chapter problems and suggested answers.
- URLs of all Web sites mentioned in the book.
- Complimentary software.

- An annotated list of suggested cases to accompany the book.
- PowerPoint versions of selected tables and figures.

The complimentary software consists of three easy-to-use Excel programs, which I have found helpful when analyzing financial statements, projecting financing needs, and evaluating investment opportunities. The URL for this cornucopia of treats is **www.mhhe.com/higgins9e**.

A word of caution: *Analysis for Financial Management* emphasizes the application and interpretation of analytic techniques in decision making. These techniques have proved useful for putting financial problems into perspective and for helping managers anticipate the consequences of their actions. But techniques can never substitute for thought. Even with the best technique, it is still necessary to define and prioritize issues, to modify analysis to fit specific circumstances, to strike the proper balance between quantitative analysis and more qualitative considerations, and to evaluate alternatives insightfully and creatively. Mastery of technique is only the necessary first step toward effective management.

I want to thank Nathan Walcott and Eric Wehrly for continuing help on end-of-chapter problems. Both will make fine finance teachers in coming years. I am indebted to Andy Halula of Standard & Poor's for providing timely updates to Research Insight. The ability to access the most recent Compustat data on compact disc was a great help in providing timely examples of current practice. I also owe a large thank you to the following people for their insightful reviews of the 8th edition and their constructive advice. They did an excellent job, and any remaining shortcomings are mine not theirs.

Philip Meyers
Marymount Manhattan College

Mofidul Islam (Schumon Johnson)
Columbia Southern University

John Herbert
Trinity University

Michael Kennedy
Northwest Christian College

Nikhil P. Varaiya
San Diego State University

John S. Strong
College of William and Mary

Ailsa Roell
Columbia University

I appreciate the exceptional direction provided by Michele Janicek, Ashley Smith, Meg Maloney, Kathryn Mikulic, Gina Hangos, and Joanne Mennemeier of McGraw-Hill on the development, design and editing of the book. Bill Alberts, David Beim, Dave Dubofsky, Bob Keeley, Jack McDonald, George Parker, Megan Partch, Larry Schall, and Alan Shapiro have my continuing gratitude for their insightful help and support throughout the book's evolution. Thanks go as well to my daughter, Sara Higgins, for writing and editing the accompanying software. Finally, I want to express my appreciation to students and colleagues at the University of Washington, Stanford University, The Darden School IMD, The Koblenz Graduate School of Management, The Gordon Institute of Business Science, The Swiss International Business School ZfU AG, Boeing, and Microsoft, among others, for stimulating my continuing interest in the practice and teaching of financial management.

I envy you learning this material for the first time. It's a fascinating intellectual adventure.

Robert C. (Rocky) Higgins
University of Washington
rhiggins@u.washington.edu

Brief Contents

Contents

PART ONE

Assessing the Financial Health of the Firm

CHAPTER ONE

Interpreting Financial Statements

Financial statements are like fine perfume; to be sniffed but not swallowed.

Abraham Brilloff

Accounting is the scorecard of business. It translates a company's diverse activities into a set of objective numbers that provide information about the firm's performance, problems, and prospects. Finance involves the interpretation of these accounting numbers for assessing performance and planning future actions.

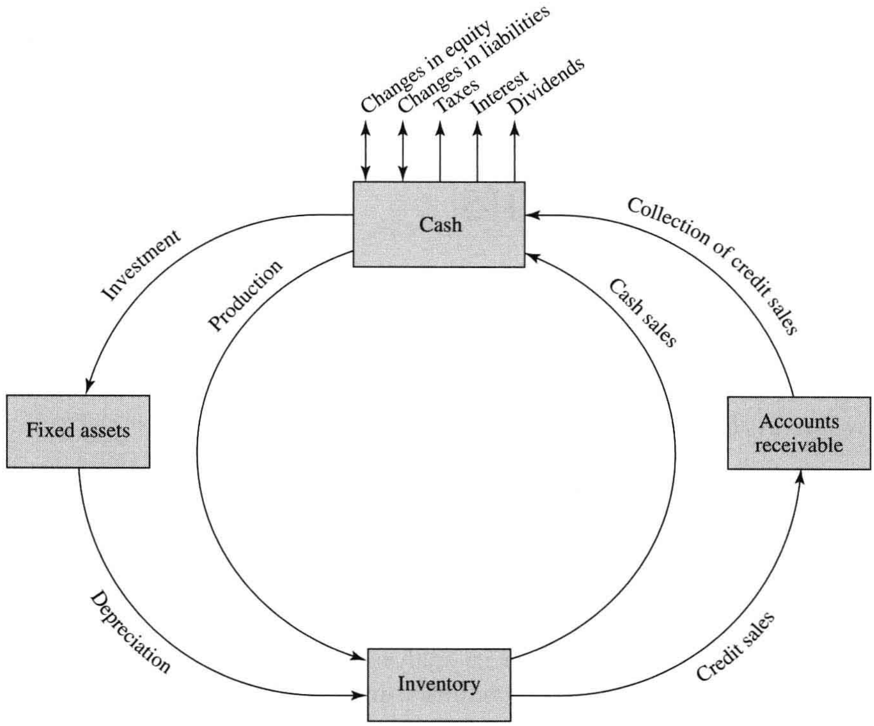
The skills of financial analysis are important to a wide range of people, including investors, creditors, and regulators. But nowhere are they more important than within the company. Regardless of functional specialty or company size, managers who possess these skills are able to diagnose their firm's ills, prescribe useful remedies, and anticipate the financial consequences of their actions. Like a ballplayer who cannot keep score, an operating manager who does not fully understand accounting and finance works under an unnecessary handicap.

This and the following chapter look at the use of accounting information to assess financial health. We begin with an overview of the accounting principles governing financial statements and a discussion of one of the most abused and confusing notions in finance: cash flow. Two recurring themes will be that defining and measuring profits is more challenging than one might expect, and that profitability alone does not guarantee success, or even survival. In Chapter 2, we look at measures of financial performance and ratio analysis.

The Cash Flow Cycle

Finance can seem arcane and complex to the uninitiated. However, a comparatively few basic principles should guide your thinking. One is that *a company's finances and operations are integrally connected*. A company's

FIGURE 1.1 The Cash Flow-Production Cycle



activities, method of operation, and competitive strategy all fundamentally shape the firm's financial structure. The reverse is also true: Decisions that appear to be primarily financial in nature can significantly affect company operations. For example, the way a company finances its assets can affect the nature of the investments it is able to undertake in future years.

The cash flow production cycle in Figure 1.1 illustrates the close interplay between company operations and finances. For simplicity, suppose the company shown is a new one that has raised money from owners and creditors, has purchased productive assets, and is now ready to begin operations. To do so, the company uses cash to purchase raw materials and hire workers; with these inputs, it makes the product and stores it temporarily in inventory. Thus, what began as cash is now physical inventory. When the company sells an item, the physical inventory changes back into cash. If the sale is for cash, this occurs immediately; otherwise, cash is not realized until some later time when the account receivable is collected. This simple movement of cash to inventory, to accounts receivable, and back to cash is the firm's *operating*, or *working capital, cycle*.