# MANAGERIAL ECONOMICS:

ANALYSIS AND CASES

**FOURTH EDITION** 

THENRY & THAYNES





# Managerial economics Analysis and cases

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#### Preface

This text on managerial economics contains: (1) expositions of theoretical and analytical tools of economics that are useful in managerial decision making; (2) reviews of empirical studies and illustrations of applications of the managerial economics concepts; (3) many short problems and a number of cases involving managerial situations that call for economic analysis; (4) lists of articles in professional journals that are recommended for further reading.

The book reflects several guidelines developed by the author of the first two editions: (1) The exposition of theoretical ideas should flow from simple to complex with considerable repetition of the basic concepts; (2) Each presentation of theoretical analysis should be immediately followed by practical applications to demonstrate relevance and help bridge the gap between theory and practice; (3) An abundance of problems and cases should be provided to let students test their understanding of theoretical concepts and develop the judgment skills required in applications of managerial economics; (4) There should be enough institutional, psychological, and sociological material to give students practice in coping with the influences of complex and shifting environments upon decision processes; (5) The underlying analytical structure from economics should be carefully related to concepts from accounting, finance, production, marketing, personnel, and business policy to help students integrate their professional knowledge.

In preparing this fourth edition, I have been aware that many students add the text to their permanent professional libraries. I have tried to provide adequate expositions over a wide range of topics, so that the book will be satisfactory for future use as a reference by practicing managers and staff economists.

Quantitative approaches to managerial economic analysis have been given a little more emphasis than in earlier editions. However, the assumed mathematical and statistical preparation of students is at the sophomore and junior level. Teachers can easily increase or decrease the

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quantitative emphasis to suit needs and abilities of particular classes and individual students.

Users of earlier editions will find (in Chapters 6 through 10) a completely reorganized and more carefully developed treatment of the following topics: resource allocation, cost minimization, cost estimation, cost and profitability analysis for continuative production, and cost and profitability analysis for discrete runs of production. Although the remainder of the text is much like the corresponding material in the third edition, close readers will find many small changes. One (not so small) change that deserves attention here is the integration of decision tree analysis. A simple decision tree is explained (in connection with decisions about new products) in Chapter 10. A risk-adjusted tree is discussed (in relation to pricing decisions in oligopoly firms) in Chapter 11. And a sequential decision tree with discounted payoffs is described (in a capital budgeting application) in Chapter 14.

I am very grateful to the following persons:

Louis Ederington of Georgia State University for collaboration in rewriting Chapter 10 (Profitability Analysis: Discrete Runs of Production) and Larry Schroeder of Syracuse University for his help in revising Chapter 4 (Business Conditions Analysis), Chapter 5 (Short-Range Forecasting), and Chapter 15 (Cost Effectiveness and Benefit-Cost Analyses);

Bruce Allen of Michigan State University, Ann Fisher of State University of New York College at Fredonia, and John Crockett of the University of Houston for the large number of constructive suggestions resulting from their close reviews of the manuscript, and copy editor Carol Reitz for her assistance with this edition.

Dean Kenneth Black, Jr. of the College of Business Administration at Georgia State University for urging me to make the book my best effort and giving me a full measure of support in the project.

I shall be grateful for suggestions for improving the fifth edition from teachers and students who use this book.

March 1978

WILLIAM R. HENRY

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## Part one

# Introduction to managerial economics