INTRODUCTION TO MANAGERIAL ECONOMICS

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Preface

The world is witnessing a knowledge explosion in many fields including those of technology, information, communications, management and economics. This book is designed to help future managers understand how business firms are adapting to the new economic environment and how decisions are made to survive and prosper with global competition. The book contains 25 illustrative examples, 236 questions and problems, and 59 cases.

In writing the book, I benefited from my experience of many years in business and academe, where I had the privilege of knowing a great many people who have directly or indirectly influenced me and stimulated my intellectual curiosity in and knowledge of managerial economics. Of those managers in business and government who provided me with useful data and information, only a few can be mentioned here.

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Peter J. Cassimatis
Eastchester, N.Y.
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1 Introduction

Managerial economics is concerned with the use of economic theory and analysis for operating decisions and long-range planning of business firms in a changing economy and increasing technological innovation and global competition.

The objective of this book is to present a concise but comprehensive discussion of the theory and practice of managerial economics, and related concepts from production management, finance, marketing and management science, to provide a unified framework for operating decisions and long-range planning.

1.1 ORGANIZATION AND OBJECTIVES

Throughout the text, examples will be used to illustrate the use of managerial economics to a variety of situations faced by managers in operating and planning a business enterprise. The book is appropriate for all students who take Managerial Economics as a breadth course (according to AACSB), and for students in executive MBA programs and corporate executive development programs.

The course of managerial economics at the undergraduate and graduate levels, usually, requires as prerequisites principles of economics, statistics and quantitative methods. Therefore, this book presents, sufficiently, additional theory and analysis but the emphasis is on solving problems and business cases of typical economic decisions encountered by managers. Each chapter includes a number of examples and their solutions are integrated to that chapter and other chapters.

1.2 OUTLINE OF THE BOOK

As the table of contents of the book indicates, the text consists of five modules or parts. In Part I, the basic concepts of the *economic model of the firm* are presented. Part II discusses *profitability analysis*, Part III deals with *long-range planning*, and Part IV focuses on *decision and risk analysis*. The concluding Part V considers the *economic environment* within which the firm operates.

The discussion of the economics of the firm begins in Chapter 2 with *revenue and demand analysis*. It is assumed that the firm faces competition for its product or service and, therefore, business decisions must be based on the right conceptual model of the market where the law of supply and demand operates. Chapter 3 shows that *production cost analysis* plays a major role in managerial decisions. After an overview of production theory, it is shown that empirical cost functions are required for production decisions and that over the long run economies of scale and economies of scope must be realized, if the firm is to remain competitive. The various methods used by managers in *estimating demand and cost* functions are discussed in Chapter 4. Emphasis is placed on deriving realistic relationships between product demand and such variables as price, advertising, income and demographics. In estimating cost functions, the objective is to obtain cost-output relationships that determine the optimum scale of operations.

Profitability analysis begins with Chapter 5 where the concept of profit, its measurement and the various methods of *profit maximization* are discussed. The analysis emphasizes the decision criteria that managers use to determine the optimum combination of output and price to maximize profit, to maximize revenue for a certain amount of profit, or to operate at a profitable output that satisfies other objectives.

However, the conduct and performance of a firm are influenced by the nature and degree of competition prevailing in the market. Chapter 6 discusses *market structure and competition* with emphasis on the four principal types of market structure: pure competition, monopolistic competition, oligopoly and monopoly. The role of advertising and its effects on product differentiation and competition are also discussed. Next, Chapter 7 presents various *pricing strategies* that managers use to achieve the objectives of the firm under different competitive situations. Emphasis is placed on the following: cost-plus pricing, price discrimination, transfer pricing, pricing of joint products and pricing decisions in a global economy.

Part III of the book introduces students to the concepts and methods used by managers for long-range planning. Chapter 8 presents an overview of *business forecasting* methods available to managers for making projections about future activities of the firm, emphasizing those techniques that have been reported to be useful in business literature and are consistent with economic theory and management practice.

Next, the theory and methods of evaluating and selecting capital investment proposals, known as *capital budgeting*, are presented in Chapter 9. The topics include cash flow analysis, the net present value model, the cost of capital, capital rationing and sensitivity analysis of projects. In addition, as firms find it increasingly necessary to expand their operations in many foreign countries, their managers are expected to know how to evaluate and select capital investment opportunities abroad. Chapter 10 continues the discussion on capital budgeting as it applies to the *globalization of capital investments*.

Up to this point, in many examples and case studies, the risk and uncertainty, which are inherent in business decisions, were often mentioned but not dealt with adequately. Chapter 11 addresses the challenge facing managers who must make *decisions under uncertainty*. The discussion introduces key concepts of decision analysis such as payoff tables, single-stage and multistage decision trees and probability distributions for random events.

Next, in Chapter 12, we discuss methods available for managers to conduct *risk analysis* of projects. Probability distributions of capital outlays and cash flows are discussed to show how managers compute the relative index of risk and the expected net present value of projects under various scenarios. The discussion of risk analysis continues in Chapter 13 which presents the theory and analytical methods for developing *decision strategies* when many alternatives and states of nature are faced by managers. Topics include Bayesian revision theory and the use of sample information to develop optimal decision strategies.

The last part of the book deals with the economic environment, domestic and foreign, which all firms must understand for their profitability and growth.

Because government is the largest consumer and investor in the economy, it can stimulate or constrain economic activity in all markets. Therefore, managers need to understand the relationship between *government and business*. Chapter 14 presents an overview of antitrust laws and various forms of regulation which impact on the conduct and performance of business firms, and the capital investment aspects of public projects. Finally, the globalization of production, communications and financial markets make it increasingly possible for small and large firms to compete internationally. Chapter 15 describes current trends in the *globalization of business* and discusses kinds of decisions managers must make for their firms to survive and prosper in a global economy.