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0521526256 - Managerial Economics: A Problem-Solving Approach

Nick Wilkinson

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Managerial Economics

Managerial economics, meaning the application of economic methods in the managerial decision-making process, is a fundamental part of any business or management course. This textbook covers all the main aspects of managerial economics: the theory of the firm; demand theory and estimation; production and cost theory and estimation; market structure and pricing; game theory; investment analysis and government policy. It includes numerous and extensive case studies, as well as review questions and problem-solving sections at the end of each chapter. Nick Wilkinson adopts a user-friendly problem-solving approach which takes the reader in gradual steps from simple problems through increasingly difficult material to complex case studies, providing an understanding of how the relevant principles can be applied to real-life situations involving managerial decision-making. This book will be invaluable to business and economics students at both undergraduate and graduate levels who have a basic training in calculus and quantitative methods.

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Preface

Managerial economics, meaning the application of economic methods to the managerial decision-making process, is a fundamental part of any business or management course. It has been receiving more attention in business as managers become more aware of its potential as an aid to decision-making, and this potential is increasing all the time. This is happening for several reasons:

- 1 It is becoming more important for managers to make good decisions and to justify them, as their accountability either to senior management or to shareholders increases.
- 2 As the number and size of multinationals increases, the costs and benefits at stake in the decision-making process are also increasing.
- 3 In the age of plentiful data it is more imperative to use quantitative and rationally based methods, rather than 'intuition'.
- 4 The pace of technological development is increasing with the impact of the 'new economy'. Although the exact nature of this impact is controversial, there is no doubt that there is an increased need for economic analysis because of the greater uncertainty and the need to evaluate it.
- 5 Improved technology has also made it possible to develop more sophisticated methods of data analysis involving statistical techniques. Modern computers are adept at 'number-crunching', and this is a considerable aid to decision-making that was not available to most firms until recent years.

As managerial economics has increased in importance, so books on the subject have proliferated. Many of the more recent ones claim like this one to take a problem-solving approach. I have found from my own teaching experience that, in spite of this, students of the subject tend to have two main problems:

- 1 They claim to understand the theory, but fail to see how to put principles into practice when faced with the kind of problems they find in the textbooks, even though these are considerably simplified compared with real-life situations.
- 2 They fail to see the relevance of the techniques presented in the books in terms of application to real-life situations.

The two problems are clearly related. Textbook problems are simplified, in terms of the amount of data and decision variables, to make them easier for

students to analyse. However, the result of this is that the textbook problems tend to fall between two stools: they are still too difficult in some cases for students to tackle without considerable help (the first problem), yet they are too simplified and abstract for students to see how textbook methods can be applied to real-life situations (the second problem).

This book attempts to overcome the considerable obstacles above. It adopts a user-friendly problem-solving approach, which takes the reader in gradual steps from easy, very simplified problems through increasingly difficult material to complex case studies.

Pedagogical features

- 1 The objectives of each chapter are clearly stated at the start of the chapter.
- 2 Case studies are plentiful and have been carefully selected. These are designed to be global in their application and relevance, and of recent origin. They are sometimes longer than the typical case study in textbooks in order to achieve a fuller flavour of real life, and they concentrate on the managerial decision-making aspect. The cases are also integrated with the material in the text, not just in terms of relevance, but also in terms of asking specific questions, often of a quantitative nature.
- 3 Examples are given throughout the text of firms or situations, to illustrate principles and their real-life application; an effort is made to use examples to which students can easily relate from their own experience.
- 4 There is an emphasis on the interdisciplinary aspects of managerial economics; problems are addressed in all the main functional areas of marketing, finance, production and human resources.
- 5 Quantitative techniques are introduced only where they are relevant to the material discussed, and are then applied in that context. This is contrary to the common treatment, where many techniques are explained in the early part of textbooks, before the relevant economic theory. Teaching experience suggests that students comprehend the techniques more easily if they can immediately see their application. It is assumed in the text that students already have a basic knowledge of calculus and statistics.
- 6 Key terms and concepts are written in **bold**; the definitions and interpretations of these terms and concepts are written in **bold italics**.
- 7 Many chapters include a section titled 'A problem-solving approach' at the end of the chapter, in order to bridge the gap described above as the first student problem. These sections include several solved problems, with the rationale for the methodology explained as well as the calculations.
- 8 Summaries are provided at the end of each chapter of the key points.
- 9 Review questions are included at the end of each chapter for students to test their understanding of the material.
- 10 Problems of a quantitative nature are also included at the end of chapters. These can be used by both students and instructors, as test questions or assignments.

- 11 Starred material is included which indicates a greater degree of difficulty; this is more suitable for MBA students, and can be omitted without causing problems with understanding the remaining material. Sometimes the starred material relates to whole sections, sometimes to subsections, and sometimes just to particular headings.
- 12 Throughout the book there is an effort to tie economic theory and practice together. Students should be able to see how empirical studies are conducted and the role of these in testing theories; the relevance of this process to managerial decision-making is emphasized.

Structure and content

The text is structured into parts, chapters, sections, subsections, headings and subheadings. The first four are self-explanatory; headings are titled alphabetically, while subheadings are titled numerically. An attempt is made to ensure both consistency of treatment and clarity of exposition, so that students can easily see how the various materials are related.

Part I of the text is an overview of the subject matter, and is particularly concerned with the methodology employed and the objectives of firms and managers. Part II is concerned with examining demand analysis. This involves a discussion of consumer theory, the theoretical principles of demand and the empirical aspects of demand estimation. Considerable attention is given to examining statistical techniques of estimation, much more than in the typical text. This is because of the increasing importance of the use of these techniques and the ubiquity of software packages for data analysis. Part III examines production theory and costs; the treatment is similar to the previous part, in that the principles of production and costs are discussed, and then the empirical and statistical aspects of estimation are explained. Part IV examines strategy analysis; this covers market structure, pricing, game theory, investment analysis and the impact of government policy on managerial decision-making. The coverage here is broader than a typical text, and there is particular emphasis on the consideration of non-price decisions and interdependent decision-making.

In each chapter there are three or four case studies, with questions attached. These are inserted into the text as close as possible to their points of relevance. Many chapters also include solved problems; sometimes these are embodied in the text as examples to illustrate the concepts involved, and in other cases they are included at the end of the chapter, according to whatever seems more appropriate. There are also review questions and in many cases additional problems at the end of the chapters, following the chapter summaries. The currency units involved in these problems vary, being mainly in pounds sterling and US dollars; this is in keeping with the international nature of the material in both the text and the case studies.

Acknowledgements

This text grew out of lecture material that I have developed while teaching courses at both undergraduate and graduate level, mainly but not entirely in managerial economics, over more than twenty years. During that time I have had many excellent students in my classes, who have enabled me to understand more clearly the requirements for a text of this type. Their comments and questions have contributed significantly to the style and form of the book. Other students have also contributed, in that their questions and problems have over the years led to certain methods of presentation and exposition which have, I hope, improved both the clarity and relevance of the material.

I am grateful to the anonymous referees for various pieces of constructive advice regarding structure and content. In particular I would like to thank John Mark of King's College London for his advice and encouragement. Finally, I would like to thank Yasmin, my wife, for her unending patience and support.

The majority of the material in the text has been class-tested, but I am sure that there is still scope for improvement in terms of both content and clarity of exposition. Constructive suggestions in these areas are certainly welcome.

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