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Theory and Application

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PREFACE

When I started to write this book, I thought it would be a comparatively easy task, given my previous work on public enterprise economics *, coupled with the permission of both Springer and North-Holland to reproduce parts of my previous publications. Today, after finishing the last chapter, I know how wrong I was. Writing the chapters on nationalization and privatization, on piecemeal policy, and on optimal quality, turned out to be as as difficult as compiling all the empirical material for the applied chapters, and computing normative and positive fares for the London bus and underground services. Moreover, not only did I revise all the chapters, I had published before, but rewrote parts of them completely.

I am indebted to many colleagues and students for comments on earlier drafts of this book. It is impossible to list here all those who have helped me. But I should like to thank particularly: Patricia Apps, Heinz-Jürgen Büchner, Wolfgang Peters, Ray Rees, Hans-Dieter Stolper, Georg Tillmann and Ruth Watzke for having read carefully and criticized incisively successive drafts of this book; Alexander Löser and Hans-Georg Zimmermann for doing all the computations of the empirical chapters and for commenting meticulously on earlier drafts of them; Kurt Klappholz for cross-examining me on the exact meaning of so many of my statements and for carefully correcting my English; Maurice Garner for improving my knowledge of nationalization and privatization; Malcolm Fairhurst, Stephen Glaister and Hugh Gravelle for many discussions of London (Regional) Transport; Mrs. Lydia Danner and Barbara Zimmermann for their faultless typing of the manuscript which had to be camera-ready.

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* Economic theory of public enterprise, Lecture notes in economics and mathematical systems, vol. 188, Springer, Berlin, Heidelberg, New York 1981; Public sector pricing, in: A. Auerbach and M. Feldstein, eds., Handbook of public economics, vol. I, North-Holland, Amsterdam, New York 1985, pp. 129 - 211.

I also must thank the London School of Economics for inviting me to lecture on public enterprise economics every year for over ten years, and the Special Research Units 21 and 303 at the University of Bonn for financial and moral support which they have given to this book.

Bonn, August 1985 Dieter Bös

TECHNICAL NOTE

Formulas are indicated by a number which refers to the order in which they occur within one chapter. When reference is made, say to equation (25), it is always the equation of the same chapter. References to formulas of other chapters are made by using two numbers, the first referring to the chapter and the second to the order within the chapter. Thus, equation (8-2) is the second equation of chapter 8.

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CHAPTER 1 INTRODUCTION

1.1 NORMATIVE AND POSITIVE THEORY

This is a book about prices. The reader may be astonished that pricing can be seen as the central problem of public enterprises. But why should prices of railways, of postal services, of local public utilities, or of nationalized enterprises be of less importance than prices of private enterprises? Pricing of publicly supplied goods is the primary vehicle for embedding public enterprises adequately into a market economy.

We concentrate on publicly supplied private goods, i.e. goods which individuals consume in different quantities and where people who do not pay are excluded from consumption. The reader may be aware that most public enterprises, in fact, supply such private goods. Rail, mail, communal electricity or gas supply, nationalized steel or car producers provide good examples. Therefore, in our context, free riding causes no greater problems than in the case of private enterprises.

If there is such a far-reaching similarity between public and private enterprises, why is a separate theory of public enterprises necessary? The simple fact that the owner of an enterprise is either a public authority or a private authority does not justify the development of such a special theory from the point of view of ordinary microeconomic theory. Theorists who adhere to the "property rights"-school will, of course, dissent.

Thus, from our point of view, the main difference is not ownership. The main difference is the multitude of political and economic determinants of public enterprises' activities as compared to the mainly commercial determinants of the activities of private enterprises. The consequences, and not

the genesis, of government objectives and constraints for an enterprise that tries to "make the best of it" are the center of an economic theory of public enterprises. Prices are the best indicator of the consequences of combining such political and economic determinants of public enterprises.

We do not deny that some public enterprises are allowed to behave in much the same way as private enterprises do [1]. However, a theory of public enterprises must not concentrate primarily on those few enterprises which behave like private ones, but on the many which behave differently. The major aspects of such a theory of public enterprises in Western-type economies are as follows:

First, public enterprises usually do not aim to maximize profits. This negative proposition allows for different positive statements regarding public enterprises' objectives:

a) Public enterprises ought to maximize welfare. This statement is the basis of a *normative economic theory of public enterprises.* "Normative" means that the application of the respective pricing rules can be justified by some higher-order value judgements as formally expressed by social welfare functions. As "ought" implies "can", normative pricing rules are empirically applicable. There are many examples where marginal-cost pricing or Ramsey pricing have actually been applied. (See, for example, Quoilin (1976) on Electricité de France.) On the other hand, it must be admitted that there are many examples where prescriptions of the welfare kind failed in practice. (See, for instance, the NEDO-report (1976) on British nationalized enterprises.) After presenting the basic features of a fairly general model of an economy with public enterprises in part I of the book, we will turn to a detailed treatment of pricing policies for welfare maximization, deriving the most important normative pricing rules in part II. The empirical applicability of normative theory will be illustrated in part IV using London Transport data as an example.

[1] Volkswagen in Germany, or Elf Aquitaine in France provide good examples.

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