Editors' Preface to Macmillan Studies in Economics

The rapid growth of academic literature in the field of economics has posed serious problems for both students and teachers of the subject. The latter find it difficult to keep pace with more than a few areas of their subject, so that an inevitable trend towards specialism emerges. The student quickly loses perspective as the maze of theories and models grows and the discipline accommodates an increasing amount of quantitative techniques.

'Macmillan Studies in Economics' is a new series which sets out to provide the student with short, reasonably critical surveys of the developments within the various specialist areas of theoretical and applied economics. At the same time, the studies aim to form an integrated series so that, seen as a whole, they supply a balanced overview of the subject of economics. The emphasis in each study is upon recent work, but each topic will generally be placed in a historical context so that the reader may see the logical development of thought through time. Selected bibliographies are provided to guide readers to more extensive works. Each study aims at a brief treatment of the salient problems in order to avoid clouding the issues in detailed argument. None the less, the texts are largely self-contained, and presume only that the student has some knowledge of elementary micro-economics and macro-economics.

Mathematical exposition has been adopted only where necessary. Some recent developments in economics are not readily comprehensible without some mathematics and statistics, and quantitative approaches also serve to shorten what would otherwise be lengthy and involved arguments. Where authors have found it necessary to introduce mathematical techniques, these techniques have been kept to a minimum. The emphasis is upon the economics, and not upon the quantitative methods. Later studies in the series will provide analyses of the links between quantitative methods, in particular econometrics, and economic analysis.

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Production Functions

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Contents

<i>Preface</i>	9
1 Introduction	11
Production functions: what and why	13
Costs and prices	19
Some points on methodology	25
2 The Cobb–Douglas Function	29
Discovery and early development	31
The elasticity of substitution in the C–D case	34
Returns to scale in the C–D case	37
Technical progress and the C–D function	40
Some comments on the C–D function	43
3 The Constant Elasticity of Substitution Function	45
Efficiency, distribution and substitution in the CES function	54
Estimation of the CES function	58
An alternative estimation procedure	59
Technical progress and the CES function	64
Returns to scale and the CES function	67
Some comments on the CES function	69
4 General Equilibrium Functions	71
Input–output coefficients	75
Input–output with capital and labour	78
Variable input–output coefficients	80
The RAS method of projecting coefficients	82
<i>Bibliography</i>	85

Perface

An introductory work of this nature poses two problems of selection. The first is that the study of production functions leads easily into the theory of growth on the one hand and into the theory of distribution on the other. The temptation to extend the work into a discussion on growth has been firmly resisted, but some discussion of the theory of distribution was inescapable in view of the usual methods of estimating production functions.

The second problem of selection arises from the highly mathematical approach typically adopted to the specification and investigation of production functions. In an introductory text it might be expected that only rudimentary mathematics would be used, but this is simply not possible if the subject is to be treated at all seriously. However, the mathematics have been kept to a minimum and, where possible, an intuitive explanation has also been attempted.

The theoretical development of production functions has been closely linked with the empirical work and hence both are referred to and commented upon – the commentary, however, is by no means exhaustive. The empirical content calls for some allusion to econometrics, but no attempt has been made to discuss this particular aspect of the overall problem of specifying and estimating production functions.

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D. F. H.