EWORD

Teachers of economics and statistics have felt acutely the need for a textbook which would give students an adequate introduction to the large and growing number of econometric studies which have appeared in recent years. The present book is designed to fill precisely this need.

The field of Econometrics covers both the mathematical formulation of economic hypotheses with a view toward their statistical testing and the actual process of subjecting these hypotheses to a statistical test. The econometrician must be competent in three directions: he must be an economic theorist, he must be a mathematician, and he must be a statistician. This being the case, it is not at all surprising that econometric studies have been criticized from one or more of these three points of view by specialists in these fields. Econometrics is an interdisciplinary science: and one must be patient with all interdisciplinary sciences. It is easy to throw stones from the unbreakable glass house of our own field of specialization.

Econometrics has much to commend itself as a technique of analysis. The powerful tools of mathematics make possible first of all the formulation of economic hypotheses without the confining boundaries of rigid ceteris paribus assumptions; and the equally powerful tools of statistics enable us then to confront these hypotheses meaningfully with the facts. Thus the use of mathematical symbols in economic analysis does not mean that the analysis becomes "more abstract," "more theoretical," or "more useless." Precisely the opposite is true.

Mistakes have been made and will be made by econometricians. The use of mathematical symbols does not—as is sometimes believed—guarantee against hidden or contradictory assumptions. Least of all does it guarantee against poor judgment or downright stupidity. Econometrics is no better than the econometrician! This does not impugn the technique of analysis itself.

Professor Tinbergen is well known to English-speaking readers as the author of numerous articles in the technical journals, director of the League of Nations study on Statistical Testing of Business-Cycle Theories, and co-author of a recent book on Dynamics of Business Cycles.

The present volume is a translation of a widely used Dutch book and has been revised and enlarged for the English edition. Up-to-date references have been included throughout, and Part IV and the Appendix have been added. The book explains the relationship of Econometrics to Economics and Statistics and outlines the process of formulating economic hypotheses mathematically and of subjecting them to a statistical test. It explains the methods of obtaining the various component equations of the system—psychic, technical, and business; and it describes the process of setting up an economic model of the system as a whole. Finally, it illustrates the use of econometric methods for policy purposes.

The beginning student requires very little knowledge of mathematics and statistics. With careful study he will find himself carried into some of the most interesting and important aspects of economic theory and policy.

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