QUANTITY AND QUALITY IN ECONOMIC RESEARCH
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STATISTICAL SCIENCE IN ECONOMICS

"Nec decipere, nec decipi."
(Neither to deceive, nor to be deceived.)

A professional society of members who are interested in the development of Statistical Science in Economics on the basis of epistemological foundations, the IS$^3$E was founded in 1982. Its objectives are:

To clarify statistical and mathematical applications and misapplications;
To effect a union of statisticians and economists;
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To conduct research programs on improvement of statistical methods; and
To organize seminars and conferences throughout the world.

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INTRODUCTION

Given the frequent misapplication of statistical methodology, the International Society of Statistical Science in Economics (\(IS^3E\)) was founded by Dr. Vladislav V. Shvyrkov to “unite economists and statisticians to promote the development of statistical science in economics.”

By 1984 and the First International Conference, in Princeton, New Jersey, the organization had broadened the scope of its mission, as well as its international audience, to include the proper use of statistical science in applied economics and in the other functional areas of business administration. It is this cross-disciplinary and qualitative-quantitative dimension that differentiates the International Society of Statistical Science in Economics.

The current national concern with quality control was anticipated in the title and content of the Society’s research volume series, *Quantity and Quality in Economic Research*. Indeed, Volume IV continues in the tradition of the previous volumes, but reflects the growing emphasis on global issues. Hence, this volume is divided into three parts: international financial economics, statistical science and economics, and applied economics and finance. Below is a brief discussion of each paper as they appear in each section.

Part I of this volume consists of five chapters addressing timely international issues. Bonitsis and Kallianiotis address the thorny issue of the persistent U.S. trade deficit within the context of a two-country econometric model and find that a set of macroeconomic parameters have contributed to the external imbalance. This finding is in contrast to the one parameter culprit, e.g., an overvalued currency, offered by many. The paper by Kasibhatla shows that the loan pushing hypothesis does not explain international bank lending to Brazil, for he finds that syndicated Eurocurrency loans to Brazil are efficiently priced. Then the traditional theory of international finance is put under scrutiny by Malindretos and Tsanacas.
They comprehensively analyze the theory's shortcomings not to discredit it, but to strengthen its applicability by offering suggestions for the selection of the appropriate policies for external adjustment. The next paper by Rivera-Solis finds that multinational bank entrance decreased bank concentration in the long run in Spain. The final chapter of this section by Anastasopoulos examines alternative models of international trade within the context of international travel; this comparative study will be invaluable reading for serious researchers in tourism studies.

Three very thought provoking papers dealing with applications of statistical science are contained in Part II of this volume. First, Shvyrkov exposes the unwarranted assumption employed in the conventional statistical treatment of contingency tables; namely, that the influence of the unexplanatory factor is not significant on the relationship between two classification variables. He describes the new approach for the analysis of 2 x 2 tables derived from the New Quality Philosophy in statistics. Second, the paper by Winkler takes one on a comparative historical journey into the realm of statistics in the West and former East; one will be fascinated by how differently statistical science is treated in these two worlds. These two papers are well complemented by the third study by Jain and Rowley; their work adds to the growing body of literature that is exposing some of the haphazard axiomatic methodological basis of traditional econometrics. This paper, needless to say, is essential reading for anyone doing applied econometric work.

The third, and final, part of this volume consists of seven papers on various issues in applied economics and finance. Nicholas presents a method for comparing the effectiveness of different state lottery operations; Telofski and Kim, in contrast, construct an international service market opportunity index that can be used to rank individual countries in terms of their market potential. The following two studies deal with corporate restructuring issues: Floros and Tsetsekos find that differences across industries in abnormal returns at the announcement of stock splits are attributed to differences in cash flows and performance in each industry; Shojai and Kurland construct a logit model to predict the success of in-sample and out-of-sample takeover bids. Then a theoretical model is presented by Randall and Chen to calculate the net benefits attributed with the refinancing of
a home mortgage loan. While Arize and Ndubizu conclude that the implementation of SFAS no. 52 decreased both the volatility of foreign currency translation gains/losses and analysts’ forecast errors. This section closes with an examination of the economic determinants of juvenile crime in New York City by Rezvani, Bonitsis, and Geithman; this research is an application of the new economics of crime to a major U.S. metropolitan area.

It would be an act of remissness not to mention that the manuscript for this volume was prepared with the invaluable assistance of several graduate research students. They include Mr. Srinivas Munukutla and Mr. Vipul Patel as well as Mr. Mahendra Kumar Sagar and Mr. Manoj Amin—the last two individuals were indispensable in this volume’s final preparation. IS³E extends its gratitude to them. In addition, special thanks is extended to the reviewers and the members of the editorial board who so painstakingly reviewed, commented, and corrected the papers contained in this volume.

It is clear that this volume offers a cornucopia of research papers that will interest a wide and diverse audience; thus achieving IS³E’s goal of inspiring interdisciplinary research into the appropriate role statistical science has in economics and in the other functional areas of business administration.

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