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978-0-521-37090-5 - Nonparametric and Semiparametric Methods in Econometrics and Statistics:

Proceedings of the Fifth International Symposium in Economic Theory and Econometrics

Edited by William A. Barnett, James Powell and George E. Tauchen

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This collection of papers delivered at the Fifth International Symposium in Economic Theory and Econometrics in 1988 is devoted to recent advances in the estimation and testing of models that impose relatively weak restrictions on the stochastic behavior of data. Particularly in highly non-linear models, empirical results are very sensitive to the choice of the parametric form of the distribution of the observable variables, and often nonparametric and semiparametric models are a preferable alternative. Methods and applications that do not require strong parametric assumptions for their validity, that are based on kernels and on series expansions, and methods for independent and dependent observations are investigated and developed in these essays by renowned econometricians.

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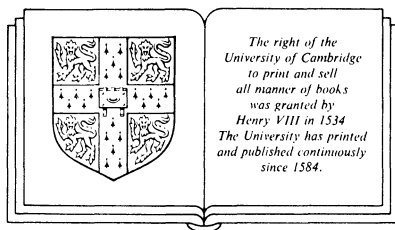
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Editors' preface

The contents of this volume comprise the proceedings of a conference held at Duke University on May 18–20, 1988. The conference, titled Nonparametric and Semiparametric Methods in Econometrics and Statistics, was devoted to recent advances in estimation and testing of models that impose relatively weak restrictions on the stochastic behavior of the data. The interest in such methods arises from increased awareness of the sensitivity of empirical results to misspecification of the parametric form of the distribution of the observable variables, particularly for highly nonlinear models. The papers in this volume, while varying widely in methodology and modeling approaches, are all directed toward developing and implementing methods that do not require strong parametric assumptions for their validity.

The volume is divided into four parts spanning the scope of the conference. Part I is on methods and applications based on kernels. Part II is on methods and applications based on series expansions. Part III is on methods for independent observations. Part IV is on methods for dependent observations.

The conference that produced this proceedings volume is the fifth in a new conference series, called International Symposia in Economic Theory and Econometrics. The proceedings series is under the general editorship of William A. Barnett. Individual volumes in the series generally have co-editors, and the series has a permanent Board of Advisory Editors. The symposia in the series are sponsored by the Innovation, Creativity, and Capital Institute at the University of Texas at Austin and are cosponsored by the RGK Foundation.

This fifth conference also was cosponsored by the National Science Foundation through the Conference in Econometrics and Mathematical Economics program of the National Bureau for Economic Research, the Institute of Statistics and Decision Sciences at Duke University, and the

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Department of Economics, the Graduate School of Business, and the Center for Statistical Sciences at the University of Texas at Austin.

The first conference in the series was coorganized by William A. Barnett and A. Ronald Gallant, who also coedited the proceedings volume. That volume appeared as the volume 30, October–November 1985 edition of the *Journal of Econometrics* and was reprinted as a volume in this Cambridge University Press monograph series, entitled *New Approaches to Modeling, Specification Selection, and Econometric Inference*.

Beginning with the second symposium in the series, the proceedings of the symposia appeared directly as volumes in this Cambridge University Press monograph series. The coorganizers of the second symposium and coeditors of its proceedings volume were William A. Barnett and Kenneth J. Singleton. The topic was *New Approaches to Monetary Economics*. The coorganizers of the third symposium, which was on *Dynamic Econometric Modeling*, were William A. Barnett and Ernst Berndt; and the coeditors of that proceedings volume were William A. Barnett, Ernst Berndt, and Halbert White. The coorganizers of the fourth symposium and coeditors of its proceedings volume, *Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity*, were William A. Barnett, John Geweke, and Karl Shell. The coorganizers and proceedings coeditors of the fifth symposium, which produced the current volume, were William A. Barnett, James Powell, and George E. Tauchen.

The organizers and proceedings coeditors of the sixth symposium in the series were Claude d'Aspremont, William A. Barnett, Bernard Cornet, Jean Gabszewicz, and Andreu Mas-Colell. That conference was held at the Center for Operations Research and Econometrics (CORE) in Louvain-La-Neuve, Belgium, in June 1989, and the proceedings volume will be the sixth volume in this monograph series.

The intention of the volumes in the proceedings series is to provide refereed journal-quality collections of research papers of unusual importance in areas of currently highly visible activity within the economics profession. Because of the refereeing requirements associated with the editing of the proceedings, the volumes in the series will not necessarily contain all of the papers presented at the corresponding symposia.

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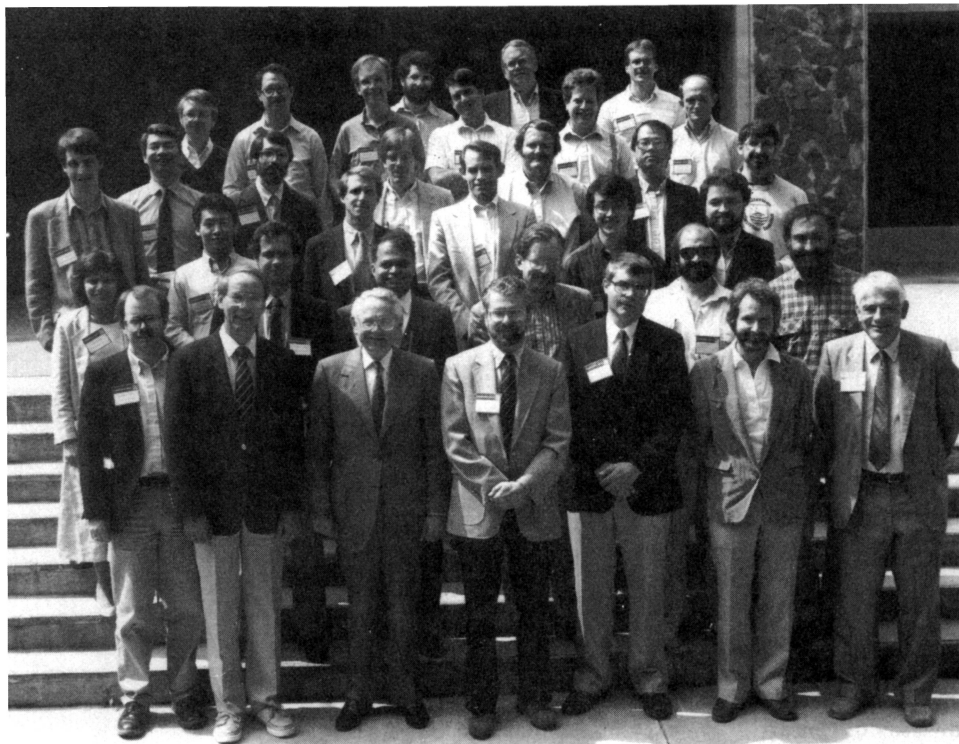
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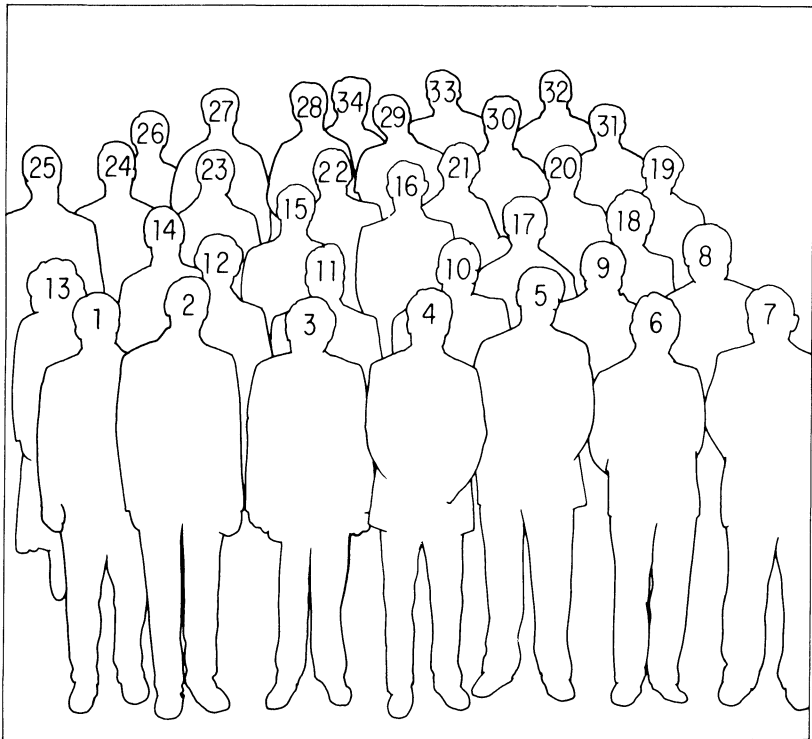
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