

ARTICLES

- Jan R. Magnus and H. Neudecker**
Symmetry, 0-1 Matrices and Jacobians: A Review 157
- Gilbert W. Bassett and Roger W. Koenker**
Strong Consistency of Regression Quantiles and
Related Empirical Processes 191
- John L. Knight**
The Distribution of the Stein-Rule Estimator in a Model with
Non-Normal Disturbances 202
- Kazuhiro Ohtani and Masahito Kobayashi**
A Bound Tests for Equality Between Sets of Coefficients in Two Linear
Regression Models Under Heteroscedasticity 220
- Yasuko Chikuse and A. W. Davis**
A Survey on the Invariant Polynomials with Matrix Arguments
in Relation to Econometric Distribution Theory 232

ET INTERVIEW

- Professor T. W. Anderson** (by Peter C. B. Phillips) 249

PROBLEMS AND SOLUTIONS

PROBLEMS

- Dale J. Poirier**, Contrast in Inferences Based on Sampling Distributions and
Posterior Distributions 289
- Nicholas M. Kiefer**, Estimation of ARCH Models 289
- Heinz Neudecker**, Theil's Minimum MSE Estimator for the Standard Linear Model 290
- Jan R. Magnus**, An Eigenvalue Problem 290
- R. W. Farebrother**, The Distribution of LIML in the Leading Case 290
- John L. Knight**, Moments of OLS and 2SLS via Fractional Calculus 292

SOLUTIONS

- Grant H. Hillier**, Limited Information Estimation Solution 294
- Alberto Holly and Jan. R. Magnus**, Non-Linear Estimation 297
- John L. Knight**, A Non-normal Limiting Distribution 300

Cambridge University Press
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, N.Y. 10022
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© 1986 Cambridge University Press

Printed in the United States of America

NOTES FOR CONTRIBUTORS

Contributions. Contributions are welcomed from all countries. They should be written in English.

Manuscripts. Four copies of manuscripts should be submitted to:

Peter C. B. Phillips
Editor, *Econometric Theory*
Cowles Foundation for Research
in Economics
Yale University
P.O. Box 2125 Yale Station
New Haven, Connecticut 06520-2125
U.S.A.

Manuscripts also may be submitted directly to a member of the Editorial Committee provided that a copy of the letter of submission and one copy of the manuscript are sent directly to the editor.

Manuscripts are accepted for review on the understanding that the same work has not been and will not be published nor is presently submitted elsewhere. While under editorial review, it is the responsibility of the authors to keep the Editor informed about submissions, publication plans and actual publication of related research or abstracts thereof in other outlets, including letters, journals, review publications, journals in other disciplines, conference proceedings and published dissertations. It is further understood that all persons listed as authors have given their approval for the submission of the paper and that any person cited as a source of personal communication has approved such citation; written authorization may be required at the Editor's discretion. Authors are responsible for obtaining written permission to publish material for which they do not own the copyright. Articles and other material published in *Econometric Theory* represent the opinions of the authors and should not be construed to reflect the opinions of the Editor, Advisory Board, Editorial Board or the Publisher.

Problems and Solutions Series. This series will publish student exercises in econometrics and research level problems. All problems must be submitted in triplicate with a clear title, relevant references and a complete solution to:

Professor Alberto Holly
Département d'économétrie
et d'économie politique
Université de Lausanne
École des HEC, BFSH,
1015 Lausanne-Dorigny
Lausanne, Switzerland

After publication of a problem, solutions are invited for publication in the following issue and will be selected on a competitive basis that takes into account the correctness, conciseness and elegance of the solution. All problems and solutions will be refereed.

Readers are also encouraged to write to the Editor with interesting unsolved problems for which only partial results are currently available, and to advise the Editor if they discover a published problem for which a solution already exists in the literature.

Preparation of Manuscript. The entire manuscript (including notes and references) should be typed double-spaced on $8\frac{1}{2} \times 11$ -inch or A4 white paper, with wide margins to accommodate copyediting. Manuscript pages should be numbered consecutively. *Page 1* should provide the article title, author's(s) names (in the form preferred for publication), complete affiliations and telephone numbers. At the bottom of *Page 1* place any footnotes to the title or authors, indicated by superscripts *, **, etc. *Page 2* should contain a proposed running head (abbreviated form of the title) of 40 characters or less, and the name and mailing address of the author to whom proofs should be sent. *Page 3* should contain a short abstract of the paper in less than 150 words. The Abstract will appear at the head of the article when published in the Journal.

Equations. All equations should be typewritten and the numbers for displayed equations should be placed in parentheses in the right margin. References to equations should simply use the form "(3)". Superscripts and subscripts should be typed clearly above and below the line, respectively. Theorem, lemma and proposition statements should appear in italic print. End of proof signposts should appear as such: ■

Tables and Figures. Tables and figures should be numbered consecutively in a separate series. Every table or figure should have a title or caption and at least one reference in the text to indicate its appropriate location. Figures (charts, graphs, or other artwork) should be ready for photographic reproduction; they cannot be redrawn by the printer. All figure labels and details should be clearly printed and large enough to remain legible after a reduction to half size.

References. References should be cited in the text by the author's last name and the relevant number from the reference list or simply by number. Complete bibliographic information for each citation should be included in the list of references. Examples of correct style for bibliographic citation in the text are: Bergstrom [1]; ... equation (10) of [3]; in recent work [2,4]. References should be typed in alphabetical order in the style of the following examples:

1. Bergstrom, A. R. *Statistical inference in continuous time economic models*. Amsterdam: North Holland, 1976.
2. Granger, C. W. J. Generating mechanisms, models and causality. In W. Hildenbrand (ed.), *Advances in Econometrics*, Chapter 8 and pp. 237–253. New York: Cambridge University Press, 1983.
3. Herz, C. S. Bessel functions of matrix argument. *Annals of Mathematics* 61 (1955): 474–523.
4. Sargan, J. D. & A. Bhargava. Maximum likelihood estimation of regression models with first order moving average errors when the root lies on the unit circle. *Econometrica* 51 (1983): 799–820.

Journal names should not be abbreviated.

Footnotes. When more than a simple source citation is called for, footnotes may be used. These should be numbered consecutively throughout the text and typed together on a separate page following references. Source citations within footnotes follow the same style as citations in the text.

Copyediting and Proofreading. The publisher reserves the right to copyedit and proofread all articles accepted for publication, but authors will be asked to review their manuscripts if changes have been substantial. Page proofs of articles will be sent to authors for corrections of typographical errors only.

Offprints. Authors receive 25 offprints of their article free of charge; additional numbers may be purchased if ordered at proof stage (an order form will be sent with proofs). Contributors will be asked to assign their copyrights, on certain conditions, to Cambridge University Press.

EDITORIAL POLICY. *Econometric Theory* aims to endow econometrics with an innovative and authoritative journal dedicated to advance theoretical research in econometrics. It will provide a centralized professional outlet for original theoretical contributions in all of the major areas of econometrics and it will seek to foster the multidisciplinary features of econometrics that extend beyond the subject of economics. Among the many aspects of econometrics to come within the scope of *ET* are the statistical theory of estimation, testing, prediction and decision procedures in traditionally active areas of research such as linear and nonlinear modeling, simultaneous equations theory, time series, studies of robustness, nonparametric methods, inference under misspecification, finite sample econometrics, limited dependent variable models, the treatment of panel data, and models of discrete choice. *ET* will provide a receptive arena for theoretical studies which open up new fields of research in econometrics and whose application potential is on a longer term horizon. Particularly welcome are papers which promote original econometric research in relation to modern developments in mathematical statistics and probability theory. Contributions which exhibit methodological and technical advances in these fields and which illustrate their potential in econometric research are actively encouraged. Articles which unify earlier econometric work either in productive ways or by the use of more elegant methods also lie within the scope of the Journal.

As well as articles that embody original theoretical research, *ET* will publish historical studies on the evolution of econometric thought and on the subject's major scholars. *ET* will also serve an educational role in econometrics by the inclusion of a "Problems and Solutions Series" and by the publication of pedagogical papers which deal explicitly with educational issues and which discuss new approaches to teaching econometrics.