

TRABAJOS DE ESTADISTICA

Review published by "Departamento de Estadística" of the "Consejo Superior de Investigaciones Científicas" Madrid, Spain.

| Vol. IV | CONTENTS | Cuad. I |
|-------------------|--|---------|
| R. FORTET | Procesos estocásticos en cascada. | |
| S. RIOS | Algunas leyes de probabilidad y procesos estocásticos que se reducen a un tipo general de Laplace-Stieltjes. | |
| J. GIL PELÁEZ | Las funciones absolutas en la Estadística. | |
| A. H. KOLMOGOROFF | Sucesiones estacionarias en espacios de Hilbert. | |
| J. TENA | Sobrevisión por muestreo en la Universidad de Madrid. | |
| Notas. | Crónicas. Bibliografía. Cuestiones. | |

For everything in connection with works, exchanges and subscription write to Prof. Sixto Rios, Departamento de Estadística del Consejo Superior de Investigaciones Científicas, Serrano 123, Madrid, Spain. The Review is composed of three fascicles published quarterly (about 350 pages) and its price is 80 pts. for Spain and South-America and 3 American Dollars for all other countries.

JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION

1108 16th St., N.W.

Washington 6, D. C.

June, 1953
VOL. 48 NO. 262

The Post-Enumeration Survey of the 1950 Census: A Case History in Survey Design
ELI S. MARKS, W. PARKER MAULDING, AND HAROLD NISSELSON

On the Distinction between Enumerative and Analytic Surveys... W. EDWARDS DEMING
The Up-and-down Method with Small Samples
K. A. BROWNLEE, J. L. HODGES, JR., AND MURRAY ROSENBLATT

A Multiple Group Least Squares' Problem and the Significant of the Associated Orthogonal Polynomials... BRADFORD F. KIMBALL

Wesley Clair Mitchell: The Economic Scientist... ADOLF A. BERLE

The Velocity of Time Deposits (three charts)... GEORGE GARVY

Changes in the Function Distribution of Income... JESSE BURKHEAD
(five charts under separate cover)

On Errors in Matrix Inversion... PAUL S. DWYER AND FREDERICK V. WAUGH

Designing Single-sampling Inspection Plans when the Sample Size is Fixed (eight charts)
ABRAHAM GOLUB

Confidence Intervals for the Number Showing a Certain Characteristic in a Population when Sampling is without Replacement... LEO KATZ

BOOK REVIEWS

PUBLICATIONS RECEIVED

ASA

THE AMERICAN STATISTICAL ASSOCIATION INVITES
AS MEMBERS ALL PERSONS INTERESTED IN:

1. Development of new theory and method
2. Improvement of basic statistical data
3. Application of statistical methods to practical problems.

ECONOMETRICA

Journal of the Econometric Society

Contents of Vol. 21, No. 2 - April, 1953

- E. MALINVAUD.....Capital Accumulation and Efficient Allocation of Resources
MAURICE ALLAIS.....Notes Theoriques sur l'Incertitude de l'Avenir et le Risque
I. N. HERSTEIN AND JOHN MILNOR..An Axiomatic Approach to Measurable Utility
JULIAN L. HOLLEY.....A Dynamic Model: Part 2. Actual Model Structures and
Numerical Results
M. MERCIER.....Comptabilite Nationale et Tableaux Economiques
ROBERT H. STROTZ, J. C. McANULTY, AND J. B. NAINES...Goodwin's Nonlinear
Theory of the Business Cycle—An Electro-Analog Solution
ROBERT SOLOW AND PAUL SAMUELSON..Balanced Growth Under Constant Returns
to Scale
KARL BORCH.....Effects on Demand of Changes in the Distribution of Income
J. TINBERGEN AND H. M. A. VAN DER WERFF.....Four Alternative Policies to
Restore Balance of Payments Equilibrium—A Comment and an Extension
Book Reviews, Announcements, Data on Members and Subscribers

Published Quarterly

Subscription rates available on request

The Econometric Society is an international society for the advancement of economic theory in its relation to statistics and mathematics.

Subscriptions to *Econometrica* and inquiries about the work of the Society and the procedure in applying for membership should be addressed to Rossen L. Cardwell, Acting Secretary, The Econometric Society, The University of Chicago, Chicago 37, Illinois, U. S. A.

BIOMETRIKA

A Journal for the Statistical Study of Biological Problems

Volume 40

Contents

Parts 1 and 2, June 1953

On the range of partial sums of a finite number of independent normal variates. By ANIS, A. A. & LLOYD, E. H. The Total Size of a General Stochastic Epidemic. By BAILEY, N. T. J. Approximate confidence intervals. By BARTLETT, M. S. Estimating Parameters in Truncated Pearson Frequency Distributions without resort to Higher Moments. By COHEN, A. C. The Superposition of several strictly periodic Sequences of Events. By COX, D. R. & SMITH, W. L. On the utilization of marked specimens in estimating populations of flying insects. By CRAIG, C. C. Experimental evidence concerning contagious distributions. By EVANS, D. A. The effect of unequal group variances on the F-test for the homogeneity of group means. By HORSNELL, G. Incomplete and Absolute Moments of the Multivariate normal distribution with some applications. By KAMAT, A. R. On the Mean Successive Difference and its Ratio to the Root Mean Square. By KAMAT, A. R. Tests of Significance in a 2×2 contingency table: extension of Finney's table. By LATSCHA, R. The estimation of population parameters from data obtained by the capture-recapture method, Part III. By LESLIE, P. H. & CHITTY, D. Estimation of a functional relationship. By LINDLEY, D. V. A Sequential Test for Randomness. By MOORE, P. G. Note on 'The Jacobians of certain matrix transformations useful in Multivariate Analysis'. By OLKIN, I. A Method for Judging all Contrasts in the Analysis of Variance. By SCHEFFE, H. Tables of the Angular Transformation. By STEVENS, W. L. The Estimation and Comparison of Strengths of Association in Contingency Tables. By STUART, A. A problem of Interference between Two Queues. By TANNER, J. C. *Miscellanea*: Time Intervals between accidents, A Note on Maguire, Pearson & Wynn's paper. By BARNARD, G. A. On a method of Estimating Biological Populations in the Field. By CRAIG, C. C. Non normality in two sample *t*-tests. By GRONOW, D. G. C. Doolittle Method and the fitting of polynomial to weighted data. By GUEST, F. G. Note on the Poisson Index of Dispersion. By KATHIRGAMATAMBY, N. On an extension of Geary's Theorem. By LAHA, E. G. A Rapid Method of Estimating the Correlation Coefficient from the range of the deviations about the reduced major axis. By LEIGH-DUGMORE, C. H. The effect of overlapping in bacterial counts of incubated colonies. By MACK, C. Further notes on the analysis of accident data. By MAGUIRE, B. A., PEARSON, E. S. & WYNN, A. H. A. A simple method of devising best critical regions similar to the sample space in tests of an important class of composite hypotheses. By RAO, K. S.

The subscription price, payable in advance, is 45s. inland, 54s. export (per volume including postage). Cheques should be drawn to Biometrika and sent to "The Secretary, Biometrika Office, Department of Statistics, University College, London, W.C. 1." All foreign cheques must be in sterling and drawn on a bank having a London agency.

MATHEMATICAL REVIEWS

A journal containing reviews of the mathematical literature of the world, with full subject and author indices

Publication of this journal is sponsored by the American Mathematical Society, Mathematical Association of America, Institute of Mathematical Statistics, London Mathematical Society, Edinburgh Mathematical Society, Union Matematica Argentina, and others.

Subscriptions accepted to cover the calendar year only.
Issues appear monthly except July. \$20.00 per year.

Send subscription order or request for sample copy to

AMERICAN MATHEMATICAL SOCIETY
80 Waterman Street, Providence 6, Rhode Island

JOURNAL OF THE ROYAL STATISTICAL SOCIETY

Series B (Methodological)

Contents of Volume 14, No. 1, 1952

- P. ARMITAGE..... The Statistical
Theory of Bacterial Populations Subject to Mutation (with Discussion)
- DAVID G. KENDALL
On the Choice of a Mathematical Model to Represent Normal Bacterial Growth
- K. D. TOCHER.... The Design and Analysis of Block Experiments (with Discussion)
- S. C. PEARCE..... Some New Designs of Latin Square Type
- I. J. GOOD..... Rational Decisions
- MARTIN SANDELIUS
A Confidence Interval for the Smallest Proportion of a Binomial Population
- A. M. WALKER..... Some Properties of the Asymptotic
Power Function of Goodness-of-Fit Tests for Linear Autoregressive Schemes
- A. GARDNER..... Greenwood's "Problem of Intervals": An Exact Solution for $N = 3$

The Royal Statistical Society, 4, Portugal Street, London, W.C.2.

SKANDINAVISK AKTUARIETIDSKRIFT

1952 - Parts 1 - 2

Contents

- ERLING SVERDRUP..... Basic Concepts in Life Assurance Mathematics
J. WOLFOWITZ..... Consistent Estimators of the Parameters of a Linear Structural
Relation
PER OTTESTAD..... On the Analysis of Variance of Percentage Fractions
J. LEFÈVRE..... Application de la Théorie Collective du Risque à la Réassurance
"Excess-Loss."
KAI LAI CHUNG..... On the Renewal Theorem in Higher Dimensions
ARNE JENSEN..... A Short Remark on the Theory of Random Sampling and the
Theory of Variance
N. BLOMQUIST..... On an Exhaustion Process
P. WHITTLE..... Certain Nonlinear Models of Population and Epidemic Theory
P. WHITTLE..... On Principal Components and Least Square Methods of
Factor Analysis

Annual subscription: 10 Swedish Crowns (Approx. \$2.00).

Inquiries and orders may be addressed to the Editor,
SKÄRVIKSVÄGEN 7, DJURSHOLM (SWEDEN)

SANKHYĀ

The Indian Journal of Statistics

Edited by P. C. Mahalanobis

Vol. 11, Parts 3 and 4, 1951

Preface. By P. C. MAHALANOBIS. Dynamic systems of the recursive type—economic and statistical aspects. By HERMAN O. A. WOLD. The applicability of large sample tests for moving average and autoregressive schemes to series of short length—an experimental study: Part 1: Moving average. By ABRAHAM MATTHAI AND M. B. KANAN. Part 2: Autoregressive series. By S. RAJA RAO AND RANJAN K. SOM. Part 3: The discriminant function approach in the classification of time series (Part III of statistical inference applied to classificatory problems). By C. RADHAKRISHNA RAO. On the estimation of parameters in a recursive system. By A. C. DAS. Bias in estimation of serial correlation coefficients. By A. SREE RAMA SASTRY. Some moments of moment-statistics and their use in tests of significance in autocorrelated series. By A. SREE RAMA SASTRY. Elasticities of demand for certain Indian imports and exports. By V. NARASIMHA MURTI AND V. KASI SASTRI. Balance between income and leisure. By M. V. JAMBUNATHAN. The use of commercial punched card machines for statistical analysis with special reference to time series problems. By ABRAHAM MATTHAI. On simple difference sets. By T. A. EVANS AND H. B. MANN. Bounds on the distribution of chi-square. By SHANTI A. VORA. On the limit points of relative frequencies. By D. BASU. Indian Statistical Institute: Nineteenth Annual Report: 1950-51

Annual subscription: 30 rupees

Inquiries and orders may be addressed to the
Editor, Sankhyā, Presidency College, Calcutta, India.

THE INSTITUTE OF MATHEMATICAL STATISTICS

(Organized September 12, 1935)

OFFICERS FOR 1953

President:

M. H. Hansen, Bureau of the Census, Washington, D. C.

President-Elect:

E. G. Olds, Carnegie Institute of Technology, Pittsburgh, Pennsylvania

Secretary-Treasurer:

K. J. Arnold, Michigan State College, East Lansing, Michigan

Editor:

E. L. Lehmann, University of California, Berkeley, California

The purpose of the Institute of Mathematical Statistics is to stimulate research in the mathematical theory of statistics and to promote cooperation between the field of pure research and the fields of application.

Membership dues including subscription to the ANNALS OF MATHEMATICAL STATISTICS are \$10.00 per year within the United States and Canada and \$7.00 per year elsewhere. Dues and inquiries regarding membership in the Institute should be sent to the Secretary-Treasurer of the Institute.

MEETINGS OF THE INSTITUTE

SUMMER MEETING—KINGSTON, ONTARIO—

August 31–September 4, 1953.

To be held at Queen's University and the Royal Military College in Kingston, Ontario in conjunction with meetings of the American Mathematical Society, the Mathematical Association of America and the Econometric Society. Abstracts of contributed papers to be presented at these meetings must be in the hands of Associate Secretary, Lionel Weiss, Department of Mathematics, Cornell University, Ithaca, New York, by July 18, 1953.

ANNUAL MEETING—WASHINGTON, D. C.—

December 27–30, 1953.

To be held in conjunction with meetings of the American Statistical Association and the Econometric Society. Abstracts of contributed papers to be presented at this meeting must be in the hands of Associate Secretary, Lionel Weiss, Department of Economics, University of Virginia, Charlottesville, Virginia, by November 13, 1953.

SUMMER MEETING—MONTREAL, QUEBEC—

September 10–13, 1954.

To be held in conjunction with meetings of the American Statistical Association and the Econometric Society.