

Washington Statistical Society

CHAPTER • AMERICAN STATISTICAL ASSOCIATION

WSS Newsletter—June 1982

WSS-Sponsored:

Calendar

Topic: Statistical Analysis on Microcomputers
Speakers: David Morganstein, Westat Inc., Tom Woteki, Ferox Micro Systems
Date and Time: Tuesday, June 15, 1982, 12:30–2:00 p.m.
Location: George Washington University, Hall of Government, Room B04
710 21st Street, NW. (21st & G Streets), Washington, DC

Topic: Comparison and Evaluation of Statistical Matching Methods
Speaker: Gerhard Paass, Institute for Planning and Decision Systems, Bonn, Germany
Date and Time: Thursday, June 17, 1982, 12:30–2:00 p.m.
Location: Forrestal Building, 1000 Independence Avenue, SW, Room GJ-015, Wash., D.C.

Topic: Some Implications of Heterogeneity for Low-Dose Extrapolations
Speaker: Elizabeth H. Margosches, U.S. Environmental Protection Agency
Date and Time: Tuesday, June 22, 1982, 12:30–2:00 p.m.
Location: Federal Building, 12th and Penn. Ave., NW, Room 3000B, Washington, D.C.
(Federal Triangle Metro Stop)

Other Sponsor:

Topic: Annual Report, Statistics of Income—1979, Individual Income Tax Returns—1979
Sponsor: Internal Revenue Service, Statistics of Income Division
Date and Time: Tuesday, June 1, 1982, 1:00 p.m.
Location: 1201 E Street, NW, Room 806B, Wash., D.C. (Blue/Orange/Red Lines—Metro Ctr)

Topic: Statistics of Income—1978-1979 Corporation Income Tax Returns
Sponsor: Internal Revenue Service, Statistics of Income Division
Speaker: Ray Samuelson
Date and Time: Wednesday, June 9, 1982, 1:00–2:00 p.m.
Location: 1201 E Street, NW, Room 806B, Washington, D.C.

Topic: Prediction Models and Unequal Probability Sampling
Sponsor: National Center for Health Statistics
Speaker: Richard M. Royall, Ph.D., Department of Biostatistics, Johns Hopkins University
Date and Time: Thursday, June 24, 1982, 1:30–2:30 p.m.
Location: Center Building, Room 7-32, 3700 East-West Highway, Hyattsville, Maryland

Topic: Annual Report, Statistics of Income—1979-1980, Sole Proprietorship Returns and Working Paper, "Methodological Changes in the SOI, Sole Proprietorship Program"
Sponsor: Internal Revenue Service, Statistics of Income Division
Speaker: Raymond Wolfe
Date and Time: Wednesday, July 21, 1982, 1:00 p.m.
Location: 1201 E Street, NW, Room 806B, Washington, DC, (Blue/orange/red lines Metro Center)

ANNUAL DINNER MEETING

Speaker: Dr. Jerry L. Jordan, Council of Economics Advisors
Date and Time: Wednesday, June 16, 1982

DETAILED INFORMATION ON THE MEETINGS

- Topic:** Statistical Analysis on Microcomputers
Chair: Jim Carpenter, BLS
Abstract: Within the past two years, statistical analysis packages have been introduced on the micro-computer market. Their statistical capabilities range from Visicalc, the popular "electronic spreadsheet", to sophisticated versions of mainframe packages like SAS. Compared to large mainframes, micros (or "personal computers") offer significant advantages of interest to the statistician. However, each micro stat pac has its limitations. The speakers will discuss the advantages and limitations.
The speakers will also demonstrate several statistical software packages which are currently on the market (or soon will be) and will discuss what features a statistician would shop for. Demonstrations will use an Apple II+, and IBM personal computer and a large screen Advent monitor. (Use of particular hardware or software does not constitute endorsement by WSS).

- Topic:** Comparison and Evaluation of Statistical Matching Methods
Chair: Barbara Bailar, U.S. Census Bureau
Abstract: Statistical matching methods combine records from samples with different but overlapping sets of variables in order to construct a new sample that comprises all variables. In general the matched records come from different units in the underlying population. Most matching methods published up to now are constructed according to heuristic principles. Their performance has been little evaluated so far.
This paper describes the results of a theoretical and experimental evaluation of statistical matching methods. First a criterion for the goodness of a match is derived based on goodness of fit concepts. Then four different matching methods are applied to a splitted sample, and the deviation of the generated samples from the original sample is evaluated. The results show that adequate matching methods cause no significant distortions of the common distribution as long as the 'conditional independence assumption' holds, whereas the violation of this assumption always leads to severe biases. The implications for practical applications are discussed and some improvements of matching methods are proposed.

- Topic:** Some Implications of Heterogeneity for Low-Dose Extrapolations
Abstract: Carcinogenesis testing typically is carried out with relatively homogeneous strains of animals and at doses above those to which it is expected humans will be exposed. The extent to which an extrapolation from experimental doses to low doses will successfully project an upper limit on the population's probability of response depends on, among other factors, the extent to which population heterogeneity is recognized and the type of extrapolation model.

- Topic:** Annual Report, Statistics of Income—1979, Individual Income Tax Returns—1979
Abstract: The Internal Revenue Service, Statistics of Income Division, is sponsoring a seminar on the next in the series of annual reports, *Statistics of Income—1979, Individual Income Tax Returns—1979*. Norman Waits and Terry Smith of the Statistics of Income Division will present highlights of these statistical reports on individual returns. Interested persons are invited to attend whether or not they are WSS or ASA members. The seminar will be held June 1, 1982, 1:00 p.m. at 1201 E Street, NW, Room 806B, Washington, D.C. Further information may be obtained by contacting Ray Plowden, Norman Waits, or Terry Smith on 376-0155 or 376-0147. Published copies of the reports are presented available from the Superintendent of Documents.

DETAILED INFORMATION ON THE MEETINGS (continued)

Topic: Statistics of Income—1978-1979 Corporation Income Tax Returns
Abstract: The Internal Revenue Service, Statistics of Income Division is sponsoring a seminar on the complete report, Statistics of Income—1978-1979, Corporation Income Tax Returns. Ray Samuelson of the Statistics of Income Division will present highlights of this report. Data extracts from the report may be obtained by contacting the speaker on 376-0170.

Topic: Prediction Models and Unequal Probability Sampling
Abstract: Prediction models are used to study the Horvitz-Thompson estimator in probability-proportional-to-size sampling and six estimators of its variance. The variance estimators include the Horvitz-Thompson, Yates-Grundy, and jackknife statistics, as well as two bias-robust estimators from prediction theory. An empirical study confirms prediction theory's implications about these estimators.
For further information, call Office of Research and Methodology (301) 436-7111

Topic: Annual Report, Statistics of Income—1979-1980, Sole Proprietorship Returns and Working Paper, "Methodological Changes in the SOI Sole Proprietorship Program"
Abstract: The Internal Revenue Service, Statistics of Income Division, is sponsoring a seminar on the next in the series of annual reports, Statistics of Income—1979-1980, Sole Proprietorship Returns on Wednesday, July 21, 1982, 1:00 p.m. at 1201 E Street, NW, Room 806B, Washington, D.C. Raymond Wolfe of the Statistics of Income Division will present highlights of this statistical report on sole proprietorships. Also, a Statistics of Income Division working paper entitled "Methodological Changes in the SOI Sole Proprietorship Program" will be discussed. Interested persons are invited to attend whether or not they are WSS or ASA members. Further information on this seminar may be obtained by contacting Raymond Wolfe on 376-0151 or Raymond Plowden on 376-0155. Published copies of the annual report will be available from the Superintendent of Documents, Government Printing Office in July, 1982.

ANNUAL DINNER MEETING

Speaker: Dr. Jerry L. Jordan, Council of Economics Advisors
Topic: Macroeconomic Issues for the 1980's
Date and Time: Wednesday, June 16, 1982—Cocktails (Cash Bar-6-8 P.M.)—Dinner - 7:30 P.M. Program (Guest Speaker's Speech and Presentation on Shiskin Award)—8:30 P.M.
Location: Fort McNair Officers' Club, Entrance on P Street between 3rd and 4th Sts., SW (Building No. 60)
Cost: \$12.00 per person (including tips)
Menu: Mellon Ball Cocktail, Veal Cordon Bleu and etc.
Please make checks payable to Washington Statistical Society and mail to Charles Roberts, 4501 Cheltenham Drive, Bethesda, MD 20814 (Telephone: 357-1678 work) before June 10, 1982

Print name(s) for Name Tag(s) _____
Address _____
Telephone No. _____ No. of Persons _____

EMPLOYMENT COLUMN

Deadline for inserting notices
is the 10th of the month
preceding the publication date

Send notices and requests to:
Evelyn R. Kay, 905 Presidential
National Center for Education Statistics
400 Maryland Avenue, SW
Washington, DC 20202

(301) 436-6791

JOB OPENINGS

The Statistics Branch of the Agricultural Marketing Service, USDA, expects job openings at the GS-5 through GS-12 levels. Candidates should have graduate level training, good verbal and writing skills, and some ADP experience such as exposure to SAS, BMDP, and APL. The Branch does applied research and consults on problems from a wide area of statistical applications such as experimental design, sampling, calibrations, time series, and econometrics. Contact Dr. Charles P. Pautler, Jr., 202/447-7081, or send SF-171 to USDA/AMS/MRD/SB, 14th & Independence Avenue, SW, Room 0611—South Building, Washington, D.C. 20250.

Statisticians are being sought to provide statistical support for test planning and to develop methods for experimental data analysis using small sample sizes. PhD level in statistics and experience in engineering/scientific applications desirable but not required. Send resume to Stevan F. Sayre, Department ADI-220A, The John Hopkins University, Applied Physics Laboratory, Johns Hopkins Road, Laurel, Maryland 20810; or call (301) 953-7100, extension 7521.

(mailed 5/28/82)



AMERICAN STATISTICAL ASSOCIATION

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