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Studies in Socio-Economics. Armonk, N.Y. and London: Sharpe, 1993. Pp. xv, 304. \$49.95, cloth; \$21.95, paper. ISBN 1-56324-377-6, pbk.

*JEL 94-1054*

Explores the moral philosophy or philosophies of management embedded in the work of twelve important economists and investigates how they pictured the nature of business and management, the ideal enterprise, and the role of an enterprise in society. Discusses the work of François Quesnay, the Marquis of Mirabeau, Adam Smith, David Ricardo, Karl Marx, John Stuart Mill, Léon Walras; Alfred Marshall, Gustav Schmoller, Charles Gide, Gunnar Myrdal, and John Maynard Keynes. Guillet de Monthoux is a professor at Stockholm University. Bibliography; index.

HAYEK, FRIEDRICH AUGUST. *Hayek on Hayek: An autobiographical dialogue*. Edited by STEPHEN KRESGE AND LEIF WENAR. Chicago: University of Chicago Press, 1994. Pp. xi, 170. \$27.50. ISBN 0-226-32062-6.

*JEL 94-1055*

Provides a detailed chronology of the early life and education of F. A. Hayek, his intellectual progression, and the reception of his ideas. Consists of conversation between Hayek and various interviewers, interspersed with autobiographical notes written over a period of years since 1945. Draws largely on Hayek's interviews with W. W. Bartley III, a biographer of Hayek, and on interviews made under the auspices of the Oral History Program at the University of California, Los Angeles. Selects Hayek's own statements on the development of his ideas and significant events in his life, attempting to preserve the authentic voice of Hayek himself. Includes an introduction by Stephen Kresge providing a brief account of the historical and intellectual context of Hayek's life. Intended as a supplement to the Collected Works of F. A. Hayek series. The late Friedrich A. Hayek was recipient of the Nobel Memorial Prize in Economics, a pioneer in monetary theory, and the principal proponent of the libertarian philosophy. Index of persons and places.

TORRENS, ROBERT. *The Economists Refuted and other early economic writings*. Reprint edition. Edited with an introduction by P. D. GROENEWEGEN. Reprints of Economic Classics, Series 2, no. 3. Fairfield, N.J.: Kelley, [1984] 1993. Pp. xx, 103. \$25.00. ISBN 0-678-01460-4.

*JEL 94-1056*

Reprint of three papers by Robert Torrens (1780-1864) on political economy, highlighting aspects of his economics on which he changed his mind, in particular, his theory of profits and views on the role of effectual demand in stimulating production. Presents reprints of "The Economists Re-

futed" (1808); "Strictures on Mr. Ricardo's Doctrine Respecting Exchangeable Value" (1818); and "Mr. Owen's Plan for Relieving the National Distress" (1819). No index.

#### B4 ECONOMIC METHODOLOGY

*See also:* Book numbers *JEL 94-1043, 94-1099, 94-1356*

## C *Mathematical and Quantitative Methods*

### C0 GENERAL

HAMILTON, JAMES D. *Time series analysis*. Princeton: Princeton University Press, 1994. Pp. xiv, 799. \$55.00. ISBN 0-691-04289-6.

*JEL 94-1057*

Textbook for a graduate econometrics course in time series analysis, integrating theoretical and empirical issues and incorporating recent advances. Discusses difference equations; lag operators; stationary ARMA processes; forecasting; maximum likelihood estimation; spectral analysis; asymptotic distribution theory; linear regression models; linear systems of simultaneous equations; covariance-stationary vector processes; vector autoregressions; Bayesian analysis; the Kalman filter; estimation by generalized method of moments; models of nonstationary time series; processes with deterministic time trends; univariate processes with unit roots; unit roots in multivariate time series; cointegration; full-information maximum likelihood analysis of cointegrated systems; time series models of heteroskedasticity; and the modeling of time series with changes in regime. Includes end-of-chapter exercises. Hamilton is Professor of Economics at the University of California, San Diego. Author and subject indexes.

LUPTON, ROBERT. *Statistics in theory and practice*. Princeton: Princeton University Press, 1993. Pp. x, 188. \$24.95. ISBN 0-691-07429-1.

*JEL 94-1058*

Provides an introduction to those parts of mathematical statistics most useful in practical contacts with statistical problems. Assumes an understanding of calculus and an introduction to complex analysis. Covers some common probability distributions; distributions related to the Gaussian; sampling; distributions of sample statistics; Bayes's theorem and maximum likelihood; confidence intervals; hypothesis testing; the theory of maximum likelihood estimators; least squares fitting for linear models; hypothesis testing in the linear model; rank correlation coefficients; tests of fit; and robust tests for means. Includes problems that illuminate

points made in the text and present additional material. Lupton is a member of the professional technical staff in astrophysical sciences at Princeton University. Symbol, problem, and subject indexes.

See also: Book numbers *JEL 94-1035, 94-1051*

**C3 ECONOMETRIC METHODS: MULTIPLE/  
SIMULTANEOUS EQUATION MODELS**

NORIEGA-MURO, ANTONIO E. *Nonstationarity and structural breaks in economic time series: Asymptotic theory and Monte Carlo simulations*. Aldershot, U.K.; Brookfield, Vt.; Hong Kong and Sydney: Ashgate, Avebury, 1993. Pp. vii, 256. \$59.95. ISBN 1-85628-580-4. *JEL 94-1059*

Presents an econometric analysis of nonstationarity in economic time series, specifically addressing the problems of testing for the existence of stochastic or deterministic trends in series that possess structural breaks. Surveys the available procedures for testing the null hypothesis of a unit root against the alternative that the process is stationary around a fixed linear trend and against more general alternatives. Addresses the specification and analysis of test regressions for unit root tests against breaking trend-stationary alternatives. Considers the asymptotic and finite sample behavior of statistics from unit root test regressions when the alternative is a breaking trend-stationary model. Analyzes the nonstationarity of annual U.K. GDP over the period 1855-1987. Suggests directions for future research. Based on the author's doctoral thesis. Noriega-Muro is at the University of Guanajuato. No index.

**C4 ECONOMETRIC AND STATISTICAL METHODS:  
SPECIAL TOPICS**

BRIGHTMAN, HARVEY AND SCHNEIDER, HOWARD. *Statistics for business problem solving*. Second edition. Cincinnati: South-Western, College Division, 1994. Pp. xi, 885. ISBN 0-538-83130-8. *JEL 94-1060*

Introduces the student to statistical methods and reasoning that aid in problem detection, problem diagnosis, and decision-making to improve managerial performance. Discusses the role of statistics in problem sensing and diagnosis. Introduces basic probability concepts and examines probability distributions. Describes how to collect data by conducting sampling surveys or pilot studies. Explains how to analyze and interpret study results, covering making inferences about one population, making inferences about two populations, hypothesis testing, and analysis of variance. Introduces regression analysis and discusses categorical variables in

regression models, building nonlinear regression models, building and evaluating models using the general linear test, and detecting and minimizing multicollinearity. Examines forecasting and explains Chi-Square methods. Discusses quality and tools for controlling and improving quality. Includes end-of-chapter exercises and problems. Brightman is Regents' Professor of Decision Sciences and Schneider is Associate Professor of Decision Sciences at Georgia State University. Index.

CAMPANELLI, PAMELA AND THOMAS, ROGER. *Working lives developmental research: Issues surrounding the collection of life-time work histories*. Moorfoot, Sheffield: U.K. Employment Department, 1994. Pp. 70. Paper. *JEL 94-1061*

Addresses a central methodological issue for the Employment Department's proposed *Working Lives Survey*: how to ensure that information on life events obtained through long-term recall is as complete, reliable, and valid as is possible within the constraints of a standardized quantitative survey interview. Reports on a small-scale specialized pilot study involving a review of how other studies approached the task of collecting life history data; the development of quantitative work-related life history questions and their administration to a balanced sample of twenty respondents; the administration of follow-up in-depth interviews using qualitative and cognitive techniques; a comparison of the results of the quantitative and in-depth methods to ascertain the nature of the omissions and errors that occur when standard quantitative questioning techniques are used; and the development of recommendations concerning how to formulate improved questions, prompts, and memory triggers to aid recall within the context of a structured questionnaire. Appendices present basic facts about the sample used in the study; the recruitment instructions; the quantitative questionnaire and interviewer guidelines; a calendar aide; a qualitative topic guide; a form for recording employment status history; and three versions of the life history calendar. No index.

DUNCAN, JOSEPH W. AND GROSS, ANDREW C. *Statistics for the 21st century: Proposals for improving statistics for better decision making*. New York: Dun & Bradstreet, 1993. Pp. vi, 266. \$14.95, paper. ISBN 1-56203-310-7. *JEL 94-1062*

Encourages change and reform in statistical systems in order to push them toward providing more usable knowledge. Considers the nature of the Information Age and the changes in the global realities that call for new statistical systems. Analyzes the strengths, weaknesses, and opportunities presented by the statistical information emanating

from international agencies, government bureaus, individual firms in the private sector, and statistical/information industry firms and nonprofit agencies. Considers the three primary dimensions of statistical information: uses and users, products and producers, and dissemination and presentation. Evaluates how current statistical systems either are or are not adequately determining action, considering information use in health care policy; the new United Nations System of National Accounts; and some challenges in the area of international balance of payments accounts, with a focus on the U.S. system. Presents recommendations for improvements in the U.S. national accounts and in international statistics. Duncan is Vice President, Corporate Economist, and Chief Statistician at Dun & Bradstreet Corporation. Gross is Professor of Marketing and International Business at Cleveland State University. Bibliography; no index.

#### C5 ECONOMETRIC MODELING

BICKEL, PETER J., ET AL. *Efficient and adaptive estimation for semiparametric models*. Johns Hopkins Series in the Mathematical Sciences. Baltimore and London: Johns Hopkins University Press, 1993. Pp. xix, 560. \$95.00. ISBN 0-8018-4541-6.

JEL 94-1063

Addresses estimation in situations where one believes he or she has enough knowledge to model some features of the data parametrically but is unwilling to assume anything for other features. Demonstrates how the information bounds and methods of estimation developed in the contexts of non- and semiparametric models can be viewed as natural extensions and developments of the corresponding bounds and methods in the classical parametric model context. Applies these techniques in a broad range of models, illustrating the ease with which heuristic calculations of "optimal behavior" can be carried out. Develops the theory of information bounds for estimation of infinite-dimensional parameters. Presents a coherent heuristic view of the methods of estimation actually used in semiparametric models. Coauthors are Chris A. J. Klaassen, Ya'acov Ritov, and Jon A. Wellner. Bickel is at the University of California, Berkeley. Bibliography; author and subject indexes.

GRANGER, CLIVE W. J. AND TERÄSVIRTA, TIMO. *Modelling nonlinear economic relationships*. Oxford; New York; Toronto and Melbourne: Oxford University Press, 1993. Pp. x, 187. \$45.00, cloth; \$19.95, paper. ISBN 0-19-877319-6.

JEL 94-1064

Describes how to model nonlinear relationships between series and provides usable techniques for economists. Discusses basic concepts; some gen-

eral nonlinear models and tools for analysis; nonlinear models in economic theory; particular nonlinear multivariate models; long-memory models; linearity testing; building nonlinear models; forecasting, aggregation, and nonsymmetry; and strategies for nonlinear modeling. Illustrates some of the techniques presented by modeling industrial production and by considering a possible nonlinear relationship between U.S. GNP and an index of leading indicators. Granger is Professor of Economics at the University of California, San Diego. Teräsvirta is in the Research Department of the Bank of Norway, Oslo. Index.

NEWBOLD, PAUL AND BOS, THEODORE. *Introductory business and economic forecasting*. Second edition. Cincinnati: South-Western, College Division, [1990] 1994. Pp. x, 582. ISBN 0-538-82874-9.

JEL 94-1065

Provides an introduction to business forecasting methods suitable for undergraduate and M.B.A. students who have taken an introductory business statistics course. Discusses basic statistical concepts; correlation and the linear regression model; the multiple regression model; time series and their components; exponential smoothing algorithms; ARIMA models and the Box-Jenkins approach to forecasting; econometric forecasting models, leading indicators, and expectations; the relationships between, and extensions of, regression models, exponential smoothing algorithms, and ARIMA models; other quantitative forecasting methods; judgmental methods and technological forecasting; and the combination and evaluation of forecasts. Concludes with an overview of business forecasting methods. Newbold is at the University of Illinois, Champaign. Bos is at the University of Alabama, Birmingham. Selected bibliography; name and subject indexes.

#### C6 MATHEMATICAL METHODS AND PROGRAMMING

TAKAYAMA, AKIRA. *Analytical methods in economics*. Ann Arbor: University of Michigan Press, 1993. Pp. xix, 672. \$54.50, cloth; \$24.95, paper. ISBN 0-472-08135-7, pbk.

JEL 94-1066

Presents an exposition of the basic analytical economic tools in economics today and illustrates their applications to selected economic problems. Introduces some necessary mathematical background. Surveys the major results of nonlinear programming theory; discusses sensitivity analysis and its applications; and covers other selected topics in microeconomics. Discusses the economics of uncertainty and information, considering the expected utility hypothesis and its applications. Deals with basic concepts and stability properties in the theory of differential equations and some economic

applications; expounds the theory of linear differential equations on the plane; and offers some macroeconomic applications of the theory of differential equations. Explains the basic results of optimal control theory; considers a mathematical theorem for the infinite horizon optimal control problem; and deals with optimal control theory for the finite horizon case. Takayama is Vandever Professor of Economics at Southern Illinois University. Name and subject indexes.

See also: Book number *JEL 94-1069*

#### C7 GAME THEORY AND BARGAINING THEORY

BRAMS, STEVEN J. *Theory of moves*. Cambridge; New York and Melbourne: Cambridge University Press, 1994. Pp. xii, 248. \$54.95, cloth; \$17.95, paper. ISBN 0-521-45226-0. *JEL 94-1067*

Develops a theory that describes optimal strategic calculations in normal-form games in which the players can move and countermove from an initial state. Examines the rules of play of the theory of moves and illustrates how the starting point of play may matter. Discusses the anticipation problem that may arise when players must choose strategies simultaneously. Explores why players may find it in their interest to deliberately forego their best payoffs and move, at the start, to a state where they receive less. Discusses moving, order, and threat power and demonstrates how the possession of these powers can sometimes upset the Nash or nonmyopic equilibria—or stabilize nonequilibria—when there is an asymmetry in the capabilities of the two players because of a power imbalance. Considers how incomplete information may lead to misperception and deception in certain situations. Brams is Professor of Politics at New York University. Glossary; bibliography; index.

STRAFFIN, PHILIP D. *Game theory and strategy*. New Mathematical Library, vol. 36. Washington, D.C.: Mathematical Association of America, 1993. Pp. x, 244. \$27.50, paper. ISBN 0-88385-637-9. *JEL 94-1068*

Textbook intended for high school students and laymen, covering the most important ideas of mathematical game theory in an interdisciplinary context. Covers two-person zero-sum games, two-person non-zero-sum games, and  $n$ -person games. Intersperses the mathematical theory with applications of that theory in anthropology, social psychology, economics, politics, business, biology, and philosophy. Prerequisites are algebra and elementary analytic geometry. Includes end-of-chapter exercises. Straffin is Professor of Mathematics at Beloit College. Bibliography; index.

#### C8 DATA COLLECTION AND DATA ESTIMATION METHODOLOGY; COMPUTER PROGRAMS

ARBEL, AMI. *Exploring interior-point linear programming: Algorithms and software*. Foundations of Computing series. Cambridge and London: MIT Press, 1993. Pp. xxiv, 211. \$35.00, paper. ISBN 0-262-51073-1. *JEL 94-1069*

Presents theoretical background to interior-point linear programming algorithms and serves as an expanded user's guide to a software package included with the book. The software package implements three interior-point linear programming algorithms, comes on a 3½ inch diskette, and is designed for use on IBM-PC microcomputers and compatibles operating under the DOS operating system. Suitable for upper-level undergraduate or graduates courses dealing specifically with the topic of interior-point linear programming algorithms or as a supplementary text for courses in operations research, management science, and applied mathematics dealing with the topic of linear programming. Part 1 discusses the modeling of linear programming problems, reviews the simplex algorithm, and introduces an interior-point linear programming algorithm. Part 2 describes the interior-point algorithms implemented in the software accompanying the book. Part 3 provides the complete user's guide to the software package. Arbel is Professor in the Department of Industrial Engineering at Tel Aviv University. Selected bibliography; index.

BRYMAN, ALAN AND BURCESS, ROBERT G., eds. *Analyzing qualitative data*. London and New York: Routledge, 1994. Pp. xii, 232. \$62.50. ISBN 0-415-06062-1. *JEL 94-1070*

Eleven papers demonstrate that a range of approaches are involved in qualitative data analysis and suggest different ways in which qualitative data can be handled to overcome problems with these data. Papers focus on fieldwork; analyzing the step-family; analyzing discourse; some problems in analyzing a feminist project; linking qualitative and quantitative data analysis; recollections of a team approach; multisite case study research; the transition from filing cabinet to computer; qualitative data analysis for applied policy research; patterns of crisis behavior; and reflections on qualitative data analysis. Contributors are mainly social scientists. Bryman is at Loughborough University. Burgess is at the University of Warwick. Name and subject indexes.

FRUDE, NEIL. *A guide to SPSS/PC +*. Second edition. New York; London; Heidelberg and Tokyo: Springer, [1987] 1993. Pp. xvi, 336. \$39.00, paper. ISBN 0-387-91442-0. *JEL 94-1071*

Presents a progressive tutorial for SPSS/PC + — the PC version of the Statistical Package for the Social Sciences. Provides step-by-step instructions for collecting information from a survey and then using SPSS/PC + to analyze the data. Serves as a stand-alone text for simple analyses and as an introduction to the information provided in the more comprehensive SPSS/PC + manuals. Frude is a senior lecturer in the School of Psychology at the University of Wales, Cardiff. Index.

HECK, ANDRE. *Introduction to Maple*. New York; London; Heidelberg and Tokyo: Springer, 1993. Pp. xiii, 497. \$39.00. ISBN 0-387-97662-0.

JEL 94-1072

Introduces the modern computer algebra system Maple, which automates the symbolic, numeric, and graphical computation involved in mathematical problem solving. Assumes the reader uses Maple V Release 2. Discusses computer algebra and examines its advantages and limitations. Presents a detailed, step-by-step exposition of Maple as a symbolic calculator, discussing how to assign a name to a value and how to unassign a variable; practical information that will help the user to get around with Maple; polynomials and rational functions; internal data representation and substitution; manipulation of polynomials and rational expressions; functions; differentiation; integration and summation; truncated series expansions, power series, and limits; composite data types; simplification of expressions containing mathematical functions; graphics; solving equations; differential equations; and linear algebra. Includes end-of-chapter exercises. Heck is Managing Director of the CAN Expertise Center in Amsterdam. Bibliography; index.

REDFERN, DARREN. *The Maple handbook*. New York; Heidelberg; London and Tokyo: Springer, 1993. Pp. 497. \$29.00, paper. ISBN 0-387-94054-5.

JEL 94-1073

Provides a complete reference tool for the Maple language, detailing all the built-in mathematical, graphic, and system-based commands available in Maple V Release 2 symbolic computation language. Lists commands with their explanations under the following headings: calculus; linear algebra; solving equations; polynomials and common transformations; geometry; combinatorics and graph theory; number theory; standard functions and constants; expression manipulation; plotting; programming and system commands; and miscellaneous. Includes an introductory overview of Maple and directions on getting started. Redfern is at Practical Approach, Stratford, Ontario. Index.

See also: Book number JEL 94-1370

## C9 DESIGN OF EXPERIMENTS

See also: Book number JEL 94-1176

## D Microeconomics

### D0 GENERAL

See also: Book number JEL 94-1039

### D1 HOUSEHOLD BEHAVIOR AND FAMILY ECONOMICS

BECKER, GARY S. *A treatise on the family*. Paperback reprint. Cambridge and London: Harvard University Press, [1981] 1991, Pp. xii, 424. \$19.95, paper. ISBN 0-674-90699-3. JEL 94-1074

Second enlarged edition is now available in paperback. [See JEL no. 92-0059 for the annotation.]

BOCOCK, ROBERT. *Consumption*. Key Ideas series. London and New York: Routledge, 1993. Pp. xii, 131. \$12.95, paper. ISBN 0-415-06962-9.

JEL 94-1075

Presents a Gramscian analysis of consumption in capitalism, focusing on consumption as a social and cultural process. Discusses the ways in which sociologists have studied consumption and how they have seen its role in the twentieth century. Provides an overview of consumption patterns in Great Britain since the end of the Second World War. Examines the main theoretical concepts that are relevant to the analysis of modern consumption, including the concepts of commodities, cultural values, and alienation. Discusses the social scientists who were influenced by the work of structuralists on language and symbols and the importance of their work for the analysis of consumption. Examines ideas about identity and their relationship to the study of consumption and assesses the usefulness of a Lacanian approach in understanding modern, or postmodern, consumption, especially in relation to desires and changes in the social and cultural construction of identity. Reflects upon where modern consumption may be heading and its impact on other social institutions such as religion. Bocock is Senior Lecturer in Sociology at the Open University. Bibliography; author and subject indexes.

COSTA, JANEEN ARNOLD AND BELK, RUSSELL W., eds. *Research in consumer behavior*. Volume 6. Greenwich, Conn. and London: JAI Press, 1993. Pp. viii, 260. \$73.25. ISBN 1-55938-497-2.

JEL 94-1076

Eight papers examine current research in consumer behavior. Dennis W. Rook and Meryl Paula Gardner focus on impulse buying. Annamma Joy explores corporations as consumers of art. Aaron