

REFERENCES

- Abbott, M. and Ashenfelter, O. (1976). Labor supply, commodity demand, and the allocation of time. *Review of Economic Studies*, 43, 389–412.
- Adcock, R. J. (1878). A problem in least squares. *Analyst*, 5, 53–54.
- Allen, R. C. and Diewert, W. E. (1981). Direct versus implicit superlative index number formulae. *Review of Economics and Statistics*, 63, 430–435.
- Amemiya, T. (1974). The nonlinear two-stage estimator. *Journal of Econometrics*, 105–110.
- Amemiya, T. (1975). The nonlinear limited information maximum likelihood estimator and the modified nonlinear two-stage least squares estimator. *Journal of Econometrics*, 375–386.
- Amemiya, T. (1977). The maximum likelihood and the nonlinear three-stage least squares estimator in the general nonlinear simultaneous equation models. *Econometrica*, 49, 955–968.
- Anderson, T. W. (1984). *An Introduction to Multivariate Statistical Analysis*, 2nd Edition, New York: Wiley.
- Anderson, R. G., Jones, B. E. and Nesmith, T. D. (1997a). Monetary aggregation theory and statistical index numbers. *Federal Reserve Bank of St. Louis Review* (Jan/Feb).
- Anderson, R. G., Jones, B. E. and Nesmith, T. D. (1997b). Building new monetary services indexes: data and methods. *Federal Reserve Bank of St. Louis Review* (Jan/Feb).
- Arrow, K. J. (1962). The economic implications of learning by doing. *Review of Economic Studies*, 29, 155–173.
- Arrow, K. J. and Hahn, F. H. (1971). *General Competitive Analysis*, San Francisco: Holden-Day.
- Ash, R. B. (1972). *Real Analysis and Probability*, New York: Academic Press.
- Ashley, R. A. and Patterson, D. M. (1989). Linear versus nonlinear macroeconomies: a statistical test. *International Economic Review*, 30, 685–704.
- Ashley, R. A., Patterson, D. and Hinich, M. J. (1986). A diagnostic test for nonlinear serial dependence in time series fitting errors. *Journal of Time Series Analysis*, 7(3), 165–178.
- Atkinson, S. E. (1979). Responsiveness of time-of-day electricity pricing. *Journal of Econometrics*, 9, 79–95.
- Bahadur, R. R. (1964). On Fisher's bound for asymptotic variances. *Annals of Mathematical Statistics*, 35(4), 1545–1552.

- Baltensperger, E. (1980). Alternative approaches to the theory of the banking firm. *Journal of Monetary Economics*, 6, January, 1–37.
- Banker, R. D., Charnes, A., Cooper, W. W. and Maindiratta, A. (1982). *A Comparison of DEA and Translog Estimates of Production Frontiers using Simulated Observations from a Known Technology*, Austin: Center for Cybernetic Studies Paper 452, University of Texas.
- Bard, Y. (1973). *Nonlinear Parameter Estimation*, New York: Academic Press Inc.
- Barnett, W. A. (1974a). *Maximum Likelihood Estimation of Nonlinear Systems of Equations*, FRB Special Studies Paper 50, Washington, DC: Board of Governors of the Federal Reserve System.
- Barnett, W. A. (1974b). *The Full-Employment Equivalent Price of Leisure*, Special Studies Paper 52, Washington, DC: Board of Governors of the Federal Reserve System.
- Barnett, W. A. (1976). Maximum likelihood and iterated Aitken estimation of nonlinear systems of equations. *Journal of the American Statistical Association*, 71, 354–360 (Reprinted in this volume as Chapter 19).
- Barnett, W. A. (1977a). Recursive subaggregation and a generalized hypocycloidal demand model. *Econometrica*, 45, 1117–1136 (Reprinted in this volume as Chapter 11).
- Barnett, W. A. (1977b). Pollak and Wachter on the household production function approach. *Journal of Political Economy*, 85, 1073–1082 (Reprinted in this volume as Chapter 18).
- Barnett, W. A. (1978). The user cost of money. *Economic Letters*, 1, 145–149 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 1, North-Holland).
- Barnett, W. A. (1979a). The joint allocation of leisure and goods expenditure. *Econometrica*, 45, 1117–1136 (Reprinted in this volume as Chapter 2).
- Barnett, W. A. (1979b). Random sets and confidence procedures. *Rocky Mountain Journal of Mathematics*, 9, 453–461 (Reprinted in this volume as Chapter 21).
- Barnett, W. A. (1979c). Theoretical foundations for the Rotterdam model. *Review of Economic Studies*, 46, 109–130 (Reprinted in this volume as Chapter 1).
- Barnett, W. A. (1980a). Economic monetary aggregates: an application of index number and aggregation theory. *Journal of Econometrics*, 14, 11–48 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 2, North-Holland).
- Barnett, W. A. (1980b). Economic monetary aggregates: reply. *Journal of Econometrics*, 14, 57–59.
- Barnett, W. A. (1981a). *Consumer Demand and Labor Supply: Goods, Monetary Assets, and Time*, Amsterdam: North-Holland.
- Barnett, W. A. (1981b). The new monetary aggregates: a comment. *Journal of Money, Credit, and Banking*, 13, 485–489.
- Barnett, W. A. (1982a). "Divisia indices," in *Encyclopedia of Statistical Sciences*, S. Kotz and N. L. Johnson (eds.), vol. 2, New York: Wiley (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 5, North-Holland).

- Barnett, W. A. (1982b). The optimal level of monetary aggregation. *Journal of Money, Credit, and Banking*, 14(4, pt. 2), 687–710 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 7, North-Holland).
- Barnett, W. A. (1982c). The flexible Laurent demand system. *Proceedings of the 1982 American Statistical Association Meetings*, Business and Economic Statistic Section, 77, 82–89.
- Barnett, W. A. (1983a). New indices of money supply and the flexible Laurent demand system. *Journal of Business and Economic Statistics*, 1, 7–23 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 16, North-Holland).
- Barnett, W. A. (1983b). Definitions of second order approximation and of flexible functional form. *Economics Letters*, 12, 31–35 (Reprinted in this volume as Chapter 3).
- Barnett, W. A. (1983c). The recent reappearance of the homotheticity restriction on preferences. *Journal of Business and Economic Statistics*, 1, 215–218 (Reprinted in this volume as Chapter 13).
- Barnett, W. A. (1983d). Understanding the new Divisia monetary aggregates. *Review of Public Data Use*, 11, 349–355 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 4, North-Holland).
- Barnett, W. A. (1984a). On the flexibility of the Rotterdam model: a first empirical look. *European Economic Review*, 24, 285–289.
- Barnett, W. A. (1984b). Recent monetary policy and the Divisia monetary aggregates. *American Statistician*, 38, 165–172 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 23, North-Holland).
- Barnett, W. A. (1985). The minflex–Laurent translog flexible functional form. *Journal of Econometrics*, 30, 33–44 (Reprinted in this volume as Chapter 5).
- Barnett, W. A. (1987). "The microeconomic theory of monetary aggregation," in *New Approaches to Monetary Economics*, W. A. Barnett and K. Singleton (eds.), Cambridge, MA: University Press, 115–168 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 3, North-Holland).
- Barnett, W. A. (1990). Developments in monetary aggregation theory. *Journal of Policy Modeling*, 12(2), 205–257.
- Barnett, W. A. (1991). "A reply," in *Monetary Policy on the 75th Anniversary of the Federal Reserve System*, M. T. Belongia (ed.), Dordrecht: Kluwer Academic, 232–244 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 14, North-Holland).
- Barnett, W. A. and Chen, P. (1986). Economic theory as a generator of measurable attractors. *Mondes en Développement*, 14(453), 13–28 (Reprinted in *Laws Of Nature and Human Conduct: Specificities and Unifying Themes*, I. Prigogine and M. Sanglier (eds.), Brussels: GORDES, 209–224).
- Barnett, W. A. and Chen, P. (1988a). "The aggregation theoretic monetary aggregates are chaotic and have strange attractors: an econometric application of mathematical chaos," in *Dynamic Econometric Modeling*, Proceedings of the 3rd International

- Symposium on Economic Theory and Econometrics, W. A. Barnett, E. Berndt and H. White (eds.), Cambridge, MA: Cambridge University Press, 199–246 (Reprinted in this volume as Chapter 22).
- Barnett, W. A. and Chen, P. (1988b). Deterministic chaos and fractal attractors as tools for nonparametric dynamical econometric inference. *Journal of Mathematical Modeling*, 10(4), 275–296.
- Barnett, W. A. and Choi, S. (1989a). A Monte Carlo study of tests of blockwise weak separability. *Journal of Business and Economic Statistics*, 7, 363–377 (Reprinted in this volume as Chapter 12).
- Barnett, W. A. and Choi, S. (1989b). “A comparison between the conventional econometric approach to structural inference and the nonparametric chaotic attractor approach,” in *Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity*, Proceedings of the Fourth International Symposium in Economic Theory and Econometrics, W. A. Barnett, J. Geweke and K. Shell (eds.), Cambridge, MA: Cambridge University Press, 141–212.
- Barnett, W. A. and Hahn, H. J. (1994). Financial firm production of monetary services: a generalized symmetric Barnett variable profit function approach. *Journal of Business and Economic Statistics*, 12, 33–46 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 20, North-Holland, and in the current volume as Chapter 15).
- Barnett, W. A. and Hinich, M. J. (1992). Empirical chaotic dynamics in economics. *Annals of Operations Research*, 37, 1–15.
- Barnett, W. A. and Hinich, M. J. (1993). “Has chaos been discovered with economic data,” in *Evolutionary Dynamics and Nonlinear Economics*, P. Chen and R. Day (eds.), Oxford: Oxford University Press, 254–263 (Reprinted in this volume as Chapter 25).
- Barnett, W. A. and Jonas, A. (1983). The Müntz-Szatz demand system: an application of a globally well behaved series expansion. *Economics Letters*, 11, 337–342 (Reprinted in this volume as Chapter 8).
- Barnett, W. A. and Lee, Y. W. (1985). The global properties of the minflex Laurent, generalized Leontief and translog flexible functional forms. *Econometrica*, 53, 1421–1437 (Reprinted in this volume as Chapter 4).
- Barnett, W. A. and Lee, Y. W. (1987). The Laurent series approach to structural modeling. *European Journal of Operations Research*, 30(3), 270–279.
- Barnett, W. A. and Pasupathy, M. (2003). Regularity of the generalized quadratic production model: a counterexample. *Econometric Reviews*, 22(2), 135–154.
- Barnett, W. A. and Serletis, A. (1990). A dispersion dependency diagnostic test for aggregation error: with applications to monetary economics and income distribution. *Journal of Econometrics*, 43, 5–43 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 9, North-Holland).
- Barnett, W. A. and Xu, H. (1996). An investigation of recent empirical paradoxes in monetary economics. *International Review of Comparative Public Policy*, 8, 139–155.
- Barnett, W. A. and Yue, P. (1988a). The Asymptotically Ideal Model (AIM), Working paper.

- Barnett, W. A. and Yue, P. (1988b). "Semiparametric estimation of the asymptotically ideal model: the AIM demand system," in *Advances in Econometrics, Nonparametric and Robust Inference*, G. Rhodes and T. Fomby (eds.), vol. 7, JAI Press, 229–252, (Reprinted in this volume as Chapter 9).
- Barnett, W. A., Kopecky, K. J. and Sato, R. (1981a). Estimation of implicit utility demand models. *European Economic Review*, 15, 247–259.
- Barnett, W. A., Offenbacher, E. K. and Spindt, P. A. (1981b). New concepts of aggregated money. *Journal of Finance*, 36, 497–505 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 8, North-Holland).
- Barnett, W. A., Offenbacher, E. K. and Spindt, P. A. (1984). The new Divisia monetary aggregates. *Journal of Political Economy*, 92, 1049–1085 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 17, North-Holland).
- Barnett, W. A., Lee, Y. W. and Wolfe, M. D. (1985). The three-dimensional global properties of the Minflex Laurent, generalized Leontief, and translog flexible functional forms. *Journal of Econometrics*, 30, 3–31 (Reprinted in this volume as Chapter 6).
- Barnett, W. A., Hinich, M. J. and Weber, W. E. (1986). The regulatory wedge between the demand-side and supply-side aggregation-theoretic monetary aggregates. *Journal of Econometrics*, 33, 165–185 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 19, North-Holland).
- Barnett, W. A., Lee, Y. W. and Wolfe, M. D. (1987). The global properties of the two Minflex Laurent flexible functional forms. *Journal of Econometrics*, 36, 281–298 (Reprinted in this volume as Chapter 7).
- Barnett, W. A., Geweke, J. and Wolfe, M. D. (1991a). "Seminonparametric Bayesian estimation of applied general equilibrium models," in *Equilibrium Theory and Applications*, Proceedings of the Sixth International Symposium in Economic Theory and Econometrics, W. A. Barnett, A. Mas-Colell, J. Drèze, C. D'Aspremont and B. Cornet (eds.), Cambridge, MA: Cambridge University Press, 425–480.
- Barnett, W. A., Geweke, J. and Wolfe, M. (1991b). Seminonparametric Bayesian estimation of the asymptotically ideal production model. *Journal of Econometrics*, 49, 5–50 (Reprinted in this volume as Chapter 14).
- Barnett, W. A., Geweke, J. and Yue, P. (1991c). "Seminonparametric Bayesian estimation of the asymptotically ideal model: the AIM demand system," in *Nonparametric and Semiparametric Methods*, W. A. Barnett, J. Powell and G. Tauchen (eds.), Cambridge, MA: Cambridge University Press, 127–173 (Reprinted in this volume as Chapter 10).
- Barnett, W. A., Fisher, D. and Serletis, A. (1992). Consumer theory and the demand for money. *Journal of Economic Literature*, 30, 2086–2119 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 18, North-Holland).
- Barnett, W. A., Kirova, M. and Pasupathy, M. (1995a). Estimating policy invariant deep parameters in the financial sector, when risk and growth matter. *Journal of Money, Credit, and Banking*, 27, 1402–1430 (Reprinted in *The Theory of Monetary Aggregation*, W. A. Barnett and A. Serletis (eds.), 2000, Chapter 22, North-Holland).

- Barnett, W. A., Gallant, A. R., Hinich, M. J., Jungeilges, J., Kaplan, D. T. and Jensen, M. J. (1995b). Robustness of nonlinearity and chaos tests to measurement error, inference method, and sample size. *Journal of Economic Behavior and Organization*, 27, 301–320 (Reprinted in this volume as Chapter 23).
- Barnett, W. A., Jones, B. E. and Nesmith, T. D. (1996a). Divisia second moments: an application of stochastic index number theory. *International Review of Comparative Public Policy*, 8, 115–138.
- Barnett, W. A., Gallant, A. R., Hinich, M. J., Jensen, M. J. and Jungeilges, J. A. (1996b). "Comparisons of the available tests for nonlinearity and chaos," in *Dynamic Disequilibrium Modeling: Theory and Applications*, W. A. Barnett, G. Gandolfo and C. Hillinger (eds.), Cambridge, MA: Cambridge University Press, 313–346.
- Barnett, W. A., Gallant, A. R., Hinich, M. J., Jungeilges, J., Kaplan, D. and Jensen, M. J. (1996c). "An experimental design to compare tests of nonlinearity and chaos," in *Nonlinear Dynamics in Economics*, W. A. Barnett, A. Kirman and M. Salmon (eds.), Cambridge, MA: Cambridge University Press, 163–191.
- Barnett, W. A., Gallant, A. R., Hinich, M. J., Jungeilges, J., Kaplan, D. and Jensen, M. J. (1997). A single-blind controlled competition between tests for nonlinearity and chaos. *Journal of Econometrics*, 82, 157–192 (Reprinted in this volume as Chapter 26).
- Barnett, W. A., Hinich, M. J. and Yue, P. (2000). The exact theoretical rational expectations monetary aggregate. *Macroeconomic Dynamics*, 4(2), 197–221.
- Bartelsman, E. J. (1995). Of empty boxes: returns to scale revisited. *Economics Letters*, 49, 59–67.
- Barten, A. P. (1964). Consumer demand functions under conditions of almost additive preferences. *Econometrica*, 32, 1–38.
- Barten, A. P. (1968). Estimating demand functions. *Econometrica*, 36, 213–351.
- Barten, A. P. (1969). Maximum likelihood estimation of a complete system of demand equations. *European Economic Review*, 1, 7–73.
- Barten, A. P. (1974). Complete systems of demand equations: some thoughts about aggregation and functional form. *Recherches Economiques de Louvain*, 40, 1–18.
- Basmann, R. L., Molina, D. J. and Slottje, D. J. (1983). Budget constraint prices as preference changing parameters of generalized Fechner-Thurstone direct utility functions. *American Economic Review*, 73, 411–413.
- Bell, F. W. and Murphy, N. B. (1968). Costs in commercial banking: a quantitative analysis of bank behavior and its relation to bank regulation, Research Report No. 41, Federal Reserve Bank of Boston.
- Belongia, M. T. and Chalfant, J. A. (1989). The changing empirical definition of money: some estimates from a model of the demand for money substitutes. *Journal of Political Economy*, 97, 387–397.
- Ben-Mizrachi, A., Procaccia, P. and Grassberger, P. (1984). Characterization of experimental (noisy) strange attractors. *Physical Review A*, 29, 975–977.
- Benhabib, J. and Day, R. H. (1980). Erratic accumulation. *Economics Letters*, 6(2), 113–117.

- Benhabib, J. and Day, R. H. (1981). Rational choice and erratic behavior. *Review of Economic Studies*, 48, 459–471.
- Benhabib, J. and Day, R. H. (1982). A characterization of erratic dynamics in the overlapping generations model. *Journal of Economic Dynamics and Control*, 4, 27–55.
- Bennettin, G., Galgani, L., Giorgilli, A. and Strelcyn, J. M. (1980). Lyapunov characteristic exponents for smooth dynamical systems: a method for computing all of them. *Meccanica*, 15, 21–30.
- Benston, G. J. (1965). Branch banking and economies of scale. *Journal of Finance*, 20, 312–341.
- Benston, G. J., Hanweck, G. A. and Humphrey, D. B. (1982). Scale economies in banking: a restructuring and reassessment. *Journal of Money, Credit, and Banking*, 14, 435–456.
- Benston, G. J., Berger, A. N., Hanweck, G. A. and Humphrey, D. B. (1983). Economies of scale and scope in banking, Research Paper in Banking and Financial Economics, Board of Governors of the Federal Reserve System, June.
- Berge, C. (1963). *Topological Spaces*, New York: Macmillan.
- Berger, J. O. and Wolpert, R. L. (1984). *The Likelihood Principle*, The Institute of Mathematical Statistics.
- Bernanke, B. and Gertler, M. (1987). "Banking and macroeconomic equilibrium," in *New Approaches to Monetary Economics*, W. A. Barnett and K. J. Singleton (eds.), Cambridge, MA: Cambridge University Press, 89–111.
- Berndt, E. R. and Christensen, L. R. (1973a). The internal structure of functional relationships: separability, substitution, and aggregation. *Review of Economic Studies*, 40(3), 403–410.
- Berndt, E. R. and Christensen, L. R. (1973b). The translog function and the substitution of equipment, structure, and labor in US manufacturing 1929–68. *Journal of Econometrics*, 1, 81–113.
- Berndt, E. R. and Christensen, L. R. (1974). Testing for the existence of a consistent aggregate index of labor inputs. *American Economic Review*, 64, 391–404.
- Berndt, E. R. and Khaled, M. S. (1979). Parametric productivity measurement and choice among flexible functional forms. *Journal of Political Economy*, 87(6), 1220–1245.
- Berndt, E. R., Hall, B. H., Hall, R. E. and Hausman, J. A. (1974). Estimation and inference in nonlinear structural models. *Annals of Economic and Social Measurement*, 3, 653–666.
- Berndt, E. R., Diewert, W. E. and Darrough, M. N. (1977). Flexible functional forms and expenditure distributions: an application to Canadian consumer demand functions. *International Economic Review*, 18, 651–676.
- Betancourt, R. R. (1971). The estimation of price elasticities from cross section data under additive preferences. *International Economic Review*, 12, 283–292.
- Bhattacharya, S. and Gale, D. (1987). "Preference shocks, liquidity, and Central Bank policy," in *New Approaches to Monetary Economics*, W. A. Barnett and K. J. Singleton (eds.), Cambridge, MA: Cambridge University Press, 69–88.

- Bickel, P. J. (1967). "Some contributions to the theory of order statistics," in *Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability*, L. M. Le Cam and J. Neyman (eds.), California: University of California Press, 575–591.
- Bickel, P. J. and Bühlmann, P. (1996). What is a linear process? *Proceedings of the National Academy of Science*, 93(12), 128–131 (USA Statistics Section).
- Bierens, H. (1990). A consistent conditional moment test of functional form. *Econometrica*, 58, 1443–1458.
- Billingsley, P. (1968). *Convergence of Probability Measures*, New York: Wiley.
- Birnbaum, Z. W. (1952). Numerical tabulation of the distribution of Kolmogorov's statistic for finite sample size. *Journal of the American Statistical Association*, 47, 425–441.
- Blackorby, C. and Russell, R. R. (1976). Functional structure and the Allen partial elasticities of substitution: an application of duality theory. *Review of Economic Studies*, 43, 285–292.
- Blackorby, C., Boyce, R., Nissen, D. and Russell, R. (1975). Estimation of demand systems generated by the Gorman polar form; a generalization of the S-branch utility tree, Discussion Paper No. 74-17, Department of Economics, University of California, San Diego.
- Blackorby, C., Primont, D. and Russell, R. R. (1975). On the flexibility of flexible functional forms, Discussion Paper No. 75-02, University of British Columbia.
- Blackorby, C., Primont, D. and Russell, R. R. (1977). On testing separability restrictions with flexible functional forms. *Journal of Econometrics*, 5, 195–209.
- Blackorby, C., Primont, D. and Russell, R. R. (1978). *Duality, Separability, and Functional Structure: Theory and Economic Applications*, Amsterdam: North-Holland.
- Blackorby, C., Schworm, W. and Fisher, T. (1986). Testing for the existence of input aggregates in an economy production function, Working Paper No. 86-26, Department of Economics, University of British Columbia.
- Blatt, J. M. (1978). On the econometric approach to business-cycle analysis. *Oxford Economic Papers*, 30, 292–300.
- Bliss, C. J. (1975). *Capital Theory and the Distribution of Income*, Amsterdam: North-Holland.
- Board of Governors of the Federal Reserve System, (1979–1983). *Functional Cost Analysis*, Washington, DC: Federal Reserve Board.
- Board of Governors of the Federal Reserve System, (1983). *Functional Cost Analysis: 1983 Average Banks*, Washington, DC: Federal Reserve Board.
- Bowden, R. (1973). The theory of parametric identification. *Econometrica*, 41, 1069–1074.
- Bowman, K. O. and Shenton, L. R. (1975). Omnibus contours for departures from normality based on $\sqrt{b_1}$ and b_2 . *Biometrika*, 62, 243–250.
- Box, G. E. P. and Jenkins, G. M. (1970). *Time Series Analysis-Forecasting and Control*, Holden-Day.
- Brainard, W. and Tobin, J. (1963). Financial intermediaries and the effectiveness of monetary control. *American Economic Review*, 53, 383–400.
- Brainard, W. and Tobin, J. (1968). Pitfalls in financial model building. *American Economic Review*, 58, 99–122.

- Brillinger, D. R. (1965). An introduction to polyspectrum. *Annals of Mathematical Statistics*, 36, 1351–1374.
- Brillinger, D. R. and Rosenblatt, M. (1967a). "Asymptotic theory of k th order spectra," in *Spectral Analysis of Time Series*, B. Harris (ed.), New York: Wiley, 153–188.
- Brillinger, D. R. and Rosenblatt, M. (1967b). "Computation and interpretation of k th order spectra," in *Spectral Analysis of Time Series*, B. Harris (ed.), New York: Wiley, 189–232.
- Brock, W. (1986). Distinguishing random and deterministic systems: abridged version. *Journal of Economic Theory*, 40(1), 168–194.
- Brock, W. A. and Dechert, W. D. (1988). "Theorems on distinguishing deterministic and random systems," in *Dynamic Econometric Modelling*, Proceedings of the Third International Symposium in Economic Theory and Econometrics, W. A. Barnett, E. Berndt and H. White (eds.), Cambridge, MA: Cambridge University Press, 247–268.
- Brock, W. A. and Sayers, C. L. (1988). Is the business cycle characterized by deterministic chaos? *Journal of Monetary Economics*, 22(1), 71–90.
- Brock, W. A., Dechert, W. D. and Scheinkman, J. (1986). *A Test for Independence Based on the Correlation Dimension*, USA: University of Wisconsin-Madison and University of Chicago.
- Brock, W. A., Hsieh, D. A. and LeBaron, B. (1991). *Nonlinear Dynamics, Chaos, and Instability: Statistical Theory and Economic Evidence*, Cambridge, MA: MIT Press.
- Brock, W. A., Lakonishok, J. and LeBaron, B. (1992). Simple technical trading rules and the stochastic properties of stock returns. *Journal of Finance*, 1731–1764.
- Brock, W. A., Dechert, W. D., Scheinkman, J. and LeBaron, B. (1996). A test for independence based on the correlation dimension. *Econometric Reviews*, 15(3), 197–235.
- Brockett, P. L., Hinich, M. and Wilson, G. R. (1987). Nonlinear and non-Gaussian ocean noise. *Journal of Acoustic Society of America*, 82(4), 1386–1394.
- Brockett, P. L., Hinich, M. J. and Patterson, D. (1988). Bispectral-based test for the detection of Gaussianity and linearity in time series. *Journal of the American Statistical Association*, 83(403), 657–664.
- Brockwell, P. and Davis, R. (1991). *Time Series: Theory and Method*, Berlin: Springer.
- Broomhead, D. S., Huke, J. P. and Muldoon, M. R. (1992). Linear filters and non-linear systems. *Journal of the Royal Statistical Society B*, 54, 373–382.
- Brown, M. and Heien, D. H. (1972). The S-branch utility tree: a generalization of the linear expenditure system. *Econometrica*, 40, 737–747.
- Brown, R. S., Caves, D. and Christensen, L. (1979). Modelling the structure of cost and production for multiproduct firms. *Southern Economic Journal*, 46(1), 256–273.
- Buck, R. C. (1965). *Advanced Calculus*, New York: McGraw-Hill.
- Bunow, B. and Weiss, G. H. (1979). How chaotic is chaos? Chaotic and other 'noisy' dynamics in the frequency domain. *Mathematical Biosciences*, 47, 221–237.
- Burgess, D. F. (1974). A cost minimization approach to import demand equations. *Review of Economics and Statistics*, 56, 225–234.

- Byron, R. P. (1970). A simple method for estimating demand systems under separable utility assumptions. *Review of Economic Studies*, 37, 261–274.
- Byron, R. P. (1984). On the flexibility of the Rotterdam model. *European Economic Review*, 24, 285–289.
- Casdagli, M., Eubank, S., Farmer, J. D. and Gibson, J. (1991). State space reconstruction in the presence of noise. *Physica D*, 51, 52–98.
- Caves, D. W. and Christensen, L. R. (1980a). Global properties of flexible functional forms. *American Economic Review*, 70, 422–432.
- Caves, D. W. and Christensen, L. R. (1980b). Econometric analysis of residential time-of-use electricity pricing experiments. *Journal of Econometrics*, 14, 287–306.
- Caves, D. W., Christensen, L. R. and Diewert, W. E. (1982a). Multilateral comparisons of output, input, and productivity using superlative index numbers. *Economic Journal*, 92, 73–86.
- Caves, D. W., Christensen, L. R. and Diewert, W. E. (1982b). The economic theory of index numbers and the measurement of input, output, and productivity. *Econometrica*, 50, 1393–1414.
- Chalfant, J. A. (1987). A globally flexible, almost ideal demand system. *Journal of Business and Economic Statistics*, 5(2), 233–242.
- Chalfant, J. A. and Gallant, A. R. (1985). Estimating substitution elasticities with the Fourier cost function. *Journal of Econometrics*, 28, 205–222.
- Charnes, A., Cooper, W. W. and Schinnar, A. (1982). Transforms and approximations in cost and production function relations. *Omega*, 10, 207–211.
- Chen, P. (1987). Nonlinear Dynamics and Business Cycles, Ph.D. Thesis, University of Texas, Austin, USA.
- Chipman, J. S. (1974). Homothetic preferences and aggregation. *Journal of Economic Theory*, 8, 26–38.
- Christensen, L. R. (1968). Savings and the Rate of Return, Ph.D. Thesis, University of California, Berkeley, USA.
- Christensen, L. R. (1975). Transcendental logarithmic utility functions. *American Economic Review*, 65, 367–383.
- Christensen, L. R. and Manser, M. E. (1977). Estimating US consumer preferences for meats with a flexible utility function. *Journal of Econometrics*, 5, 37–53.
- Christensen, L. R., Jorgenson, D. W. and Lau, L. J. (1971). Conjugate duality and the transcendental logarithmic production function. *Econometrica*, 39, 255–256.
- Christensen, L. R., Jorgenson, D. W. and Lau, L. J. (1973). Transcendental logarithmic production frontiers. *Review of Economics and Statistics*, 55, 28–45.
- Christensen, L. R., Jorgenson, D. W. and Lau, L. J. (1975). Transcendental logarithmic utility functions. *American Economic Review*, 65, 367–383.
- Christiano, L. J. (1986). Money and the US economy in the 1980's: a break from the past. *Federal Reserve Bank of Minneapolis Quarterly Review*, 2–13.
- Chrystal, K. A. and MacDonald, R. (1994). Empirical evidence on the recent behavior and usefulness of the simple sum and weighted measures of the money stock. *Federal Reserve Bank of St Louis Review*, March/April, 73–109.

- Chung, K. L. (1968). *A Course in Probability Theory*, Brace & World.
- Clark, J. A. (1984). Estimation of economies of scale in banking using a generalized functional form. *Journal of Money, Credit and Banking*, 16, 53–75.
- Collet, P. and Eckmann, J. (1980). *Iterated Maps on the Interval as Dynamical Systems*, Basel: Birkhauser.
- Crutchfield, J. P. and Farmer, J. D. (1982). Fluctuations and simple chaotic dynamics. *Physics Report*, 92, 45–82.
- Dalal, A. (1983). A third-order translog cost function. *Rivista Internationale Di Scienze Economiche E Commerciali*, 30, 355–360.
- Dalle Molle, J. W. and Hinich, M. J. (1991). "Cumulant spectra-based tests for the detection of coherent signal in noise," in *Proceedings of the International Signal Processing Workshop on Higher Order Statistics*, J. L. Lacoume, M. A. Lagunas and C. L. Nikias (eds.), 151–154.
- Dalle Molle, J. W. and Hinich, M. J. (1995). Trispectral analysis of stationary random time series. *Journal of the Acoustical Society of America*, 97(5), 2963–2978.
- Darrough, M. N. (1977). A model of consumption and leisure in an intertemporal framework: a systematic treatment using Japanese data. *International Economic Review*, 18, 677–696.
- Davidson, R. and Mackinnon, J. G. (1993). *Estimation and Inference in Econometrics*, Oxford: Oxford University Press.
- Day, R. H. (1982). Irregular growth cycles. *American Economic Review*, 72, 406–414.
- Day, R. H. (1983). The emergence of chaos from classical economic growth. *Quarterly Journal of Economics*, 54, 201–213.
- Day, R. H. (1985). Dynamical systems theory and complicated economic behaviour. *Environment and Planning B: Planning and Design*, 12, 55–64.
- Day, R. H. (1992). Complex economic dynamics: obvious in history, generic in theory, elusive in data. *Journal of Applied Econometrics*, 7, 19–23.
- DeCoster, G. P. and Mitchell, D. W. (1991a). Nonlinear monetary dynamics. *Journal of Business and Economic Statistics*, 9, 455–462.
- DeCoster, G. P. and Mitchell, D. W. (1991b). The efficacy of the correlation dimension technique in detecting determinism in small samples. *Journal of Statistical Computer Simulation*, 39, 221–229.
- DeCoster, G. P. and Mitchell, D. W. (1992). Dynamic implications of chaotic monetary policy. *Journal of Macroeconomics*, 14(2), 267–287.
- DeCoster, G. P. and Mitchell, D. W. (1994). Reply. *Journal of Business and Economic Statistics*, 12, 136–137.
- Deaton, A. (1974a). The analysis of consumer demand in the United Kingdom, 1900–1970. *Econometrica*, 42, 341–368.
- Deaton, A. (1974b). A Reconsideration of the empirical implications of additive preferences. *Economic Journal*, 84, 338–347.
- Deaton, A. and Muellbauer, J. (1980a). An almost ideal demand system. *American Economic Review*, 70, 312–326.

- Deaton, A. and Muellbauer, J. (1980b). *Economics and Consumer Behavior*, Cambridge, MA: Cambridge University Press.
- Debreu, G. (1959). *Theory of Value*, New York: Wiley.
- Debreu, G. (1974). Excess demand functions. *Journal of Mathematical Economics*, 1, 15–21.
- Delong, J. and Summers, L. (1984). Are business cycles symmetric? Harvard Institute of Economic Research Discussion Paper 1076.
- Denny, M. (1974). The relationship between functional forms for production systems. *Canadian Journal of Economics*, 7, 21–31.
- Denny, M. and Fuss, M. (1977). The use of approximation analysis to test for separability and the existence of consistent aggregates. *American Economic Review*, 67, 404–418.
- Denny, M. and Pinto, C. (1978). "An aggregate model with multi-product technologies," in *Production Economics: A Dual Approach to Theory and Applications*, M. Fuss and D. McFadden (eds.), vol. 2, Amsterdam: North-Holland, 53–70.
- Dhrymes, P. J. (1970). *Econometrics*, New York: Harper and Row.
- Diamond, D. W. and Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. *Journal of Political Economy*, 91, 401–419.
- Diewert, W. E. (1971). An application of the Shephard duality theorem: a generalized Leontief production function. *Journal of Political Economy*, 79, 481–507.
- Diewert, W. E. (1973a). Functional forms for profit and transformation functions. *Journal of Economic Theory*, 6, 284–316.
- Diewert, W. E. (1973b). *Separability and a Generalization of the Cobb–Douglas Cost, Production, and Indirect Utility Functions*, Ottawa: Research Branch, Department of Manpower and Immigration.
- Diewert, W. E. (1974a). "Applications of duality theory," in *Frontiers of Quantitative Economics*, M. D. Intriligator and D. A. Kendrick (eds.), vol. 2, Amsterdam: North-Holland, 106–171.
- Diewert, W. E. (1974b). A note on aggregation and elasticities of substitution. *Canadian Journal of Economics*, 7, 12–20.
- Diewert, W. E. (1974c). Intertemporal consumer theory and the demand for durables. *Econometrica*, 42, 497–516.
- Diewert, W. E. (1976a). Exact and superlative index numbers. *Journal of Econometrics*, 4, 115–145.
- Diewert, W. E. (1976b). Generalized Slutsky conditions for aggregate consumer demand functions, Discussion paper 76-05, University of British Columbia.
- Diewert, W. E. (1978). Superlative index numbers and consistency in aggregation. *Econometrica*, 46(4), 883–900.
- Diewert, W. E. (1980a). "Aggregation problems in the measurement of capital," in *The Measurement of Capital*, D. Usher (ed.), Chicago: University of Chicago Press, 433–538, (for the N.B.E.R.).
- Diewert, W. E. (1980b). "Reply by Diewert," in *The Measurement of Capital*, D. Usher (ed.), Chicago: University of Chicago Press (for the N.B.E.R.) 538.

- Diewert, W. E. (1981). "The economic theory of index numbers: a survey," in *Essays in the Theory and Measurement of Consumer Behaviour in Honour of Sir Richard Stone*, A. Deaton (ed.), Cambridge, MA: Cambridge University Press, 163–208.
- Diewert, W. E. (1993). "Symmetric means and choice under uncertainty," in *Essays in Index Number Theory, Contributions to Economic Analysis* 217, W. E. Diewert and A. O. Nakamura (eds.), vol. 1, Amsterdam: North-Holland, 355–433.
- Diewert, W. E. (1995a). On the stochastic approach to index numbers, Discussion Paper No. DP95-31, University of British Columbia.
- Diewert, W. E. (1995b). Functional form problems in modeling insurance and gambling. *The Geneva Papers on Risk and Insurance Theory*, 20, 135–150.
- Diewert, W. E. and Lawrence, D. A. (2002). "The deadweight costs of capital taxation in Australia," in *Efficiency in the Public Sector*, K. J. Fox (ed.), Dordrecht: Kluwer Academic Publishers, 103–167.
- Diewert, W. E. and Parkan, C. (1985). Tests for the consistency of consumer data. *Journal of Econometrics*, 30, 127–147.
- Diewert, W. E. and Wales, T. J. (1987). Flexible functional forms and global curvature conditions. *Econometrica*, 55, 43–68.
- Diewert, W. E. and Wales, T. J. (1988a). A normalized quadratic semiflexible functional form. *Journal of Econometrics*, 37, 327–342.
- Diewert, W. E. and Wales, T. J. (1988b). Normalized quadratic systems of consumer demand functions. *Journal of Business and Economic Statistics*, 6, 303–312.
- Diewert, W. E. and Wales, T. J. (1992). Quadratic spline models for producer's supply and demand functions. *International Economic Review*, 33, 705–722.
- Diewert, W. E. and Wales, T. J. (1993). Linear and quadratic spline models for consumer demand functions. *Canadian Journal of Economics*, 26, 77–106.
- Diewert, W. E. and Wales, T. J. (1995). Flexible functional forms and tests of homogeneous separability. *Journal of Econometrics*, 67, 259–302.
- Duffie, D. (1991). "The theory of value in security markets", in *Handbook of Mathematical Economics*, W. Hildenbrand and H. Sonnenschein (eds.), vol. 4, Amsterdam: North-Holland, 1615–1682.
- Dufour, J. M. (1989). Nonlinear hypotheses: inequality restrictions, and non-nested hypotheses: exact simultaneous tests in linear regressions. *Econometrica*, 57, 335–356.
- Dugundji, J. (1964). *Topology*, Boston, NY: Allyn.
- Eastwood, B. J. and Gallant, A. R. (1987). Adaptive truncation rules for seminonparametric estimators that achieve asymptotic normality, Working Paper, Graduate School of Business, University of Chicago, Chicago.
- Eckmann, J.-P. and Ruelle, D. (1985). Ergodic theory of chaos and strange attractors. *Review of Modern Physics*, 57, 617–656.
- Eisenberg, E. (1961). Aggregation of utility functions. *Management Science*, 7, 337–350.
- Eisenpress, H. and Greenstadt, J. (1966). The estimation of nonlinear econometric systems. *Econometrica*, 34, 851–861.

- Elbadawi, I., Gallant, A. R. and Souza, G. (1983). An elasticity can be estimated consistently without a priori knowledge of functional form. *Econometrica*, 51, 1731–1751.
- Ellner, S., Gallant, A. R., McCaffrey, D. F. and Nychka, D. W. (1991). Convergence rates and data requirements for Jacobian-based estimates of Liapunov exponents from data. *Physics Letters A*, 153, 357–363.
- Engle, R. and Granger, C. W. J. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica*, 55(2), 251–276.
- Epstein, L. and Yatchew, A. (1985). The empirical determination of technology and expectations. *Journal of Econometrics*, 27, 235–258.
- Ewis, N. A. and Fisher, D. (1984). The translog utility function and the demand for money in the United States. *Journal of Money, Credit, and Banking*, 14, 34–52.
- Ewis, N. A. and Fisher, D. (1985). Toward a consistent estimate of the demand for monies: an application of the Fourier flexible form. *Journal of Macroeconomics*, 7, 151–174.
- Fair, R. C. (1972). A full-information maximum likelihood program. *Econometrica*, 40, 773.
- Fayyad, S. (1986). Monetary Asset Component Grouping and Aggregation: An Inquiry Into the Definition of Money, Ph.D. Thesis, University of Texas, Austin, USA.
- Feigenbaum, M. J. (1978). Quantitative universality for a class of nonlinear transformations. *Journal of Statistical Physics*, 19, 25–52.
- Feller, W. (1966). *An Introduction to Probability Theory and Its Applications*, vol. 2, New York: Wiley.
- Fischer, S. (1974). Money and the production function. *Economic Inquiry*, 12(4), 517–533.
- Fisher, D. (1989). Velocity and the growth of money in the United States, 1970–1985. *Journal of Macroeconomics*, 11(3), 323–332.
- Fisher, F. M. (1966). *The Identification Problem in Econometrics*, New York: McGraw-Hill.
- Flood, L. R., Finke, R. and Theil, H. (1984). An evaluation of alternative demand systems by means of implied income elasticities. *Economics Letters*, 15(1–2), 21–27.
- Fraser, A. and Swinney, H. (1986). Independent co-ordinates for strange attractors from mutual information. *Physical Reviews A*, 33(2), 1134–1140.
- Friedman, A. (1970). *Foundations of Modern Analysis*, Holt.
- Friedman, B. M. and Kuttner, K. N. (1992). Money, income, prices, and interest rates. *American Economic Review*, 82, 472–492.
- Fuss, M. A. (1977). The demand for energy in Canadian manufacturing. *Journal of Econometrics*, 5, 89–116.
- Gallant, A. R. (1975a). Seemingly unrelated nonlinear regression. *Journal of Econometrics*, 3, 35–50.
- Gallant, A. R. (1975b). The power of the likelihood ratio test of location in nonlinear regression models. *Journal of the American Statistical Association*, 70, 198–203.
- Gallant, A. R. (1977). Three-stage least-squares estimation for a system of simultaneous, nonlinear, implicit equations. *Journal of Econometrics*, 5, 71–88.

- Gallant, A. R. (1981). On the bias in flexible functional forms of an essentially unbiased form: the Fourier flexible form. *Journal of Econometrics*, 1(5), 211–245.
- Gallant, A. R. (1982). Unbiased determination of production technologies. *Journal of Econometrics*, 20, 285–323.
- Gallant, A. R. (1984). The Fourier flexible form. *American Journal of Agricultural Economics*, 66, 204–208.
- Gallant, A. R. (1985). Identification et convergence en régression semi-non-paramétrique. *Annales de l'INSEE*, 59/60, 239–265.
- Gallant, A. R. (1987). *Nonlinear Statistical Models*, New York: Wiley.
- Gallant, A. R. and Golub, G. H. (1984). Imposing curvature restrictions on flexible functional forms. *Journal of Econometrics*, 267, 295–321.
- Gallant, A. R. and Holly, A. (1980). Statistical inference in an implicit, nonlinear, simultaneous equation model in the context of maximum likelihood estimation. *Econometrica*, 48, 697–720.
- Gallant, A. R. and Monahan, J. F. (1985). Explicit infinite-dimensional Bayesian analysis of production technologies. *Journal of Econometrics*, 30, 171–201.
- Gallant, A. R. and Nychka, D. W. (1987). Semi-nonparametric maximum likelihood estimation. *Econometrica*, 55(2), 363–390.
- Gallant, A. R. and White, H. (1988). *There Exists a Neural Network that Does Not Make Avoidable Mistakes*, Proceedings of the Second IEEE International Conference on Neural Networks, SOS Printing, vol. 1, 657–664.
- Gallant, A. R. and White, H. (1992). On learning the derivatives of an unknown mapping with multilayer feedforward networks. *Neural Networks*, 5, 129–138.
- Gencay, R. and Dechert, W. D. (1992). An algorithm for the n Lyapunov exponents of an n -dimensional unknown dynamical system. *Physica D*, 59, 142–157.
- Geweke, J. (1986). Exact inference in the inequality constrained normal linear regression model. *Journal of Applied Econometrics*, 1, 127–142.
- Geweke, J. (1987). Antithetic acceleration of Monte Carlo integration in Bayesian inference, ISDS Discussion Paper 87-07, Duke University, Durham, USA.
- Geweke, J. (1988a). "Exact inference in models with autoregressive conditional heteroskedasticity," in *Dynamic Econometric Modeling*, Proceedings of the Third International Symposium in Economic Theory and Econometrics, W. Barnett, E. Berndt and H. White (eds.), Cambridge, MA: Cambridge University Press, 73–104.
- Geweke, J. (1988b). Efficient sampling from the multivariate-t with linear restrictions in high dimensions, ISDS Discussion Paper, Duke University, Durham, USA.
- Geweke, J. (1989a). "Modeling with normal polynomial expansions," in *Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity*, Proceedings of the Fourth International Symposium in Economic Theory and Econometrics, W. Barnett, J. Geweke and K. Shell (eds.), Cambridge, MA: Cambridge University Press, 337–360.
- Geweke, J. (1989b). Bayesian inference in econometric models using Monte Carlo integration. *Econometrica*, 57, 1317–1340.
- Gibson, G. and Jeffries, C. (1984). Observation of period doubling and chaos in spin-wave instabilities in yttrium iron garnet. *Physics Reviews A*, 29, 811–818.

- Gilbert, A. R. (1984). Bank market structure and competition: a survey. *Journal of Money, Credit and Banking*, 14, 617–645.
- Gilligan, T., Smirlock, M. and Marshall, W. (1984). Scale and scope economies in the multi-product banking firm. *Journal of Monetary Economics*, 13, 393–405.
- Godfrey, L. G. (1988). *Misspecification Tests in Econometrics*, Cambridge, MA: Cambridge University Press.
- Godfrey, M. D. (1965). An exploratory study of the bispectrum of economic time series. *Applied Statistics*, 14, 48–69.
- Goldberger, A. S. (1967). Functional form and utility: a review of consumer demand theory, Systems Formulation, Methodology, and Policy Workshop Paper No. 6703, Social Systems Research Institute, University of Wisconsin.
- Goldfeld, S. M. and Quandt, R. E. (1972). *Nonlinear Methods in Econometrics*, Amsterdam: North-Holland.
- Goldman, S. M. and Uzawa, H. (1964). A note on separability in demand analysis. *Econometrica*, 32, 387–398.
- Golub, G. H. and Van Loan, C. F. (1980). An analysis of the total least squares problem. *Siam Journal of Numerical Analysis*, 17, 883–893.
- Gorman, W. M. (1953). Community preference fields. *Econometrica*, 21, 63–80.
- Gourieroux, C., Holly, A. and Monfort, A. (1982). Likelihood ratio, Wald and Kuhn-Tucker tests in linear models with inequality constraints. *Econometrica*, 50, 43–62.
- Grandmont, J. M. (1985). On endogenous competitive business cycles. *Econometrica*, 53, 995–1045.
- Granger, C. W. J. (1981). Some properties of time series data and their use in econometric model specification. *Journal of Econometrics*, 16, 121–130.
- Granger, C. W. J. (1991). *Some Recent Generalizations of Cointegration and the Analysis of Long-Run Relationships*, Oxford: Oxford University Press.
- Granger, C. W. J. and Engle, R. (1987). Co-integration and error correction: representation, estimation and testing. *Econometrica*, 55, 251–276.
- Granger, C. W. J. and Newbold, P. (1974). *Forecasting Economic Time Series*, New York: Academic Press.
- Grassberger, P. and Procaccia, I. (1983a). Measuring the strangeness of strange attractors. *Physica*, 90, 189–208.
- Grassberger, P. and Procaccia, I. (1983b). Characterization of strange attractors. *Physical Review Letters*, 50(5), 346–349.
- Green, H. A. J. (1964). *Aggregation in Economic Analysis: An Introductory Survey*, Princeton, NJ: Princeton University Press.
- Green, H. A. J. (1971). *Consumer Theory*, Harmondsworth: Penguin.
- Grossman, M. (1973). Unemployment and consumption: note. *American Economic Review*, 63, 208–213.
- Grossmann, S. and Sonneborn-Schmick, B. (1982). Correlation decay in the Lorenz model as a statistical physics problem. *Physics Reviews A*, 25, 2371–2384.

- Groves, G. W. and Hannan, E. J. (1968). Time series regression of sea level on weather. *Reviews of Geophysics*, 6(2), 129–174.
- Guckenheimer, J. and Holmes, P. (1983). *Nonlinear Oscillations, Dynamical Systems, and Bifurcations of Vector Fields*, Berlin: Springer.
- Guilkey, D. K. and Lovell, C. A. K. (1980). On the flexibility of the translog approximation. *International Economic Review*, 21, 137–147.
- Guilkey, D. K., Lovell, C. A. K. and Sickles, R. C. (1983). A comparison of the performance of three flexible functional forms. *International Economic Review*, 24, 591–616.
- Hall, R. E. (1973). The specification of technology with several kinds of output. *Journal of Political Economy*, 81, 878–892.
- Ham, J. C. (1978). A note on the efficient estimation of the linear expenditure system. *Journal of the American Statistical Association*, 73, 208–210.
- Hammersley, J. M. and Handscomb, D. C. (1964). *Monte Carlo Methods*, London: Methuen.
- Hancock, D. (1985). The financial firm: production with monetary and nonmonetary goods. *Journal of Political Economy*, 93, 859–880.
- Hancock, D. (1986). A model of the financial firm with imperfect asset and deposit elasticities. *Journal of Banking and Finance*, 10(1), 37–54.
- Hancock, D. (1987). "Aggregation of monetary goods: a production model," in *New Approaches to Monetary Economics*, W. A. Barnett and K. Singleton (eds.), Cambridge, MA: Cambridge University Press, 200–218.
- Hancock, D. (1991). *A Theory of Production for the Financial Firm*, Dordrecht: Kluwer Academic Publishers.
- Hansen, L. P. (1982). Large sample properties of generalized method of moments estimators. *Econometrica*, 50, 1029–1054.
- Hansen, L. P. and Singleton, K. J. (1982). Generalized instrumental variable estimation of nonlinear rational expectations models. *Econometrica*, 50, 1269–1285.
- Hao, B.-L. (1984). *Chaos*, Singapore: World Scientific.
- Hartley, H. O. (1964). Exact confidence regions for the parameters in nonlinear regression laws. *Biometrika*, 51, 347–353.
- Hasenkamp, G. (1975). Index numbers and sub-systems of demand equations, Paper presented at the Third World Congress of the Econometric Society, Toronto.
- Hatanaka, M. (1975). On the full information estimation of the simultaneous equation model which is nonlinear in variables only, Discussion Paper No. 88, The Institute of Social and Economic Research, Osaka University, Toyonaka.
- Hausman, J. A. (1975). An instrumental variable approach to full-information estimators for linear and certain nonlinear econometric models. *Econometrica*, 43, 727–738.
- Hayes, K. (1986). Third-order translog utility functions. *Journal of Business and Economic Statistics*, 4, 339–346.
- Heckman, J. (1974). Shadow prices, market wages, and labor supply. *Econometrica*, 42, 679–694.

- Heckman, J. J. (2000). Causal parameters and policy analysis in economics: a twentieth century retrospective. *Quarterly Journal of Economics*, 115, 45–97.
- Helleman, R. (ed.) (1981). *Nonlinear Dynamics*, New York: New York Academy of Sciences.
- Henon, M. (1976). A two dimensional mapping with a strange attractor. *Communications in Mathematical Physics*, 50, 69–77.
- Hillinger, C. (1970). Comment on invariance axioms and economic indexes. *Econometrica*, 38, 773–774.
- Hinich, M. J. (1982). Testing for Gaussianity and linearity of a stationary time series. *Journal of Time Series Analysis*, 3(3), 1969–1976.
- Hinich, M. J. (1996). Testing for dependence in the input to a linear time series model. *Nonparametric Statistics*, 6, 205–221.
- Hinich, M. J. and Messer, G. R. (1995). On the principle domain of the discrete bispectrum of a stationary signal. *IEEE Transactions on Signal Processing*, 43(9), 2130–2134.
- Hinich, M. J. and Patterson, D. (1985a). Evidence of nonlinearity in stock returns. *Journal of Business and Economic Statistics*, 3, 69–77.
- Hinich, M. J. and Patterson, D. (1985b). Identification of the coefficients in a nonlinear time series of the quadratic type. *Journal of Econometrics*, 30, 269–288 (Reprinted in *New Approaches to Modeling, Specification Selection, and Econometric Inference*, Proceedings of the First International Symposium in Economic Theory and Econometrics, W. A. Barnett and R. Gallant (eds.), 1989, Cambridge University Press).
- Hinich, M. J. and Patterson, D. (1989). "Evidence of nonlinearity in the trade by trade stock market return generating process," in *Economic Complexity: Chaos, Sunspots, Bubbles and Nonlinearity*, Proceedings of the Fourth International Symposium in Economic Theory and Econometrics, W. A. Barnett, J. Geweke and K. Shell (eds.), Cambridge, MA: Cambridge University Press, 383–409.
- Hinich, M. J. and Rothman, P. (1998). A frequency domain test of time reversibility. *Macroeconomic Dynamics*, 2(1), 72–88.
- Hinich, M. J. and Wilson, G. R. (1992). Time delay estimation using the cross bispectrum. *IEEE Transactions on Signal Processing*, 40(1), 106–113.
- Hofstadter, D. (1985). *Metamagical Themes: Questioning for the Essence of Mind and Pattern*, Basic Books, Chapter 16, 364–395.
- Hong, Y. (1996). Consistent testing for serial correlation of unknown form. *Econometrica*, 64, 837–864.
- Hoppensteadt, F. and Hyman, J. (1977). Periodic solutions of a logistic difference equation. *SIAM Journal on Applied Mathematics*, 32, 73–81.
- Hsieh, D. A. and LeBaron, B. (1991). "Finite sample properties of the BDS statistic," in *Nonlinear Dynamics, Chaos, and Instability: Statistical Theory and Economic Evidence*, H. Brock and B. LeBaron (eds.), Cambridge, MA: MIT Press.
- Hulten, C. R. (1973). Divisia index numbers. *Econometrica*, 63, 1017–1026.
- Humphrey, D. B. and Moroney, J. R. (1975). Substitution among capital, labor, and natural resource products in American manufacturing. *Journal of Political Economy*, 83, 357–382.

- Hunter, W. C. and Timme, S. G. (1986). Technical change, organizational form, and the structure of bank production. *Journal of Money, Credit and Banking*, 18, 152–166.
- Ingersoll, J. E. (1987). *Theory of Financial Decision Making*, New York: Rowman and Littlefield.
- Jacklin, C. J. and Bhattacharya, S. (1988). Distinguishing panics and information based bank runs: welfare and policy implications. *Journal of Political Economy*, 96, 568–592.
- Jenkins, G. M. and Watts, D. (1968). *Spectral Analysis and Its Applications*, San Francisco, CA: Holden-Day.
- Jennrich, R. I. (1969). Asymptotic properties of nonlinear least squares estimators. *Annals of Mathematical Statistics*, 40, 633–643.
- Johansen, S. (1988). Statistical analysis of cointegrating vectors. *Journal of Economic Dynamics and Control*, 12, 231–254.
- Johansen, S. (1991). Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. *Econometrica*, 59(6), 1551–1580.
- Johansen, S. (1992a). A representation of vector autoregressive processes integrated of order 2. *Econometric Theory*, 8, 188–202.
- Johansen, S. (1992b). Testing for weak exogeneity and the order of cointegration in UK money demand data. *Journal of Policy Modeling*, 14(3), 313–334.
- Johansen, S. (1995a). A statistical analysis of cointegration for $I(2)$ variables. *Econometric Theory*, 11, 25–59.
- Johansen, S. (1995b). *Likelihood-Based Inference in Cointegrated Vector Auto-Regressive Models*, Oxford: Oxford University Press.
- Johansen, S. and Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with an application to the demand for money. *Oxford Bulletin of Economics and Statistics*, 52, 169–210.
- Jones, B. E. (1998). *An I(2) Cointegration Analysis of US Monetary Aggregates*, St Louis: Washington University, working paper.
- Jørgensen, C., Kongsted, H. C. and Anders Rahbek, A. (1999). Trend stationarity in the $I(2)$ cointegration model. *Journal of Econometrics*, 90, 265–289.
- Jorgenson, D. W. and Fraumeni, B. M. (1981). "Relative prices and technical change," in *Modeling and Measuring Natural Resource Substitution*, E. Berndt and B. Field (eds.), Cambridge, MA: MIT Press.
- Jorgenson, D. W. and Laffont, J.-J. (1974). Efficient estimation of nonlinear simultaneous equations with additive disturbance. *Annals of Economic and Social Measurement*, 3, 615–640.
- Jorgenson, D. W. and Lau, L. J. (1975). The structure of consumer preferences. *Annals of Economic and Social Measurement*, 4, 49–101.
- Jorgenson, D. W. and Lau, L. J. (1977). "Statistical tests of the theory of consumer behavior," in *Quantitative Wirtschaftsforschung*, H. Albach, E. Helmstadter and R. Henn (eds.), JCB Mohr, 383–394.
- Jorgenson, D. W., Lau, L. J. and Stoker, T. (1982). "The transcendental logarithmic model of aggregate consumer behavior", in *Advances in Econometrics*, R. Basman and G. Rhodes (eds.), vol. 1, JAI Press, 97–238.

- Joshi, V. M. (1966). Admissibility of confidence intervals. *Annals of Mathematical Statistics*, 37, 629–638.
- Joshi, V. M. (1967). Inadmissibility of the usual confidence sets for the mean of a multivariate normal population. *Annals of Mathematical Statistics*, 38, 1868–1875.
- Joshi, V. M. (1969). Admissibility of the usual confidence sets for the mean of a univariate or bivariate normal population. *Annals of Mathematical Statistics*, 40, 1042–1067.
- Joshi, V. M. (1970). Admissibility of invariant confidence procedures for estimating a location parameter. *Annals of Mathematical Statistics*, 41, 1568–1581.
- Joshi, V. M. (1971). Admissibility of the usual confidence sets for a class of bivariate populations. *Annals of Mathematical Statistics*, 42, 622–679.
- Jungeilges, J. A. (1996). "Operational characteristics of White's test for neglected nonlinearities," in *Nonlinear Dynamics in Economics*, W. A. Barnett, A. Kirman and M. Salmon (eds.), Cambridge, MA: Cambridge University Press, 219–266.
- Kadiyala, K. R. (1972). Production functions and elasticity of substitution. *Southern Economic Journal*, 38, 281–284.
- Kalaba, R. and Testfatsion, L. (1980). A least-squares model specification test for a class of dynamic nonlinear economic models with systematically varying parameters. *Journal of Optimization Theory and Applications*, 32(4), 537–567.
- Kaplan, D. T. (1994). Exceptional events as evidence for determinism. *Physica D*, 73, 38–48.
- Kaplan, J. and Yorke, J. A. (1978). "Chaotic behaviour of multidimensional difference equations," in *Functional Differential Equations and the Approximation of Fixed Points*, Lecture Notes in Mathematics, H. O. Peitgen and H. O. Walther (eds.), vol. 73, Berlin: Springer, 204–227.
- Katzner, D. W. (1970). *Static Demand Theory*, New York: Macmillan.
- Kay, S. M. and Marple, S. L. Jr. (1981). Spectrum analysis—a modern perspective. *Proceedings of the IEEE*, 69(11), 1380–1419.
- Keller, W. J. (1976). A nested CES-type utility function and its demand and price-index functions. *European Economic Review*, 7, 175–186.
- Kendall, D. G. (1974). "Foundations of a theory of random sets," in *Stochastic Geometry*, E. F. Harding and D. G. Kendall (eds.), New York: Wiley.
- Kendall, M. G. and Stuart, A. (1961). *The Advanced Theory of Statistics*, vol. 2, New York: Hafner.
- Kiefer, N. M. (1975). Quadratic utility, labor supply, and commodity demand, Working Paper No. 67, Industrial Relations Section, Princeton University, USA.
- Kiefer, N. M. (1977). A Bayesian analysis of commodity demand and labor supply. *International Economic Review*, 18, 209–217.
- Kiefer, N. M. and Mackinnon, J. G. (1975). Small sample properties of demand system estimates, Research Memorandum No.179, Princeton University, USA.
- Kiefer, N. M. and Salmon, M. (1983). Testing normality in econometric models. *Econometric Letters*, 11, 123–127.
- Kinderman, A. J. and Ramage, J. G. (1976). Computer generation of normal random numbers. *Journal of the American Statistical Association*, 71, 893–896.

- King, R. G. and Watson, M. W. (1996). Money, prices, interest rates, and the business cycle. *The Review of Economics and Statistics*, 78(1), 35–53.
- King, R. G., Plosser, C. I., Stock, J. H. and Watson, M. W. (1991). Stochastic trends and economic fluctuations. *American Economic Review*, 81(4), 819–840.
- Klein, B. (1974). Competitive interest payments on bank deposits and the long-run demand for money. *American Economic Review*, 64, 931–949.
- Kloek, T. and van Dijk, H. K. (1978). Bayesian estimates of equation system parameters: an application of integration by Monte Carlo. *Econometrica*, 45, 1–19.
- Kodde, D. A. and Palm, F. C. (1986). Wald criterion for jointly testing equality and inequality restrictions. *Econometrica*, 54, 1243–1248.
- Koopmans, L. H. (1975). *The Spectral Analysis of Time Series*, New York: Academic Press.
- Koopmans, T. C., Rubin, H. and Leipnik, R. B. (1950). "Measuring the equation systems of dynamic economics," in *Statistical Inference in Dynamic Economic Models*, Cowles Commission Monograph 10, T. C. Koopmans (ed.), New York: Wiley, 53–237.
- Kuan, C. and White, H. (1991). Artificial neural networks: an econometric perspective, Working paper, Department of Economics and Institute for Neural Computation, University of California, San Diego, USA.
- Kuznets, S. (ed.) (1952). *Income and Wealth of the United States, Trends and Structure*, Bowes and Bowes: International Association for Research in Income and Wealth.
- Kuznets, S. (ed.) (1961). *Capital in the American Economy*, National Bureau of Economic Research.
- Ia Cour, L. F. (2004). "On the measurement problem of 'money': results from the experience with Divisia monetary aggregates for Denmark and some methodological considerations of the comparison of money demand relations based on alternative monetary aggregates," in *Index Numbers and Statistical Methods for the Finance Sector*, M. T. Belongia and J. M. Binner (eds.), Palgrave, in press.
- Lange, O. (1942). Theoretical derivation of elasticities of demand and supply: the direct method. *Econometrica*, 10, 193–214.
- Lau, L. J. (1972). Profit functions of technologies with multiple inputs and outputs. *Review of Economics and Statistics*, 54, 281–289.
- Lau, L. J. (1974). "Applications of duality theory: a comment," in *Frontiers of Quantitative Economics II*, M. Intriligator and D. Kendrick (eds.), Amsterdam: North-Holland.
- Lau, L. J. (1978a). "Applications of profit functions", in *Production Economics: A Dual Approach to Theory and Application*, M. Fuss and D. McFadden (eds.), Amsterdam: North-Holland, 133–215.
- Lau, L. J. (1978b). "Testing and imposing monotonicity, convexity, and quasi-convexity constraints," in *Production Economics: A Dual Approach to Theory and Application*, M. Fuss and D. McFadden (eds.), vol. 1, Amsterdam: North-Holland, 409–453.
- Lee, T.-H. and Tse, Y. (1996). Cointegration tests with conditional heteroskedasticity. *Journal of Econometrics*, 73, 401–410.
- Lee, T.-H., White, H. and Granger, C. (1993). Testing for neglected nonlinearities in time series models. *Journal of Econometrics*, 56, 269–290.

- Leontief, W. W. (1947a). A note on the interrelation of subsets of independent variables of a continuous function with continuous first derivatives. *Bulletin of the American Mathematical Society*, 55, 343–350.
- Leontief, W. W. (1947b). An introduction to a theory of the internal structure of functional relationships. *Econometrica*, 15, 361–373.
- Lewbel, A. (1987). Fractional demand systems. *Journal of Econometrics*, 36, 311–338.
- Li, T.-Y. and Yorke, J. A. (1975). Period three implies chaos. *American Mathematical Monthly*, 82, 985–992.
- Lluch, C. (1973). The extended linear expenditure system. *European Economic Review*, 4, 21–32.
- Loeve, M. (1963). *Probability Theory*, Princeton, NJ: Van Nostrand.
- Lorenz, E. N. (1963). Deterministic nonperiodic flow. *Journal of the Atmospheric Sciences*, 20, 120–141.
- Lucas, R. E. (1981). *Studies in Business Cycle Theory*, Cambridge, MA: MIT Press.
- Müller, P. and Terrell, M. (1989). *Optimal Mix of Accept–Reject and Importance Sampling in Monte Carlo Integration*, Durham, USA: Duke University, Class notes.
- MacKinlay, A. C. and Richardson, M. (1991). Using generalized method of moments to test mean-variance efficiency. *Journal of Finance*, 46, 511–527.
- Mackey, M. C. and Glass, L. (1977). Oscillation and chaos in physiological control systems. *Science*, 197, 287–289.
- Madanski, A. (1959). The fitting of straight lines when both variables are subject to error. *Journal of the American Statistical Association*, 54, 173–206.
- Magill, M. and Shafer, W. (1991). "Incomplete markets", in *Handbook of Mathematical Economics*, W. Hildenbrand and H. Sonnenschein (eds.), vol. 4, Amsterdam: North-Holland, 1523–1610.
- Malinvaud, E. (1966). *Statistical Methods of Econometrics*, Amsterdam: North-Holland.
- Malinvaud, E. (1970a). *Statistical Methods of Econometrics*, Amsterdam: North-Holland.
- Malinvaud, E. (1970b). The consistency of nonlinear regression. *Annals of Mathematical Statistics*, 41(3), 956–969.
- Mandelbrot, B. (1977). *Fractals, Form, Chance, and Dimension*, San Francisco, CA: Freeman.
- Manser, M. E. (1974). Estimating Consumer Preferences and Cost of Living Indexes for US Meat and Produce (1947–1971), Ph.D. Thesis, University of Wisconsin, Madison, USA.
- Manser, M. E. (1976). Elasticities of demand for food: an analysis using non-additive utility functions allowing for habit formation. *Southern Economic Journal*, 43, 879–891.
- Mantel, R. R. (1974). On the characterization of aggregate excess demand. *Journal of Economic Theory*, 7, 348–353.
- Mantel, R. R. (1976). Homothetic preferences and community excess demand functions. *Journal of Economic Theory*, 12, 197–201.
- Maravall, A. (1983). An application of nonlinear time series forecasting. *Journal of Business and Economic Statistics*, 1(1), 66–74.
- Massey, F. J. (1951). The Kolmogorov-Smirnov test for goodness of fit. *Journal of the American Statistical Association*, 46, 68–78.

- Matheron, G. (1975). *Random Sets and Integral Geometry*, New York: Wiley.
- Matsumoto, K. and Tsuda, I. (1983). Noise-induced order. *Journal of Statistical Physics*, 31, 87–106.
- May, K. (1946). The aggregation problem for a one industry model. *Econometrica*, 14, 285–298.
- May, R. M. (1976). Simple mathematical models with very complicated dynamics. *Nature*, 261, 459–467.
- May, R. M. and Oster, G. F. (1976). Bifurcations and dynamic complexity in simple ecological models. *American Naturalist*, 220, 573–599.
- McCaffrey, D. F., Ellner, S., Gallant, A. R. and Nychka, D. W. (1992). Estimating the Lyapunov exponent of a chaotic system with nonparametric regression. *Journal of the American Statistical Association*, 87(419), 682–695.
- McFadden, D. (1964). *Existence Conditions for Theil-Type Preferences*, Berkeley: University of California (mimeographed).
- McFadden, D. (1978). "Cost, revenue, and profit functions", in *Production Economics: A Dual Approach to Theory and Application*, M. Fuss and D. McFadden (eds.), vol. 1, Amsterdam: North-Holland, 3–109.
- McFadden, D. (1985). Specification of econometric models, Presidential Address, Fifth World Congress of the Econometric Society, Cambridge, MA.
- McFadden, D., MasColell, A., Mantel, R. R. and Richter, M. K. (1974). A characterization of community excess demand functions. *Journal of Economic Theory*, 9, 361–374.
- Mendel, J. M. (1991). Tutorial on higher-order statistics (spectra) in signal processing and system theory. *Proceedings of the IEEE*, 79(3), 278–305.
- Michael, E. (1971). Topologies on spaces of subsets. *Transactions of the American Mathematical Society*, 71, 152–182.
- Minsky, H. (1975). *John Maynard Keynes*, Columbia: Columbia University Press.
- Miyao, R. (1996). Does a cointegrating M2 demand relation really exist in the United States? *Journal of Money, Credit, and Banking*, 28(3), 365–380.
- Moroney, J. R. and Trapani, M. J. (1981). "Alternative models of substitution and technical change in natural resource intensive industries," in *Modeling and Measuring Natural Resource Substitution*, E. Berndt and B. Field (eds.), Cambridge, MA: MIT Press, 48–69.
- Mossin, A. (1968). Time horizons and terminal capital. *Swedish Journal of Economics*, 70, 200–220.
- Mountain, D. C. (1988). The Rotterdam model: an approximation in variable space. *Econometrica*, 56, 477–484.
- Muellbauer, J. (1975). Aggregation, income distribution and consumer demand. *Review of Economic Studies*, 42, 524–544.
- Muellbauer, J. (1976). Community preferences and the representative consumer. *Econometrica*, 44, 979–999.
- Muellbauer, J. (1977). Testing the Barten model of household composition effects and the cost of children. *The Economic Journal*, 87, 460–487.

- Müller, P. and Terrell, M. (1989) Optimal mix of accept-reject and importance sampling in Monte Carlo integration, Class notes, Duke University, Durham, USA.
- Mullineaux, D. J. (1978). Economies of scale and organizational efficiency in banking: a profit-function approach. *Journal of Finance*, 33, 259-280.
- Mundlak, Y. and Razin, A. (1969). Aggregation, index numbers and the measurement of technical change. *The Review of Economics and Statistics*, 51, 166-175.
- Murray, J. D. and White, R. W. (1983). Economies of scale and economies of scope in multiproduct financial institutions: a study of British Columbia credit unions. *Journal of Finance*, 38, 887-902.
- Neftci, S. N. (1978). A time-series analysis of the real wages-employment relationship. *Journal of Political Economy*, 86, 281-291.
- Newey, W. K. and West, K. D. (1987). A simple, positive semi-definite, heteroscedasticity and autocorrelation consistent covariance matrix. *Econometrica*, 55, 703-708.
- Nicholis, C. and Nicolis, G. (1984). Is there a climatic attractor? *Nature*, 311, 529-532.
- Nicholis, C. and Nicolis, G. (1985). *Reconstruction of the Dynamics of the Climatic System from Time Series Data*, Free University of Brussels (preprint).
- Nikias, C. L. and Raghubeer, M. R. (1987). Bispectrum estimation: a digital signal processing framework. *Proceedings of the IEEE*, 75(7), 869-891.
- Nychka, D. W., Ellner, S., Gallant, A. R. and McCaffrey, D. F. (1992). Finding chaos in noisy systems. *Journal of the Royal Statistical Society B*, 54(2), 399-426.
- Oseledec, V. (1968). A multiplicative ergodic theorem: Lyapunov characteristic numbers for dynamical systems. *Transactions Moscow Mathematical Society*, 19, 197-231.
- Otnes, R. K. and Enochson, L. (1972). *Digital Time Series Analysis*, New York: Wiley.
- Ott, E. (1981). Strange attractors and chaotic motions of dynamical systems. *Review of Modern Physics*, 53, 655-671.
- Owen, J. D. (1971). The demand for leisure. *Journal of Political Economy*, 79, 56-76.
- Parks, R. W. (1969). Systems of demand equations: an empirical comparison of alternative functional forms. *Econometrica*, 37, 629-650.
- Parulo, P. (1996). On the determination of integration indices in I(2) systems. *Journal of Econometrics*, 72(1-2), 313-356.
- Patterson, D. (1983). BISPEC: a program to estimate the bispectrum of a stationary time series. *American Statistician*, 37, 323-324.
- Paulus, J. D. (1972). The Estimation of Large Systems of Consumer Demand Equations Using Stochastic Prior Information, Ph.D. Thesis, University of Chicago, USA.
- Paulus, J. D. (1975). Mixed estimation of a complete system of consumer demand equations. *Annals of Economic and Social Measurement*, 4, 117-132.
- Pearce, I. F. (1964). *A Contribution to Demand Analysis*, Oxford: Oxford University Press.
- Philips, L. (1978). The demand for leisure and money. *Econometrica*, 46, 1025-1044.
- Phillips, P. C. B. (1976). On the iterated minimum distance estimator and the quasi-maximum likelihood estimator. *Econometrica*, 44, 449-460.
- Phlips, L. (1974). *Applied Consumption Analysis*, Amsterdam: North-Holland.

- Phlips, L. and Spinnewyn, F. (1982). "Rationality versus in dynamic demand systems", in *Advances in Econometrics*, R. L. Basmann and G. F. Rhodes (eds.), vol. 1, JAI Press, 3–33.
- Pollak, R. A. and Wachter, M. L. (1975). The relevance of the household production function and its implications for the allocation of time. *Journal of Political Economy*, 83(2), 255–277.
- Pollak, R. A. and Wales, T. J. (1969). Estimation of the linear expenditure system. *Econometrica*, 37, 611–628.
- Poterba, J. M. and Rotemberg, J. J. (1987). "Money in the utility function: an empirical implementation," in *Approaches to Monetary Economics*, W. A. Barnett and K. J. Singleton (eds.), Cambridge, MA: Cambridge University Press, 219–240.
- Powell, A. A. (1966). A complete system of consumer demand equations for the Australian economy fitted by a model of additive preferences. *Econometrica*, 34, 661–675.
- Powell, A. A., Hoa, T. V. and Wilson, R. H. (1968). A multi-sectoral analysis of consumer demand in the post-war period. *Southern Economic Journal*, 35, 109–120.
- Priestley, M. (1981). *Spectral Analysis and Time Series*, vol. 2, New York: Academic Press.
- Prigogine, I. (1980). *From Being to Becoming*, San Francisco, CA: Freeman.
- Prigogine, I. and Stengers, I. (1984). *Order Out of Chaos: Man's New Dialogue with Nature*, New York: Bantam.
- Pu, S. S. (1946). A note on macroeconomics. *Econometrica*, 14, 299–302.
- Ramsey, J. B. and Rothman, P. (1994). Comment on 'Nonlinear monetary dynamics' by DeCoster and Mitchell. *Journal of Business and Economic Statistics*, 12, 135–136.
- Ramsey, J. B., Sayers, C. L. and Rothman, P. (1990). The statistical properties of dimension calculations using small data sets: some economic applications. *International Economic Review*, 31, 991–1020.
- Rao, C. R. (1965). *Linear Statistical Inference and Its Applications*, New York: Wiley.
- Rao, C. R. (1973). *Linear Statistical Inference and Its Applications*, New York: Wiley.
- Rao, S. T. and Gabr, M. (1980). A test for linearity of stationary time series. *Journal of Time Series Analysis*, 1, 145–158.
- Richard, J. F. and Steel, M. F. J. (1987). Bayesian analysis of systems of seemingly unrelated regression equations under a recursive extended natural conjugate prior density, ISDS Discussion Paper 87-06, Duke University, Durham, USA.
- Richter, M. K. (1966). Invariance axioms and economic indexes. *Econometrica*, 34, 739–755.
- Robles, B. J. (1993). The optimal demand for money in US manufacturing: a dynamic micro theoretic approach, Discussion Paper No 93-15, Department of Economics, University of Colorado, Boulder, USA.
- Rogosinski, W. (1952). *Volume and Integral*, New York: Wiley.
- Rossi, P. E. (1983). Specification and Analysis of Econometric Production Models, Ph.D. Thesis, University of Chicago, Chicago, USA.
- Rossler, O. E. (1976). Different types of chaos in two simple differential equations. *Zeitschrift für Naturforschung*, 31A, 1664–1670.

- Rotemberg, J. J. (1991). "Commentary: monetary aggregates and their uses," in *Monetary Policy on the 75th Anniversary of the Federal Reserve System*, Proceedings of the Fourteenth Annual Economic Policy Conference of the Federal Reserve Bank of St Louis, M. T. Belongia (ed.), Dordrecht: Kluwer Academic Publishers, 223–231.
- Rotemberg, J. J., Driscoll, J. C. and Poterba, J. M. (1995). Money, output, and prices: evidence from a new monetary aggregate. *Journal of Business and Economic Statistics*, 13(1), 67–83.
- Rothenberg, T. J. (1971). Identification of parametric models. *Econometrica*, 39, 577–592.
- Rothenberg, T. J. (1973). *Efficient Estimation with A Priori Information*, Cowles Foundation Monograph 23, Yale: Yale University Press.
- Rudin, W. (1966). *Real and Complex Analysis*, New York: McGraw-Hill.
- Ruelle, D. and Takens, F. (1971). On the nature of turbulence. *Communications in Mathematical Physics*, 20, 167–192.
- Sakai, H. and Tokumaru, H. (1980). Autocorrelations of a certain chaos. *IEEE Transactions on Acoustics, Speech and Signal Processing, V.I. ASSP*, 28(5), 588–590.
- Samuelson, P. A. (1947). *Foundations of Economic Analysis*, Atheneum.
- Samuelson, P. A. (1950). The problem of integrability in utility theory. *Economica*, 17, 355–385.
- Samuelson, P. A. and Sato, R. (1984). Unattainability of integrability and definiteness conditions in the general case of demand for money and goods. *American Economic Review*, 74(4), 588–604.
- Santomero, A. M. (1984). Modeling the banking firm: a survey. *Journal of Money, Credit and Banking*, 14, 576–602.
- Sargent, T. J. (1987). *Dynamic Macroeconomic Theory*, Cambridge, MA: Harvard University Press.
- Scheinkman, J. and LeBaron, B. (1989). "Nonlinear dynamics and GNP data," in *Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity*, Proceedings of the Fourth International Symposium in Economic Theory and Econometrics, W. A. Barnett, J. Geweke and K. Shell (eds.), Cambridge, MA: Cambridge University Press, 213–227.
- Schmetterer, L. (1966). "On the asymptotic efficiency of estimates," in *Research Papers in Statistics (Festschrift for J. Neyman)*, F. N. David (ed.), New York: Wiley, 301–316.
- Schuster, H. G. (1984). *Deterministic Chaos: An Introduction*, Physik-Verlag.
- Schwarz, G. (1978). Estimating the dimension of a model. *Annals of Statistics*, 6, 461–464.
- Selvanathan, E. A. (1989). Further results on aggregation of differential demand equations. *Review of Economic Studies*, 56, 799–805.
- Serletis, A. (1987). "Monetary asset separability tests," in *New Approaches to Monetary Economics*, Proceedings of the Second International Symposium in Economic Theory and Econometrics, W. A. Barnett and K. Singleton (eds.), Cambridge, MA: Cambridge University Press, 159–182.
- Serletis, A. (1995). Random walks, breaking trend functions, and the chaotic structure of the velocity of money. *Journal of Business and Economic Statistics*, 4, 453–458.
- Serletis, A. and King, M. (1993). The role of money in Canada. *Journal of Macroeconomics*, 15(1), 91–107.

- Shaw, R. (1981). Strange attractors, chaotic behavior, and information flow. *Zeitschrift für Naturforschung*, 36A, 80–112.
- Shephard, R. W. (1970). *Theory of Cost and Production Functions*, Princeton, NJ: Princeton University Press.
- Silvey, S. D. (1959). The Lagrange multiplier test. *Annals of Mathematical Statistics*, 30(2), 389–407.
- Sims, C. A. (1971). Distributed lag estimation when the parameter space is explicitly infinite-dimensional. *Annals of Mathematical Statistics*, 42, 1622–1636.
- Sims, C. A. (1988). *Uncertainty in Macroeconomics: Uncertainty across Models*, American Economic Review, American Economic Association Papers and Proceedings, 163–167.
- Smith, R. L. (1992). Estimating dimension in noisy chaotic time series. *Journal of the Royal Statistical Society B*, 54, 329–351.
- Solari, L. (1971). *Théorie des Choix et Fonctions de Consommation Semi-Agrégées*, Librairie DROZ.
- Sonnenschein, H. (1973). The utility hypothesis and market demand theory. *Western Economic Journal*, 11, 404–410.
- Starrett, D. (1977). Measuring returns to scale in the aggregate, and the scale effect on public good. *Econometrica*, 45, 1439–1455.
- Stein, C. (1962). Confidence sets for the mean of a multivariate normal distribution. *Journal of the Royal Statistical Society*, 24, 265–269.
- Stokes, H. (1991). *Specifying and Diagnostically Testing Econometric Models*, Quorum Books.
- Stutzer, M. (1980). Chaotic dynamics and bifurcations in a macro model. *Journal of Economic Dynamics and Control*, 2, 353–376.
- Swinney, H. (1985). "Observations of complex dynamics and chaos," in *Fundamental Problems in Statistical Mechanics VI*, E. G. D. Cohen (ed.), Amsterdam: Elsevier North-Holland.
- Swofford, J. L. and Whitney, G. A. (1987). Nonparametric test of utility maximization and weak separability for consumption, leisure, and money. *Review of Economics and Statistics*, 69, 458–464.
- Swofford, J. L. and Whitney, G. A. (1988). Comparison of nonparametric tests of weak separability for annual and quarterly data on consumption, leisure, and money. *Journal of Business and Economic Statistics*, 6, 241–246.
- Taggart, R. A. Jr. (1984). Comment on modeling the banking firm: a survey. *Journal of Money, Credit and Banking*, 14, 612–616.
- Takens, F. (1980). "Detecting strange attractors in turbulence," in *Dynamical Systems and Turbulence, Lecture Notes in Mathematics No. 898*, D. Rand and L. Young (eds.), Berlin: Springer, 366–382.
- Takens, F. (1983). "Distinguishing deterministic and random systems," in *Nonlinear Dynamics and Turbulence*, G. Borenblatt, G. Iooss and D. Joseph (eds.), London: Pitman, 315–333.

- Takens, F. (1984). On the Numerical Determination of the Dimension of an Attractor (unpublished manuscript).
- Theil, H. (1967). *Economics and Information Theory*, Amsterdam: North-Holland.
- Theil, H. (1971). *Principles of Econometrics*, New York: Wiley.
- Theil, H. (1972). *Statistical Decomposition Analysis*, Amsterdam: North-Holland.
- Theil, H. (1973). "Some recent developments in consumer demand analysis," in *Economic Structure and Development, Essays in Honour of Jan Tinbergen*, H. C. Linneman, H. Linneman and P. de Wolff (eds.), Amsterdam: North-Holland.
- Theil, H. (1975). *Theory and Measurement of Consumer Demand*, vol. 1, Amsterdam: North-Holland.
- Theil, H. (1976). *Theory and Measurement of Consumer Demand*, vol. 2, Amsterdam: North-Holland.
- Theil, H. (1980). *The Systemwide Approach to Microeconomics*, Chicago: University of Chicago Press.
- Theil, H. and Brooks, R. B. (1970). How does the marginal utility of income change when real income changes? *European Economic Review*, 2, 218–239.
- Thornton, D. L. and Yue, P. (1992). An extended series of Divisia monetary aggregates. *Federal Reserve Bank of St Louis Review*, 74, 35–52.
- Tobin, J. (1961). Money, capital, and other stores of value. *American Economic Review Papers and Proceedings*, 51, 26–37.
- Tucker, H. G. (1967). *A Graduate Course in Probability*, New York: Academic Press.
- United States Bureau of the Census. (1960). *Historical Statistics of the United States, Colonial Times to 1957*, Washington, DC: Government Printing Office.
- United States Department of Agriculture (USDA). (1968a). *Food: Consumption, Prices, Expenditures*, Washington, DC: Government Printing Office.
- United States Department of Agriculture (USDA). (1968b). *Supplement to Food: Consumption, Prices, Expenditures*, Washington, DC: Government Printing Office.
- Uzawa, H. (1962). Production functions with constant elasticities of substitution. *Review of Economic Studies*, 29, 291–299.
- Van Huffel, S. and Vandewalle, J. (1991). *The Total Least Squares Problem: Computational Aspects and Analysis*, Society for Industrial and Applied Mathematics.
- Varian, H. R. (1982). The nonparametric approach to demand analysis. *Econometrica*, 50, 945–973.
- Varian, H. R. (1983). Non-parametric tests of consumer behavior. *Review of Economic Studies*, 50, 99–110.
- Varian, H. R. (1984). *Microeconomic Analysis*, New York: W.W. Norton and Company Inc.
- Varian, H. R. (1985). Non-parametric analysis of optimizing behavior with measurement error. *Journal of Econometrics*, 30, 445–458.
- Vastano, J. and Kostelich, E. J. (1986). "Comparison of algorithms for determining Lyapunov exponents from experimental data," in *Entropies and Dimensions*, Meyer-Kress (ed.), Berlin: Springer, 100–107.

- Walden, A. T. and Williams, M. L. (1993). Deconvolution, bandwidth and the trispectrum. *Journal of the American Statistical Association*, 88, 1323–1329.
- Wales, T. J. (1977). On the flexibility of flexible functional forms: an empirical approach. *Journal of Econometrics*, 5, 183–193.
- Wallace, D. L. (1959). Conditional confidence level properties. *Annals of Mathematical Statistics*, 30, 864–876.
- Watson, M. W. (1994). “Vector autoregressions and cointegration”, in *Handbook of Econometrics*, R. F. Engle and D. L. McFadden (eds.), vol. 4, Amsterdam: Elsevier, Chapter 47.
- Wegge, L. L. (1965). Identifiability criteria for a system of equations as a whole. *Australian Journal of Statistics*, 7, 67–77.
- Weiss, L. (1973). Asymptotic properties of maximum likelihood estimators in some nonstandard cases, II. *Journal of the American Statistical Association*, 68, 428–430.
- Weiss, L. (1975). The asymptotic distribution of the likelihood ratio in some nonstandard models. *Journal of the American Statistical Association*, 70, 204–208.
- Welch, P. D. (1967). The use of fast Fourier transform for the estimation of power spectra: a method based on time averaging over short modified periodograms. *IEEE Transactions on Audio and Electroacoustics*, AU-15(2), 70–73.
- White, H. (1980). Using least squares to approximate unknown regression functions. *International Economic Review*, 21, 149–170.
- White, H. (1989a). Some asymptotic results for learning in single hidden-layer feedforward network models. *Journal of the American Statistical Association*, 84(408), 1003–1013.
- White, H. (1989b). An additional hidden unit test for neglected nonlinearity in multilayer feedforward networks, in *Proceedings of the International Joint Conference on Neural Networks*, vol. 2, New York: IEEE Press, 451–455.
- Wiley, D. E., Schmidt, W. H. and Bramble, W. J. (1973). Studies of a class of covariance structure models. *Journal of the American Statistical Association*, 68, 317–323.
- Willig, R. D. (1976). Integrability implications for locally constant demand elasticities. *Journal of Economic Theory*, 12, 391–401.
- Wolak, F. A. (1989a). Local and global testing of linear and nonlinear inequality constraints in nonlinear econometric models. *Econometric Theory*, 5, 1–35.
- Wolak, F. A. (1989b). Testing inequality constraints in linear econometric models. *Journal of Econometrics*, 41(2), 205–235.
- Wolf, A. and Swift, J. (1984). “Progress in computing Lyapunov exponents from experimental data,” in *Statistical Physics and Chaos in Fusion Plasma*, C. W. Holton Jr. and L. E. Reichl (eds.), New York: Wiley.
- Wolf, A., Swift, J., Swinney, H. and Vastano, J. (1984). *Determining Lyapunov Exponents from a Time Series*, Austin, USA: Department of Physics, University of Texas.
- Wolf, A., Brandstater, A. and Swift, J. (1985). *Comment on Recent Calculations of Fractional Dimension of Attractors*, Austin, USA: University of Texas (pre-print).
- Wolfowitz, J. (1965). Asymptotic efficiency of the maximum likelihood estimator. *Theory of Probability and Its Applications*, 10, 247–254.

- Wonnacott, T. H. and Wonnacott, R. J. (1977). *Introductory Statistics for Business and Economics*, 2nd Edition, New York: Wiley.
- Woodford, M. (1989). "Imperfect intermediation and complex dynamics," in *Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity*, Proceedings of the Fourth International Symposium in Economic Theory and Econometrics, W. Barnett, J. Geweke and K. Shell (eds.), Cambridge, MA: Cambridge University Press, 309–338.
- Woodland, A. D. (1978). On testing weak separability. *Journal of Econometrics*, 8, 383–398.
- Yoshihara, K. (1969). Demand functions: an application to the Japanese expenditure pattern. *Econometrica*, 37, 257–274.
- Zacks, S. (1971). *The Theory of Statistical Inference*, New York: Wiley.
- Zellner, A. (1963). An application of quadratic programming and linear decision rules to linear regression with inequality constraints on the coefficients. *Econometrica*, 31, 111–130.
- Zellner, A. and Revankar, N. S. (1969). Generalized production functions. *Review of Economic Studies*, 36, 241–249.