## **CURRICULUM VITA November 2007**

Harry H. Kelejian
Department of Economics
University of Maryland
College Park, MD 20742-7211
Phone: 301-405-3492

FAX: 301-405-3542 e-mail: Kelejian@econ.umd.edu

**Education:** B.A. Economics: Hofstra College, June, 1962

M.A. Economics: University of Wisconsin, February, 1964 Ph.D. Economics: University of Wisconsin, June, 1968

Thesis Topic: Wage Equations for Selected U.S. Manufacturing

Industries

Major Professor: A.S. Goldberger

Department of Economics University of Wisconsin

# **Employment Record:**

Instructor in Economics, University of Wisconsin

June, 1966-August, 1966.

Lecturer in Economics, Princeton University

September, 1966-June, 1968.

Assistant Professor, Princeton University

June, 1968-June, 1971.

Associate Professor, New York University

September, 1971-June, 1974.

Director of Graduate Studies, New York University

September, 1972-June, 1974.

Professor of Economics, University of Maryland

September, 1974-

Visiting Professor, Institute for Advanced Studies, Vienna, Austria

October 1, 1978-January 31, 1979. Also in January 2005.

Visiting Professor, Australian National University, Canberra, Australia

September 2, 1982-October 28, 1982.

Visiting Scholar, Institute for Water Resources, Army Corps of Engineers, 1989-1999

Visiting Professor, University of Konstanz, Konstanz, Germany, April 1-May 31, 1997

# **Consulting Activities and Approximate Dates:**

W.R. Grace and Company, New York City (1972)

Econ. Inc., Princeton, N.J. (1973-75)

C&P Telephone Company, Washington, D.C. (1976)

Arthur Young & Company, Washington, D.C. (1977-1980)

Sciometrics, New York City (1979-80)

The Federal Trade Commission, Washington, D.C. (1979)

AT&T Communications (1980-1990)

Booz, Allen, and Hamilton, Inc. (1980)

The World Bank (1982)

Wilkes, Artes, Hedrick and Lane (1983)

Glassman-Oliver (1988-1990, 1994-1995)

Association of American Railroads (1991)

D.C. Public Service Commission (1991-1992)

InterAmerican Development Bank (1998-1999)

Interindustry Economic research Fund, Inc. 2006

Washington Economics Consulting group, Inc. 2006

# **Recent research grants**

"Specification and Estimation of Spatial Models", NSF, June 1, 2000-Dec 31, 2003. Joint research project with Ingmar Prucha.

"New Methods and Software for Spatial-Regression Analysis", National Institute of Health, SBIR with Stata Corp, July 2006-June 2007.

#### **Journal Editorial Work**

#### (a) Editorial Board Member

- (1) Papers in Regional Science: 1999-2004
- (2) Journal of Regional Science: 2003-
- (3) Spatial Economic Analysis: 2005-
- (4) Letters in Spatial and Resource Sciences: 2006-

## (b) **Guest Editor**

(1) Guest Editor, along with I. Prucha and B. Baltagi of a special spatial econometrics edition of the <u>Journal of Econometrics</u>.

## **Related Activities**

1. Fellow of the Regional Science Association International: 2007-

2. Board of Directors of the Spatial Econometric Association 2006-

## **Publications:**

- "A Spatial J-Test for Model Specification Against a Single or a Set of Non-nested Alternatives", forthcoming in "Letters in Spatial and Resource Sciences
- "Specification and Estimation of Spatial Autoregressive Models with Autoregressive and Heteroskedastic Disturbances," (with I. Prucha), forthcoming in The Journal of Econometrics.
  - "The relative efficiencies of various predictors in spatial models containing spatial lags, with I. Prucha. In <u>Regional Science and Urban Economics</u>, vol. 37, pp. 283-432, 2007
  - "HAC Estimation in a Spatial Framework" (with Ingmar Prucha). <u>Journal of</u> Econometrics, 140, pp 131-154, 2007
  - "Panel Data Models with Spatially Correlated Error Components" with (M. Kapoor and Ingmar Prucha), <u>Journal of Econometrics</u> 140, pp 97-130, 2007.
  - "Analysis of spatially dependent data", with Badi H. Baltagi and Ingmar R. Prucha, <u>Journal of Econometrics</u> 140, pp 1-4, 2007.
  - "Estimation Problems in Models with Spatial Weighting Matrices Which Have Blocks of Equal Elements", (with I. Prucha and Y. Yuzefovich), <u>Journal of Regional Science</u>, 46, August 2006, pp. 507-515
- "A Spatial Modeling Approach to Contagion Among Emerging Economies", (with G. Tavlas, and G. Hondroyiannis), Open Economies Review, Vol. 17 Nos 4-5, Dec 2006, pp. 423-441.
- "Demographic Trends in U.S. Cities: 1970-1990", (with D. Robinson and R. Vigil), in: Contemporary Issues in Urban and Regional Economics, edited by L. Yee. Nova Science Publisher, Hauppange, NY., pp. 153-179, 2005.
- "Instrumental Variable Estimation of a Spatial Autoregressive Model with Autoregressive Disturbances: Large and Small Sample Results" (with I. Prucha and Y. Yuzefovich), in: <u>Advances in Econometrics, Vol. 18: Spatial Spatiotemporal</u> Econometrics, (K. Pace and J. LeSage eds), Elsevier, 2004.

- "The Influence of Spatially Correlated Heteroskedasticity on Tests for Spatial Correlation" (with D. Robinson), Chapter 4 in New Advances in Spatial Econometrics, L.Anselin, R.J.D.M. Florax, ad & J. Rey (eds.), Springer: Berlin 2004.
- "Estimation of Simultaneous Systems of Spatially Interrelated Cross Sectional Equations" (with Ingmar Prucha), <u>Journal of Econometrics</u>, 118, 2004.
- "Properties of Tests for Spatial Error Components: A Further Analysis" (with Y. Yuzefovich). Chapter 7, pp. 135-149, in <u>Spatial Econometrics and Spatial Statistics</u>, A. Getis, J. Mur, and H.G. Zoller (eds.), Palgrove, Macmillan: Basingstoke, Hampshire, England, 2004.
- "Small Sample Properties of Estimators of Spatial Autoregressive Models with Autoregressive Disturbances" (with D. Das and Ingmar Prucha), in <u>Papers in Regional</u> Science, Vol. 82, Jan 2003.
- "2SLS and OLS in a Spatial Autoregressive Model with Equal Weights (with Ingmar Prucha), in <u>Journal of Regional Science and Urban Economics</u>, November 2002.
- "On the Asymptotic Distribution of the Moran I Test Statistic with Applications", with I. Prucha, in Journal of Econometrics, Vol. 104, 2001.
- "Returns to Investment in Navigation Infrastructure: An Equilibrium Approach", (with D. Robinson) in <u>Annuals of Regional Science</u>, Vol. 34, 2000.
- "A Generalized Moments Estimator for the Autoregressive Parameter in a Spatial Model", (with I. Prucha)., <u>International Economic Review</u>, May 1999.
- "A Generalized Spatial Two Stage Least Squares Procedure for Estimating a Spatial Autoregressive Model with Autoregressive Errors", (with Ingmar Prucha), in <u>Journal of Real Estate Finance and Economics</u>, Vol. 17:1, pp. 99-121, 1998.
- "A Suggested Test for Spatial Autocorrelation and/or Heteroskedasticity and Corresponding Monte Carlo Results", (with D. Robinson), in <u>Regional Science and Urban Economics</u>, Vol. 28, pp. 389-418, 1998.
- "Estimation of Spatial Regression Models with Autoregressive Errors by Two Stage Least Squares Procedures: A Series Problem", (with I. Prucha), <u>International Regional Science Review</u>, Vol. 20, pp. 103-111, 1997.

"Testing for Spatial Error Autocorrelation in the Presence of Endogenous Regressors", (with Luc Anselin), <u>International Regional Science Review</u>, Vol. 20, 1 & 2, pp. 153-182, 1997.

"Infrastructure Productivity Estimation and its Underlying Econometric Specifications: A Sensitivity Analysis", with D. Robinson, <u>Papers in Regional Science</u>, Vol. 76, 1:115-131, 1997.

"Aggregated Heterogeneous Dependent Data and the Logit Model: A Suggested Approach", Economics Letters, Vol. 47, 1995.

"Econometrics" (with I. Prucha), in <u>Encyclopedia of Operations Research and Management Science</u>, eds: Saul I. Gass and Carl M. Harris, Kluwer Academic Publishers, 1996.

"Spatial Correlation: A Suggested Alternative to the Autoregressive Model", (with D. Robinson), in <u>New Directions in Spatial Econometrics</u>, edited by Luc Anselin and Raymond Florax, Springer Verlag, 1995.

"A Suggested Method of Estimation for Spatial Interdependent Models with Autocorrelated Errors, and an Application to a County Expenditure Model", (with D. Robinson), <u>Papers of Region Science</u>, July 1993.

"The Logit Model and Panel Data via Respected Observations: A Clarification and Extension of the Literature", <u>Economics Letters</u>, 40, 1992, pp. 135-140.

Spatial Autocorrelation: A New Computationally Simple Test with an Application to Per Capita County Police Expenditures (with D. Robinson) <u>Regional Science and Urban Economics</u>, Vol. 22, 1992, pp. 317-331.

"A Rare Events Model: Monte Carlo Results on Sample Design and Large Sample Guidance," with C. Hiemstra, <u>Economics Letters</u>, 37 (1991), pp. 255-263.

"A Probability Model of Lockage Stalls and Interferences", <u>Transportation Research</u> <u>Record</u>, No. 1313, Freight Transportation, 1991.

"A Random Coefficient Qualitative Choice Model of the Demand for Telecommunications" (with J. Gatto and S. Stephan), <u>Economic Letters</u>, Vol. 35, Jan 1991, pp. 45-50.

"A Note Concerning Specifications of Interactive Random Coefficient Regression Models," (with J. Gatto and S. Stephan), <u>Journal of Econometrics</u>, Vol. 47, 1991.

"Interstate/InterLATA Telecommunication Demand Modelling" (with J. Gatto and S. Stephan), Review of Business, Fall 1989, Vol. 11, No. 2, pp. 25-31.

"Stochastic Generalizations of Demand Systems with an Application to Telecommunications" (with J. Gatto and S. Stephan), <u>Information Economics and Policy</u>, Vol. 3, 1988.

"Independent or Uncorrelated Disturbances in Linear Regression: An Illustration of the Difference" (with I. Prucha), <u>Economic Letters</u>, Vol. 19, 1985.

"The Structure of Simultaneous Equation Estimators: A Generalization Towards Non-normal Disturbances" (with I. Prucha), <u>Econometrica</u>, May 1984.

"Autocorrelated and Heteroskedastic Disturbances in Linear Regression Analysis: A Monte Carlo Study" (with B. Bumb), <u>SANKHYA</u>, Series B, Vol. 45, Part 2, August 1983.

"Inference in Random Coefficient Panel Data Models: A Correction and Clarification of the Literature" (with S. Stephen), February, 1983, <u>International Economic Review</u>.

## Also, in:

<u>The Econometrics of Panel Data</u>, Vol. 1, Edward Elgar Publication, Editor G.S. Maddala, 1993.

"An Extension of a Standard Test for Heteroskedasticity to a Systems Framework," <u>Journal of Econometrics</u>, November, 1982.

"Pollution, the Ozone Layer, and the Consequent Economic Cost Concerning Agricultural Production" (with B. Vavrichek), Chapter 7 in <u>The Economics of Managing Chlorofluorocarbons: Stratospheric Ozone and Climate Issues</u> (J. Cumberland, J. Hibbs, and I. Hoch, editors), Washington, D.C.: Resources for the Future, 1982.

"The Value of Information in a Storage Model with Open and Closed Loop Controls: A Numerical Example" (with D. Bradford), <u>Journal of Economic Dynamics and Control</u>, 3 (1981), pp. 307-317.

"Lagged Endogenous Variables and the Cochrane-Orcutt Procedure" (with R. Betancourt), Econometrica, July, 1981.

"An Evaluation of the Forecasting Performance of Macro Economic Models with Special Emphasis on Size" (with B. Vavrichek) in <u>Large-Scale Macro-Economics Models</u> (J. Kmenta and J.B. Ramsey, eds.), North Holland, 1981.

"Aggregation and Disaggregation of Nonlinear Econometric Equations," in <u>Evaluation of Econometric Models</u>, J. Kmenta and J. Ramsey, eds., North Holland, 1981.

"Estimating the Demand for Broadway Theater: A Preliminary Inquiry" (with William Lawrence), in <u>Economic Policy for the Arts</u>, W. Henden, J. Shanahan, and A. MacDonald, eds., Abt Books, 1980.

"The Value of Improved Information Relating to Wheat Crop Forecasting: An Over View of the Bradford/Kelejian Modelling Efforts," <u>Sozialwissenschaftliche Annalen</u>, Band 2, 1978, Seite 107-118, Physica-Verlag, Wien.

"Forecasting with Nonlinear Econometric Models: A Comparison of Two Procedures" (with P. Devine), <u>American Statistical Association</u>, 1978, Proceedings of the Business and Economic Statistics Section.

"The Value of Information for Crop Forecasting with Bayesian Speculation" (with D. Bradford), The Bell Journal of Economics and Management Science, Spring, 1978.

"A Note on the Variability of the Replacement Investment Capital Stock Ratio: Reply" (with G. Bitros), Review of Economics and Statistics, November, 1977.

"The Value of Information for Crop Forecasting in a Market System" (with D. Bradford), Review of Economic Studies, October, 1977.

"A Stochastic Control Approach to Factor Demand" (with G. Bitros), <u>International Economic Review</u>, October, 1976. (Presented at third N.B.E.R. Conference on Stochastic Control in Econ.)

"The Cyclical Variability of the Replacement Investment Rate, Some Evidence from the Scrappage Rate" (with G. Bitros), <u>Review of Economics and Statistics</u>, August, 1974.

"Methods of Estimation for Markets in Disequilibrium: A Further Analysis" (with Ray Fair), <u>Econometrica</u>, January, 1974.

"Random Parameters in a Simultaneous Equation Framework," <u>Econometrica</u>, May, 1974.

"An Econometric Model for the Flight of the Suburbs" (with D. Bradford), <u>Journal of Political Economy</u>, May-June, 1973.

"Information Lost in Aggregation: A Bayesian Approach - A Further Note," Econometrica, March, 1973.

"Identification of Non Linear Systems: An Interpretation of Fisher: Also, the Multiple Solution Problem," edited portions of this paper appear in Non Linear Econometric Methods, S. Goldfeld and R. Quandt, North Holland, 1972.

"Cobb-Douglas Type Function with Both Additive and Multiplicative Disturbance Terms: A Further Analysis," <u>International Economic Review</u>, February, 1972.

"The Formulation of the Dependent Variable in the Wage Equation" (with S.W. Black), Review of Economic Studies, January, 1972.

"Information Lost in Aggregation: A Bayesian Approach," Econometrica, January, 1972.

"Two Stage Least Squares and Econometric Models Linear in the Parameters but Non Linear in the Endogenous Variables," <u>Journal of the American Statistical Association</u>, June, 1971.

"A Note on Estimation of Production Function Models," <u>Southern Economic Journal</u>, April, 1971.

"A Macro Model of the U.S. Labor Market" (with S.W. Black), <u>Econometrica</u>, September, 1970.

"Dynamic Econometric Models: Simulation Versus Analytical Solutions" (with E.P. Howrey), in Design of Computer Simulation Experiments, ed. by T.H. Naylor, Duke University Press, 1969.

#### Also in:

Macroeconometric Modelling, Vol 2: The International Library of Critical Writings in Econometrics, edited by Kenneth Wallis, Edward Elgar Pub. Ltd: Aldershot, UK, 1994.

#### Also in:

Computer Simulation Experiments with Models of Economic Systems, John Wiley and Sons, 1970.

"Missing Observations in Multivariate Regression: Efficiency of a First-Order Method," Journal of the American Statistical Association, December, 1969.

#### **Books**:

An Introduction to Econometric Analysis (with W. Oates), Harper and Row Publishers, 1. 1974.

Second Edition, Harper and Row Publishers, 1981.

Third Edition, Harper and Row Publishers, 1989.

Foreign Editions: Translated into Portuguese (1978); Korean Student Edition (1984),

translated into Spanish (1988).

2. An Analysis of Spatially Dependent Data: (Guest Editor with Badi Baltigi, and Ingmar Prucha) Journal of Econometrics, Vol. 140, 2007.

## **Papers Submitted for Publication:**

- 1. Spatial Aspects of Contagion Among Emerging Economies (with G. Tavlas and
- G. Hondroyiannis)

2. "A Spatial Cliff-Ord-type Model with Heteroskedastic Innovations: Small and Large Sample Results", (with Irani Arriz, David Drukker, and Ingmar Prucha. Submitted to Regional Science and Urban Economics.

# **Work in Progress:**

- 1. Spatial Models with Endogenous Weighting Matrices (with Ingmar Prucha)
- 2. Spatial Interdependencies and Relative Geographic Location as Determinants Of Institutional Development (with Peter Murrel and Oleksandr Shepotylo)
- 3 Border Issues in Spatial Econometric Models, with I. Prucha, R. Eggers, and M. Pfaffermayr.

## **Miscellaneous:**

- (1) I have written other papers which have not been published and so are not listed above.
- (2) I was selected for the Prentice Hall of Fame economist card series.

## **References:**

Professor Luc Anselin, Department of Agricultural and Consumer Economics, University of Illinois

Professor Anil Bera, Department of Economics, University of Illinois Professor Ingmar Prucha, Department of Economics, University of Maryland