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**EDUCATION**

University of Pennsylvania, Ph.D. Economics, December, 1979.  
Carnegie-Mellon University, M.S. Statistics, May, 1975.  
American University of Beirut, B.A. Statistics, February, 1974.

**ACADEMIC POSITIONS**

Distinguished Professor of Economics, Syracuse University, 2005-present.  
Part-time Chair in Economics, University of Leicester, 2004-present.  
George Summey, Jr. Professor of Liberal Arts, Texas A&M University, 1993 -2005.  
Visiting Professor, University of California-San Diego, 2002.  
Visiting Professor, University of Arizona, 1996.  
Professor of Economics, Texas A&M University, 1988 -2005.  
Associate Professor of Economics, University of Houston, 1984-1988.  
Assistant Professor of Economics, University of Houston, 1979-1984.

**RESEARCH EXPERIENCE**

Senior Research Associate, Center for Policy Research, Syracuse University, 2005-present.  
Research Fellow, CESifo, Munich Society for the Promotion of Economic Research, 2003 to present.  
Research Fellow, ERMES, Université Pantheon-Assas, Paris II, 2003 to present.  
Research Fellow, Institute for Labor Research (IZA), Bonn, Germany, 2002 to present.  
Research Fellow, Private Enterprise Research Center, Texas A&M University, 1991 to 2005.  
Research Fellow, Center for Public Policy, University of Houston, 1982-1988.

**PROFESSIONAL MEMBERSHIP**

Associate Editor, *Journal of Econometrics*, 1999-present. Fellow of the *Journal of Econometrics*, 1995.  
Co-Editor, *Empirical Economics*, 1999-present. Editorial Board, *Empirical Economics*, 1994-present.  
Replication Editor, *Journal of Applied Econometrics*, 2003-present.  
Editorial Board, *Econometric Reviews*, 1994-present.  
Series Editor, *Contributions to Economic Analysis*, Elsevier Science, 2003-present.  
*Econometric Theory* Multa Scripsit Award, 1998, Plura Scripsit Award, 2004.  
*Journal of Applied Econometrics* Distinguished Authors Award, 2008.  
*Distinguished Achievement Award in Research*, The Association of Former Students, Texas A&M University, 2002.  
Member of the *American Statistical Association*, *Econometric Society*, *International Statistical Institute*.  
Secretary/Treasurer, Business and Economics Sections, *American Statistical Association*, 2000.  
Chair-Elect, Business and Economics Sections, *American Statistical Association*, 2005.  
Member of the Board of Directors of the *Spatial Econometrics Association*, 2006-present.  
Member of the *Scientific Committee* for the following International Conferences on Panel Data: Paris, France (1990, 1994, 1997), Budapest, Hungary (1992), Amsterdam, Holland (1996), Göteborg, Sweden (1998), Geneva, Switzerland (2000), Berlin, Germany (2002), Copenhagen, Denmark (2005), Cambridge, United Kingdom (2006), Xiamen University, China (2007).  
Member of the *Scientific Committee* for the following International Conference on Spatial Econometrics and Statistics: Rome, Italy (2006), Cambridge, United Kingdom (2007), New York (2008), Barcelona, Spain (2009).  
Organizer of the 1<sup>st</sup> and 6<sup>th</sup> Texas Econometrics Camp, Guadalupe River Ranch, Boerne, Texas, February 1996, and February 2001.  
Organizer of the 11th International Conference on Panel Data, College Station, Texas, June 2004.  
Organizer of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> New York Econometrics Camps, held at Saratoga Springs, New York, February 2006, and March 2007 and Ithaca, New York, April, 2008.

## PUBLICATIONS

- “On Seemingly Unrelated Regressions with Error Components,” *Econometrica*, Vol. 48 (September, 1980), pp.1547-1551.
- “Pooling: An Experimental Study of Alternative Testing and Estimation Procedures in a Two-Way Error Components Model,” *Journal of Econometrics*, Vol. 17 (September, 1981), pp. 21-49.
- “Simultaneous Equations with Error Components,” *Journal of Econometrics* Vol. 17 (November, 1981), pp. 189-200.
- “Gasoline Demand in the OECD: An Application of Pooling and Testing Procedures,” with James Griffin, *European Economic Review*, Vol. 22 (July, 1983), pp. 117-137.
- “U.S. Gasoline Demand: What Next?” with James M. Griffin, *The Energy Journal*, Vol. 5 (January, 1984), pp. 129- 140.
- “A Monte Carlo Study for Pooling Time Series of Cross-Section Data in the Simultaneous Equations Model,” *International Economic Review*, Vol. 25 (October, 1984), pp. 603-624.
- “Short and Long Run Effects in Pooled Models,” with James M. Griffin, *International Economic Review*, Vol. 25 (October, 1984), pp. 631-645.
- “Small Sample Results on Schmidt’s Truncated Remainder to the Gamma Distributed Lag,” with Jay R. Ferry, *Statistical Papers*, Vol. 26 (June, 1985), pp. 87-95.
- “The Bias of the Estimated Variances of Least Squares Estimators in an Error Components Model,” *Statistical Papers*, Vol. 26 (June, 1985), pp. 147-155.
- “Pooling Cross-Sections with Unequal Time-Series Lengths,” *Economics Letters*, Vol. 18 (1985), pp. 133-136.
- “Estimating Dynamic Demand for Cigarettes Using Panel Data: The Effects of Bootlegging, Taxation and Advertising, Reconsidered,” with Dan Levin, *The Review of Economics and Statistics*, Vol. 68 (February, 1986), pp. 148-155.
- “Pooling Under Misspecification: Some Monte Carlo Evidence on the Kmenta and the Error Components Techniques,” *Econometric Theory*, Vol. 2 (December, 1986), pp. 429-440.
- “To Pool or Not to Pool: The Quality Bank Case,” *The American Statistician*, Vol. 41 (May, 1987), pp. 150-152.
- “On Estimating From a More General Time-Series Cum Cross-Section Data Structure,” *The American Economist*, Vol. 31 (Fall, 1987), pp. 69-71.
- “Quasi-Experimental Price Elasticities of Cigarette Demand and the Bootlegging Effect,” with Rajeev K. Goel, *American Journal of Agricultural Economics*, Vol. 69 (November, 1987), pp. 750-754.
- “A General Index of Technical Change,” with James M. Griffin, *Journal of Political Economy*, Vol. 96 (February, 1988), pp. 20-41. Also, translated into Hungarian and appeared as “A technikai haladás általános indexe,” *Szigma*, Vol. 21 (1989-1990), pp. 80-100.
- “A Generalized Error Component Model with Heteroscedastic Disturbances,” with James M. Griffin, *International Economic Review*, Vol. 29 (November, 1988), pp. 745-753.
- “On the Efficiency of Two-Stage and Three-Stage Least Squares Estimators,” *Econometric Reviews*, Vol. 7 (1988-1989), pp. 165-169.
- “Further Monte Carlo Evidence on Seemingly Unrelated Regressions with Unequal Number of Observations,” with Susan Garvin and Steven Kerman, *Annales D’Économie et de Statistique*, Vol. 14 (April-June, 1989), pp. 103-115.
- “Applications of a Necessary and Sufficient Condition for OLS to be BLUE,” *Statistics and Probability Letters*, Vol. 8 (October, 1989), pp. 457-461.

- “Alternative Models of Managerial Behavior: Empirical Tests for the Petroleum Industry,” with James M. Griffin, *The Review of Economics and Statistics*, Vol. 71 (November, 1989), pp. 579-585.
- “The Error Components Regression Model: Conditional Relative Efficiency Comparisons,” *Statistical Papers*, Vol. 31 (February, 1990), pp. 1-13.
- “Quasi-Experimental Price Elasticity of Liquor Demand in the United States: 1960-1983,” with Rajeev Goel, *American Journal of Agricultural Economics*, Vol. 72 (May, 1990), pp. 451-454.
- “A Lagrange Multiplier Test for the Error Components Model with Incomplete Panels,” with Qi Li, *Econometric Reviews*, Vol. 9 (1990), pp. 103-107.
- “Recovering Precision from Seemingly Redundant Rounded Data,” with Irwin L. Collier, Jr., *Journal of Forecasting*, Vol. 9 (October-December, 1990), pp. 457-465.
- “On Efficient Estimation With Panel Data: An Empirical Comparison of Instrumental Variables Estimators,” with Sophon Khanti-Akom, *Journal of Applied Econometrics*, Vol. 5 (October-December, 1990), pp. 401-406.
- “Intercountry Evidence on the Performance of the Simple Error Correction Mechanism Model of Consumption,” with Manouchehr Mokhtari, *Empirical Economics*, Vol. 15 (December, 1990), pp. 303-314.
- “A Joint Test for Serial Correlation and Random Individual Effects,” with Qi Li, *Statistics and Probability Letters*, Vol. 11 (March, 1991), pp. 277-280.
- “A Transformation That Will Circumvent The Problem of Autocorrelation in an Error Component Model,” with Qi Li, *Journal of Econometrics*, Vol. 48 (June, 1991), pp. 385-393.
- “Editors’ Introduction and Overview: Panel Data Analysis,” with Baldev Raj, *Empirical Economics*, Vol. 17 (March, 1992), pp. 1-8.
- “A Survey of Recent Theoretical Developments in the Econometrics of Panel Data,” with Baldev Raj, *Empirical Economics*, Vol. 17 (March, 1992), pp. 85-109.
- “A Note on the Estimation of Simultaneous Equations with Error Components,” with Qi Li, *Econometric Theory*, Vol. 8 (March, 1992), pp. 113-119.
- “Monte Carlo Evidence on Panel Data Regressions With AR(1) Disturbances and an Arbitrary Variance on the Initial Observations,” with Young-Jae Chang and Qi Li, *Journal of Econometrics*, Vol. 52 (June, 1992), pp. 371-380.
- “A Monotonic Property for Iterative GLS in the Two-Way Random Effects Model,” with Qi Li, *Journal of Econometrics*, Vol. 53 (July-September, 1992), pp. 45-51.
- “Prediction in a One-Way Error Component Model with Serial Correlation,” with Qi Li, *Journal of Forecasting*, Vol. 11 (September, 1992), pp. 561-567.
- “Monte Carlo Results on Several New and Existing Tests for the Error Component Model,” with Young-Jae Chang and Qi Li, *Journal of Econometrics*, Vol. 54 (October-December, 1992), pp. 95-120.
- “Cigarette Taxation: Raising Revenues and Reducing Consumption,” with Dan Levin, *Structural Change and Economic Dynamics*, Vol. 3 (December, 1992), pp. 321-335.
- “Useful Matrix Transformations for Panel Data Analysis: A Survey,” *Statistical Papers*, Vol. 34 (November, 1993), pp. 281-301.
- “A Simple Recursive Estimation Method for Regression Models with AR(p) Disturbances,” with Qi Li, *Statistical Papers*, Vol. 35 (May, 1994), pp. 93-100.

- “Incomplete Panels: A Comparative Study of Alternative Estimators for the Unbalanced One-Way Error Component Regression Model,” with Young-Jae Chang, *Journal of Econometrics*, Vol. 62 (June, 1994), pp. 67-89.
- “Estimating Error Component Models With General MA(q) Disturbances,” with Qi Li, *Econometric Theory*, Vol. 10 (June, 1994), pp. 396-408.
- “Consistency, Asymptotic Unbiasedness and Bounds on the Bias of  $s^2$  in the Linear Regression Model with Error Component Disturbances,” with Walter Krämer, *Statistical Papers*, Vol. 35 (November, 1994), pp. 323-328.
- “Airline Deregulation: The Cost Pieces of the Puzzle,” with James M. Griffin and Daniel Rich, *International Economic Review*, Vol. 36 (February, 1995), pp. 245-258.
- “Editor’s Introduction: Panel Data,” *Journal of Econometrics*, Vol. 68 (July, 1995), pp. 1-4.
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- “Public Capital Stock and State Productivity Growth: Further Evidence from an Error Components Model,” with Nat Pinnoi, *Empirical Economics*, Vol. 20 (June, 1995), 351-359.
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- “The Measurement of Firm-Specific Indexes of Technical Change,” with James M. Griffin and Daniel Rich, *The Review of Economics and Statistics*, Vol. 77 (November, 1995), pp. 654-663.
- “A General Condition for an Optimal Limiting Efficiency of OLS in the General Linear Regression Model,” with Walter Krämer, *Economics Letters*, Vol. 50 (January, 1996), pp. 13-17.
- “Testing for Random Individual and Time Effects Using a Gauss-Newton Regression,” *Economics Letters*, Vol. 50 (February, 1996), pp. 189-192.
- “Testing for Random Individual Effects Using Recursive Residuals,” with Young-Jae Chang, *Econometric Reviews*, Vol. 15 (1996), pp. 331-338.
- “A Nonparametric Test for Poolability Using Panel Data,” with Javier Hidalgo and Qi Li, *Journal of Econometrics*, Vol. 75 (December, 1996), pp. 345-367.
- “Pooled Estimators v.s. Their Heterogeneous Counterparts in the Context of Dynamic Demand for Gasoline,” with James M. Griffin, *Journal of Econometrics*, Vol. 77 (April, 1997), pp. 303-327.
- “Testing for Linear and Loglinear Error Component Regression Against Box-Cox Alternatives,” *Statistics and Probability Letters*, Vol. 33 (April, 1997), pp. 63-68.
- “Monte Carlo Results on Pure and Pretest Estimators of An Error Component Model With Autocorrelated Disturbances,” with Qi Li, *Annales D’Économie et de Statistique*, Vol. 48 (October-December, 1997), pp. 69-82.
- “Worldwide Institutional Rankings in Econometrics: 1989-1995,” *Econometric Theory*, Vol. 14 (February, 1998), pp. 1-44.
- “The German Wage Curve: Evidence from the IAB Employment Sample,” with Uwe Blien, *Economics Letters*, Vol. 61 (November, 1998), pp. 135-142.
- “Testing for Random Individual and Time Effects Using Unbalanced Panel Data,” with Young-Jae Chang and Qi Li, *Advances in Econometrics*, Vol. 13 (1998), pp. 1-20.
- “Excess Capacity: A Permanent Characteristic of U.S. Airlines,” with James M. Griffin and Sharada Vadali, *Journal of Applied Econometrics*, Vol. 13 (December, 1998), pp. 645-657.

- “Double Length Regressions for Linear and Log-Linear Regressions With AR(1) Disturbances,” *Statistical Papers*, Vol. 40 (April, 1999), pp. 199-209.
- “Applied Econometrics Rankings: 1989-1995,” *Journal of Applied Econometrics*, Vol. 14 (July-August, 1999), pp. 423-441.
- “Unequally Spaced Panel Data Regressions with AR(1) Disturbances,” with Ping X. Wu, *Econometric Theory*, Vol. 15 (December, 1999), pp. 814-823.
- “Specification Tests in Panel Data Models Using Artificial Regressions,” *Annales D’Économie et de Statistique*, Vol. 55-56 (September-December, 1999), pp. 277-297.
- “To Pool or Not to Pool: Homogeneous versus Heterogeneous Estimators Applied to Cigarette Demand,” with James M. Griffin and Weiwen Xiong, *The Review of Economics and Statistics*, Vol. 82 (February, 2000), pp. 117-126.
- “A Consistent Test for the Parametric Distribution of Regression Disturbances,” with Qi Li, *Advances in Econometrics*, Vol. 14 (2000) pp. 3-24.
- “Simultaneous Equations with Incomplete Panels,” with Young-Jae Chang, *Econometric Theory*, Vol. 16 (April, 2000), pp. 269-279.
- “Nonstationary Panels, Cointegration in Panels and Dynamic Panels: A Survey,” with Chihwa Kao, *Advances in Econometrics*, Vol. 15 (2000), pp. 7-51.
- “Editors Introduction: Nonstationary Panels, Cointegration in Panels and Dynamic Panels,” with Thomas B. Fomby and R. Carter Hill, *Advances in Econometrics*, Vol. 15 (2000), pp. 1-5.
- “Double-Length Regressions for the Box-Cox Difference Model with Heteroskedasticity or Autocorrelation,” with Dong Li, *Economics Letters*, Vol. 69 (October, 2000), pp. 9-14.
- “The East German Wage Curve: 1993-1998,” with Uwe Blien and Katja Wolf, *Economics Letters*, Vol. 69 (October, 2000), pp. 25-31.
- “The Unbalanced Nested Error Component Regression Model,” with Seuck Heun Song and Byoung Cheol Jung, *Journal of Econometrics*, Vol. 101, (April, 2001), pp. 357-381.
- “LM Tests for Functional Form and Spatial Error Correlation,” with Dong Li, *International Regional Science Review*, Vol. 24, (April, 2001), pp. 194-225.
- “Double Length Artificial Regressions for Testing Spatial Dependence,” with Dong Li, *Econometric Reviews*, Vol. 20 (2001), pp. 31-40.
- “The Econometrics of Rational Addiction: The Case of Cigarettes,” with James M. Griffin, *Journal of Business and Economic Statistics*, Vol. 19, (October, 2001), pp. 449-454.
- “Estimation of Econometric Models with Nonparametrically Specified Risk Terms,” with Qi Li, *Econometric Reviews*, Vol. 20, (2001), pp. 445-460.
- “LM Tests for the Unbalanced Nested Panel Data Regression Model With Serially Correlated Errors,” with Seuck Heun Song and Byoung Cheol Jung, *Annales d’Économie et de Statistique*, Vol. 65 (January-March, 2002), pp. 219-268.
- “Series Estimation of Partially Linear Panel Data Models with Fixed Effects,” with Dong Li, *Annals of Economics and Finance*, Vol. 3 (May, 2002), pp. 103-116.
- “On Instrumental Variable Estimation of Semiparametric Dynamic Panel Data Models,” with Qi Li, *Economics Letters*, Vol. 76 (June, 2002), pp. 1-9.

- “Comparison of Forecast Performance for Homogeneous, Heterogeneous and Shrinkage Estimators. Some Empirical Evidence from US Electricity and Natural-Gas Consumption,” with Georges Bresson and Alain Pirotte, *Economics Letters*, Vol. 76 (August, 2002), pp. 375-382.
- “Rational Addiction to Alcohol: Panel Data Analysis of Liquor Consumption,” with James M. Griffin, *Health Economics*, Vol. 11 (September, 2002), pp. 485-491.
- “Simple LM Tests for the Unbalanced Nested Error Component Regression Model,” with Seuck Heun Song and Byoung Cheol Jung, *Econometric Reviews*, Vol. 21 (October, 2002), pp. 167-187.
- “A Comparative Study of Alternative Estimators for the Unbalanced Two-Way Error Component Regression Model,” with Seuck Heun Song and Byoung Cheol Jung, *The Econometrics Journal*, Vol. 5 (December, 2002), pp. 480-493.
- “Worldwide Institutional and Individual Rankings in Econometrics Over the Period 1989-1999: An Update,” *Econometric Theory*, Vol. 19 (February, 2003), pp. 165-224.
- “Fixed Effects, Random Effects or Hausman-Taylor? A Pretest Estimator,” with Georges Bresson and Alain Pirotte, *Economics Letters*, Vol. 79 (June, 2003), pp. 361-369.
- “Wage Policy in the Health Care Sector: A Panel Data Analysis of Nurses’ Labour Supply,” with Jan Erik Askildsen and Tor Helge Holmas, *Health Economics*, Vol. 12 (September, 2003), pp. 705-719.
- “A Generalized Design of Bilateral Trade Flow Models,” with Peter Egger and Michael Pfaffermayr, *Economics Letters*, Vol. 80 (September, 2003), pp. 391-397.
- “Homogeneous, Heterogeneous or Shrinkage Estimators? Some Empirical Evidence from French Regional Gasoline Consumption,” with James M. Griffin, Georges Bresson and Alain Pirotte, *Empirical Economics*, Vol. 28, (November, 2003), pp. 795-811.
- “Testing Panel Data Regression Models with Spatial Error Correlation,” with Seuck Heun Song and Won Koh, *Journal of Econometrics*, Vol. 117 (November, 2003), pp. 123-150.
- “A Comparative Study of Pure and Pretest Estimators for A Possibly Misspecified Two-Way Error Component Model,” with Georges Bresson and Alain Pirotte, *Advances in Econometrics*, Vol. 17 (2003), pp. 1-27.
- “Editor’s Introduction: Panel Data, Theory and Application,” *Empirical Economics*, Vol. 29 (January, 2004), pp. 1-4.
- “Tobin q: Forecast Performance for Hierarchical Bayes, Shrinkage, Heterogeneous and Homogeneous Panel Data Estimators,” with Georges Bresson and Alain Pirotte, *Empirical Economics*, Vol. 29 (January, 2004), pp. 107-113.
- “Comment on Modeling Regional Interdependencies Using a Global Error-Correcting Macroeconometric Model,” *Journal of Business and Economic Statistics*, Vol. 22, (April, 2004), pp. 163-164.
- “Testing for Linear and Log-Linear Models Against Box-Cox Alternatives with Spatial Lag Dependence,” with Dong Li, *Advances in Econometrics*, Vol. 18 (2004), pp. 35-74.
- “State Tax Changes and Quasi-Experimental Price Elasticities of U.S. Cigarette Demand: An Update,” with Rajeev Goel, *Journal of Economics and Finance*, Vol. 28 (Fall, 2004), pp. 424-431.
- “Skilled-Biased Technical Change in U.S. Manufacturing: A General Index Approach,” with Daniel Rich, *Journal of Econometrics*, Vol. 126 (June, 2005), pp.549-570.
- “Adaptive Estimation of Heteroskedastic Error Component Models,” with Georges Bresson and Alain Pirotte, *Econometric Reviews*, Vol. 24 (2005), pp.39-58.

- “A Panel Data Study of Physician’s Labor Supply: The Case of Norway,” with Espen Bratberg and Tor Helge Holmas, *Health Economics*, Vol. 14 (October, 2005), pp. 1035-1045.
- “Estimating An Economic Model of Crime Using Panel Data from North Carolina,” *Journal of Applied Econometrics*, Vol. 21 (May-June, 2006), pp. 543-547.
- “Transaction Tax and Stock Market Behavior: Evidence From an Emerging Market,” with Qi Li and Dong Li, *Empirical Economics*, Vol. 31 (June, 2006), pp. 393-408.
- “Rational Alcohol Addiction: Evidence from the Russian Longitudinal Monitoring Survey,” with Ingo Geishecker, *Health Economics*, Vol. 15 (September, 2006), pp. 893-914.
- “Unbalanced Panel Data: A Survey,” with Seuck Heun Song, *Statistical Papers*, Vol. 47 (October, 2006), pp. 493-523.
- “Random Effects and Spatial Autocorrelation with Equal Weights,” *Econometric Theory*, Vol. 22 (October, 2006), pp. 973-984.
- “Joint LM Test for Heteroskedasticity in a One-Way Error Component Model,” with Georges Bresson and Alain Pirotte, *Journal of Econometrics*, Vol. 134 (October, 2006), pp. 401-417.
- “Prediction in the Panel Data Model with Spatial Correlation: The Case of Liquor,” with Dong Li, *Spatial Economic Analysis*, Vol. 1 (November, 2006), pp. 175-185.
- “An Alternative Derivation of Mundlak’s Fixed Effects Results Using System Estimation,” *Econometric Theory*, Vol. 22 (December, 2006), pp. 1191-1194.
- “On the Use of Panel Data Methods to Estimate Rational Addiction Models,” *Scottish Journal of Political Economy*, Vol. 54 (February, 2007), pp. 1-18.
- “Editors’ Introduction: Heterogeneity and Cross Section Dependence in Panel Data Models: Theory and Applications,” with M. Hashem Pesaran, *Journal of Applied Econometrics*, Vol. 22 (March, 2007), pp. 229-232.
- “Panel Unit Root Tests and Spatial Dependence,” with Georges Bresson and Alain Pirotte, *Journal of Applied Econometrics*, Vol. 22 (March, 2007), pp. 339-360.
- “Comments on: Panel Data Analysis — Advantages and Challenges by Cheng Hsiao,” **TEST, Journal of the Sociedad Española de Estadística e Investigación Operativa**, Vol. 16 (May, 2007), pp. 28-31.
- “Testing for Cointegrating Rank via Model Selection: Evidence from 165 Data Sets,” with Zijun Wang, *Empirical Economics*, Vol. 33 ( July, 2007), pp. 41-49.
- “Alternative Ways Of Obtaining Hausman’s Test Using Artificial Regressions,” with Long Liu, *Statistics and Probability Letters*, Vol. 77 ( July, 2007), pp. 1413-1417.
- “Editors’ Introduction: Analysis of Spatially Dependent Data,” a special issue of *Journal of Econometrics*, with Harry Kelejian and Ingmar Prucha, *Journal of Econometrics*, Vol. 140 (September, 2007), pp. 1-4.
- “Testing for Serial Correlation, Spatial Autocorrelation and Random Effects Using Panel Data,” with Seuck Heun Song, Byoung Cheol Jung and Won Koh, *Journal of Econometrics*, Vol. 140 (September, 2007), pp. 5-51.
- “Estimating Models of Complex FDI: Are there Third Country Effects?,” with Peter Egger and Michael Pfaffermayr, *Journal of Econometrics*, Vol. 140 (September, 2007), pp. 260-281.
- “Worldwide Econometrics Rankings: 1989-2005,” *Econometric Theory*, Vol. 23 (October, 2007), pp. 952-1012.

“Intra- and Extra-Euro Area Import Demand for Manufactures,” with Robert Anderton, Frauke Skudelny and Nuno Sousa, *Applied Economics Quarterly*, Vol. 53 (Number 3, 2007), pp. 221-241.

“Editors’ Introduction: Spatial Econometrics,” with Giuseppe Arbia, *Empirical Economics*, Vol. 34 (February, 2008), pp. 1-4.

“Forecasting with Panel Data,” *Journal of Forecasting*, Vol. 27 (March, 2008), pp. 153-173.

“A Monte Carlo Study for Pure and Pretest Estimators of a Panel Data Model With Spatially Autocorrelated Disturbances,” with Peter Egger and Michael Pfaffermayr, forthcoming in *Annales d’Économie et de Statistique*.

“Estimating Regional Trade Agreement Effects on FDI in an Interdependent World,” with Peter Egger and Michael Pfaffermayr, forthcoming in *Journal of Econometrics*.

“New Evidence on the Dynamic Wage Curve for Western Germany: 1980-2004,” with Uwe Blien and Katja Wolf, forthcoming in *Labour Economics*.

“Testing for Heteroskedasticity and Spatial Correlation in a Random Effects Panel Data Model,” with Seuck Heun Song, and Jae Hyeok Kwon, forthcoming in *Computational Statistics and Data Analysis*.

“Testing For Random Effects and Spatial Lag Dependence in Panel Data Models,” with Long Liu, forthcoming in *Statistics and Probability Letters*.

“Asymptotic Properties of Estimators for the Linear Panel Regression Model with Individual effects and Serially Correlated Errors: The Case of Stationary and Non-Stationary Regressors and Residuals,” with Chihwa Kao and Long Liu, forthcoming in *Econometrics Journal*.

“Financial Development, Openness and Institutions,” with Panicos Demetriades and Siong Hook Law, forthcoming in *Journal of Development Economics*.

## REFEREED PROBLEMS AND SOLUTIONS

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“Prediction With a Two-Way Error Component Model,” *Econometric Theory*, Problem 88.1.1, Vol. 4 (April, 1988), p. 171.

“An Alternative Heteroscedastic Error Component Model,” *Econometric Theory*, Problem 88.2.2, Vol. 4 (August, 1988), pp. 349-350.

“The Efficiency of OLS in a Seemingly Unrelated Regressions Model,” *Econometric Theory*, Problem 88.3.4, Vol. 4 (December, 1988), pp. 536-537.

“A Variance Comparison of OLS and Feasible GLS in an Error Components Model,” *Econometric Theory*, Problem 89.1.5, Vol. 5 (April, 1989), p. 175.

“The Equivalence of the Boothe-MacKinnon and the Hausman Specification Tests in the Context of Panel Data,” *Econometric Theory*, Problem 89.3.3, Vol. 5 (December, 1989), p. 454.

“The Lower Triangular Matrix Associated With an Autoregressive Process,” *Econometric Theory*, Solution 88.3.3, Vol. 5 (December, 1989), pp. 461-463.

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- “A Comparison of Variance Components Estimators Using Balanced Versus Unbalanced Data,” with Qi Li, *Econometric Theory*, Problem 90.2.3, Vol. 6 (June, 1990), pp. 283-285.
- “The Heteroscedastic Consequences of an Arbitrary Variance for the Initial Disturbance of an AR(1) Model,” with Qi Li, *Econometric Theory*, Problem 90.3.1, Vol. 6 (September, 1990), p. 405.
- “The Differencing Test in a Regression With Equicorrelated Disturbances,” *Econometric Theory*, Problem 90.4.5, Vol. 6 (December, 1990), p. 488.
- “Variance Component Estimation Under Misspecification,” with Qi Li, *Econometric Theory*, Problem 91.3.3, Vol. 7 (September, 1991), pp. 418-419.
- “The Bias of the Standard Error of OLS for an AR(1) Process With an Arbitrary Variance on the Initial Observations,” with Qi Li, *Econometric Theory*, Problem 92.1.4, Vol. 8 (March, 1992), p. 146.
- “Sampling Distributions and Efficiency Comparisons of OLS and GLS in the Presence of Both Serial Correlation and Heteroscedasticity,” *Econometric Theory*, Problem 92.2.3, Vol. 8 (June, 1992), pp. 304-305.
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- “Nested Effects,” *Econometric Theory*, Problem 93.4.2, Vol. 9 (December, 1993), pp. 687-688.
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“Swedish Liquor Consumption: New Evidence on Taste Change,” with James M. Griffin presented at the 11<sup>th</sup> International Conference on Panel Data held at Texas A&M University, College Station, Texas, June 4-6, 2004.

“Adaptive Estimation of Heteroskedastic Error Component Models,” with Georges Bresson and Alain Pirotte, presented at the 11<sup>th</sup> International Conference on Panel Data held at Texas A&M University, College Station, Texas, June 4-6, 2004. Also, the 59<sup>th</sup> European Meeting of the Econometric Society (ESEM) in Madrid, August 20-24, 2004.

“Estimating Models of Complex FDI: Are there Third Country Effects?,” with Peter Egger and Michael Pfaffermayr, presented at the Spatial Econometrics Workshop in Kiel, Germany, April, 2005.

“Rational Alcohol Addiction: Evidence from the Russian Longitudinal Monitoring Survey,” with Ingo Geishecker, presented at the conference on ‘Economics of Addiction and of Health Inequality’ held at Universitat Pompeu Fabra, Barcelona, May, 2005. Also at the 14<sup>th</sup> European Workshop on Econometrics and Health Economics held at the University College Dublin, Ireland, September, 2005.

- “Joint LM Test for Heteroskedasticity in a One-Way Error Component Model,” with Georges Bresson and Alain Pirotte, presented at the 12<sup>th</sup> International Conference on Panel Data held at CAMS in Copenhagen, Denmark, June 24-26, 2005.
- “Panel Unit Root Tests and Spatial Dependence,” with Georges Bresson and Alain Pirotte, presented at the 12<sup>th</sup> International Conference on Panel Data held at CAMS in Copenhagen, Denmark, June 24-26, 2005. Also at the International Workshop on Spatial Econometrics and Statistics held at University LUISS “Guido Carli”, Rome, Italy, May 25-27, 2006, and the 61<sup>st</sup> European Meeting of the Econometric Society (ESEM) in Vienna, August 24-28, 2006.
- “A Generalized Spatial Panel Data Model with Random Effects,” with Peter Egger and Michael Pfaffermayr, presented at Camp Econometrics XI, Huntsville, Texas, February, 2006. The 13<sup>th</sup> International Conference on Panel Data held in Cambridge, England, July 7-9, 2006. Also, at the “Networks of Innovations and Spatial Analysis of Knowledge Diffusion Conference” held at the Jean-Monet University- Saint Etienne-France, September 14-15, 2006, and the 23rd Annual Canadian Econometric Study Group, Niagara Falls, October 20-21, 2006, and the 6th “Spatial Econometrics and Statistics” workshop held in Dijon, France, June 4-5, 2007.
- “Estimating Regional Trade Agreement Effects on FDI in an Interdependent World,” with Peter Egger and Michael Pfaffermayr, presented at a conference entitled: “The Use of Econometrics in Informing Public Policy Makers,” held at the James A. Baker III Institute for public policy at Rice University, April 22-23, 2006. The Canadian Economics Association meeting in Montreal, May 25-28, 2006 and the International Workshop on Spatial Econometrics and Statistics held at University LUISS “Guido Carli”, Rome, Italy, May 25-27, 2006. Also, the 13<sup>th</sup> International Conference on Panel Data held in Cambridge, England, July 7-9, 2006.
- “On the Use of Panel Data Methods to Estimate Rational Addiction Models,” presented as the *President’s lecture* at the Scottish Economic Society Conference in Perth, Scotland, April 24-26, 2006.
- “Forecasting with Panel Data,” presented at the 8<sup>th</sup> Deutsch Bundesbank Spring conference on “New Developments in Economics Forecasting,” in Eltville, Germany, 5-6 May, 2006. Also as the *key note address* for the 4<sup>th</sup> Nordic Econometric meeting held in Tartu, Estonia, 24-26 May, 2007.
- “Spatial Panels,” presented as the *key note address* for the 4<sup>th</sup> Nordic Econometric meeting held at the University of Tartu, Estonia, 24-26 May, 2007. Also, as the *key note address* for the 1<sup>st</sup> World Conference of the Spatial Econometrics Association held at the University of Cambridge, England, July 11-14, 2007, and the 13<sup>th</sup> Annual Conference of the African Econometric Society held at the University of Pretoria, South Africa, July 9-11, 2008.
- “A Monte Carlo Study for Pure and Pretest Estimators of a Panel Data Model With Spatially Autocorrelated Disturbances,” with Peter Egger and Michael Pfaffermayr, presented at the North American Summer Meeting of the Econometric Society held at Duke University, June 21-24, 2007. Also at the 62<sup>nd</sup> European Meeting of the Econometric Society (ESEM) in Budapest, August 27-31, 2007.
- “Phillips Curve or Wage Curve? Evidence from West Germany: 1980-2004,” with Uwe Blien and Katja Wolf, presented at the XXI Annual Conference of the European Society for Population Economics held at University of Illinois at Chicago, June 14-16, 2007. Also the 22nd Meeting of the European Economic Association that will be held in Budapest August 27-31 2007, and the 47th Congress of the European Regional Science Association in Paris, August 29 to September 2, 2007.
- “Financial Development, Openness and Institutions,” with Panicos Demetriades and Siong Hook Law, presented at the 22nd Meeting of the European Economic Association in Vienna, August 24-28, 2006. Also at the IMF conference entitled “New Perspectives on Financial Globalization,” in Washington D.C., April 26-27, 2007.
- “Forecasting with Spatial Panel Data,” with Georges Bresson and Alain Pirotte, presented at a conference in honor of Phoebus Dhrymes in Paphos, Cyprus, June 1-3, 2007. Also, at the 14th International Conference on Panel Data at the Wang Yanan Institute for Studies in Economics (WISE), Xiamen University, China, July 16-18, 2007, and the 63<sup>rd</sup> European Meeting of the Econometric Society (ESEM) held at the University of Bocconi in Milan, Italy, August 27-31, 2008.

“Asymptotic Properties of Estimators for the Linear Panel Regression Model with Individual effects and Serially Correlated Errors: The Case of Stationary and Non-Stationary Regressors and Residuals,” with Chihwa Kao and Long Liu presented at the Midwest Meetings at Washington University St. Louis, October 13-14, 2007.

## WORKING PAPERS

“A Generalized Spatial Panel Data Model with Random Effects,” with Peter Egger and Michael Pfaffermayr.

“Forecasting with Spatial Panel Data,” with Georges Bresson and Alain Pirotte.

“Testing for Heteroskedasticity and Serial Correlation in a Random Effects Panel Data Model,” with Seuck Heun Song, and Byoung Cheol Jung.

## REFEREE

*Econometrica, Journal of Econometrics, Econometric Theory, Journal of Applied Econometrics, Econometric Reviews, International Economic Review, The Review of Economics and Statistics, The Review of Economic Studies, Journal of Political Economy, American Economic Review, Journal of the American Statistical Association, European Economic Review, Economic Journal, Economic Inquiry, Economics Letters, Journal of Development Economics, Canadian Journal of Economics, American Journal of Agricultural Economics, Empirical Economics, Scandinavian Journal of Economics, The American Statistician, Journal of Business and Economic Statistics, The Statistician, Journal of Economic Surveys, Journal of Industrial Economics, Journal of Structural Change and Economic Dynamics, Journal of Quantitative Economics, Journal of Productivity Analysis, Scandinavian Journal of Statistics, Statistics and Probability Letters, Journal of Multivariate Analysis, Statistica Neerlandica, Statistical Papers, Communications in Statistics-Theory and Methods, Bulletin of Economic Research, Japanese Economic Review, Health Economics, Journal of Health Economic, Papers in Regional Science, National Science Foundation.*

## RESEARCH GRANTS

Research Initiation Grant, University of Houston, 1980.

National Science Foundation, Grant SES81-06667, “An Experimental Study for Pooling Time-Series of Cross-Section Data in the Simultaneous Equations Model,” 1981.

Advanced Research Program Grant, University of Houston, “Pooling Incomplete Time Series of Cross-Section Data Using Unbalanced ANOVA Designs,” 1985.

Energy Laboratory, University of Houston, “A General Index of Technical Change: The Case of Steam-Electric Generation,” 1986.

Texas Advanced Research Program, “Cigarette Taxation: Raising Revenues and Reducing Consumption,” 1989.

Texas Advanced Research Program, “The Effects of Airline Deregulation on Costs and Technical Change,” 1991.

Naomi Lewis Faculty Fellowship in Liberal Arts, Texas A&M University, 1992-1993.

Bush Program in Economics of Public Policy, “The Econometrics of Rational Addiction: The Case of Cigarettes,” 1998.

Bush Program in Economics of Public Policy, “Empirical Tests of the Rational Addiction Model,” 1999.

Texas Advanced Research Program, “Liquor Consumption: The Relative Impact of Different Social Control Devices,” 1999.

Bush Program in Economics of Public Policy, “The Econometrics of Spatial Panel Data Models,” 2000.

Bush Program in Economics of Public Policy, “Homogeneous, Heterogeneous or Shrinkage Estimators? Some Empirical Evidence from French Regional Gasoline Consumption,” 2001.

European Union Center Grant, “Intra-and Extra Euro Area Import Demand -- Has the Euro Made a Difference?” 2004.

## GUEST LECTURES

*Australia:* Monash University, University of Sydney, University of New England, Australian National University, University of Melbourne, University of New South Wales, Reserve Bank of Australia; *Austria:* Institute for Advanced Studies, Vienna, University of Innsbruck; *Canada:* University of Guelph, University of Laval; University of Montreal; Queen’s University; Carleton University, University of British Columbia, Victoria University; *Central America:* Centro De Investigacion Y Docencia Economicas (CIDE), Mexico; *China:* Hong Kong Science and Technology; *Estonia:*

University of Tartu; *France*: Université Pathéon-Assas Paris II, INRA-Toulouse, Groupement de Recherche En Économie Quantitative D'Aix-Marseille (GREQAM); *Germany*: Dörtmund University, University of Hanover, Freie Universität - Berlin, Martin-Luther-Universität-Halle-Wittenberg, Johann Wolfgang Goethe-Universität Frankfurt am Main, Universität - Hohenheim, Institute for Economic Research-Halle (IWH), Institute for Employment Research-Nürnberg (IAB), Center for Economic Research-Mannheim (ZEW), University of Regensburg, Universität Konstanz, Institute for Labor Research-Bonn (IZA), European Central Bank (ECB) Frankfurt, University of Mannheim, Ludwig-Maximilian University, Munich, (CESifo) Munich Society for the Promotion of Economic Research, (DIW) German Institute for Economic Research, Berlin; *Greece*: Aristotle University; *Holland*: University of Amsterdam, Tilburg University, University of Groningen; *Hungary*: Central European University (Budapest); *Italy*: Centro Interuniversitario di Econometria (CIDE)-Bertinoro, Tor Vergata University-Rome, University of Bergamo; *Korea*: Seoul National University, Korea University, Ewha University; *Norway*: University of Bergen; *Spain*: Pompeu Fabra, *Sweden*: University of Göteborg; *Switzerland*: University of Bern, University of St. Gallen; *South America*: Universidad del Rosario, Colombia, Central Bank of Colombia; *Turkey*: Koc University, Middle East Technical University; *United Kingdom*: University of Leicester, University of Manchester, Cass Business School, University of Leeds; *United States*: Arizona State University, University of Arizona, California Institute of Technology, University of California-Berkeley, University of California-Riverside, University of California-San Diego, University of Chicago, University of Cincinnati, Cornell University, Emory University, Georgia State University, University of Georgia, University of Houston, Johns Hopkins University, University of Illinois at Urbana-Champaign, Indiana University, Louisiana State University, University of Maryland, University of Michigan, Michigan State University, New York University, University of North Carolina-Chapel Hill, Ohio State University, University of Oregon, Pennsylvania State University, University of Pennsylvania, Rice University, University of Rochester, Southern Methodist University, University of Southern California, SUNY-Albany, Syracuse University, University of Texas at Austin, Virginia Polytechnic Institute and State University, West Virginia University.

#### KEY NOTE ADDRESS

1. "Key Note Speaker," for the Triangle Econometrics Conference, sponsored by Duke University, University of North Carolina and North Carolina State University, Raleigh/Durham, December, 2000.
2. "Key Note Speaker," for the Texas Camp Econometrics XI, Huntsville, Texas, February, 2006.
3. "President's lecture" for the Scottish Economic Society Conference in Perth, Scotland, April 24-26, 2006.
4. "Key Note Speaker," for the 4<sup>th</sup> Nordic Econometric meeting held at the University of Tartu, Estonia, 24-26 May, 2007.
5. "Key Note Speaker," for the 1<sup>st</sup> World Conference of the Spatial Econometrics Association held at the University of Cambridge, England, July 11-14, 2007.
6. "Key Note Speaker," for the 13<sup>th</sup> Annual Conference of the African Econometric Society held at the University of Pretoria, South Africa, July 9-11, 2008.

#### SHORT COURSES

<b>Austria</b>	Institute for Advanced Studies, Vienna (2001); University of Innsbruck (2002); University of Vienna (2008).
<b>Australia</b>	International Modeling Conference on the Asia-Pacific Economy, Cairns (1996)
<b>Colombia</b>	Universidad del Rosario, Bogota (2003)
<b>France</b>	University of Paris II, Pantheon (2000)
<b>Germany</b>	Institute for Economic Research (IWH)-Halle (1997); European Central Bank, Frankfurt (2001); University of Mannheim (2002); Center for Economic Studies (CES-Ifo), Munich (2002, 2005); German Institute for Economic Research (DIW), Berlin (2004)
<b>Greece</b>	The Marie Curie Training Program in Applied Health Economics, Thessaloniki (2006).
<b>Italy</b>	Centro Interuniversitario de Econometria (CIDE)-Bertinoro (1998, 2008); Tor Vergata University-Rome (2002); University of Roma "La Sapienza" (2008)
<b>Korea</b>	Seoul National University (2002)
<b>Netherlands</b>	Netherlands Network of Economics (NAKE), Utrecht University (2005)
<b>Portugal</b>	University of Coimbra (2007); Banco de Portugal (2008)
<b>Scotland</b>	University of Stirling (2007)
<b>Spain</b>	Institute for Prospective Technological Studies (2006) Seville; Universitat Pompeu Fabra (2007);

Barcelona Graduate School of Economics (2008)

**Switzerland** University of Zurich (2003)

**United Kingdom** University of Leicester (2008)

**United States** University of Arizona (1996); University of California-San Diego (2002); International Monetary Fund (IMF), Washington D.C. (August, 2004; January, 2005; August 2005; May 2006; May 2007; May 2008); Inter-American Development Bank (November, 2005); University of Cincinnati (2004).