CURRICULUM VITAE
Alastair R. Hall
August 23, 2005

Contact Information:

Department of Economics
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North Carolina State University
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Educational Qualifications:

Ph.D. Economics, University of Warwick, UK, 1985
M.Sc. Economics and Econometrics, University of Southampton, UK, 1983
B.A. (First Class Honours Degree) Economics, University of Warwick, UK, 1981

Work Experience:

- Professor, Department of Economics, North Carolina State University, 1992-.
- Associate Professor, Department of Economics, North Carolina State University, 1990–1992.
- Associate Member, Department of Statistics, North Carolina State University, 1987-.
- Assistant Professor, Department of Economics, North Carolina State University, 1985-1990.
- Research Associate on project funded by American Statistical Association at Bureau of the Census, U.S. Department of Commerce, Washington, DC, 1984-1985.

- Senior Research Fellow, Department of Economics, University of Birmingham, March 1996 - June 1998.
- Visiting Professor, Graduate School of Business, University of Wisconsin-Madison, January 1993 - December 1993.
- Visiting Assistant Professor, Department of Economics, University of Pennsylvania, September 1987 - July 1989.

Publications:

(i) Books:

- *Generalized Method of Moments*, Advanced Texts in Econometrics Series, Oxford University Press, 2005.

(ii) Articles in refereed journals:

- Information in Generalized Method of Moments Estimation and Entropy Based Moment Selection, accepted for publication in *Journal of Econometrics* (with Atsushi Inoue, Kalidas Jana and Changmock Shin).

- Covariance Matrix Estimation and the Limiting Behaviour of the Overidentifying Restrictions Test in the Presence of Structural Instability, *Econometric Theory*, (2003), 19, 962-983 (with Atsushi Inoue and Fernanda Peixe).

- A Consistent Method for the Selection of Relevant Instruments, *Econometric Reviews*, (2003), 22, 269-288 (with Fernanda Peixe).

- The Large Sample Behaviour of the GMM Estimator in Misspecified Models, *Journal of Econometrics*, (2003), 114, 361-394 (with Atsushi Inoue).

- Data Mining and the Selection of Instruments, *Journal of Economic Methodology*, (2000), 7, 265-277 (with Fernanda Peixe).

- GARP, Seperability and the Representative Agent, *Macroeconomic Dynamics*, (2000), 4, 324-342 (with Adrian Fleissig and John Seater).

- Two Extensions of Some Recent Tests for Structural Stability, *Structural Change and Economic Dynamics*, (1999), 10, 431-443 (with Amit Sen).

- Structural Stability Testing Based on Generalized Method of Moments Estimators, *Journal of Business and Economic Statistics*, (1999), 17, 335-348 (with Amit Sen).

- Predictive Tests for Structural Change with Unknown Breakpoint, *Journal of Econometrics*, (1997), 82, 209-233 (with Eric Ghysels and Alain Guay).

- On Periodic Structures and Testing for Seasonal Unit Roots, *Journal of the American Statistical Association*, (1996), 91, 1551-1559 (with Eric Ghysels and Hahn Lee).

- Judging Instrument Relevance in Instrumental Variables Estimation, *International Economic Review*, (1996), 37, 283-298 (with Glenn Rudebusch and David Wilcox).

- Residual Autocovariances and Unit Root Tests Based on Instrumental Variable Estimators from Time Series Regression Models, *Journal of Time Series Analysis*, (1995), 16, 555-570.

Publications (continued):

(ii) Articles in refereed journals (continued):

- Testing for a Unit Root with Pretest Data Based Model Selection, *Journal of Business and Economic Statistics*, (1994), 12, 461-470.
- Trying Out for the Team: Do Exhibitions Matter? Evidence from the National Football League, *Journal of the American Statistical Association*, (1994), 89, 1091-1100 (with Lee Craig).
- Order Identification in Misspecified Autoregressive Time Series Models, *Journal of Time Series Analysis*, (1994), 15, 279-284.
- Generalized Predictive Tests and Structural Change Analysis in Econometrics, *International Economic Review*, (1994), 35, 199-230 (with Jean-Marie Dufour and Eric Ghysels).
- Testing for a Unit Root in Time Series Using Instrumental Variable Estimators with Pretest Data Based Model Selection, *Journal of Econometrics*, (1992), 54, 223-250.
- Joint Hypothesis Tests for a Random Walk Based on Instrumental Variable Estimators, *Journal of Time Series Analysis*, 13, (1992), 29-45.
- On Estimating the Speed of Adjustment in Inventory Investment Equations, *Journal of Business and Economic Statistics*, (1991), 9, 441-454 (with Robert Rossana).
- Testing for Unit Roots in Autoregressive Moving Average Models, *Journal of Econometrics*, (1991), 48, 325-354 (with Sastry Pantula).
- The Lagrange Multiplier Test for Normality Against Semi Non-Parametric Alternatives, *Journal of Business and Economic Statistics*, (1990), 8, 417-426.
- Testing Nonnested Euler Conditions with Quadrature-Based Methods of Approximation, *Journal of Econometrics*, (1990), 46, 273-308 (with Eric Ghysels).
- Are Consumption-Based Intertemporal Capital Asset Pricing Models Structural?, *Journal of Econometrics*, (1990), 45 Annals 1990-3, 121-140 (with Eric Ghysels).
- A Test for Structural Stability of Euler Parameters Estimated via the Generalized Method of Moments Estimator, *International Economic Review*, (1990), 31, 355-364 (with Eric Ghysels).
- Testing for a Unit Root in the Presence of Moving Average Errors, *Biometrika*, (1989), 76, 49-56.
- The Information Matrix Test for the Linear Model, *Review of Economic Studies*, (1987), 54, 257-263.

Publications (continued):

(ii) Articles in refereed journals (continued):

- Conditions for a Matrix Kronecker Lemma, *Linear Algebra and Its Applications*, (1986), 76, 271-277.

(iii) Notes in refereed journals:

- Comment on "Testing Target Zone Models Using Efficient Method of Moments" by Chung and Tauchen, *Journal of Business and Economic Statistics*, (2001), 19, 269-271.
- Covariance Matrix Estimation and the Power of the Overidentifying Restrictions Test, *Econometrica*, (2000), 68, 1517-1527.
- Instrumental Variable Based Unit Root Tests When Both ARMA(p,q) Orders are Chosen to be too Large, *Economics Letters*, (1996), 52, 247-255 (with Tae Yoon Lee).
- Discussion of "Induced Seasonality and Production Smoothing Models of Inventory Behavior" by Spencer Krane, *Journal of Econometrics*, (1993), Annals 1993-1, 169-72.
- Order Identification of ARMA Models Based on Instrumental Variable Estimators, *IEEE Transactions on Automatic Control*, (1991), AC-36, 1116-1117.
- Instrument Choice and Tests for a Unit Root, *Economics Letters*, (1991), 35, 161-165 (with Kevin Hassett).
- On the Calculation of the Information Matrix Test in the Normal Linear Regression Model, *Economics Letters*, (1988), 29, 31-35.
- Convergence of the Kalman Filter Gain for a Class of Nondetectable Signal Extraction Problems, *IEEE Transactions on Automatic Control*, (1987), AC-32, 1036-1039 (with Peter Burridge).
- A Simplified Method of Calculating the Score Test for Serial Correlation in Multivariate Models, *Economics Letters*, (1986), 21, 159-161.
- A Simplified Method of Calculating the Distribution Free Cox Test, *Economics Letters*, (1985), 18, 149-151.

(iv) Chapters or sections in books:

- Generalized Method of Moments, in *Companion in Theoretical Econometrics*, B. Baltagi (ed.), Basil Blackwell, Oxford, UK, (2001), 230–255.
- A Nonparametric Approach to Stochastic Discount Factor Estimation, in *Advances in Econometrics: Applying Kernel and Nonparameteric Estimation to Economic Topics (Volume 14)*, R. C. Hill and T. B. Fomby (eds), JAI Press, Stamford, Connecticut, (2000), 155-178 (with Fan Hu and Douglas Nychka).

Publications (continued):

(iv) Chapters or sections in books (continued):

- Hypothesis Testing in Models Estimated by Generalized Method of Moments, in *Generalized Method of Moments Estimation*, L. Matyas (ed.), Cambridge University Press, New York, (1999), 96-127.
- Generalized Method of Moments, *Encyclopedia of Statistical Sciences Update Volume 1*, Samuel Kotz ed., Wiley, New York, (1997), 276-280.
- Some Aspects of Generalized Method of Moments Estimation, in *Handbook of Statistics, Vol. 11: Econometrics*, G.S. Maddala, C.R. Rao and H.D. Vinod (eds.), North Holland, New York, (1993), 393-417.
- An Extension of Quadrature-Based Methods for Solving Euler Equations, *IMA Volume in Mathematics and Its Applications*, Vol. 46: New Directions in Time Series Analysis, Part II, D. Brillinger, P. Caines, Geweke, M. Rosenblatt and M. Taqqu (eds.), Springer Verlag, New York, (1993), 147-151 (with Eric Ghysels).

(v) Papers in proceedings:

- Structural Stability Testing in Econometric Models, *American Statistical Association: Proceedings of the Business and Economic Section*, (1996), 219-224 (with Amit Sen).
- Testing for Unit Roots After Data Based Model Selection, *American Statistical Association: Proceedings of the Business and Economic Section*, (1992), 150-154.
- Estimation of a Factor Demand Model Using Census Bureau Establishment Level Data, *American Statistical Association: Proceedings of the Business and Economics Section*, (1985), 14-22 (with Edward Kokkelenberg).

(vi) Book reviews:

- "Periodicity and Stochastic Trends in Economic Time Series" by P. H. Franses, Oxford University Press, (1996), *The Economic Journal*, (1997), 107, 1602-3.
- "Co-integration, Error-Correction and the Econometric Analysis of Non-Stationary Data" by A. Banerjee, J. Dolado, J. Galbraith and D. Hendry, Oxford University Press, (1993), *The Economic Journal*, (1996), 106, 1813.

(vii) Other publications:

- Editors' Introduction to the Twentieth Anniversary Commemorative Issue of the *Journal of Business and Economic Statistics*, *Journal of Business and Economic Statistics*, (2002), 20, 1-4 (with Eric Ghysels).

Publications (continued):

(vii) Other publications (continued):

- Editors' Introduction to the JBES Twentieth Anniversary Issue on the Generalized Method of Moments, *Journal of Business and Economic Statistics*, (2002), 20, 441 (with Eric Ghysels).
- Interview with Lars Peter Hansen, *Journal of Business and Economic Statistics*, (2002), 20, 442-447 (with Eric Ghysels).
- Interview with Christopher A. Sims, *Journal of Business and Economic Statistics*, (2002), 20, 448-449 (with Eric Ghysels).

Current Research Papers:

- The Mean Squared Error of the Instrumental Variables Estimator when the Disturbance has an Elliptical Distribution, April, 2000, revised December, 2004, (with Kostas Kyriakoulis and Fernanda Peixe).
- Non-nested Testing in Models Estimated by Generalized Method of Moments, May, 2005, (with Denis Pelletier).
- Entropy Based Moment Selection in the Presence of Weak Identification, May, 2005, (with Atsushi Inoue and Changmock Shin).
- Long Run Canonical Correlations: Estimation and Testing, February 2005, (with Kalidas Jana).
- Effects of Decoupled Payments on Farm Labour Supply of Dutch Dairy Farmers, June, 2005 (with Daan Ooms).
- Inference Regarding Multiple Structural Changes in Linear Models Estimated via Two Stage Least Squares, April 2005, (with Sanggohn Han).

Professional Activities:

- Co–editor, *Journal of Economic and Business Statistics*, 2001 - 2003.
- Associate editor, *Journal of Financial Econometrics*, 2001 -.
- Associate Editor, *Econometric Reviews*, 2000 -.
- Associate Editor, *Journal of Business and Economic Statistics*, 1992 - 2000.
- Member of the Committee on Publications for the American Statistical Association, 2001 and 2003.

Professional Activities (continued):

- Representative for the Business and Economics Section to the Council of Sections of the American Statistical Association, 2001 - 2003.
- Secretary/Treasurer for the Business and Economics Section of the American Statistical Association, 1999.
- Member of the Adjudication Committee for the Arnold Zellner Thesis prize awarded by the Business and Economic Section of the American Statistical Association, 1999, 2002, 2003.
- Reviewer for *Mathematical Reviews*, 1996 - 2000.
- Referee for *American Economic Review*, *Annales d'Economie et de Statistiques*, *Annals of Statistics*, *Automatica*, *Communications in Statistics*, *Econometrica*, *Econometric Reviews*, *Econometric Theory*, *European Review of Agricultural Economics*, *IEEE Transactions on Automatic Control*, *International Economic Review*, *Journal of Applied Econometrics*, *Journal of Business and Economic Statistics*, *Journal of Econometrics*, *Journal of Empirical Finance*, *Journal of the American Statistical Association*, *Journal of Macroeconomics*, *Journal of Nonparametric Statistics*, *Journal of Statistical Planning and Inference*, *Mathematical and Computer Modelling*, *Oxford Bulletin of Economics and Statistics*, *Review of Economics and Statistics*, *Review of Economic Studies*, *Sankhya*, *Statistics & Probability Letters*, *Technometrics*, *The American Statistician*, *The Manchester School.*
- Grant reviewer for National Science Foundation, Fonds pour la formation de chercheurs et l'aide a la recherche (Fonds FCAR), Quebec, Canada, Social Science and Humanities Research Council of Canada, Economic and Social Science Research Council, United Kingdom, Nederlandse Organisatie voor Wetenschappelijk Onderzoek.
- Manuscript reviewer for Oxford University Press.
- Co-organizer of the Triangle Econometrics Conference, 1999-.
- Member of Program Committee for "A Conference in Honor of Arnold Zellner: Recent Developments in the Theory, Method, and Application of Information and Entropy Econometrics", Washington DC, September 19-21, 2003.
- Co-organizer of the Triangle Econometrics Workshop, 2003-.
- Member of Program Committee for "A Conference in Honor of George Judge: The Second Conference on Information and Entropy Econometrics: Theory, Method and Applications", American University, Washington DC, September 23-25, 2005.
- Member of Adjudication Committee for "Best Article in *Econometric Reviews* in 2002-4".

Awards

NCSU College of Management Outstanding Teaching Award, 2002.

Professional Associations

Member of: The American Economic Association, The American Finance Association, The American Statistical Association, The Econometric Society.

Grants

- "Generalized Method of Moments Estimation", Faculty Research and Professional Development Grant, NCSU, spring 1995.
- "Issues of Structural Stability in Time Series Econometrics" funded by F.C.A.R., Quebec, Canada, (project with Jean-Marie Dufour, Eric Ghysels, Marc Hallin, Pierre Perron and Victoria Zinde-Walsh). 1990-1993.

Consulting and Short Term Visiting Appointments

- Visiting Professor, Department of Economics and Management, Wageningen Agricultural University, Wageningen, The Netherlands, June 1-20, 1999.
- Visiting Professor, CentER for Economic Research, Tilburg University, Tilburg, The Netherlands, June 1-25, 1995.
- Consultant, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC, November 1-4, 1993.
- Visiting Scholar at the Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC, November 12-15, 1991.

Invited Lectures

- *Generalized Method of Moments: Theory and Practice.* Mansholt Graduate School of Social Sciences, Wageningen University, Wageningen, The Netherlands, June 13-17, 2005.
- *Generalized Method of Moments: Theory and Applications.* Mansholt Graduate School of Social Sciences, Wageningen University, Wageningen, The Netherlands, July 8-12, 2002.
- *Generalized Method of Moments.* Department of Economics and Management, Wageningen Agricultural University, Wageningen, The Netherlands, June 14-16, 1999.
- *An Introduction to Generalized Method of Moments.* MSc. level graduate econometrics class, Department of Agricultural and Resource Economics, University of Arizona, Tucson, AZ, March 9, 1999.
- *Generalized Method of Moments Estimation: Inference and Applications.* Netherlands Graduate School of Economics, Center for Economic Research, Tilburg University, May 30 - June 3, 1994.

Invited Lectures (continued)

- *An Introduction to Generalized Method of Moments Estimation.* Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC, November 1991.

Conference and Seminar Presentations

- *Long Run Canonical Correlations: Estimation, Inference and Usefulness in Econometric Analysis of Time Series, (with Kalidas Jana)*: Southern Economic Association Meeting, Washington DC, November 18-20, 2005.

- *Entropy Based Moment Selection in the Presence of Weak Identification, (with Atsushi Inoue and Changmock Shin)*: "A Conference in Honor of George Judge: The Second Conference on Information and Entropy Econometrics: Theory, Method and Applications", American University, Washington DC, September 23-25, 2005.

- *Inference Regarding Multiple Structural Changes in Linear Models Estimated via Two Stage Least Squares, (with Sanggohn Han)*: The Ninth World Congress of the Econometric Society, London, UK, August 18-25, 2005.

- *EU Policy Reform Simulation Based on Panel Data Estimation of On- and Off- Farm Labour Supply Equations for Dutch Dairy Farmers*: American Agricultural Economics Association Annual Meeting, Providence, RI, July 24-27, 2005; EAAE Seminar on "Modelling Agricultural Policies: State of the Art and New Challenges", February 3-5, 2005, Parma, Italy.

- *Information in Generalized Method of Moments Estimation and Entropy Based Moment Selection, (with Atsushi Inoue, Kalidas Jana and Changmock Shin)*: "A Conference in Honor of Arnold Zellner: Recent Developments in the Theory, Method, and Application of Information and Entropy Econometrics", American University, Washington DC, September 20-21, 2003.

- *A Comparative Study of Three New Methods of Instrument Selection in Econometrics, (with Kalidas Jana)*: Southern Economic Association Meetings, San Antonio, TX, November 21-23, 2003; Joint Statistical Meetings, San Francisco, CA, August 3-7, 2003.

- *The Generalized Method of Moments Approach to Econometric Analysis*: The International Biometric Society, Eastern North American Region Meetings, Tampa, FL, March 30-April 2, 2003.

- *Information in Empirical Likelihood and Generalized Method of Moments Estimation, (with Atsushi Inoue)*: Montreal Econometrics seminar, Concordia University, Montreal, CA, October 2003; Department of Economics, University of Birmingham, Birmingham, UK, June 2003; NBER/NSF Conference on Weak and/or Many Instruments, MIT, Canbridge, MA; CentER, Tilburg University, Tilburg, The Netherlands, April 2003; Department of Economics, University of Rochester, Rochester NY, March 2003.

Conference and Seminar Presentations (continued)

- *The Mean Squared Error of the Instrumental Variables Estimator when the Disturbance has an Elliptical Distribution*: European Meeting of the Econometric Society, Venice, Italy, August 25-28, 2002.

- *Long Run Canonical Correlations: Estimation and Testing, (with Kalidas Jana)*: Southern Economic Association Meeting, Tampa, FL, November 17-19, 2001; Joint Statistical Meetings, Atlanta, GA, August 5-9, 2001.

- *A Canonical Correlations Interpretation of Generalized Method of Moments Estimation with Applications to Moment Selection, (with Atsushi Inoue)*: Allied Social Science Meetings, Washington DC, January 2-5, 2003; Triangle Econometrics Conference, Research Triangle, NC, December 7, 2001; NBER-NSF Time Series Conference, Raleigh, NC, September 21-22, 2001; Joint Statistical Meetings, Atlanta, GA, August 5-9, 2001.

- *A Consistent Method for the Selection of Relevant Instruments, (with Fernanda Peixe)*: Department of Economics, Virginia Polytechnic Institute, Blacksburg, VA, November 2000; Joint Statistical Meetings, Indianapolis, IN, August 13 - 17, 2000; World Congress of the Econometric Society, Seattle, WA, August 11 - 16, 2000; Sixth Conference of CEMAPRE: Mathematics Applied to Economics and Management, Lisbon, Portugal, June 5-7, 2000; Department of Economics, Michigan State University, East Lansing, MI, November 1999.

- *The Large Sample Behaviour of the GMM Estimator in Misspecified Models, (with Atsushi Inoue)*: Joint Statistical Meetings, Indianapolis, IN, August 13 - 17, 2000; Allied Social Science Meetings, Boston, MA January 7-9, 2000; Midwest Econometrics Group Meeting, Iowa State University, Ames IA, October 8-9, 1999.

- *Generalized Method of Moments: a Survey and Some New Results on the Impact of Misspecification*: Department of Statistics, North Carolina State University, Raleigh NC, February 1999.

- *Covariance Matrix Estimation and the Power of the Overidentifying Restrictions Test*: Department of Economics, Cornell University, Ithaca, NY, March 1999; Department of Economics, University of Arizona, Tucson, AZ, March 1999; Department of Economics, Pennsylvania State University, State College, PA, February 1999; Triangle Econometrics Conference, Research Triangle Park, NC, December 11, 1998; Department of Economics, North Carolina State University, October 1998.

- *A Nonparametric Approach to Mutual Fund Performance Evaluation, (with Fan Hu and Douglas Nychka)*: Department of Economics, University of Warwick, Coventry, U. K., March, 1998; CREST, INSEE, Malakoff, France, March 1998.

Conference and Seminar Presentations (continued)

- *Testing Portfolio Performance, (with Peter Knez)*: European Meetings of the Econometric Society, Toulouse, France, August 27-30, 1997; Department of Applied Economics, University of Cambridge, Cambridge, U. K., April 1997; Department of Economics, University of Manchester, Manchester, U. K., March 1997; Department of Economics, University of Edinburgh, Edinburgh, U. K., February 1997; Tinbergen Institute, Rotterdam, The Netherlands, February, 1997; Department of Economics, University of Birmingham, Birmingham, U. K., February, 1997.

- *Structural Stability Testing in Models Estimated Via Generalized Method of Moments, (with Amit Sen)*: Nuffield College, Oxford University, Oxford, U. K., May 1997; G.R.E.M.A.Q., Universite de Toulouse, Toulouse, France, May 1997; Department of Econometrics, Tilburg University, Tilburg, The Netherlands, March 1997; Allied Social Science Association Meetings, New Orleans, LA, January 4-6, 1997; Southern Economic Association Annual Conference, Washington D. C., November 1996; Department of Economics, London School of Economics, London, U. K., October, 1996; NBER/NSF Time Series Conference, Rotterdam, The Netherlands, October 17-19, 1996; Nottingham One Day Conference on Time Series Econometrics, University of Nottingham, Nottingham, UK, September 23, 1996; European Meetings of the Econometric Society, Istanbul, Turkey, August 25-29, 1996; Joint Statistical Meetings, Chicago, IL, August 4-8, 1996; ESRC Econometric Study Group Conference, Bristol, U. K., July 11-13, 1996; Department of Agricultural Economics, University of Arizona, Tucson, AZ, April 1996; Department of Economics, East Carolina University, Greenville, NC, March 1996.

- *On Periodic Structures and Testing for Seasonal Unit Roots, (with Eric Ghysels and Hahn Lee)*: Seventh World Congress of the Econometric Society, Tokyo, Japan, August 22-29, 1995.

- *Predictive Tests for Structural Change with Unknown Breakpoint, (with Eric Ghysels and Alain Guay)*: Research Triangle Econometrics Conference, Research Triangle Park, NC, December 8, 1995; Department of Economics, University of Birmingham, Birmingham, U. K., July 1995; Department of Economics, European University Institute, Fiesole, Italy, June 1995; Department of Actuarial Sciences and Eonometrics, University of Amsterdam, Amsterdam, The Netherlands, June 1995; CentER for Economic Research, Tilburg University, Tilburg, The Netherlands, June 1995; Department of Economics, North Carolina State University, Raleigh, NC, February 1995; Allied Social Science Meetings, Washington D. C., January 6-8, 1995.

- *GARP, Seperability and the Representative Agent, (with Adrian Fleissig and John Seater)*: Department of Economics, North Carolina State University, Raleigh, NC, November 1994.

Conference and Seminar Presentations (continued)

- *Judging the Quality of Instruments in Instrumental Variables Estimation of the Linear Model, (with Glenn Rudebusch and David Wilcox)*: Second Triangle Econometrics Conference, Research Triangle Park, NC, December 9, 1994; Department of Economics, Universite de Montreal, Montreal, Quebec, Canada, November 1994; Department of Economics, University of Rochester, Rochester, NY, September 1994; Department of Economics, Warwick University, Coventry, U. K., June 1994; Department of Economics, North Carolina State University, Raleigh, NC, March, 1994; Allied Social Science Association Meetings, Boston, MA, January 3-5, 1994.

- *Unit Roots, Model Selection and the Time Series Properties of Inventories*: Research Triangle Econometrics Conference, Research Triangle Park, NC, December 1993; Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C., October 1993; Department of Economics, Wayne State University, Detroit, MI, October 1993; Department of Economics, University of Michigan, Ann Arbor, MI, October 1993.

- *Testing for I(1) in Periodic Time Series, (with Eric Ghysels)*: Midwest Econometric Group Meetings, Urbana-Champaign, IL, September 24-25, 1993; Joint Statistical Meetings, San Francisco, CA, August 8-12, 1993.

- *Testing for Structural Stability of Euler Equations: Applications to Consumption Based Asset Pricing Models*: Department of Finance, University of Wisconsin, Madison WI, March 1993.

- *Unit Root Tests based on Instrumental Variable Estimators*: Department of Statistics, University of Wisconsin-Madison, Madison, WI, March 1993.

- *Unit Root Tests after Data Based Model Selection*: Joint Statistical Meetings, Boston, MA, August 9-13, 1992.

- *An Introduction to Generalized Method of Moments Estimation*: Department of Economics, North Carolina State University, Raleigh, NC, March 1992.

- *An Eigenvalue Based Test for Heteroscedasticity, (with Anil Bera)*: Allied Social Science Association Annual Meeting, New Orleans, LA, January 2-5, 1992.

Conference and Seminar Presentations (continued)

- *Testing for a Unit Root in Time Series with Pretest Data Based Model Selection*: Department of Economics, University of Wisconsin-Madison, Madison, WI, April 1993; Department of Economics, University of Illinois, Urbana-Champaign, IL, April 1992; Department of Economics, University of Pittsburgh, Pittsburgh, PA, April 1992; Department of Economics, University of Texas at Austin, Austin, TX, January 1992; Department of Statistics, North Carolina State University, Raleigh, NC, October 1991; Department of Economics, Southampton University, Southampton, U.K., July 1991; Allied Social Science Association Annual Meeting, Washington, DC, December 28-30, 1990; Department of Economics, North Carolina State University, Raleigh, NC, December 1990.

- *Model Selection and Unit Root Tests Based on Instrumental Variable Estimators*: Sixth World Congress of the Econometric Society, Barcelona, Spain, August 22-28, 1990; Department of Economics, Duke University, Durham, NC, March 1990.

- *On Generalized Method of Moments, Maximum Likelihood and Asymptotic Efficiency, (with Eric Ghysels)*: European Meetings of the Econometric Society, Munich, West Germany, September 4-8, 1989.

- *Generalized Predictive Tests and Structural Change Analysis in Econometrics, (with Jean-Marie Dufour and Eric Ghysels)*: Department of Economics, Southampton University, Southampton, U.K., January 1992; Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC, November 1991; Department of Economics, North Carolina State University, Raleigh, NC, October 1991; Allied Social Science Association Annual Meeting, Atlanta, GA, December 28-30, 1989; Canadian Econometrics Study Group Sixth Annual Meeting, Hamilton, Ontario, October 12-14, 1989; Far Eastern Meetings of the Econometric Society, Kyoto, Japan, June 10-11, 1989.

- *Testing for Unit Roots in Autoregressive Moving Average Models using Instrumental Variables Estimators,(with Sastry Pantula and Kevin Hassett)*: North American Summer Meetings of the Econometric Society, Ann Arbor, Michigan, June 21-24, 1989; Department of Economics, University of Pennsylvania, Philadelphia, PA, February 1989; Department of Economics, Columbia University, New York, NY, October 1988; Department of Economics, Universite de Montreal, Montreal, Quebec, September 1988.

- *Are Consumption-Based Intertemporal Capital Asset-Pricing Models Structural?, (with Eric Ghysels)*: European Meetings of the Econometric Society, Munich, West Germany, September 4-8, 1989; NBER Conference on Econometric Methods and Financial Time Series, Boston, MA, March 31-April 1, 1989; The Second Annual Conference of the Canadian Macro Study Group, Universite du Quebec a Montreal, Montreal, Quebec, October 21-23, 1988.

Conference and Seminar Presentations (continued)

- *Lagrange Multiplier Tests for Normality Against Semi Non-Parametric Alternatives*: Allied Social Sciences Association Annual Meeting, New York, NY, December 28-30, 1988; Department of Economics, Princeton University, Princeton, NJ, April 1988; Department of Economics, University of Illinois, Urbana-Champaign, IL, April 1988; Department of Economics, University of Pennsylvania, Philadelphia, PA, March 1988.

- *A Test for Structural Stability of Euler Parameters Estimated via The Generalized Method of Moments Estimator, (with Eric Ghysels)*: The European Meetings of the Econometric Society, Bologna, Italy, August 29 - September 2, 1988.

- *A Test for Nonlinearity of Time Series Based on the Volterra Expansion, (with Paul Kupiec)*: NSF - NBER Seminar on Time Series, Raleigh, NC, October 16-17, 1987.

- *Additional Specification Tests for GMM Estimated Euler Conditions with Macroeconomic Examples, (with Eric Ghysels)*: Canadian Econometrics Study Group Conference on Advances in Econometrics and Modelling, Waterloo, Ontario, September 18-19, 1987; Department of Economics, Universite de Montreal, Montreal, Quebec, May 1987.

- *Testing Nonnested Euler Conditions with Quadrature-Based Methods of Approximation, (with Eric Ghysels)*: North American Summer Meetings of the Econometric Society, University of California, Berkeley, CA, June 24-27, 1987; Department of Economics, Queens University, Kingston, Ontario, May 1987; Department of Economics, Virginia Polytechnic Institute and State University, Blacksburg, VA, April 1987; Research Triangle Econometrics Seminar, Research Triangle Institute, Research Triangle Park, NC, March 1987.

- *Conditions for Asymptotic Analysis in Dynamic Nonlinear Models*: North American Summer Meetings of the Econometric Society, Duke University, Durham, NC, June 25-28, 1986.

- *Estimation of a Factor Demand Model Using Census Bureau Establishment Level Data, (with Edward Kokkelenberg)*: Joint Statistical Meetings, Las Vegas, Nevada, August 5-8, 1985; Statistical Research Division Colloquium Series, Bureau of the Census, U.S. Department of Commerce, Washington, DC, April 1985.

- *Conditions for the Consistency and Asymptotic Normality of Nonlinear FIML When the Error Distribution is Incorrectly Assumed to be Normal*: Department of Economics, University of Pennsylvania, Philadelphia, PA, May 1986; Fifth World Congress of the Econometric Society, Boston, MA, August 17-24, 1985; Department of Economics and Business, North Carolina State University, Raleigh, NC, February 1985; Department of Economics, University of Minnesota, Minneapolis, MN, February 1985; Department of Economics, University of Michigan, Ann Arbor, MI, February 1985; Department of Economics, George Washington University, Washington, DC, January 1985.

Conference and Seminar Presentations (continued)

- *The Information Matrix Test for the Linear Model*: York Conference on Approaches to Econometric Model Building and Testing, York University, York, U.K., September 20-22, 1983; The European Meeting of the Econometric Society, Pisa, Italy, August 29 - September 2, 1983; The Social Science Research Council Econometric Study Group Meeting, Warwick University, Coventry, U.K., July 12-14, 1983.

Teaching Experience

- *Graduate Level*: Econometrics, Time Series Econometrics, Microeconometrics, Advanced Seminar Course in Econometrics; Intermediate Econometrics; Mathematics for Economists; Intermediate Business Statistics.

- *Undergraduate Level*: Introductory Statistics for Business and Economics; Introductory Microeconomics; Introductory Macroeconomics; Introductory Econometrics; Topics in Econometrics.

Graduate Dissertation Committee Work
All at North Carolina State University unless otherwise stated.

Chairperson or Co-Chairperson for:

- Sanggohn Han, Ph.D. candidate Economics and Statistics (co-chair David Dickey).

- Kostas Kyriakoulis, Ph.D. candidate Economics.

- Chagmock Shin, Ph.D., Economics, 2005
  Thesis Title: Entropy Based Moment Selection in Generalized Method of Moments.

- Kalidas Jana, Ph.D., Economics, 2005
  Thesis Title: Canonical Correlations and Instrument Selection in Econometrics.

- David Doorn, Ph.D., Economics, 2003
  Thesis Title: Three Essays on Trend Analysis and Misspecification in Structural Econometric Models.

- Matthew Roberts, Ph.D., Economics, 2001, (co-chair with Barry Goodwin)
  Thesis Title: Specification and Estimation of Econometric Models of Asset Prices.

- Fernanda Peixe, Ph.D.(University of Birmingham, U. K.), Economics, 2000.
  Thesis Title: Instrument Selection in Econometric Models: Consequences and Methods.

- Fan Hu, Ph.D., Economics, 1997, (co-chair with Douglas Pearce).
  Thesis Title: Three Essays in Measuring Mutual Fund Performance.

Graduate Dissertation Committee Work (continued)
All at North Carolina State University unless otherwise stated.

Chairperson or Co-Chairperson for:

- Amit Sen, Ph.D., Economics and Statistics, 1997, (co-chair with Sastry Pantula).
  Thesis Title: New Tests of Structural Stability and Applications to Consumption Based Asset Pricing Models.

Committee member for:

- *Ph.D candidates in Economics:* Roger Aliaga Diaz, Maryam Arabshahi.
- *Ph.D candidate in Agricultural and Environmental Sciences, Wageningen University, NL:* Daan Ooms
- *Ph.D in Economics:* Hulya Saygili (2005), Oliver Fenton Wells (2004), Claudiney Pereira (2003), Zulal Sogutlu Denaux (2001), Kathy Best (1999), Frank Stevenson (1999), Jonathan Yoder (1999), Linda Chappell (1998), Dong-Feng Li (1998), Melinda Pitts (1997), John Dawson (1996), Ashok Mishra (1996), Michelle Trawick (1996), Banaga Abdelmagid (1995), Bryan Hubbell (1995), Anthony Rezitis (1995), Robert Borges (1994), Weshah Razzak (1994), China-Ta Chuang (1992), Carlos Gargiulo (1992), M.D. Belayet Hossain (1992), Sree Kamal Sen (1991).
- *Ph.D in Economics and Statistics:* Alan Ker (1996), Adrian Fleissig (1993).
- *Ph.D in Statistics:* Jung Wook Park (2005), Harshavardhana Rao (2004), Zeynep Kalaylioglu (2002), Daniel McCaffrey (1991).