Curriculum Vitae **Aug 19, 2019**

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EDUCATION

- **Ph.D. (Economics), Dept. of Economics, University of California, San Diego, 1994:**
  "Essays in Forecasting Stationary and Nonstationary Stochastic Processes", PhD Advisers: Sir Clive W.J. Granger, Halbert White and Valerie Ramey
- **M.A. in Economics, University of California, San Diego, 1991**
- **B.A. in Applied Economics, University of Waterloo, 1988**

CURRENT POSITION

- **Rutgers University, Department of Economics, New Brunswick, NJ, USA**
  Professor, July 2005 – present
  Director of Graduate Studies, July 2006 – July 2015
  Associate Professor, July 2002 - July 2005
- **Rutgers University, Department of Mathematics, New Brunswick, NJ, USA**
  Lecturer in the Masters of Mathematical Finance Program, 2013 – present

PAST POSITIONS

- **Purdue University, Department of Economics, West Lafayette, IN, USA**
  Associate Professor, July 2001 - July 2002
- **Texas A&M University, Department of Economics, College Station, TX, USA**
  Associate Professor, June 1999 - July 2001
- **Pennsylvania State University, Department of Economics, State College, PA, USA**
  Assistant Professor, Sept 1994 - June 1999

VISITING PROFESSOR/SCHOLAR AT UNIVERSITIES & CENTRAL BANKS

- **International Monetary Fund, Global Financial Stability Analysis, Monetary & Capital Markets Department, June 2017**
- **Bank of Canada, Canadian Economic Analysis Group, Various 2009-2013**
- **Warwick University, Dept. of Economics, Coventry, U.K., Visiting Scholar, Various 2007-2012**
- **University of Pula, Dept. of Tourism and Economics, Pula, Croatia, Visiting Scholar, May 2010**
- **Central Univ. of Finance and Economics, Financial Econometrics Center, Beijing, China Adjunct Professor, June 2007 - August 2009**
- **Centro Interuniversitario di Econometria, Bertinoro, Italy, Visiting Lecturer, June 2007**
- **Queen Mary, University of London, Dept. of Economics, London, U.K., Visiting Scholar, March 1999, February 2000, May 2004, March 2006**

- **University of Maryland, Department of Economics, College Park, MD, USA**
  Visiting Scholar, August 1996, October 1997, June 2003, September 2005
- **Exeter University, Department of Economics, Exeter, U.K., Visiting Scholar, April 2001, June 2002, April 2003**
- **University of California, San Diego, Department of Economics, La Jolla, CA, USA**
  Visiting Scholar, July 2000 - July 2001, July 2002
- **Humbolt University, Department of Economics and Statistics, Berlin, Germany**
  Visiting Scholar, September 1999
- **University of Pennsylvania, Department of Economics, Philadelphia, PA, USA**
  Visiting Scholar, September 1996, July 1997, January 1998

CONSULTING ENGAGEMENTS.

- **Economatrix Research Associates, Inc., Senior Associate, Financial Econometrics, Time Series Analysis, Forecasting, 2001 – present**
- **Quantitative Finance (Cathay - Conning Group, prev. DFA Inc.), 2001-2019**
- **Bank of Korea, Research Department, 2014-2015**
- **Federal Reserve Bank of Philadelphia, Real-Time Data Research Center, 2008-2009**
- **Union Bank of Switzerland, Financial Markets Research Division, 1998-2001**

AWARDS, HONORS AND FELLOWSHIPS

- **2018 Rutgers Award in Recognition of Outstanding Contributions to the Rutgers University Graduate Program in Economics**
- **2014-2015 Rutgers University Board of Trustees Award for Excellence in Research.**
- **2014 Best Paper Award in Derivatives, *Financial Management Association*, "Empirical Evidence on The Importance of Aggregation, Asymmetry, and Jumps for Volatility Prediction," Diep Duong and Norman Swanson, 2014, *Journal of Econometrics*.**
- **2006 *Journal of Econometrics Fellow*.**
- **2005 Outstanding Paper Award, *International Journal of Forecasting*, "Forecasting Economic and Financial Time-Series With Non-Linear Models," Michael Clements, Philip Hans Franses and Norman R. Swanson, 2004, *International Journal of Forecasting*.**
- **2005 *Bright Idea Research Award, Seton Hall University School of Business and NJPRO Foundation* "The Volume of Federal Litigation and the Macroeconomy," Lance Bachmeier, Patrick Gaughan and Norman R. Swanson, 2004, *International Review of Law and Economics.***
- **Fellow, Private Enterprise Research Center, Texas A&M University, College Station, TX, USA, 1999-2000, 2000-2001**
  Bush Public Policy School Fellowship, Texas A&M University, USA, 2000, 2001
- **NSF Early Career Development Award, National Science Foundation, 1998-1999**
- **Outstanding Undergraduate Instructor Award, Pennsylvania State University, PA, USA, 1998, 1995**
- **1997 Best Paper Award, *International Journal of Forecasting*, "Forecasting Economic Time Series Using Adaptive Versus Nonadaptive and Linear Versus Nonlinear Econometric Models," Norman R. Swanson and Halbert White, 1997, *International Journal of Forecasting.***
- **Doctoral Fellowship, Social Sciences and Humanities Research Council, Canada, 1990, 1991, 1992, 1993**
- **Academic Excellence and Teaching Awards, University of California, San Diego, 1990, 1991, 1992, 1993**

- **Gold Medal finalist for most outstanding graduating Undergraduate Student at the University of Waterloo, 1988**
- **Arts Upper Year Scholarship, University of Waterloo, 1987**

KEYNOTE AND PLENARY ADDRESSES AND LECTURES

- **"Robust Forecast Superiority Testing with an Application to Assessing Pools of Expert Forecasters," *NBER/NSF Time Series Conference,* San Diego, September 2018.**
- **"Big Data Analytics in Economics: What Have We Learned so Far, and Where Should We Go From Here?," *Canadian Economics Association Annual Meetings, State of the Art Lecture*, June 2017**
- **"Is There a Trade-off between Accuracy and Story Telling for Short-Term Forecasting," *Bank of Canada Workshop on Nowcasting and Short-Term Forecasting*, Ottawa, Canada, November 2011**
- **"Testing for Structural Instability and Forecast Failure in Diffusion Index Models," *Causality, Prediction, and Specification Analysis*, San Diego, CA, USA, May 2011**
- **"Testing for Index Model Stability and Forecast Failure," *Netherlands Econometrics Study Group*, Rotterdam, Netherlands, May 2011**
- **"Diffusion Index Based Data Reduction and Shrinkage: Further Evidence," *Sir Clive Granger Memorial Conference*, Nottingham University, Nottingham, U.K., May 2010**
- **"The Importance of Prediction - New Methods and the Global Financial Crisis**
- **of 2008-2009," *Twenty Fifth University Anniversary Conference*, University of Pula, Croatia, May 2010**
- **"Real-Time Datasets Really Do Make a Difference: Definitional Change, Data Release, and Forecasting," *Recent Developments in Macroeconomic and Financial Forecasting,* Erasmus University, Rotterdam, Netherlands, January 2009**
- **"Information in the Revision Process of Real-Time Datasets," *International Symposium on Recent Developments in Time Series Econometrics*, Xiamen, China, May 2008**
- **"Simulation Based Specification Testing and Predictive Density Based Model Selection for Diffusion Processes," *Joint Annual ECARES-CORE-KULeuven International Econometrics Workshop*, Louvain-la-Neuve, Belgium, March 2006**

SELECT INVITED ADDRESSES AND LECTURES AT CONFERENCES/BANKS

- **"Big Data Analytics in Economics: What Have We Learned so Far, and Where Should We Go From Here?," *Deutsche Bundesbank*, Frankfurt, September 2017**
- **"Density and Conditional Distribution Evaluation and Construction," *Bank of Canada*, Ottawa, Canada, November 2012**
- **"Methods for Short Term Forecast Model Estimation and Accuracy Assessment," *Bank of Canada*, Ottawa, Canada, June 2012**
- **"Introduction to Forecasting and Forecast Evaluation," *Bank of Canada*, Ottawa, Canada, May 2011**
- **"Testing for Structural Instability and Forecast Failure in Diffusion Index Models," *5th CIREQ Time Series Conference*, Montreal, Canada, May 2011**
- **"Real-Time Datasets Really Do Make a Difference: Definitional Change, Data Release, and Forecasting," *Annual Meeting of the Real-Time Data Analysis Group*, Federal Reserve Bank of Philadelphia, PA, USA, November 2009**

- **"Real-Time Datasets Really Do Make a Difference: Definitional Change, Data Release, and Forecasting,"** ***Forecasting and Monetary Policy*****, Deutsche Bundesbank, Berlin, Germany, March 2009**
- **"Information in the Revision Process of Real-Time Datasets,"** ***Real-Time Data Analysis and Methods in Economics*****, Philadelphia, PA, USA, April 2007**
- **"Predictive Density Evaluation,"** ***Handbook of Economic Forecasting Conference*****, San Diego, CA, USA, April 2004**
- **"Predictive Density and Conditional Confidence Interval Accuracy Tests,"** ***Predictive Methodology and Application in Economics and Finance*****, San Diego, CA, USA, January 2004**
- **"An Empirical Investigation of the Usefulness of ARFIMA Models for Predicting Macroeconomic and Financial Time Series,"** ***IGIER-PIER Conference on Economic Methods in Macroeconomics and Finance*****, Bocconi University, Milano, Italy, October 2003**
- **"Estimation and Testing Using Jackknife IV in Heteroskedastic Regressions With Many Weak Instruments,"** ***NSF/NBER Conference on Weak and/or Many Instruments*****, Boston, MA, USA, June 2003**
- **"Bootstrap Conditional Distribution Tests In the Presence of Dynamic Misspecification,"** ***C.R.D.E. Conference*** **on** ***Resampling Methods in Econometrics*****, Montreal, Canada, March 2001**
- **"A Randomized Procedure for Choosing Between Level and Logarithmic Transformations,"** ***Camp Econometrics*****, Lake Conroe, TX, USA, 2000**
- **"An Out of Sample Test for Granger Causality,"** ***Nonlinear Modeling in Economics,*** **Svinkloev, Denmark, September 1999**
- **"An Out of Sample Test for Granger Causality,"** ***Nonlinear Modeling of Multivariate Macroeconomic Relations*****, Rotterdam, Netherlands, March 1999**

EDITORIAL ACTIVITY

Editor:

- ***Quantitative Finance and Economics*****, 2016-**
- ***European Journal of Pure and Applied Mathematics,*** **2010-**
- ***Economic Research*****, 2009-**

Editor - Special Issues:

- ***Econometrics,*** **Special Issue on Recent Advances in Theory and Methods for the Analysis of High Dimensional and High Frequency Financial Data, 2019**
- ***Quantitative Finance and Economics,*** **Advances in Forecasting Financial and Macroeconomic Variables Using Econometric Methods, 2019**
- ***Journal of Econometrics*****, Special Issue on Causality, Prediction, and Specification Analysis, 2014**
- ***Journal of Business and Economic Statistics*****, Special Issue on Real-Time Data Analysis and Methods in Economics, 2008**
- ***Journal of Econometrics,*** **Special Issue on Predictive Methodology and Application in Economics and Finance, 2005**
- ***International Journal of Forecasting*****, Special Issue on Forecasting Economic and Financial Time Series Using Nonlinear Methods, 2002**
- ***Studies in Nonlinear Dynamics and Econometrics*****, Special Issue on Nonlinear Econometrics, 1998**

Editorial Board:

- ***Econometrics, 2013-***

Associate Editor

- ***Econometric Reviews, 2015-***
- ***Journal of Business and Economic Statistics*, 1998-**
- ***International Journal of Forecasting*, 2000-2015**
- ***Empirical Economics*, 2006-2011**
- ***Studies in Nonlinear Dynamics and Econometrics*, 2000-2006**

OTHER PROFESSIONAL ACTIVITIES

- **Real Time Data Research Center, Federal Reserve Bank of Philadelphia, Philadelphia, PA, Fellow, 2007-2009**
- **American Statistical Association, Business and Economic Statistics Section**
- **Travel Award Committee, 2010 (Chair), 2009 (member)**
- **Society for Nonlinear Dynamics and Econometrics, Executive Board, 2002-2006**
- **Zellner Economics Thesis Award Committee, 2005 (member)**
- **Member (Current and Past):**
    - **Econometric Society**
    - **American Economic Association**
    - **Society for Financial Econometrics**
    - **American Statistical Association**
    - **International Association of Applied Econometrics**
    - **International Institute of Forecasters**
    - **Canadian Economic Association**
- **Listed: Marquis Who's Who in America; Who's Who in American Education; Who's Who in Social Sciences Higher Education**

Conference General Chair and Committee

- **Scientific Committee: International Association of Applied Econometrics, Cyprus, June 2018**
- **Program Committee: International Institute of Forecasters - International Symposium on Forecasting, Annual Conference, Boston, August 2012**
- **Program Chair: Causality, Prediction, and Specification Analysis: Recent Advances and Future Directions, San Diego, May 2011**
- **Program Committee: 5th International Scientific Conference on Entrepreneurship and Macroeconomic Management: Reflections on the World in Turmoil, Pula, Croatia, March 2011**
- **Program Chair: Conference In Memory of Clive W.J. Granger - Retrospective and Directions for Future Research, Joint ASSA/ES Special Panel Session, Chicago, January 2010**
- **Program Committee: 20th EC^2 Conference on Real Time Econometrics, Aarhus University, Aarhus, Denmark, December 2009**
- **Program Committee: International Institute of Forecasters - International Symposium on Forecasting, Annual Conference, New York City, August 2007**
- **Program Chair: Real-Time Data Analysis and Methods in Economics, Federal Reserve Bank of Philadelphia, Philadelphia, April 2007**
- **Program Committee: Society for Nonlinear Dynamics and Econometrics, Annual Conferences, Various Locations, 2003 - 2006**

- **Program Chair: Predictive Methodology and Application in Economics and Finance, San Diego, January 2005**

PUBLICATIONS

- ***"Forecast Evaluation,"*** **(with Mingmian Cheng and Chun Yao), printed in Peter Fuleky, 2020, forthcoming, *Macroeconomic Forecasting in the Era of Big Data*, Springer, New York, pp. 513-552.**

- **"Jump Spillover and Risk Effects on Excess Returns in the United States During the Great Recession," (with Jessica Schlossberg), printed in Cheng-Few Lee, 2020, forthcoming, *Handbook of Financial Econometrics, Mathematics, Statistics and Technology*, World Scientific Publishing, Singapore.**

- **"Financial Econometrics and Big Data: A Survey of Volatility Estimators and Tests for the Presence of Jumps and Co-Jumps" (with Arpita Mukherjee, Weijia Peng, and Xiye Yang), printed in C.R. Rao and Hrishikesh Vinod, 2020, forthcoming, *Handbook of Statistics*, vol 42, Elsevier, Amsterdam.**

- **"Forecasting and Nowcasting Emerging Market GDP Growth Rates: The Role of Latent Global Economic Policy Uncertainty and Macroeconomic Data Surprise Factors," (with Oguzhan Cepni and I. Ethem Guney), 2019, forthcoming, *Journal of Forecasting*.**

- **"Nowcasting and Forecasting GDP in Emerging Markets Using Global Financial and Macroeconomic Diffusion Indexes," (with Oguzhan Cepni and I. Ethem Guney), 2019, *International Journal of Forecasting,* 35, 555-572.**

- **"A Survey of Dynamic Nelson-Siegel Models, Diffusion Indexes, and Big Data Methods for Predicting Interest Rates," (with Hal Pedersen), 2019, *Quantitative Finance and Economics,* 3, 22-45.**

- **"Fixed and Long Time Span Jump Tests: Further Monte Carlo and Empirical Evidence," (with Mingmian Cheng), 2019, *Econometrics*, 7, 1-32.**

- **"Testing for Jumps and Jump Intensity Path Dependence," (with Valentina Corradi and Mervyn J. Silvapulle), 2018, *Journal of Econometrics*, 204, 248-267.**

- **"Methods for Backcasting, Nowcasting and Forecasting Using Factor-MIDAS: With An Application to Korean GDP," (with Hyun Hak Kim), 2018, *Journal of Forecasting,* 37, 281-302.**

- **"Big Data Analytics In Economics: What Have We Learned So Far, And Where Should We Go From Here?," (with Weiqi Xiong), 2018, *Canadian Journal of Economics*, 3, 695-746.**

- **"Mining Big Data Using Parsimonious Factor, Machine Learning, Variable Selection, and Shrinkage Methods," (with Hyun Hak Kim), 2018, *International Journal of Forecasting*, 34, 339-354.**

- **"Robust Forecast Comparison," (with Sainan Jin and Valentina Corradi), 2017, *Econometric Theory*, 33, 1306-1351.**

- **"Further Evidence on the Usefulness of Real-Time Datasets for Economic Forecasting," (with Andres Fernandez), 2017, *Quantitative Finance and Economics*, 1, 2-25.**

- **"Empirical Evidence on the Importance of Aggregation, Asymmetry, and Jumps for Volatility Prediction," (with Diep Duong), 2015, *Journal of Econometrics*, 187, 2015, 606-621.**

- **"Density and Conditional Distribution Based Specification Analysis," (with Diep Duong), printed in Cheng-Few Lee, 2015, *Handbook of Financial Econometrics and Statistics*, Springer, New York, pp. 1509-1561.**

- **"Prediction and Simulation Using Simple Models Characterized by Nonstationarity and Seasonality," (with Richard Urbach), *International Review of Economics and Finance,* 2015, 40, 312-323.**

- **"Testing for Structural Stability of Factor Augmented Forecasting Models," (with Valentina Corradi), *Journal of Econometrics*, 182, 2014, 100-118.**

- **"Forecasting Financial and Macroeconomic Variables Using Data Reduction Methods: New Empirical Evidence," (with Hyun Hak Kim), *Journal of Econometrics*, 178, 2014, 352-367.**

- **"Diffusion Index Model Specification and Estimation Using Mixed Frequency Datasets," (with Kihwan Kim), printed in Jun Ma and Mark Wohar, 2014, *Recent Advances in Estimating Nonlinear Models: With Applications in Economics and Finance,* Springer, New York, pp. 15-31.**

- **"Testing Overidentifying Restrictions with Many Instruments and Heteroskedasticity", (with John C. Chao, Jerry H. Hausman, Whitney K. Newey and Tiemen Woutersen), *Journal of Econometrics*, 178, 2014, 15-21.**

- **"An Expository Note on the Existence of Moments of Fuller and HFUL Estimators," (with John C. Chao, Jerry H. Hausman, Whitney K. Newey and Tiemen Woutersen), printed in Badi Baltagi, Carter Hill, Whitney Newey and Halbert White, 2012, *Essays in Honor of Jerry Hausman: Advances in Econometrics vol. 29*, Emerald, New York, pp. 87-106.**

- **"Combining Two Consistent Estimators," (with John C. Chao, Jerry H. Hausman, Whitney K. Newey and Tiemen Woutersen), printed in Badi Baltagi, Carter Hill, Whitney Newey and Halbert White, 2012, *Essays in Honor of Jerry Hausman: Advances in Econometrics vol. 29*, Emerald, New York, pp. 33-53.**

- **"Instrumental Variable Estimation with Heteroskedasticity and Many Instruments," (with John C. Chao, Jerry H. Hausman, Whitney K. Newey and Tiemen Woutersen) *Quantitative Economics*, 3, 2012, 211-255.**

- **"Asymptotic Distribution of JIVE in a Heteroskedastic IV Regression with Many Instruments", (with John C. Chao, Jerry H. Hausman, Whitney K. Newey and Tiemen Woutersen), *Econometric Theory*, 28, 2012,42-86.**

- **“A Survey of Recent Advances in Forecast Accuracy Comparison Testing, with an Extension to Stochastic Dominance,” (with Valentina Corradi), printed in Xiaohong Chen and Norman R. Swanson, 2012, *Recent Advances and Future Directions in Causality, Prediction, and Specification Analysis: Essays in Honor of Halbert L. White Jr*, Springer, New York, pp. 121-144.**

- **“Predictive Inference for Integrated Volatility", (with Valentina Corradi and Walter Distaso), *Journal of American Statistical Association*, 106, 2011, 1496-1512.**

- **“Volatility in Discrete and Continuous Time Models: A Survey with New Evidence on Large and Small Jumps,” (with Diep Duong), printed in David M. Drukker, 2011, *Missing Data Methods: Advances in Econometrics vol. 27*, Emerald, New York, pp. 179-233.**

- **“In- and Out-of-Sample Specification Analysis of Spot Rate Models: Further Evidence for the Period 1982-2008,” (with Lili Cai), *Journal of Empirical Finance*, 18, 2011, 743-764.**

- **“Predictive Density Construction and Accuracy Testing with Multiple Possibly Misspecified Diffusion Models,” (with Valentina Corradi), *Journal of Econometrics*, 161, 2011, 304-324.**

- **“Some Variables are More Worthy Than Others: New Diffusion Index Evidence on the Monitoring of Key Economic Indicators,” (with Nii Ayi Armah), *Applied Financial Economics*, 21, 2011, 43-60.**

- **“Diffusion Index Models and Index Proxies: Recent Results and New Directions,” (with Nii Ayi Armah), *European Journal of Pure and Applied Mathematics*, 3, 2010, 478-501.**

- **“Seeing Inside the Black Box: Using Diffusion Index Methodology to Construct Factor Proxies in Largescale Macroeconomic Time Series Environments,” (with Nii Ayi Armah), *Econometric Reviews*, 29, 2010, 476-510.**

- **“International Evidence on the Efficacy of New-Keynesian Models of Inflation Persistence,” (with Oleg Korenok and Stanislav Radchenko), *Journal of Applied Econometrics*, 25, 2010, 31-54.**

- **“Information in the Revision Process of Real-Time Data", (with Valentina Corradi and Andres Fernandez), *Journal of Business and Economic Statistics*, 27, 2009, 455-467.**

- **“Predictive Density Estimators for Daily Volatility Based on the Use of Realized Measures,” (with Valentina Corradi and Walter Distaso), *Journal of Econometrics*, 150, 2009, 119-138.**

- **“A Simulation Based Specification Test for Diffusion Processes,” (with Geetesh Bhardwaj and Valentina Corradi), *Journal of Business and Economic Statistics*, 26, 2008, 176-193.**

- **“Predictive Inference Under Model Misspecification with an Application to Assessing the Marginal Predictive Content of Money for Output,” (with Nii Ayi Armah), printed in Mark Wohar, 2008, *Forecasting in the Presence of Structural Breaks and Model Uncertainty*, Emerald, Bingley, UK, pp. 195-230.**

- **“Nonparametric Bootstrap Procedures for Predictive Inference Based on Recursive Estimation Schemes,” (with Valentina Corradi), *International Economic Review*, 48, 2007, 67-109.**

- **"Alternative Approximations of the Bias and MSE of the IV Estimator Under Weak Identification with Application to Bias Correction," (with John C. Chao), *Journal of Econometrics*, 137, 2007, 515-555.**

- **"How Sticky Is Sticky Enough? A Distributional and Impulse Response Analysis of New Keynesian DSGE Models,", (with Oleg Korenok), *Journal of Money, Credit and Banking*, 39, 2007, 1481-1508.**

- **"Evaluation of Dynamic Stochastic General Equilibrium Models Based on Distributional Comparison of Simulated and Historical Data," (with Valentina Corradi), *Journal of Econometrics*, 136, 2007, 699-723.**

- **"Are Statistical Reporting Agencies Getting It Right? Data Rationality and Business Cycle Asymmetry," (with Dick van Dijk), *Journal of Business and Economic Statistics*, 24, 2006, 24-42.**

- **"Asymptotic Normality of Single-Equation Estimators for the Case with a Large Number of Weak Instruments," (with John C. Chao), printed in Dean Corbae, Steven N. Durlauf and Bruce E. Hansen, 2006, *Econometric Theory and Practice: Frontiers of Analysis and Applied Research (Festschrift in Honor of Peter C.B. Phillips),* Cambridge University Press, New York, pp. 82-124.**

- **"Predictive Density and Conditional Confidence Interval Accuracy Tests," (with Valentina Corradi), *Journal of Econometrics*, 135, 2006, 187-228.**

- **"A Predictive Comparison of Some Simple Long Memory and Short Memory Models of Daily U.S. Stock Returns, With Emphasis on Business Cycle Effects," (with Geetesh Bhardwaj), printed in Dick van Dijk, Costas Milas and Phillip Rothman, 2006, *Nonlinear Time Series Analysis of Business Cycles*, Elsevier, Amsterdam, pp. 379-405.**

- **"An Empirical Investigation of the Usefulness of ARFIMA Models For Predicting Macroeconomic and Financial Time Series," (with Geetesh Bhardwaj), *Journal of Econometrics*, 131, 2006, 539-578.**

- **"Bootstrap Conditional Distribution Tests In the Presence of Dynamic Misspecification," (with Valentina Corradi), *Journal of Econometrics*, 133, 2006, 779-806.**

- **The Effect of Data Transformation on Common Cycle, Cointegration and Unit Root Tests: Monte Carlo Results and a Simple Test," (with Valentina Corradi), *Journal of Econometrics*, 132, 2006, 195-229.**

- **"Predictive Density Evaluation," (with Valentina Corradi), printed in Clive W.J. Granger, Graham Elliot and Allan Timmerman, 2006, *Handbook of Economic Forecasting*, Elsevier, Amsterdam, pp. 197-284.**

- **"Consistent Estimation With a Large Number of Weak Instruments," (with John C. Chao), *Econometrica*, 73, 2005, 1673-1692.**

- **“A Bootstrap Specification Test for Diffusion Processes,” (with Valentina Corradi), *Journal of Econometrics*, 124, 2005, 117-148.**

- **“A Test for Comparing Multiple Misspecified Conditional Interval Models,” (with Valentina Corradi), *Econometric Theory*, 21, 2005, 991-1016.**

- **“The Incremental Predictive Information Associated with Using Theoretical New Keynesian DSGE Models Versus Simple Linear Alternatives,” (with Oleg Korenok), *Oxford Bulletin of Economics and Statistics*, 67, 2005, 905-930.**

- **“Predicting Inflation: Does The Quantity Theory Help,” (with Lance Bachmeier), *Economic Inquiry*, 43, 2005, 570-585.**

- **“A Test for the Distributional Comparison of Simulated and Historical Data,” (with Valentina Corradi), *Economics Letters*, 85, 2004, 185-193.**

- **“The Volume of Federal Litigation and the Macroeconomy,” (with Lance Bachmeier and Patrick Gaughan), *International Review of Law and Economics*, 24, 2004, 191-207.**

- **“Forecasting Economic and Financial Time-Series With Non-Linear Models,” (with Michael Clements and Philip Hans Franses), *International Journal of Forecasting*, 20, 2004, 169-183.**

- **“Some Recent Developments in Predictive Accuracy Testing With Nested Models and (Generic) Nonlinear Alternatives,” (with Valentina Corradi), *International Journal of Forecasting*, 20, 2004, 185-199.**

- **“A Comparison of Alternative Causality and Predictive Ability Tests in the Presence of Integrated and Cointegrated Economic Variables,” (with Ataman Ozyildirim and Maria Pisu), printed in David Giles, 2003, *Computer Aided Econometrics*, Marcel Dekker, New York, pp. 91-148.**

- **“Trade, Investment and Growth: Nexus, Analysis and Prognosis,” (with Kala Krishna and Atamam Ozyildirim), *Journal of Development* Economics, 70, 2003, 479-499.**

- **“Vector Autoregression Models in Asset-liability Management,” (with Joe Fairchild and Hal Pedersen) printed in Bernd Scherer, 2003, *Asset and Liability Management Tools*, Risk Books, London, pp. 235-249.**

- **“Temporal Aggregation and Causality in Multiple Time Series Models,” (with Joerg Breitung), *Journal of Time Series Analysis*, 23, 2002, 651-665.**

- **“Monetary Policy Rules with Model and Data Uncertainty,” (with Myles Callan and Eric Ghysels), *Southern Economic Journal*, 69, 2002, 239-265.**

- **“A Consistent Test for Nonlinear Out of Sample Predictive Accuracy,” (with Valentina Corradi), *Journal of Econometrics*, 110, 2002, 353-381.**

- **“Let's Get 'Real' About Using Economic Data,” (with Peter Christoffersen and Eric Ghysels), *Journal of Empirical Finance*, 9, 2002, 343-360.**

- **“A New Definition for Time-Dependent Mean Reversion in Commodity Markets,” (with Ahmet E. Kocagil and Tian Zeng), *Economic Letters*, 71, 2001, 9-16.**

- **“Predictive Ability With Cointegrated Variables,” (with Valentina Corradi and Claudia Olivetti), *Journal of Econometrics*, 104, 2001, 315-358.**

- **“The Real Time Predictive Content of Money for Output,” (with Jeffery Amato), *Journal of Monetary Economics*, 48, 2001, 3-24.**

- **“An Out of Sample Test for Granger Causality,” (with John C. Chao and Valentina Corradi), *Macroeconomic Dynamics*, 5, 2001, 598-620.**

- **“Choosing Among Competing Econometric Forecasts: Regression Based Forecast Combination Using Model Selection,” (with Tian Zeng), *Journal of Forecasting*, 20, 2001, 425-440.**

- **“Semiparametric ARX Neural Network Models with an Application to Forecasting Inflation,” (with Xiaohong Chen and Jeffery Racine), *IEEE Transactions in Neural Networks*, 12, 2001, 674-683.**

- **“Data Transformation and Forecasting in Models With Unit Roots and Cointegration,” (with John C. Chao and Valentina Corradi), *Annals of Economics and Finance*, 2, 2001, 59-76.**

- **“The Econometric Consequences of the Ceteris Paribus Condition in Theoretical Economics,” (with Herman Bierens), *Journal of Econometrics*, 95, 2000, 223-253.**

  “Tests of Non-nested Hypotheses in Nonstationary Regressions With An Application to Modeling Industrial Production,” (with John C. Chao) , *Macroeconomic Dynamics*, 4, 2000, 42-72.

- **“Testing for Stationarity-Ergodicity and for Comovement Between Nonlinear Discrete Time Markov Processes,” (with Valentina Corradi and Halbert White), *Journal of Econometrics*, 96, 2000, 39-73.**

- **“A Multivariate Time Series Analysis of the Data Revision Process for Industrial Production and the Composite Leading Indicator,” (with Eric Ghysels, and Myles Callan), printed in Robert F. Engle and Halbert White, 1999, *Cointegration, Causality, and Forecasting: Festschrift in Honour of Clive W.J. Granger*, Oxford University Press, Oxford, pp. 45-75.**

- **“Nonlinear Econometric Modeling: A Selective Review,” (with Philip Hans Franses), printed in Philip Rothman, 1999, *Nonlinear Time Series Analysis of Economic and Financial Data*, Kluwer Academic Press, Amsterdam, pp. 87-109.**

- **"Finite Sample Properties of a Simple LM Test for Neglected Nonlinearity in Error-Correcting Regression Equations," *Statistica Neerlandica*, 53, 1999, 76-95.**

- **“Money and Output Viewed Through a Rolling Window,” *Journal of Monetary Economics*, 41, 1998, 455-474.**

- **"Predictive Evaluation of Econometric Forecasting Models in Commodity Futures Markets," (with Tian Zeng), *Studies in Nonlinear Dynamics and Econometrics*, 2, 1998, 159-177.**

- **"A Model Selection Approach to Real-Time Macroeconomic Forecasting Using Linear Models and Artificial Neural Networks," (with Halbert White), *Review of Economics and Statistics*, 79, 1997, 540-550.**

- **"Forecasting Economic Time Series Using Adaptive Versus Nonadaptive and Linear Versus Nonlinear Econometric Models," (with Halbert White), *International Journal of Forecasting*, 13, 1997, 439-461.**

- **"Introduction to Stochastic Unit Root Processes," (with Clive W.J. Granger), *Journal of Econometrics*, 80, 1997, 35-62.**

- **"Impulse Response Functions Based on a Causal Approach to Residual Orthogonalization in Vector Autoregressions," (with Clive W.J. Granger), *Journal of the American Statistical Association*, 92, 1997, 357-367.**

- **"Further Developments in the Study of Cointegrated Economic Variables," (with Clive W.J. Granger), *Oxford Bulletin of Economics and Statistics*, 58, 1996, 537-553. Reprinted in: Ghysels, Eric, N.R. Swanson, and Mark Watson, 2001, *The Collected Works of Clive W.J. Granger: Volume II*, Econometric Society Monographs Number 33, Cambridge University Press, Cambridge, pp. 302-318.**

- **"Forecasting Using First Available Versus Fully Revised Economic Time Series Data," *Studies in Nonlinear Dynamics and Econometrics*, 1, 1996, 47-64.**

- **"A Model Selection Approach to Assessing the Information in the Term Structure Using Linear Models and Artificial Neural Networks," (with Halbert White), *Journal of Business and Economic Statistics*, 13, 1995, 265-279. Reprinted in: Trippi, Robert R. and Efraim Turban, 1996, *Neural Networks in Finance and Investing: Using Artificial Intelligence to Improve Real-World Performance*, Irwin Professional Publishing, Chicago, pp. 675-700. Also reprinted in *Financial Analysis*, International Neural Network Society, 1998.**

OTHER PUBLICATIONS

- **"Comment on: In-Sample Inference and Forecasting in Misspecified Factor Models by Marine Carrasco and Barbara Rossi," *Journal of Business and Economic Statistics*, 34, 2016, 348-353.**

- **"Editor's Introduction: Causality, Prediction, and Specification Analysis," (with Xiaohong Chen), *Journal of Econometrics*, 182, 2014, 1-4.**

- **"Editor's Introduction: Recent Advances and Future Directions in Causality, Prediction, and Specification Analysis: Essays in Honor of Halbert L. White Jr," (with Xiaohong Chen), printed in Xiaohong Chen and Norman R. Swanson, 2012, *Recent Advances and Future Directions in Causality, Prediction, and Specification Analysis: Essays in Honor of Halbert L. White Jr*, Springer New York, iv-xvii.**

- **"Pioneer in the Field of Econometrics," (with Valentina Corradi), *Economics in Action*, 4, 2011, pp. 1-2.**

- **"Comments on: Further Developments in the Study of Cointegrated Economic Variables by Clive W.J. Granger and Norman R. Swanson," *Journal of Financial Econometrics*, 8, 2010, 187-190.**

- **"Discussion of: Weak Instrument Robust Tests in GMM and the New Keynesian Phillips Curve by Frank Kleibergen and Sophocles Mavroeidis," (with John C. Chao), *Journal of Business and Economic Statistics*, 27, 2009, 316-318.**

- **"Comment on: Forecasting Economic and Financial Variables with Global VARs by Hashem Pesaran, Til Schuermann and L. Vanessa Smith," *International Journal of Forecasting*, 25, 2009, 697-702.**

- **"Editor's Introduction: Predictive Methodology and Application in Economics and Finance: Volume in Honor of the Accomplishments of Clive W.J. Granger," (with Graham Elliot, Eric Ghysels, and Jesus Gonzalo), 2006, printed in Graham Elliot, Eric Ghysels, Jesus Gonzalo, and Norman R. Swanson, *Predictive Methodology and Application in Economics and Finance: Volume in Honor of the Accomplishments of Clive W.J. Granger, Journal of Econometrics*, 135, 1-9, Elsevier, Amsterdam.**

- **"Editor's Introduction: Forecasting Economic and Financial Time-Series With Non-Linear Models," (with Mike Clements and Philip Hans Franses), printed in Mike Clements, Philip Hans Franses and Norman R. Swanson, 2005, *Forecasting Economic and Financial Time-Series With Non-Linear Models*, *International Journal of Forecasting, 20, 1-5*, Elsevier, Amsterdam.**

- **"What to Do With Time Series: A Few Ideas from an Economist," *The Political Methodologist*, 11, 2003, 27-31.**

- ***Book Review -- Causality: Models, Reasoning and Inference*, by Judea Pearl, *Journal of Economic Literature*, 40, 2002, 925-926.**

- **"Comment on: A Vector Error Correction Forecasting Model of the U.S. Economy, by Richard G. Anderson, Dennis L. Hoffman and Robert H. Rasche," *Journal of Macroeconomics*, 24, 2002, 599-606.**

- **"Editor's Introduction: The Collected Works of Clive W.J. Granger: Volumes I and II," (with Eric Ghysels and Mark Watson), printed in Eric Ghysels, Norman R. Swanson and Mark Watson, 2001, *The Collected Works of Clive W.J. Granger: Volumes I and II*, Econometric Society Monographs Number 32, Cambridge University Press, Cambridge, pp. 1-27.**

- ***Book Review -- Forecasting Economic Time Series*, by M.P. Clements and D.F. Hendry, *Journal of the American Statistical Association*, 95, 2000, 687-688.**

  ***Book Review -- Neural, Novel and Hybrid Algorithms for Time Series Prediction*, by Timothy Masters, *Journal of the American Statistical Association*, 94, 1999, 347.**

- ***Book Review -- Statistical Foundations for Econometric Techniques*, by Asad Zaman, *Econometric Reviews*, 17, 1998, 221-225.**

- **"The Probability of Mean Reversion in Equilibrium Asset Prices and Returns," (with Tian Zeng and Ahmet E. Kocagil), *Chicago Board of Trade: Spring Research Seminar Symposium Proceedings*, EM83-8, 1997, 291-328.**

EDITED BOOKS

- ***Recent Advances and Future Directions in Causality, Prediction, and Specification Analysis: Essays in Honor of Halbert L. White Jr*, (with Xiaohong Chen), Springer, New York, 2012.**

- ***The Collected Works of Clive W.J. Granger, Volume II,* (with Eric Ghysels and Mark Watson), Econometric Society Monographs Number 33, Cambridge University Press, Cambridge, 2001.**

- ***The Collected Works of Clive W.J. Granger, Volume I*, (with Eric Ghysels and Mark Watson), Econometric Society Monographs Number 32, Cambridge University Press, Cambridge, 2001.**

WORKING PAPERS

- **"Forecasting Volatility Using Double Shrinkage Methods," (with Mingmian Cheng and Xiye Yang), Working Paper, Rutgers University, 2019.**

- **"New Evidence of the Marginal Predictive Content of Small and Large Jumps," (with Bo Yu and Bruce Mizrach), Working Paper, Rutgers University, 2019.**

- **"Robust Forecast Superiority Testing with an Application to Assessing Pools of Expert Forecasters," (with Valentina Corradi and Sainan Jin), Working Paper, Rutgers University, 2018.**

- **"Predicting Interest Rates Using Shrinkage Methods, Real-Time Diffusion Indexes, and Model Combinations," (with Weiqi Xiong), Working Paper, Rutgers University, 2019.**

- **"Mixing Mixed Frequency and Diffusion Indices in Good Times and in Bad," (with Kihwan Kim), Working Paper, Rutgers University, 2016.**

- **"An Analysis of Macroeconomic Fluctuations on the Number of Patents Awarded in the United States," (with Patrick Gaughan and Ji Zhang), Working Paper, Rutgers University, 2013.**

CONFERENCE PARTICIPATION

- **3rd Forecasting at Central Banks Conference, Ottawa, 2019.**
- **NBER/NSF Times Series Conference, San Diego, 2018.**
- **Deutsche Bundesbank Workshop on Forecasting, Frankfurt, 2017.**
- **Annual Canadian Economics Association Meetings, Antigonish, 2017.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, San Francisco, 2016.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Boston, 2015.**

- **North American Winter Meetings of the Econometric Society and the American Economic Association, Philadelphia, 2014.**
- ***Applied Time Series Econometrics*, Federal Reserve Bank of St. Louis, 2013.**
- **European Summer Meetings of the Econometric Society, Malaga, 2012.**
- ***Nowcasting and Short-Term Forecasting*, Bank of Canada, Ottawa, 2011.**
- ***Causality, Prediction, and Specification Analysis*, La Jolla, 2011.**
- ***Netherlands Econometrics Study Group Conference*, Erasmus University, Rotterdam, 2011.**

- ***Sir Clive Granger Memorial Conference,* University of Nottingham, Nottingham, 2010.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Atlanta, 2010.**
- **North American Summer Meetings of the Econometric Society, Boston, 2009.**
- **International Institute of Forecasters Annual Conference, New York, 2007.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Chicago, 2007.**
- ***Macroeconometrics and Model Uncertainty Conference*, Reserve Bank of New Zealand, Wellington, 2006.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Boston, 2006.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Philadelphia, 2005.**
- **World Congress of the Econometric Society, London, 2005.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, San Diego, 2004.**
- ***Predictive Methodology and Application in Economics and Finance*, San Diego, 2004.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Washington, 2003.**
- ***NSF/NBER Conference on Weak and/or Many Instruments*, MIT, Boston, 2003.**
- ***NSF/NBER Fall Time Series Group Meeting*, Philadelphia, 2002.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Atlanta, 2002.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, New Orleans, 2001.**
- ***NSF/NBER Summer Meeting of the Forecasting and Empirical Methods in Macroeconomics Group*, Boston, 2001.**
- **Western Economic Association Meetings, San Francisco, 2001.**
- ***Private Enterprise Research Center Conference on Globalization*, Texas A&M University, 2000.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Boston, 2000.**
- ***Texas Monetary Conference*, College Station, 2000.**
- **World Congress of the Econometric Society, Seattle, 2000.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, New York, 1999.**
- ***Forecasting Methods: Conference on New Developments*, Arrabida, 1998.**
- ***Midwest Econometric Group*, Bloomington, 1998.**
- ***NSF/NBER Summer Meeting of the Forecasting and Empirical Methods in Macroeconomics Group*, Boston, 1998.**

- **North American Summer Meetings of the Econometric Society, Pasadena, 1997.**
- ***Macroeconomic Theory and Monetary Policy*, Federal Reserve Bank of Philadelphia, Philadelphia, 1997.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, New Orleans, 1997.**
- ***NSF/NBER Summer Meeting of the Forecasting and Empirical Methods in Macroeconomics Group*, Boston, 1997.**

- ***Expectations in Economics*, Federal Reserve Bank of Philadelphia, Philadelphia, 1996.**
- ***NSF/NBER Fall Time Series Group Meeting*, Rotterdam, 1996.**
- **North American Summer Meetings of the Econometric Society, Iowa City, 1996.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, San Francisco, 1996.**
- ***NSF/NBER Fall Time Series Group Meeting*, Boston, 1995.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Washington, 1995.**
- **Society for Nonlinear Dynamics and Econometrics Annual Meeting, New York City, 1995.**
- **World Congress of the Econometric Society, Tokyo, 1995.**
- **North American Winter Meetings of the Econometric Society and the American Economic Association, Boston, 1994.**
- ***NSF/NBER Conference on Multivariate Time Series and Financial Econometrics*, San Diego, 1994.**

INVITED SEMINARS AT UNIVERSITIES

Aarhus University, Arizona State University, Catholic University of Leuven, Clemson University, Columbia University, Cornell University (2), Duke University, Free University of Brussels, Humbolt University , Indiana University , Iowa State University, John's Hopkins University, New York University (2), Notre Dame University, Ohio State University (2), Pennsylvania State University (2), Purdue University, Queen's University, Kingston (2), Rutgers University, SUNY-Binghamton, Texas A&M University (2), University of British Columbia, University of California - San Diego, University of Chicago, University of Florida, University of Kansas, University of Maryland (2), University of Michigan, University of Montreal, University of Pennsylvania (2), University of Washington –Seattle, University of South Florida, University of Southern Illinois, University of Toronto (2), Wayne State University, West Virginia University

INVITED SEMINARS AT POLICY INSTITUTIONS

Bank of Canada (multiple); Deutsche Bundesbank; Federal Reserve Bank of Kansas City (multiple); Federal Reserve Bank of St. Louis (multiple), Federal Reserve Board of Governors

GRANTS

- **Simon Foundation Grant, Rutgers University, Department of Economics, Rutgers University Research Council, Rutgers, University, 2002-2012**
- **Undergraduate Education Development Grant, Pennsylvania State University, 1998-2000**
- **National Science Foundation Research Grant SBR-9730102, 1998-1999**
- **NSF/NBER Presentation and Travel Grant, 1998**
- **International Cooperative Programs Travel Grant, Pennsylvania State University, 1998**

- **NSF/NBER Presentation and Travel Grant, 1996**
- **NSF/NBER Travel GrantInternational Cooperative Programs Travel Grant, Pennsylvania State University, 1995**
- **Econometric Society Travel Grant, 1995**
- **Research and Graduate Studies Office, Pennsylvania State University, 1994**

REFEREE SERVICES

- ***American Economic Review, Canadian Journal of Economics, Computational Statistics and Data Analysis, Annals of Statistics, Applied Financial Economics, Economics Bulletin, Economic Inquiry, Economic Journal, Economics Letters, Econometrica, Econometrics Journal, Econometric Reviews, Econometric Theory, Economic Modeling, Empirical Economics, Festschrift in Honor of Clive W.J. Granger, Finance Research Letters, Information Sciences, International Economic Review, International Journal of Finance and Economics, International Journal of Forecasting, Journal of Applied Econometrics, Journal of the American Statistical Association, Journal of Business Journal of Business and Economic Statistics, Journal of Econometrics, Journal of Economic Behavior and Organization, Journal of Economic Dynamics and Control, Journal of Economics and Business, Journal of Economic Education, Journal of Economic Surveys, Journal of Empirical Finance, Journal of Forecasting, Journal of International Money and Finance, Journal of the Japanese and International Economies, Journal of Macroeconomics, Journal of Money, Credit, and Banking, Journal of Statistics Education, Journal of Time Series Analysis, Macroeconomic Dynamics, National Tax Journal, Oxford Bulletin of Economics and Statistics, Review of Economics and Statistics, Review of Economic Studies, Southern Economic Journal, Statistical Methodology, Studies in Nonlinear Dynamics and Econometrics***

- **Academic Press, Addison-Wesley, Cambridge University Press, Norton, Springer, Thompson Publishing**

- **Economic and Social Research Council (England), National Science Foundation (USA), Social Sciences and Humanities Research Council (Canada)**

GRADUATE STUDENT ADVISING

PH.D. STUDENTS DIRECTED AS MAIN ADVISER (WITH INITIAL JOB PLACEMENTS)

- **Chun Yao, Rutgers Ph.D. (in progress)**
- **Bo Yu, Rutgers Ph.D. (in progress)**
- **Arpita Mukherjee, Rutgers Ph.D. (in progress)**
- **Weijia Peng, Rutgers Ph.D. (in progress)**
- **Hang Miao, Rutgers Ph.D. (in progress)**
- **Mingmian Chen Rutgers Ph.D., Sun-yat Sen University**
- **Xu (Jessica) Jiang, Rutgers Ph.D., Ernst & Young**
- **Weiqi (Vicky) Xiong, Rutgers Ph.D., Blackrock**
- **Sung Lee, Rutgers Ph.D., POSCO Research Institute**
- **Roque Montero, Rutgers Ph.D., Union Bank of Switzerland**
- **Kihwan Kim, Rutgers Ph.D., Korea Energy Institute**
- **Diep Duong, Rutgers Ph.D., Assistant Professor in Finance, Utica College**
- **Hyunhak Kim, Rutgers Ph.D., Assistant Professor, Kookmin University**

- **Lili Cai, Rutgers Ph.D., Assistant Professor in Finance, Shanghai Jiaotong University**
- **Nii Ayi Armah, Rutgers Ph.D., Bank of Canada**
- **Andres Fernandez, Assistant Professor at the Universidad de Los Andes in Bogotá**
- **Demet Tunali, Rutgers Ph.D., American Express**
- **Geetesh Bhardwaj, Rutgers Ph.D., Bates White**
- **Lance Bachmeier, Texas A&M Ph.D., Assistant Professor East Carolina University**
- **Tian Zeng, Penn State Ph.D., Chicago Investment Analytics, Charles Schwab**
- **Michele Gambera, Penn State Ph.D., Morningstar, Inc**
- **Myles Callan, Penn State Ph.D., Clark University**
- **Ataman Ozyildirim, Penn State Ph.D., Conference Board**

MASTERS STUDENTS DIRECTED AS MAIN ADVISER

- **Walter Bazan Palomino**
- **Meenal Singh**
- **Gyudon Jung**
- **Sami Huovilainen**
- **Melissa Schwartz**
- **Onelach Choi**