

CURRICULUM VITAE

Eric Ghysels

PRESENT POSITION: Edward M. Bernstein Distinguished Professor of
Economics and Professor of Finance, Kenan-Flagler
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EDUCATION

- 1984 Northwestern University, Kellogg Graduate School of Management, Ph.D.
(Managerial Economics and Decision Science)
Thesis Committee: V.V. Chari, T. Doan, R. Hodrick, P.E. Rossi
- 1982 Northwestern University, M.A. (Economics)
- 1979 University of Brussels, B.A. (Economics, Supra Cum Laude)

AWARDS, FELLOWSHIPS AND HONORS

- 1980-81 Fulbright Fellow, Hoover Foundation, Belgian American Educational
Foundation
- 1981-1984 Research Fellow, National Science Foundation of Belgium
- 1985 ASA/NSF/Census Fellow, American Statistical Association, Washington,
D.C.
- 1990 Keynote Speaker, World Congress of the Econometric Society, Barcelona
- 1991-1992 Research Fellow, Cowles Foundation, Yale University
- 1992 Research Fellow, Institute of Empirical Macroeconomics
- 1995 Invited Speaker, Brazilian Econometric Society, Salvador, Bahia
- 1995 Keynote Speaker, American Statistical Association, Orlando
- 1997 Nomination for Harry Johnson Best Paper Award, Canadian Journal of
Economics
- 1998 Chair-Elect, Business and Economic Statistics Section, American
Statistical Association
- 1998 Speaker, Invited Econometrics Session, Econometric Society European
Meetings, Berlin
- 1998 Nomination for the Smith Breeden Prize, Journal of Finance

- 1999 Chair, Business and Economic Statistics Section, American Statistical Association
- 1999 WFA Award, NYSE Best Paper Award in Equity Trading
- 1999 Keynote Speaker, EC² Conference on Financial Econometrics, Madrid, Spain
- 2000 Invited Speaker, International Conference on Seasonality in Economic and Financial Variables, Algarve, Portugal
- 2001 Nomination for the Smith Breeden Prize, Journal of Finance
- 2001 Fellow, Journal of Econometrics
- 2001 Fellow, American Statistical Association
- 2001-2002 Honorary Simon Visiting Professor, University of Manchester
- 2002 Listed in Who's Who in Economics. Fourth Edition.
- 2003 Invited Speaker, International Statistical Institute Meetings, Berlin.
- 2003 Keynote Speaker, Portuguese Statistical Association, Faro.
- 2003 Best Paper in Investments Award, Southern Finance Association.
- 2003 Invited Speaker, Conference on Analysis of High-Frequency Financial Data and Market Microstructure, Academia Sinica, Taiwan.
- 2004 Invited Speaker, Time Series Modeling in Marketing, Tuck School of Business at Dartmouth.
- 2005 Keynote Speaker, EC² Conference on Financial Econometrics, Istanbul, Turkey.
- 2005 Keynote Speaker, Society for Computational Economics Annual International Conference, Washington DC.
- 2005 Honorary Fellow, European Society for Computational Methods in Sciences and Engineering.
- 2005 Keynote Speaker, International Symposium on Advances in Financial Forecasting, Greece.
- 2005 Keynote Speaker, Symposium for *Deutsche Bank* Prize in Financial Economics in honor of Eugene F. Fama, Frankfurt, Germany.
- 2006 Keynote Speaker, 2006 International Symposium on Financial Engineering and Risk Management, Xiamen University, China.
- 2006 Keynote Speaker, Canadian Econometrics Study Group, Niagara Falls, Canada.
- 2007 Invited Speaker, Far Eastern Meetings of the Econometric Society, Taipei.
- 2007 All-Star JFE paper Chernov-Ghysels (2000)
- 2007 Keynote Speaker, Singapore Econometric Study Group
- 2008 Keynote Speaker, 2008 International Symposium on Nonlinear Time Series Econometrics with Applications (NTSEA2008), Wang Yanan Institute for Studies in Economics (WISE), Xiamen University, China.
- 2008 Keynote Speaker, International Forecasting Conference, Rio de Janeiro, Brasil.
- 2008 Founding Co-President, Society for Financial Econometrics (SoFiE) – with Robert Engle (NYU).
- 2008-2009 Resident Scholar, Research Department, Federal Reserve Bank of New York.
- 2009 Keynote Speaker, International Symposium on Financial Engineering and Risk Management, Xiamen University, China.
- 2009 Best Paper Award, Chinese International Conference of Finance - Guangzhou.

- 2009 Visiting Scholar, Federal Reserve Bank of New York.
- 2010 Elected as Voting Member of the Belgian American Educational Foundation.
- 2010 Invited Speaker, Financial Engineering and Risk Management Conference, Taipei.
- 2010 Keynote speaker, 6th Eurostat Colloquium on "Modern Tools for Business Cycle Analysis: The Lessons from Global Economic Crisis", Luxemburg.
- 2010 Keynote Speaker, International Conference on High-Dimensional Econometric Modeling, Cass Business School, London.
- 2010 Visiting Scholar, Federal Reserve Bank of New York.
- 2011 Fernand Braudel Senior Fellow, European University Institute, Florence, Italy.
- 2011 ET Conversation with Eric Ghysels, by Peter C.B. Phillips and Jun Yu.
- 2011 Presidential Address - Fourth SoFiE Annual Meeting, University of Chicago.
- 2011 Wim Duisenberg Fellow, European Central Bank.
- 2011 Western Finance Association Best Paper Award.
- 2012 Keynote speaker, Singapore Management University-ESSEC Business School Symposium on Empirical Finance and Financial Econometrics, Singapore.
- 2012 Marie Curie Fellow, University of Cyprus
- 2012 Fellow, Society for Financial Econometrics (SoFiE Fellow).
- 2012 Visiting Scholar, Federal Reserve Bank of New York.
- 2012 Visiting Researcher, National Bank of Belgium.
- 2013 Marie Curie Fellow, University of Cyprus
- 2013 Keynote Speaker, Inquire Europe, Edingburg.
- 2013 Visiting Scholar, Federal Reserve Bank of New York.
- 2013 Invited Speaker, Central Bank of Cyprus
- 2013 Visiting Researcher, National Bank of Belgium.
- 2013 Visiting Researcher, Federal Reserve Bank of Chicago
- 2014 Keynote speaker Bank of Portugal conference on Econometric Methods for Banking - Lisbon.
- 2014 Visiting Scholar Federal Reserve Bank of New York.
- 2014 Visiting Scholar National Bank of Belgium.
- 2014 Invited Professor, INET Cambridge University, UK.
- 2014 Invited speaker Eighth International Conference on Computational and Financial Econometrics, University of Pisa.
- 2015 Keynote speaker International Symposium in Statistics on Advances in Parametric and Semiparametric Analysis of Multivariate, Time Series, Spatial-temporal, and Familial-longitudinal Data, St. John's Canada.
- 2015 Keynote Speaker, Second Workshop on High Dimensional Time Series in Macroeconomics and Finance, Institute for Advanced Studies, Vienna.

OTHER ACADEMIC APPOINTMENTS

CEPR Research Fellow
 Research Fellow, CIRANO, Montreal
 Research Affiliate, The Volatility Institute, NYU Stern

PUBLICATIONS

1980

1. “The Information Content of Preliminary and Final Belgian GNP Data” (with J. Vuchelen), *Cahiers Économiques de Bruxelles* 87, 407-432 (in Dutch).

1981

2. “The Use of DULBEA GNP Figures in Business Cycle Analysis” (with J. Vuchelen), *Cahiers Économiques de Bruxelles* 89, 53-73 (in Dutch).

1982

3. “Philosophy of Sciences in Economics”, *Tijdschrift voor Economie en Management* 27, 455-473 (in Dutch).
4. “Time Series Analysis and Errors in GNP – A Theoretical Correction of Ghysels and Vuchelen”, *Cahiers Économiques de Bruxelles* 96, 489-495.

1987

5. “Seasonal Adjustment without Too Much a Priori Economic Theory”, 1986 *Proceedings of the American Statistical Association*, Business and Economic Statistics Section, 150-153.
6. “Seasonal Extraction in the Presence of Feedback”, *Journal of Business and Economic Statistics* 5, 191-194.
7. “On Non-Stationarity and Induced Seasonality in Inventories”, 1987 *Proceedings of the American Statistical Association*, Business and Economic Statistics Section, 477-481.

1988

8. “Seasonality in Surveys: A Comparison of Belgian, French and German Business Tests” (with M. Nerlove), *European Economic Review* 32, 81-99.
9. “Evidence from the Belgian Business Tests on Seasonal Instability of Relationships among Responses” (with M. Nerlove), in *Contributions of Business Cycle Surveys to Empirical Economics*, Karl-Heinrich Oppenendel and Günter Poser (eds.), Aubury Gower Publ. Co., England, 379-399.
10. “A Study Towards a Dynamic Theory of Seasonality for Economic Time Series”, *Journal of the American Statistical Association*, 168-172.

1989

11. “Y a-t-il des biais systématiques dans les annonces budgétaires et pourquoi?” (with J.F. David), *Canadian Public Policy/Analyse de Politique*, XV(3), 313-321.

1990

12. “Testing Non-Nested Euler Conditions with Quadrature-Based Methods of Approximation” (with A. Hall), *Journal of Econometrics* 46, 273-308.

13. "Are Consumption-Based Intertemporal Capital Asset Pricing Models Structural?" (with A. Hall), *Journal of Econometrics* 45, 121-139.
14. "Unit Root Tests and Statistical Pitfalls of Seasonal Adjustment: The Case of U.S. Post-War Real GNP", *Journal of Business and Economic Statistics* 8, 145-152.
15. "A Test for Structural Stability of Euler Conditions Parameters Estimated Via the Generalized Method of Moments Estimator" (with A. Hall), *International Economic Review* 31, 355-364.
16. "On Estimating Dynamic Models with Seasonality", in *Telecommunications Demand Modeling*, A. de Fontenay et al. (eds.) Contributions to Economic Analysis-North Holland, Amsterdam.

1992

17. "A Study Towards a Dynamic Theory of Seasonality for Economic Time Series", *Journal of the American Statistical Association*. Reprinted in *Modelling Seasonality*, S. Hylleberg (ed.), Oxford University Press, 181-192.

1993

18. "An Extension of Quadrature-Based Methods for Solving Euler Conditions" (with A. Hall), in *New Direction in Time Series Analysis*, D. Brillinger et al. (eds.), Springer-Verlag, New York, 147-153.
19. "The Effect of Seasonal Adjustment Filters on Tests for a Unit Root" (with P. Perron), *Journal of Econometrics* 55, 57-98.
20. "On Scoring Asymmetric Periodic Probability Models of Turning-Point Forecasts", *Journal of Forecasting* 12, 227-238.
21. "The ET Interview: Professor Marc Nerlove", *Econometric Theory* 9, 117-144.
22. "On Seasonal (Mis)Specification: An Empirical Investigation with U.S. Data" (with H.S. Lee and P. Siklos), *Empirical Economics* 18, 747-760.

1994

23. "On Seasonality and Regime-Switching Models", *1993 Proceedings of the American Statistical Association*, Business and Economic Statistics Section, 308-312.
24. "On the Economics and Econometrics of Seasonality." Invited paper, 1990 World Congress of the Econometric Society, August 1990, in *Advances in Econometrics I*, C.A. Sims (ed.), Cambridge University Press, 257-316.
25. "On Seasonal (Mis)Specification: An Empirical Investigation with U.S. Data" (with H.S. Lee and P. Siklos), in *New Developments in Time Series Econometrics*, J.-M. Dufour and B. Raj (eds.), Springer-Verlag, Berlin, 191-204.

26. “Generalized Predictive Tests and Structural Change Analysis in Econometrics” (with J.M. Dufour and A. Hall), *International Economic Review* 35, 199-229.
 27. “Testing for Unit Roots in Seasonal Time-Series – Some Theoretical Extensions and a Monte-Carlo Investigation” (with H.S. Lee and J. Noh), *Journal of Econometrics* 62, 415-442.
 28. “L’analyse économétrique et la saisonnalité”, *L’actualité économique* 20, 43-62.
 29. “On the Periodic Structure of the Business Cycle”, *Journal of Business and Economic Statistics* 12, 289-298.
 30. “Changes in Seasonal Patterns: Are They Cyclical?” (with F. Canova), *Journal of Economic Dynamics and Control* 18, 1143-1171.
 31. “Comments on ‘Bayesian Analysis of Stochastic Volatility Models’ by E. Jacquier, N. Polson and P. Rossi” (with J. Jasiak), *Journal of Business and Economic Statistics* 12, October 1994, 399-402.
- 1995**
32. “Is the Federal Budget Process Outcome Unbiased and Efficient: A Nonparametric Assessment” (with B. Campbell), *Review of Economics and Statistics* 77, 17-31.
 33. “The Effect of Linear Filters on Dynamic Time Series with Structural Change” (with P. Perron), *Journal of Econometrics* 70, 69-98.
 34. “Is Seasonal Adjustment a Linear or Nonlinear Data-Filtering Transformation?” (with C.W.J. Granger and P. Siklos). Invited *JBES* paper, *Journal of Business and Economic Statistics* 14, 139-152. Reprinted in Newbold, P. and S.J. Leybourne (2003) “Recent Developments in Time Series”, Edward Elgar. Reprinted in “Essays in Econometrics: collected Papers of Clive W.J. Granger: Vol. I, Cambridge University Press
 35. “Dynamic Regression of Filtered Data Series: A Laplace Approximation of the Effects of Filtering in Small Samples” (with O. Lieberman), *Econometric Theory* 12, 432-457.
 36. “Stochastic Volatility” (with A. Harvey and E. Renault), in *Handbook of Statistics 14, Statistical Methods in Finance*, G.S. Maddala and C.R. Rao (eds.), North Holland, Amsterdam, Ch. 5, 119-191.
 37. “On the Periodic Structures and Testing for Seasonal Unit Roots” (with A. Hall and H.S. Lee), *Journal of the American Statistical Association* 91, 1551-1559.
 38. “Comments and Reply to W.R. Bell, D. Findley, S. Hylleberg and M. Watson” (*Journal of Business and Economic Statistics* 1995 Invited Paper) 14, 387-397.

1996

39. “Comments on ‘New Capabilities and Methods of X-12-ARIMA Seasonal Adjustment Program’” by David F. Findley, Brian Monsell, William R. Bell, Mark Otto and Bor-Chung Chen” *Journal of Business and Economic Statistics* 16, 165-167.

1997

40. “On Seasonality and Business Cycle Durations: A Nonparametric Investigation”, *Journal of Econometrics* 79, 269-290.
41. “Seasonal Adjustment and Other Data Transformations”, *Journal of Business and Economic Statistics* 15, 410-418.
42. “An Empirical Analysis of the Canadian Budget Process” (with B. Campbell), *Canadian Journal of Economics* 30, 553-576. (Nominated for the Harry Johnson Best Paper Award – five papers nominated.)
43. “L’Intégration des Marchés Emergents et la modélisation d’Actifs Risqués: Une Etude Appliquée à la Bourse des Valeurs de Casablanca” (with M. Boyer and M. Cherkaoui), *L’actualité économique*, 73, 311-330.
44. “Predictive Tests for Structural Change with Unknown Breakpoint” (with A. Guay and A. Hall), *Journal of Econometrics* 82, 209-233. [Corrigendum, *Journal of Econometrics* 30, 337-343.].
45. “High Frequency Financial Time Series Data: Some Stylized Facts and Models of Stochastic Volatility” (with C. Gouriéroux and J. Jasiak), in *Nonlinear Modelling of High Frequency Financial Time Series* C. Dunis and B. Zhou (eds.), John Wiley, New York, Chapter 7, 127-159.
46. “Nonparametric Methods and Option Pricing” (with V. Patilea, E. Renault and O. Torrès), in *Statistics in Finance*, D. Hand and S. Jacka (eds.), Edward Arnold, London, Chapter 13, 261-282.
47. “Market Time and Asset Price Movements: Theory and Estimation” (with C. Gouriéroux and J. Jasiak), in *Statistics in Finance*, D. Hand and S. Jacka (eds.), Edward Arnold, London, Chapter 15, 307-332.
48. “An Introduction to Econometric Theory” by R. Gallant, Princeton University Press, 1997, *Journal of the American Statistical Association* 94, 1522-1523.

1998

49. “On Stable Factor Structures in the Pricing of Risk: Do Time-Varying Betas Help or Hurt?” *Journal of Finance* 53, 549-573. (Nominated for the Smith Breeden Prize)
50. “Structural Change and Asset Pricing in Emerging Markets” (with R. Garcia), *Journal of International Money and Finance* 17, 455-473.
51. “Kernel Autocorrelogram for Time Deformed Processes” (with C. Gouriéroux and J. Jasiak), *Journal of Statistical Inference and Planning* 68, 167-192.

52. “Bayesian Inference for a General Class of Periodic Markov Switching Regime Models” (with R. McCulloch and R. Tsay), *Journal of Applied Econometrics* 13, 129-144.
53. “GARCH for Irregularly Spaced Financial Data: The ACD-GARCH Model” (with J. Jasiak), *Studies in Nonlinear Dynamics and Econometrics* 2, 133-149.
54. “A Semi-Parametric Factor Model of Interest Rates and Tests of the Affine Term Structure” (with S. Ng), *Review of Economics and Statistics* 80, 535-548.

1999

55. “A Multivariate Time Series Analysis of the Data Revision Process for Industrial Production and Composite Leading Indicator” (with N. Swanson and M. Callan) in R. Engle and H. White (eds.), *Clive W.J. Granger Festschrift*, Oxford University Press, 45-75.

2000

56. “American Options with Stochastic Dividends and Volatility: A Nonparametric Investigation” (with M. Broadie, J. Detemple and O. Torrès), *Journal of Econometrics* 94, 53-92.
57. “Some Econometric Recipes for High Frequency Data Cooking”, *Journal of Business and Economic Statistics* 18, 154-163.
58. “Nonparametric Estimation of American Option Exercise Boundaries and Call Prices” (with M. Broadie, J. Detemple and O. Torrès), *Journal of Economic Dynamics and Control* 24, 1829-1857.
59. “Price Discovery without Trading: The Case of the Nasdaq Pre-opening” (with C. Cao and F. Hatheway). (NYSE Best Paper Award – WFA Meetings 1999, Santa Monica), *Journal of Finance* 55, 1339-1366.
60. “A Study Towards a Unified Approach to the Joint Estimation of Objective and Risk Neutral Measures for the Purpose of Options Valuation” (with M. Chernov), *Journal of Financial Economics* 56, 407-458. (All-Star JFE paper selection based on average yearly citations).
61. “A Time Series Model with Periodic Stochastic Regime Switching, Part I: Theory” *Macroeconomic Dynamics* 4, 467-486.
62. “Causality between Returns and Traded Volumes” (with C. Gouriéroux and J. Jasiak), *Annales d’Économie et de Statistique* 60, 189-206.
63. “Estimation of Stochastic Volatility Models for the Purpose of Option Pricing” (with M. Chernov) in Y.S. Abu-Mostafa, B. LeBaron, A.W. Lo and A.S. Weigend (eds.), *Computational Finance – Proceedings of the Sixth International Conference, Leonard N. Stern School of Business, MIT Press*, 567-582.

64. "Seasonal Nonstationarity and Near-Stationarity" (with D. Osborn and P. Rodrigues) in B. Baltagi (ed.), *Companion in Theoretical Econometrics*, Basil Blackwell, 655-677.

2001

65. "A Time Series Model with Periodic Stochastic Regime Switching, Part II: Applications to 16th and 17th Century Grain Prices" (with C. Bac and J.M. Chevret), *Macroeconomic Dynamics* 5, 32-55.
66. "Is Seasonal Adjustment a Linear or Nonlinear Data-Filtering Transformation?" (with C.W.J. Granger and P. Siklos). Invited *JBES* paper, *Journal of Business and Economic Statistics* 14, 374-386. Reprinted in "Essays in Econometrics: Collected Papers of Clive W.J. Granger: Volume I", Cambridge University Press.

2002

67. "Rolling-Sample Volatility Estimators: Some New Theoretical, Simulation and Empirical Results" (with Elena Andreou), *Journal of Business and Economic Statistics* 20, 363-376.
68. "Let's Get 'Real' about using Economic Data" (with Peter Christoffersen and Norman Swanson), *Journal of Empirical Finance* 9, 343-360.
69. "Monetary Policy Rules with Model and Data Uncertainty" (with Norman R. Swanson and Myles Callan), *Southern Economic Journal*, 69, 239-265.
70. "Detecting multiple breaks in financial market volatility dynamics" (with E. Andreou), *Journal of Applied Econometrics* 17, 579-600.
71. "Seasonal Time Series and Autocorrelation Function Estimation", (with H.S. Lee and W.R. Bell), *Manchester School*, 70, 651-664.

2003

72. "Emerging Markets and Trading Costs: Lessons from Casablanca" (with M. Cherkaoui), *Journal of Empirical Finance* 10, 169-198.
73. "Structural Change Tests for Simulated Method of Moments" (with Alain Guay) *Journal of Econometrics* 115, 91-123.
74. "Simulation Based Inference in Moving Average Models" (with Linda Khalaf and Cosme Vodounou), *Annales d'Economie et de Statistique*, 69, 85-99.
75. "Alternative Models of Stock Price Dynamics" (with M. Chernov, A.R. Gallant and G. Tauchen), *Journal of Econometrics*, 116, 225-257.
76. "Tests for breaks in the conditional co-movements of asset returns" (with E. Andreou), *Statistica Sinica*, 13, 1045-1074.

2004

77. “Stochastic Volatility Durations” (with C. Gouriéroux and J. Jasiak), *Journal of Econometrics*, 119, 413-435.
78. “The Impact of Sampling Frequency and Volatility Estimators on Change-Point Tests” (with E. Andreou), *Journal of Financial Econometrics*, 2, 290-318.
79. “Testing for Structural Change in the Presence of Auxiliary Models” (with A. Guay), *Econometric Theory* 20, 1168-1202.
80. “Modeling Market Dynamics by Time Series Econometrics” (with Koen Pauwels, Imran Currim, Marnik Dekimpe, Dominique M. Hanssens, Natalie Mizik, and Prasad Naik), *Marketing Letters*, 15:4, 167-183.

2005

81. “A Study Towards a Unified Approach to the Joint Estimation of Objective and Risk Neutral Measures for the Purpose of Options Valuation” (with M. Chernov), *Journal of Financial Economics*, Reprinted in *Stochastic Volatility: Selected Readings*, N. Shephard (ed.), Oxford University Press, 398-448.
82. “The Asian Financial Crisis: The Role of Derivative Securities Trading and Foreign Investors”, (with J. Seon), *Journal of International Money and Finance*, V 24, 607-630.
83. “There is a Risk-return Trade-off After All”, (with P. Santa-Clara and R. Valkanov), *Journal of Financial Economics*, 76, 509-548.
84. “Do Heterogeneous Beliefs Matter for Asset Pricing?” (with E. Anderson and J. Juergens), *Review of Financial Studies*, 18, 875-924.

2006

85. “Comments on Hansen and Lunde” *Journal of Business and Economic Statistics*, 24, 192-194.
86. “Predicting Volatility: How to Get Most Out of Returns Data Sampled at Different Frequencies” (with P. Santa-Clara and R. Valkanov), *Journal of Econometrics*, 131, 59-95.
87. “Sampling Frequency and Window Length Trade-offs in Data-Driven Volatility Estimation: Appraising the Accuracy of Asymptotic Approximations” (with E. Andreou), in Thomas B. Fomby and Dek Terrell (eds.) *Advances in Econometrics: Econometric Analysis of Economic and Financial Time Series, Part A – Volume 20*, 155-182.
88. “Monitoring Distortions in Financial Markets” (with E. Andreou), *Journal of Econometrics*, 135, 77-124.

89. "Forecasting and Seasonality", (with D. Osborn and P. Rodriguez) in *Handbook of Economic Forecasting*, G. Elliot, C.W.J. Granger, and A. Timmermann (eds.), Elsevier, 660-711.

90. "MIDAS Regressions: Further Results and New Directions" (with A. Sinko and R. Valkanov), *Econometric Reviews*, 26, 53-90.

2007

91. "Why do absolute returns predict volatility so well?" (with L. Forsberg), *Journal of Financial Econometrics*, 5, 31-67.

92. "Efficient Estimation of Jump Diffusions and General Dynamic Models with a Continuum of Moment Conditions" (with M. Carrasco, M. Chernov, and J-P Florens), *Journal of Econometrics*, 140, 529-573.

93. "Valuation in the US Commercial Real Estate" (with A. Plazzi and R. Valkanov), *European Financial Management*, 13, 472-497.

2008

94. "Quality Control for Structural Credit Risk" (with E. Andreou), *Journal of Econometrics*, 146, 364-375.

95. "Liquidity and Conditional Portfolio Choice: A Nonparametric Investigation" (with J. P. Pereira), *Journal of Empirical Finance*, 15, 679-699.

2009

96. "The Normal Inverse Gaussian Distribution and the Pricing of Derivatives" (with A. Eriksson and F. Wang), *Journal of Derivatives*, Spring 2009, 16, 23-37.

97. "Structural Breaks in Financial Time Series" (with E. Andreou), in *Handbook of Financial Time Series*, Torben G. Andersen, Richard A. Davis, Jens-Peter Kreiss, Thomas Mikosch (eds), 839-870.

98. "The Impact of Risk and Uncertainty on Expected Returns" (with E. Anderson and J. Juergens), *Journal of Financial Economics*, 94, 233-263.

99. "Forecasting Professional Forecasters" (with Jonathan Wright), *Journal of Business and Economic Statistics*, 27, 504-516.

100. "Which Power Variation Predicts Volatility Well?" (with B. Sohn), *Journal of Empirical Finance*, 16, 686-700.

2010

101. "The Econometrics of Option Pricing" (with R. Garcia and E. Renault), *Handbook of Financial Econometrics*, Y. Ait-Sahalia and L.P. Hansen (eds.) North Holland, 479-552.

102. “Mixed Data Sampling” *Encyclopedia of Quantitative Finance*, Ole Barndorff-Nielsen and Eric Renault (eds) Vol. 3, 1204-1207.

103. “Regression Models with Mixed Sampling Frequencies” (with E. Andreou and A. Kourtellos), *Journal of Econometrics*, 158, 246-261.

2011

104. “Volatility Forecasting and Microstructure Noise” (with A. Sinko), *Journal of Econometrics*, 160, 257-271.

105. “HYBRID GARCH Models and Intra-Daily Return Periodicity” (with X. Chen and F. Wang), *Journal of Time Series Econometrics*, 3, 1, Article 11.

106. “Forecasting with Mixed-Frequency Data” (with E. Andreou and A. Kourtellos), *Oxford Handbook of Economic Forecasting*, Michael P. Clements and David F. Hendry (ed.) Chapter 8.

107. “News - Good or Bad - and its impact on volatility predictions over multiple horizons” (with X. Chen), *Review of Financial Studies* 24, 46-81.

108. “Derivatives Do Affect Mutual Fund Returns: Evidence from the Financial Crisis of 1998” (with C. Cao and F. Hatheway), *Journal of Futures Markets* 31, 629-658.

109. “A Component Model of Dynamic Correlations” (with R. Colacito and R. Engle), *Journal of Econometrics* 164, 45-59.

2012

110. “Volatility Prediction with MIDAS” (with R. Valkanov), *Wiley Handbook Volatility Models and Their Applications*, L. Bauwens, C. Hafner and S. Laurent (ed), Chapter 16, 383-401.

111. “ET Conversation with Eric Ghysels” by Peter C.B. Phillips and Jun Yu, *Econometric Theory* 28, 207-217.

2013

112. “Ex Ante Skewness and Expected Stock Returns” (with J. Conrad and R. Dittmar), *Journal of Finance* 68, 85-124.

113. Discussion of "An Approach for Identifying and Predicting Economic Recessions in Real-Time Using Time-Frequency Functional Models" by Holan, Yang, Matteson, and Wikle (with M. Owyang), *Applied Stochastic Models in Business and Industry*, 28, 500-501.

114. “State Space Models and MIDAS Regressions” (with J. Bai and J. Wright), *Econometric Reviews*, 32, 779–813.

115. "Should macroeconomic forecasters use daily financial data and how?" (with E. Andreou and A. Kourtellos), *Journal of Business and Economic Statistics* 31, 240-251.
116. "Stock Market Volatility and Macroeconomic Fundamentals" (with R. Engle and B. Sohn), *Review of Economics and Statistics* 93, 776-797.
117. "Forecasting Real Estate Prices" (with A. Plazzi, W. Torous and R. Valkanov), Chapter 9 in *Handbook of Economic Forecasting: Vol II*, G. Elliott and A. Timmermann (eds.), Elsevier, 509-580.
118. "Mixed Frequency Vector Autoregressive Models" (with C. Foroni and M. Marcellino), *VAR Models in Macroeconomics - New Developments and Applications: Essays in Honor of Christopher A. Sims Advances in Econometrics Vol. 32*, T. B. Fomby, L. Kilian and A. Murphy (eds.), 247-272

2014

119. Comment on Hu, Yu-Pin, and Ruey S. Tsay. "Principal Volatility Component Analysis.", (with E. Andreou), *Journal of Business and Economic Statistics*, 32, 168-171.
120. "The Financial Content of Inflation Risks in the Euro Area", (with P. Andrade, V. Fourel and J. Idier), *International Journal of Forecasting*, 30, 648-659.
121. "Moment-Implied Densities: Properties and Applications", (with F. Wang), *Journal of Business and Economic Statistics*, 32, 88-111.
122. "Conditional Skewness with Quantile Regression Models: SoFiE Presidential Address and a Tribute to Hal White", *Journal of Financial Econometrics*, 12 620-644.
123. "Econometric Analysis of Volatility Component Models", (with F. Wang), *Econometric Theory* (forthcoming).
124. "HYBRID-GARCH: A Generic Class of Models for Volatility Predictions using High Frequency Data", (with Xilong Chen and Fangfang Wang), *Statistica Sinica* (forthcoming).
125. "Regime Switches in the Risk-Return Trade-off", (with Pierre Guérin and Massimiliano Marcellino), *Journal of Empirical Finance* (forthcoming).
126. "Central Bank Macroeconomic Forecasting during the Global Financial Crisis: The European Central Bank and Federal Reserve Bank of New York Experiences", (with L. Alessi, L. Onorante, R. Peach, and S. Potter.), *Journal of Business and Economic Statistics*, (forthcoming).

127. “On the size distortion from linearly interpolating low-frequency series for cointegration tests” (with J. Isaac Miller), *Essays in Honor of Peter C. B. Phillips Advances in Econometrics, Vol. 33, Chapter 4*, Thomas B. Fomby, Joon Y. Park and Yoosoon Chang (eds.), forthcoming.
128. “Macroeconomics and the Reality of Mixed Frequency Data”, *Journal of Econometrics* (forthcoming).

WORK IN PROGRESS

[Inflation Risk Measures and their Informational Content](#), (with Philippe Andrade and Julien Idier), Revised and resubmitted.

[Factor Analysis with Large Panels of Volatility Proxies](#), Submitted.

[Risk and Return Trade-Off in the U.S. Treasury Market](#), (with Anh Le, Sunjin Park and Haoxiang Zhu), Submitted.

[Testing for Granger Causality with Mixed Frequency Data](#), (with Jonathan B. Hill and Kaiji Motegi), Submitted.

[Testing for Cointegration with Temporally Aggregated and Mixed-frequency Time Series](#), (with J. Isaac Miller), Submitted.

[Liquidity, Volatility, and Flights to Safety in the U.S. Treasury Market: Evidence from a New Class of Dynamic Order Book Models](#), (with Robert Engle, Michael Fleming and Giang Nguyen), Under revision.

[Forecasting through the Rear-View Mirror: Data Revisions and Bond Return Predictability](#), (with Casidhe Horan and Emanuel Moench), Under revision.

[Macroeconomics and the Reality of Mixed Frequency Data](#), Revised and resubmitted.

[Real-Time Predictions of the U.S. Federal Government Budget: Expenditures, Revenues and Deficits](#), (with Nazire Ozkan), Under revision.

[Conditional Skewness of Stock Market Returns in Developed and Emerging Markets and its Economic Fundamentals](#), (with Alberto Plazzi and Rossen Valkanov), Under revision.

[Stigma in Financial Markets - Evidence from Liquidity Auctions and Discount Window Borrowing During the Crisis](#), (with Olivier Armantier, Asani Sarkar and Jeffrey Shrader), Under revision.

[In-sample Asymptotics and Across-sample Efficiency Gains for High Frequency Data Statistics](#), (with Per Mykland and Eric Renault), Under revision.

[Momentum Cycles and Limits to Arbitrage - Evidence from Victorian England and Post-Depression Us Stock Markets](#), (with Ben Chabot and Ravi Jagannathan), Under revision.

[A high frequency assessment of the ECB Securities Markets Programme](#) (with J. Idier, S. Manganelli and O. Vergote), Under revision.

BOOKS

“The Econometric Analysis of Seasonal Time Series” (with Denise Osborn), Cambridge University Press (2001).

“Essays in Econometrics: Collected Papers of Clive W.J. Granger: Volumes I and II” (with N. Swanson and M. Watson), Cambridge University Press (2001).

EDITORIAL SERVICES

a. Editorship

Associate Editor, *Journal of Business and Economic Statistics*, January 1990-2000.

Associate Editor, *Econometric Theory*, 1991-1992.

Associate Editor, *Review of Economics and Statistics*, 1996-2002.

Editor, Annals Issue of the *Journal of Econometrics* on “Seasonality and Econometric Models”, 1993, Vol. 55, 1-2.

Member of the Editorial Board, *Canadian Journal of Economics/Revue Canadienne d'Économique*, 1989-1993.

Editor, Annals Issue of the *Journal of Econometrics*, “Recent Developments in the Econometrics of Structural Change” (with J.-M. Dufour), 1996, Vol. 70, 1.

Editor, Annals Issue of the *Journal of Econometrics* on “Econometric Methods for Derivative Securities and Risk Management” (with R. Garcia and E. Renault), 2000, Vol. 94, 1-2.

Associate Editor, *Journal of the American Statistical Association*, 1997-2000.

Associate Editor, *Journal of Empirical Finance*, 1999-2006.

Editor, Annals Issue of the *Journal of Econometrics* on “Frontiers of Financial Econometrics and Financial Engineering” (with G. Tauchen), 2003, Vol. 116.

Editor, *Journal of Business and Economic Statistics* (with Alastair Hall), 2001-2004.

Associate Editor, *Journal of Financial Econometrics*, 2001-2006.

Associate Editor, *Journal of Econometrics*, 2004-present.

Co-Editor, *Journal of Financial Econometrics*, 2006-2012.

Editor-in-Chief, *Journal of Financial Econometrics*, 2012-present.

Editor, Annals Issue of the *Journal of Econometrics*, “The Econometric Analysis of Mixed Frequency Data”, (with M. Marcellino), (forthcoming).

b. Advisory Board

Themes in Modern Econometrics (Cambridge University Press), 2001-present.

c. Refereeing

American Economic Review, Applied Mathematical Finance, Canadian Journal of Economics/Revue canadienne d'économique, Canadian Journal of Development/Revue canadienne d'études du développement, Canadian Journal of Statistics/Revue canadienne de statistiques, Communications in Statistics, Computational Statistics, Econometrica, Econometric Review, Econometric Theory, Empirical Economics, European Economic Review, Finance Research Letters, IEEE Transaction on Automatic Control, International Economic Review, International Journal of Forecasting, Journal of Applied Econometrics, Journal of Business and Economic Statistics, Journal of Derivatives, Journal of Econometrics, Journal of Economic Dynamics and Control, Journal of Empirical Finance, Journal of Finance, Journal of Forecasting, Journal of Futures Markets, Journal of International Money and Finance, Journal of Monetary Economics, Journal of Money, Credit and Banking, Journal of Political Economy, Journal of Statistical Inference and Planning, Journal of the American Statistical Association, Journal of Time Series Analysis, Management Science, National Tax Journal, Physica D, Real Estate Economics, Review of Economics and Statistics, Review of Economic Studies, Review of Financial Studies, Statistica Neerlandica, Statistics and Probability Letters, Tijdschrift voor Economie en Management.

INVITED SEMINARS

Australian National University, Arizona State University, Board of Governors of the Federal Reserve, California Institute of Technology, CEMFI (Madrid), CIRANO, City University of Hong Kong, Columbia University, Concordia University, Cornell University, Duke University, Erasmus University, Emory University, European University Institute, ICSTE (Lisbon), ITAM (Mexico City), Johns Hopkins University, Korea University, Kyoto Institute for Economic Research, London School of Economics, Malinvaud Seminar (Paris), McGill University, McMaster University, Michigan State University, Monash University, New York University, North Carolina State University, Northwestern University, Ohio State University, Pontificia Universidade Católica do Rio de Janeiro, Princeton University, Queen's University, Research Triangle Institute, Rice University, Sorbonne University, Stanford University, Texas A&M University, Tilburg University, Tinbergen Institute, Tsinghua University, Universidad Carlos III (Madrid), Université Libre de Bruxelles, Université de Montréal, Université des Sciences Sociales (Toulouse), Université Laval, Université Lille III, Université Mohammad V, University of Aarhus, University of Alberta, University of British Columbia, University of California-Berkeley, University of California-Los Angeles, University of California-San Diego, University of California-Santa Barbara, University of Chicago, University of Cyprus, University of Iowa, University of Limburg, University of Manchester, University

of Michigan, University of Minnesota, University of North Carolina-Chapel Hill, University of Pennsylvania, University of Rochester, University of Sao Paolo, University of Southern California, University of Technology-Sydney, University of Toronto, University of Uppsala, University of Virginia, University of Western Ontario, University of Windsor, University of York, Vanderbilt University, Virginia Polytechnical Institute, Washington University, Yale University, York University.

STUDENTS (Chair or Co-Chaired)

Alain Guay	1993	Ph.D., Université de Montréal, Department of Economics. Initial employment: Université de Québec à Montréal, Canada
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Junghoon Seon	2001	Ph.D., Penn State University, Department of Economics. Initial employment: Korean Security Exchange Research Institute
Matthew Woolley	2005	Ph.D., University of North Carolina at Chapel Hill, Department of Economics. Initial employment: Moody's, New York
Arthur Sinko	2007	Ph.D., University of North Carolina at Chapel Hill, Department of Economics. Initial employment: SAS Inc.
Nishad Kapadia	2007	Ph.D., University of North Carolina at Chapel Hill Kenan Flagler Business School – Finance Department. Initial employment: Rice University, Jesse H. Jones Graduate School of Management

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Ryan Ball	2008	Ph.D., University of North Carolina at Chapel Hill Kenan Flagler Business School – Accounting Department. Initial employment: University of Chicago, Graduate School of Business
Bumjean Sohn	2009	Ph.D., University of North Carolina at Chapel Hill Kenan Flagler Business School – Finance Department. Initial employment: Georgetown University, McDonough School of Business
Fangfang Wang	2009	Ph.D., University of North Carolina at Chapel Hill Department of Statistics. Initial employment: University of Illinois at Chicago, College of Business Administration
Fernando Chague	2012	Ph.D., University of North Carolina at Chapel Hill, Department of Economics. Initial employment: University of San Paulo (post-doc)
Stephen Goldberger	2013	Ph.D., University of North Carolina at Chapel Hill, Department of Economics. Initial employment: JP Research, Palo Alto
Jinghan Meng	2014	Ph.D., University of North Carolina at Chapel Hill Kenan Flagler Business School – Finance Department Initial employment: School of Business, University of Hong Kong
Kaiji Motegi	2014	Ph.D., University of North Carolina at Chapel Hill, Department of Economics. Initial employment: Waseda University, Tokyo
Huan Zhou	2014	University of North Carolina at Chapel Hill, Department of Economics. Initial employment: Analysis Group, Washington DC

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