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## EDUCATION

- 1982-1986: Ph.D. (Economics), Yale University, CT, U.S.A., May 1986. Thesis: "Hypothesis Testing in Time Series Regression with a Unit Root," Distinction.
- 1981-1982: M.A. (Economics), Queen's University, Kingston, Canada, October 1982.
- 1978-1981: B.A. (Economics), McGill University, Montréal, Canada, June 1981, First Class Honors.

### PROFESSIONAL EXPERIENCE

1997 - Professor, Department of Economics, Boston University.

1994-1997 : Full Professor (Professeur Titulaire), Département de sciences économiques, Université de Montréal; 1992-1994: Associate Professor (Professeur Aggrégé), Département de sciences économiques, Université de Montréal; 1988-1992: Assistant Professor, Department of Economics, Princeton University; 1986-1988: Assistant Professor (Professeur Adjoint), Département de sciences économiques, Université de Montréal; 1985-1986: Lecturer (Chargé de cours), Département de sciences économiques, Université de Montréal.

b) Research Centers: 1995-1997: Director, Centre de recherche et développement en économique (C.R.D.E.), Université de Montréal; 1993-1995: Assistant Director, Centre de recherche et développement en économique (C.R.D.E.), Université de Montréal; 1986-2002 : Research Associate, Centre de recherche et développement en économique (C.R.D.E.), Université de Montréal.

c) Visiting Positions: 2004, 2002, 2000, 1998 and 1995: Visiting Professor, Pontifícia Universidade Católica, Rio de Janeiro, Brasil; 1999: Visiting Professor, Université de Bourgogne, Dijon, France; 1997 and 1995: Visiting Professor, Universidade de São Paulo, Brasil; 1996: Visiting Scholar, Centre de Recherche en Économie et Statistique, Institut Nationale de la Statistique et des Études Économiques, Paris, France; 1996: Visiting Professor, Département d'Économétrie et d'Économie Politique, Université de Lausanne, Suisse.; 1994: Visiting Scholar, Département de Statistiques, Université Libre de Bruxelles, Belgium.

d) Others: 1986-1987: Economic Consultant, Canadian Economic Council; 1986: Economic Consultant, Club du Sahel, O.E.C.D.

## OTHER PROFESSIONAL ACTIVITIES

Co-Editor: Econometrics Journal (U.K.) (2003-2013).

Honorific Member of the Editorial Board: Economía Coyuntural (Bolivia) (2017-).

Advisory Editor: Journal of Time Series Econometrics (2008-); Open Economics (2016-); Journal of Risk and Financial Management (2018-2023), Econometrics (2021-2023).

**Guest-Editor**: Journal of Time Series Analysis, Special Issue on the "Application of time series methods to climate change issues", 2016-17; Econometrics: Special Issue on "Unit root and structural breaks", 2016-17; Journal of Risk and Financial Management: Special Issue on "Time Series Econometrics" (2019-2022).

Associate Editor: Journal of Econometrics (1998-2006); Research in Economics (2016 - ). Member of the Editorial Board of: Annales d'Économie et de Statistique (France) (1992-2006), Canadian Journal of Economics (Canada) (1991-1994), Econometric Reviews (1991-2002), Econometric Theory (1992-1995), Econometrica (1993-2002), Econometrics (2018-2021), Economía (Peru) (2019 - ), Economia Aplicada (Brazil) (1997 - ), Economics Letters (1994-2003), Review of Economics and Statistics (1992-2002), Revista de Econometria (1993 - ), Applied Economic Analysis (Revista de Economia Applicada, Spain) (2019 - ).

Member of the Grant Panel Review for the International Opportunities Fund of the Social Sciences and Humanities Research Council of Canada (2008-2009).

Member of the International Scientific Committee for Actualité Économique (Québec, Canada) (1997-2022).

Member of the Executive committee for the: Canadian Economic Association (Canada) (1995-1997).

## Referee for:

Scientific Journals: L'Actualité Économique, Annales d'Économie et de Statistique, The American Economic Review, Annals of Statistics, Applied Economics, Bernoulli, the Bulletin of Economic Research, Business and Economics Letters, the Canadian Journal of Economics, the Canadian Journal of Statistics, Climatic Change, Communications in Statistics (Series B, Theory and Methods), Communications in Statistics (Simulation and Computation), Econometric Reviews, Econometric Theory, Econometrica, Econometrics, The Econometrics Journal, Economic Inquiry, Economic Journal, Economic Reviews, Economica, Empirica: The Austrian Journal of Economics, Economic Modelling, Economics Letters, Empirical Economics, The Energy Journal, European Economic Review, Explorations in Economic History, Finance, Geneva Papers on Risk and Insurance Theory, Global Finance Journal, the International Economic Review, German Economic Review, International Journal of Climatology, International Journal of Forecasting, International Mathematical Statistics, the International Review of Economics and Finance, the Journal of Applied Econometrics, the Journal of Applied Statistics, the Journal of Banking and Finance, the Journal of Business and Economic Statistics, the Journal of Climate Change, the Journal of Computational and Graphical Statistics, the Journal of Computational Statistics and Data Analysis, the Journal of Development Economics, the Journal of Econometrics, the Journal of Economic Behavior and Organization, the Journal of Economic Dynamics and Control, the Journal of Economic Education, the Journal of Economic History, the Journal of Economic Integration, the Journal of Economic Studies, the Journal of Economics and Business, the Journal of Empirical Finance, the Journal of Environmental Economics and Management, the Journal of Financial Research, the Journal of Forecasting, the Journal of International Economic Integration, the Journal of International Economics, the Journal of International Money and Finance. the Journal of International Trade and Economic Development, the Journal of the Japanese and International Economies, the Journal of Macroeconomics, the Journal of Monetary Economics, the Journal of Money, Credit and Banking, the Journal of Multivariate Analysis, the Journal of Peace Research, the Journal of Political Economy, the Journal of Quantitative Economics, the Journal of Risk and Financial Management, the Journal of the Royal Statistical Society (Series A), the Journal of the Royal Statistical Society (Series B), Journal of Statistical Computation and Simulation, the Journal of Statistical Planning and Inference, Journal of Time Series Analysis, the Manchester School, Nova Economia, Oxford Bulletin of Economics and Statistics, Oxford Economic Papers, Public Finance Review, Quantitative Finance, the Quarterly Journal of Business and Economics, the Quarterly Journal of Economics, the Quarterly Review of Economics and Finance, the Review of Economic and Statistics, The Review of Economic Studies, the Review of Financial Economics, the Review of International Economics, Revista de Econometria, Sankhya, the Scandinavian Journal of Economics, the Scandinavian Journal of Statistics, Social Science Quarterly, the Southern Economic Journal, Statistics and Probability Letters, World Development.

**Grant Agencies**: Fonds pour la Formation de Chercheurs et l'Aide à la Recherche du Québec, Social Sciences and Humanities Research Council of Canada, Natural Sciences and Engineering Council of Canada, National Science Foundation, The Economic and Social Research Council (U.K.), Research Grants Council of Hong Kong, ESRC (United Kingdom).

**Publishers**: Basil Blackwell Publishers, Cambridge University Press, Harper and Row Publishers, MIT Press, Addison Wesly Longman.

Member of the Program Committee of: The 1994 Summer Meeting of the Econometric Society, Québec; The 1995 World Meeting of the Econometric Society, Tokyo; The 1996 Summer Meeting of the Econometric Society, Iowa City. The 2004 Summer Meeting of the Econometric Society, Providence, RI. The 2007 Latin American Econometric Society Meeting, Bogota, Columbia. Co-Chair of the program committee of the 2009 North American Summer Meeting of the Econometric Society (Boston, June 4-7, 2009).

Member of the: American Economic Association, Econometric Society, American Finance Association, American Statistical Association, Canadian Economic Association, Institute of Mathematical Statistics, Société Canadienne de Sciences Économiques (1986-2002).

# AWARDS, HONOURS AND SCHOLARSHIPS

- Listed in ScholarGPS as a Lifetime Highly Ranked Researcher (top 0.05%). Only BU economist. Also have two papers in the category "Top 100 all time Highly Cited Papers in Economics". My overall percentiles are 0.01% (All Fields) and 0.02% (Economics). My impact percentiles are 0.002% (All Fields) and 0.004% (Economics, ranked 27th)...
- I received the distinction of "Doctor Honoris Causa" from the Pontificia Universidad Católica del Perú (Lima, Perú) during a ceremony held September 8, 2023 at Boston University.
- The paper "Anthropogenic influence on global increase in extreme heat and precipitation with implications for risk hotspots," (with Francisco Estrada and Yohei Yamamoto), *Scientific Reports* 13 (2023) among the top 50 most downloaded papers for 2023 in the category "Earth, Environment and Ecology"; https://www.nature.com/collections/ffheiga
- The Biometrika (1988) paper crossed 25,000 Google citations, April 2023.
- Distinguished Author Award 2022; Journal of Time Series Analysis.
- A special issue of the *Journal of Econometrics* (224, 1, 2021) was published as a follow-up to the pi-day conference held at Boston University on 3/14/2019 to celebrate my 60th birthday with former and current students, colleagues, co-authors and some friends. Eleven papers were including in the issue. My sincere thanks to the Board of the *Journal of Econometrics*, the contributors and the guests editors: Serena Ng, Zhongjun Qu and Tim Vogelsang.
- Selected as a Clarivate 2020 Citation Laureate. See https://www.prnewswire.com/news-releases/clarivate-reveals-2020-citation-laureates—annual-list-of-researchers-of-nobel-class-301136248.html and https://clarivate.com/webofsciencegroup/citation-laureates/economics/.
- According to Web of Science, 3 papers are in the top 40 most cited papers in *Econometrica* published since 1950: #20 (published in 1989), #26 (published in 1998), #38 (published in 2001).
- A special conference was held on March 14-15, 2019, at Boston University, the pi-day conference, to celebrate my 60th birthday with former and current students, colleagues, co-authors and some friends. A proceeding is planned as a special issue of the *Journal of Econometrics* Special thank to the Department of Economics and IED at Boston University for help in funding this event.
- Ranked 131 overall in REPEC; 4th in Time Series Econometrics.
- The 1988 *Biometrika* paper "Testing for a Unit Root in Time Series Regression" crossed the 10,000 number of Google cites in 2014, and 15,000 in 2017, 20,000 in 2021. It is the 3rd highest ranked paper in the history of the journal according to D.M. Titteington (2013), "Biometrika highlights from volume 28 onwards", Biometrika 100, 17-73.

- The 1989 *Econometrica* paper "The Great Crash, the Oil Price Shock and the Unit Root Hypothesis," crossed the 10,000 number of Google cites January 2022.
- Elected Fellow of the International Association for Applied Econometrics (2019).
- Elected Fellow of the Econometric Society (2007).
- Original Member, Highly Cited Researcher in the categories "Mathematics" and "Business/Economics", ISI Thomson Scientific.
- Fellow of the Journal of Econometrics (1999).
- Editorial Fellow of *Econometrics Reviews* (2018).
- Neu Family Award for Excellence in Teaching in Economics (2004).
- Presentation of the 1998 Jacob Marshack Lecture of the *Econometric Society* at the Latin American Meeting in Lima, Peru (August 14, 1998).
- Econometric Theory Multa Scripsit Award (November 1996); Econometric Theory Plura Scripsit Award (November 2008).
- Prix Triennal de la Société Canadienne de Sciences Économiques, 1994 (Prize awarded every three years for outstanding research contributions).
- The paper "L'estimation de modèles avec changements structurels multiples", Actualité Économique 73 (1997), 457-505 was selected as one of the 14 best papers published in the journal and reprinted in their last issue Actualité Économique 96 (2020), 789-837 with the following title for the commemorative issue: "50 années de l'Actualite Economiqué: un florilège de ses meilleurs articles".
- The paper "Fractional Unit Root Tests Allowing for a Structural Change in Trend under Both the Null and Alternative Hypotheses" (with Seong Yeon Chang), *Econometrics* 5 (2017), 5, 1-26, won the Best Paper Award for 2018; for papers published between 1 January 2016 and 31 December 2017 in the journal *Econometrics*. See https://www.mdpi.com/2225-1146/6/3/38/htm.
- The 2017 JTSA paper with Francisco Estrada was included by Wiley-statistics as part of a small collection of papers made open access to celebrate *European Statistics Day* focusing on the theme of '*Better Data. Better Lives*' (http://www.statisticsviews.com/ details/news/10668209/Celebrate-European-Statistics-Day.html). 2017.
- Listed in Who's Who in Economics: A Biographical Dictionary of Major Economists 1700 to 1995, edited by M. Blaug, 1999 Edwin Elgar Publishing.
- 1982-1986: Graduate School Alumni Association Fellow in Economics (Yale University), Yale University Scholarship, Social Sciences and Humanities Research Council of Canada Scholarship (S.S.H.R.C.).

- 1981-1982: S.S.H.R.C. Special M.A. Scholarship, Queen's University Bursary.
- 1979-1981: The Allan Oliver Gold Medal in Economics, the Cherry Prize in Economics, the James McGill Award, the June Redpath Exhibition Award, the McDonald Scholarship, the M.H. Betty Bursary, University Scholar, Faculty Scholar (all from McGill University).

#### CITATIONS:

The following figures are from Google Scholar as of Janury 27, 2025:

- Total number of cites: 92,491. The addition to the number of cites in 2024 was 4,858.
- Papers with 25,000+ cites: 1; 10,000-15,000: 1; 5,000-10,000: 3; 3,000-5,000: 1, 2,000-3,000: 2; 1,000-1,999: 6; 500-999: 7; 200-499: 12; 100-199: 17.

**GRANTS**: 2007-2010: National Science Foundation, "Structural Changes, Level Shifts in Variance and the Frequency of Permanent Shocks", Grant SES-0649350, \$216,126. 2000-2003: National Science Foundation, "Multiple Structural Changes with Deterministic and Stochastic Trends", Grant SES-0078492, \$227.449. 1999-2002: Fonds pour la Formation de Chercheurs et l'Aide à la Recherche du Québec (with Bryan Campbell, Marcel Dagenais, Jean-Marie Dufour, Nour Medahi, Roch Roy): "Problèmes d'économétrie des séries chronologiques en macroéconomie et en finance", \$197,000 (CAN). 1996-1999: Social Sciences and Humanities Research Council of Canada. 1996-2000: Natural Sciences and Engineering Council of Canada. 1996-1999: Fonds pour la Formation de Chercheurs et l'Aide à la Recherche du Québec (with Marcel Dagenais, Jean-Marie Dufour, Eric Ghysels, Marc Hallin and Serena Ng). 1993-1994: Programme d'Analyses et de Recherches Économiques Appliquées au Développement International (PARADI), A.C.D.I. 1993-1996: Social Sciences and Humanities Research Council of Canada. 1993-1996: Natural Sciences and Engineering Council of Canada. 1993-1996: Fonds pour la Formation de Chercheurs et l'Aide à la Recherche du Québec (with Marcel Dagenais, Jean-Marie Dufour, Eric Ghysels, Alastair Hall and Marc Hallin). 1992-1993: CAFIR (Université de Montréal). 1991-1993: National Science Foundation. 1990-1993: Fonds pour la Formation de Chercheurs et l'Aide à la Recherche du Québec (with Jean-Marie Dufour, Eric Ghysels, Alastair Hall, Marc Hallin and Victoria Zinde-Walsh). 1989-1991: Social Sciences and Humanities Research Council of Canada (with Jean-Marie Dufour). 1988-1991: Natural Sciences and Engineering Council of Canada. 1987-1990: Fonds pour la Formation de Chercheurs et l'Aide à la Recherche du Québec (with Jean-Marie Dufour and Eric Ghysels). 1987-1989: Social Sciences and Humanities Research Council of Canada (with Jean-Marie Dufour). 1986-1987: CAFIR (Université de Montréal).

#### **REFEREED JOURNAL ARTICLES**

- "Testing the Random Walk Hypothesis: Power versus Frequency of Observation," (with Robert J. Shiller) *Economics Letters* 18 (1985), 381-386. Reprinted in *The International Library of Financial Econometrics*, A.W. Lo and S.T. Harris (eds.), Edward Elgar Publishing Ltd (2007).
- "Does GNP Have a Unit Root? A Reevaluation," (with Peter C.B. Phillips) Economics Letters 23 (1987), 139-145.
- "Trends and Random Walks in Macroeconomic Time Series: Further Evidence from a New Approach," Journal of Economic Dynamics and Control 12 (1988), 297-332.
- "Testing for a Unit Root in Time Series Regression," (with Peter C.B. Phillips) Biometrika 75 (1988), 335-346. Reprinted in Time Series Econometrics (T.C. Mills, ed.), Critical Concepts in Economics, Routledge, 2015.
- 5. "The Calculation of the Limiting Distribution of the Least-Squares Estimator in a Near-Integrated Model," *Econometric Theory* 5 (1989), 241-255.
- "The Great Crash, the Oil Price Shock and the Unit Root Hypothesis," Econometrica 57 (1989), 1361-1401. Reprinted in Long Term Trends and Business Cycles (T. C. Mills, ed.), The International Library of Critical Writings in Economics (Series Editor: Mark Blaug), Edward Elgar Publishing (2002). Reprinted in Time Series Econometrics (T.C. Mills, ed.), Critical Concepts in Economics, Routledge, 2015.
- "Tests of Joint Hypotheses in Time Series Regression with a Unit Root," in Advances in Econometrics: Co-integration, Spurious Regression and Unit Roots, Vol. 8, G.F. Rhodes and T.B. Fomby (eds.), JAI Press (1990), 135-159.
- 8. "Testing for a Unit Root in a Time Series Regression with a Changing Mean," *Journal* of Business and Economic Statistics 8 (1990), 153-162.
- 9. "A Continuous Time Approximation to the Unstable First-order Autoregressive Model: the Case Without an Intercept," *Econometrica* 59 (1991), 211-236.
- 10. "A Continuous Time Approximation to the Stationary First-order Autoregressive Model," Econometric Theory 7 (1991), 236-252.
- 11. "Test Consistency with Varying Sampling Frequency," *Econometric Theory* 7 (1991), 341-368.
- "Pitfalls and Opportunities: What Macroeconomists Should Know About Unit Roots," (with John Y. Campbell) NBER Macroeconomics Annual, Vol. 6 (1991), O.J. Blanchard and S. Fisher (eds.), 141-201.

- 13. "Nonstationarity and Level Shifts with an Application to Purchasing Power Parity," (with T.J. Vogelsang), Journal of Business and Economic Statistics 10 (1992), 301-320.
- 14. "The Limiting Distribution of the Least-Squares Estimator in Nearly Integrated Seasonal Models," *Canadian Journal of Statistics* 20 (1992), 121-134.
- 15. "Racines Unitaires en Macroéconomie: Le Cas Multidimensionnel," (with John Y. Campbell), Annales d'Économie et de Statistique 27 (1992), 1-50.
- "Testing for a Unit Root in a Time Series with a Changing Mean: Corrections and Extensions," (with T.J. Vogelsang), Journal of Business and Economic Statistics 10 (1992), 467-470.
- 17. "The Effect of Seasonal Adjustment Filters on Tests for a Unit Root," (with Eric Ghysels) Journal of Econometrics 55 (1993), 57-98.
- "Racines Unitaires en Macroéconomie: Le Cas d'une Variable," Actualité Économique 68 (1992), 325-356; Reprinted in Macroéconomie: Développements Récents, P. Malgrange and L. Salvas-Bronsard (eds.), Presses de l'Université du Québec (1993).
- 19. "The Great Crash, the Oil Price Shock and the Unit Root Hypothesis: Erratum," (with T.J. Vogelsang) *Econometrica* 61 (1993), 248-249.
- "The Humped Shaped Behavior of Macroeconomic Fluctuations," *Empirical Economics* 18 (1993) (special issue), 707-727; Reprinted in *New Developments in Time Series Econometrics*, J.-M. Dufour and B. Raj (eds.), Physica-Verlag Heidelberg (1994), 151-171.
- "A Note on Johansen's Cointegration Procedure when Trends are Present," (with John Y. Campbell), *Empirical Economics* (special issue), 18 (1993), 777-789; Reprinted in *New Developments in Time Series Econometrics*, J.-M. Dufour and B. Raj (eds.), Physica-Verlag Heidelberg, 221-233.
- "A Note on the Asymptotic Distributions of Unit Root Tests in the Additive Outlier Model with Breaks," (with T.J. Vogelsang), *Revista de Econometria* 13 (1993), 181-201.
- 23. "Local Asymptotic Distribution Related to the AR(1) Model with Dependent Errors," (with Seiji Nabeya), *Journal of Econometrics* 62 (1994), 229-264.
- 24. "Unit Root Tests in ARMA Models With Data Dependent Methods for Selection of the Truncation Lag," (with Serena Ng), Journal of the American Statistical Association 90 (1995), 268-281. Reprinted in Recent Developments in Time Series (P. Newbold and S.J. Leybourne, eds.), The International Library of Critical Writings in Econometrics (Series Editors: M. Blaug and A. Darnell), Edward Elgar Publishing (2003).

- "Approximations to Some Exact Distributions in the First Order Autoregressive Model with Dependent Errors," (with Seiji Nabeya), *Econometric Reviews* 14 (1995), 421-457.
- 26. "The Effect of Linear Filters on Dynamic Time Series with Structural Change," (with Eric Ghysels), *Journal of Econometrics* 70 (1996), 69-97.
- 27. "The Adequacy of Asymptotic Approximations in the Near-Integrated Autoregressive Model with Dependent Errors," *Journal of Econometrics* 70 (1996), 317-350.
- 28. "An Analysis of the Real Interest Rate under Regime Shifts," (with René Garcia), Review of Economics and Statistics 78 (1996), 111-125.
- "Useful Modifications to Some Unit Root Tests with Dependent Errors and Their Local Asymptotic Properties," (with Serena Ng), *Review of Economic Studies* 63 (1996), 435-463.
- 30. "The Exact Error in Estimating the Spectral Density at the Origin," (with Serena Ng), Journal of Time Series Analysis 17 (1996), 379-408.
- 31. "Estimation and Inference in Nearly Unbalanced Nearly Cointegrated Systems," (with Serena Ng), *Journal of Econometrics* 79 (1997), 53-81.
- 32. "Further Evidence from Breaking Trend Functions in Macroeconomic Variables," Journal of Econometrics 80 (1997), 355-385.
- 33. "L'estimation de modèles avec changements structurels multiples", Actualité Économique 73 (1997), 457-505 (special issue in honour of Lise Salvas Bronsard).
- 34. "Estimating and Testing Linear Models with Multiple Structural Changes," (with Jushan Bai), Econometrica 66 (1998), 47-78. Reprinted in The Economics of Structural Change (H. Hagemann, M. Landesmann, and R. Scazzieri, eds.), The International Library of Critical Writings in Economics (Series Editor: Mark Blaug), Edward Elgar Publishing (2003). Also reprinted in Recent Developments in Time Series (P. Newbold and S.L. Leybourne, eds.) The International Library of Critical Writings in Economics (Series Editor: Writings in Econometrics (Series Editor: Wark Blaug and Adrian Darnell), Edward Elgar Publishing (2003).
- 35. "An Autoregressive Spectral Density Estimator at Frequency Zero for Nonstationarity Tests," (with Serena Ng), *Econometric Theory* 14 (1998), 560-603.
- 36. "Additional Tests for a Unit Root Allowing the Possibility of Breaks in the Trend Function," (with T.J. Vogelsang), International Economic Review 39 (1998), 1073-1100. Reprinted in Recent Developments in Time Series (P. Newbold and S.J. Leybourne, eds.), The International Library of Critical Writings in Econometrics (Series Editors: M. Blaug and A. Darnell), Edward Elgar Publishing (2003).

- 37. "Unit Roots in the Presence of Abrupt Governmental Interventions with an Application to Brazilian Data," (with Regina C. Cati and Marcio G.P. Garcia), *Journal of Applied Econometrics* 14 (1999), 27-56.
- 38. "A Look at the Quality of the Approximation of the Functional Central Limit Theorem," (with Sylvie Mallet) *Economics Letters* 68 (2000), 225-234.
- 39. "Asymptotic Approximations in the Near-Integrated Model with a Non-zero Initial Condition," (with Cosme Vodounou) *Econometrics Journal* 4 (2001), 143-169.
- 40. "Lag Length Selection and the Construction of Unit Root Tests With Good Size and Power," (with Serena Ng), *Econometrica 69* (2001), 1519-1554. Reprinted in *Time Series Econometrics* (T.C. Mills, ed.), *Critical Concepts in Economics*, Routledge, 2015.
- 41. "PPP May Not Hold After All: A Further Investigation," (with Serena Ng), Annals of Economics and Finance 3 (2002), 43-64.
- 42. "Computation and Analysis of Multiple Structural Change Models," (with Jushan Bai), Journal of Applied Econometrics 18 (2003), 1-22.
- 43. "Searching for Additive Outliers in Nonstationary Time Series," (with Gabriel H. Rodriguez), Journal of Time Series Analysis 24 (2003), 193-220.
- 44. "GLS Detrending, Efficient Unit Root Tests and Structural Change," (with Gabriel H. Rodríguez), *Journal of Econometrics* 115 (2003), 1-27. Reprinted in Spanish as: "GLS para eliminiar los componentes determinísticos, estadísticos de raíz unitaria eficientes y cambio estructural," *Economía* 35 (2012), 174-203.
- 45. "Critical Values for Multiple Structural Change Tests," (with Jushan Bai), *Econometrics Journal* 6 (2003), 72-78.
- 46. "Tests of Return Predictability: An Analysis of Their Properties based on a Continuous Time Asymptotic Framework," (with Cosme Vodounou), *Journal of Empirical Finance*, 11 (2004), 203-230.
- 47. "A Note on the Selection of Time Series Models," (with Serena Ng), Oxford Bulletin of Economics and Statistics 67 (2005), 115-134.
- 48. "The Variance Ratio Test: An Analysis of Size and Power based on a Continuous Time Asymptotic Framework," (with Cosme Vodounou), *Econometric Theory* 21 (2005), 562-592.
- 49. "Structural Breaks with Stochastic and Deterministic Trends," (with Xiaokang Zhu), Journal of Econometrics 129 (2005), 65-119.

- 50. "Estimating Restricted Structural Change Models," (with Zhongjun Qu) Journal of Econometrics 134 (2006), 373-399.
- 51. "A Comparison of Alternative Asymptotic Frameworks to Analyze a Structural Change in a Linear Time Trend," (with Ai Deng), *Econometrics Journal* 9 (2006), 423-447.
- 52. "A Simple Modification to Improve the Finite Sample Properties of Ng and Perron's Unit Root Tests," (with Zhongjun Qu), *Economics Letters* 94 (2007), 12-19.
- 53. "Estimating and Testing Multiple Structural Changes in Multivariate Regressions" (with Zhongjun Qu), *Econometrica* 75 (2007), 459-502 (with online supplement).
- "A Modified Information Criterion for Cointegration Tests based on a VAR Approximation" (with Zhongjun Qu), *Econometric Theory* 23 (2007), 638-685.
- 55. "A Non-local Perspective on the Power Properties of the CUSUM and CUSUM of Squares Tests for Structural Change" (with Ai Deng), *Journal of Econometrics* 142 (2008), 212-240.
- 56. "The Limit Distribution of the CUSUM of Squares Test Under General Mixing Conditions" (with Ai Deng), *Econometric Theory* 24 (2008), 809-822.
- 57. "Data Dependent Rules for Selection of the Number of Leads and Lags in the Dynamic OLS Cointegrating Regression" (with Mohitosh Kejriwal), *Econometric Theory* 24 (2008), 1425-1441.
- "The Limit Distribution of the Estimates in Cointegrated Regression Models with Multiple Structural Changes," (with Mohitosh Kejriwal), *Journal of Econometrics* 146 (2008), 59-73.
- "Unit Root Tests Allowing for a Break in the Trend Function Under Both the Null and Alternative Hypotheses," (with Dukpa Kim), Journal of Econometrics 148 (2009), 1-13. Reprinted in Time Series Econometrics (T.C. Mills, ed.), Critical Concepts in Economics, Routledge, 2015.
- "Assessing the Relative Power of Structural Break Tests Using a Framework Based on the Approximate Bahadur Slope," (with Dukpa Kim), Journal of Econometrics 149 (2009), 26-51.
- 61. "Estimating Deterministic Trends with an Integrated or Stationary Noise Component" (with Tomoyoshi Yabu), Journal of Econometrics 151 (2009), 56-69.
- 62. "Testing for Shifts in Trend with an Integrated or Stationary Noise Component, (with Tomoyoshi Yabu), Journal of Business and Economic Statistics 27 (2009), 369-396.
- 63. "Let's Take a Break: Trends and Cycles in U.S. Real GDP" (with Tatsuma Wada), Journal of Monetary Economics 56 (2009), 749-765 (with online supplement).

- 64. "GLS-based Unit Root Tests with Multiple Structural Breaks under both Under the Null and the Alternative Hypotheses," (with Josep Lluís Carrion-i-Silvestre and Dukpa Kim), *Econometric Theory* 25 (2009), 1754-1792.
- 65. "Modeling and Forecasting Stock Return Volatility Using a Random Level Shift Model," (with Yang K. Lu), *Journal of Empirical Finance* 17 (2010), 138-156.
- 66. "Long-Memory and Level Shifts in the Volatility of Stock Market Return Indices," (with Zhongjun Qu), Journal of Business and Economic Statistics (2010) 28, 275-290.
- 67. "A Sequential Procedure to Determine the Number of Breaks in Trend with an Integrated or Stationary Noise Component," (with Mohitosh Kejriwal), *Journal of Time Series Analysis* 31 (2010), 305-328.
- 68. "Testing for Multiple Structural Changes in Cointegrated Regression Models," (with Mohitosh Kejriwal), Journal of Business and Economic Statistics 28 (2010), 503-522.
- "On the Irrelevance of Impossibility Theorems: The Case of the Long-run Variance" (with Linxia Ren), Journal of Time Series Econometrics, vol. 3 (Article 1) (2011), 1-32.
- 70. "A Note on Estimating a Structural Change in Persistence," (with Mohitosh Kejriwal), Economics Letters 117 (2012), 932-935.
- 71. "Comparisons of Robust Tests for Shifts in Trend with an Application to Trend Deviations of Real Exchange Rates in the Long Run," (with Sungju Chun), Applied Economics 45 (2013), 3512-3528.
- 72. "Sampling Interval and Estimated Betas: Implications for the Presence of Transitory Components in Stock Returns," (with Sungju Chun and Cosme Vodounou), *Journal* of Empirical Finance 20 (2013), 42-62.
- 73. "Wald Tests for Detecting Multiple Structural Changes in Persistence," (with Mohitosh Kejriwal and Jing Zhou), *Econometric Theory* 29 (2013), 289-323.
- 74. "A Time-series Analysis of the 20th Century Climate Simulations Produced for the IPCC's AR4," (with Francisco Estrada, Carlos Gay-García and Benjamín Martínez-López), *PLoS ONE* 8(3) (2013), e60017.
- 75. "Memory Parameter Estimation in the Presence of Level Shifts and Deterministic Trends" (with Adam McCloskey), *Econometric Theory* 29 (2013), 1196-1237.
- 76. "A Stochastic Volatility Model with Random Level Shifts and its Application to S&P 500 and NASDAQ Return Indices," (with Zhongjun Qu), *Econometrics Journal* 16 (2013), 309-339.

- "Estimating and Testing Multiple Structural Changes in Linear Models Using Band Spectral Regressions" (with Yohei Yamamoto), *Econometrics Journal* 16 (2013), 400-429.
- 78. "Statistically-derived Contributions of Diverse Human Influences to 20th Century Temperature Changes" (with Francisco Estrada and Benjamin Martinez-López), Nature Geoscience 6 (2013), 1050-1055 (doi:10.1038/ngeo1999 with Supplementary Material, 41 pages).
- 79. "A Note on Estimating and Testing for Multiple Structural Changes in Models with Endogenous Regressors via 2SLS," (with Yohei Yamamoto), *Econometric Theory* 30 (2014), 491-507.
- 80. "Forecasting Return Volatility: Level Shifts with Varying Jump Probability and Mean Reversion," (with Jiawen Xu), International Journal of Forecasting 30 (2014), 449-463.
- 81. "Detection and Attribution of Climate Change Through Econometric Methods," (with Francisco Estrada), Buletin de la Sociedad Matematica Mexicana 20 (2014), 107-136.
- "Modified Local Whittle Estimator for Long Memory Processes in the Presence of Low Frequency (and Other) Contaminations," (with Jie Hou), *Journal of Econometrics* 182 (2014), 309-328.
- "Using OLS to Estimate and Test for Structural Changes in Models with Endogenous Regressors," (with Yohei Yamamoto), *Journal of Applied Econometrics* 30 (2015), 119-144.
- 84. "On the Usefulness or Lack Thereof of Optimality Criteria for Structural Change Tests," (with Yohei Yamamoto), *Econometric Reviews* 35 (2016), 782-844.
- 85. "Residuals-based Tests for Cointegration with GLS Detrended Data," (with Gabriel Rodriguez), *Econometrics Journal* 19 (2016), 84-111.
- 86. "Inference on a Structural Break in Trend with Fractionally Integrated Errors," (with Seong Yeon Chang), *Journal of Time Series Analysis* 37 (2016), 555-574.
- "Measuring Business Cycles with Structural Breaks and Outliers: Applications to International Data," (with Tatsuma Wada), *Research in Economics* 70 (2016), 281-303.
- 88. "Improved Tests for Forecast Comparisons in the Presence of Instabilities" (with Luis Filipe Martins), *Journal of Time Series Analysis* 37 (2016), 650-659.
- "Inference on Locally Ordered Breaks in Multiple Regressions," (with Ye Li), Econometric Reviews 36 (2017), 289-353.

- 90. "Fractional Unit Root Tests Allowing for a Structural Change in Trend under Both the Null and Alternative Hypotheses" (with Seong Yeon Chang), *Econometrics* 5 (2017), 5, 1-26. Reprinted in *Unit Root and Structural Breaks*, P. Perron (ed.). MPDI, Basel, Switzerland, 2018.
- 91. "Modelling Exchange Rate Volatility with Random Level Shifts," (with Ye Li and Jiawen Xu), Applied Economics 49 (2017), 2579-2589.
- 92. "Characterizing and Attributing the Warming Trend in Sea and Land Surface Temperatures," (with Francisco Estrada and Luis Filipe Martins), Atmosfera 30 (2017), 163-187.
- 93. "Extracting and Analyzing the Warming Trend in Global and Hemispheric Temperatures" (with Francisco Estrada), Journal of Time Series Analysis 38 (2017), 711-732.
- 94. "Testing for Flexible Nonlinear Trends with an Integrated or Stationary Noise Component," (with Mototsugu Shintani and Tomoyoshi Yabu), Oxford Bulletin of Economics and Statistics 79 (2017), 822-850.
- 95. "Combining Long Memory and Level Shifts in Modeling and Forecasting the Volatility of Asset Returns" (with Rasmus T. Varneskov), *Quantitative Finance* 18 (2018), 371-393 (with supplement).
- 96. "Testing for Common Breaks in a Multiple Equations System," (with Tatsushi Oka), Journal of Econometrics 204 (2018), 66-85.
- 97. "A Comparison of Alternative Methods to Construct Confidence Intervals for the Estimate of a Break Date in Linear Regression Models," (with Seong Yeon Chang), *Econometric Reviews* 37 (2018), 577-601.
- 98. "Causality from Long-lived Radiative Forcings to the Climate Trend" (with Francisco Estrada), Annals of the New York Academy of Sciences 1436 (2019), 195-205.
- 99. "Pitfalls of Two Step Testing for Changes in the Error Variance and Coefficients of a Linear Regression Model," (with Yohei Yamamoto), *Econometrics* 7 (2019), 22; doi:10.3390/econometrics7020022.
- 100. "Breaks, Trends and the Attribution of Climate Change: a Time-series Analysis" (with Francisco Estrada), *Economia* 42 (2019), 1-31.
- 101. "Inference Related to Common Breaks in a Multivariate System with Joined Segmented Trends with Applications to Global and Hemispheric Temperatures" (with Dukpa Kim, Tatsushi Oka and Francisco Estrada), *Journal of Econometrics* 214 (2020), 130-152.
- 102. "Testing Jointly for Structural Changes in the Error Variance and Coefficients of a Linear Regression Model," (with Yohei Yamamoto and Jing Zhou), *Quantitative Economics* 11 (2020), 1019-1057 (with online supplement).

- 103. "Bootstrap Procedures for Detecting Multiple Persistence Shifts in Heteroskedastic Time Series," (with Mohitosh Kejriwal and Xuewen Xu), Journal of Time Series Analysis 41 (2020), 696-690 (with online supplement).
- 104. "Temporal Aggregation and Long Memory for Asset Price Volatility," (with Wendong Shi), Journal of Risk and Financial Management 13 (2020), 182, 1-18.
- 105. "Testing for Changes in Forecasting Performance," (with Yohei Yamamoto), Journal of Business and Economic Statistics 39 (2021), 148-165 (with online supplement).
- 106. "Spatial Variations in the Warming Trend and the Transition to More Severe Weather in Midaltitudes," (with Francisco Estrada and Dukpa Kim), *Scientific Reports* 11:145 (2021) (with Supplement).
- 107. "Anthropogenic Influence in Observed Regional Warming Trends and the Implied Social Time of Emergence," (with Francisco Estrada and Dukpa Kim), Nature Communications Earth & Environment 2:31 (2021) (with Supplement).
- 108. "Continuous Record Laplace-based Inference about the Break Date in Structural Change Models." (with Alessandro Casini), *Journal of Econometrics* 224 (2021), 3-21 (with online supplement).
- 109. "Disentangling the Trend in the Warming of Urban Areas into Global and Local Factors," (with Francisco Estrada), Annals of the New York Academy of Science 1504 (2021), 230-246.
- 110. "A Two Step Procedure for Testing Partial Parameter Stability in Cointegrated Regression Models," (with Mohitosh Kejriwal and Xuewen Xu), Journal of Time Series Analysis 43 (2022), 219-237.
- 111. "Generalized Laplace Inference in Multiple Change-Points Models" (with Alessandro Casini), *Econometric Theory* 38 (2022), 35-65 (with supplement).
- 112. "The Great Moderation: Updated Evidence with Joint Tests for Multiple Structural Changes in Variance and Persistence," (with Yohei Yamamoto), *Empirical Economics* 62 (2022), 1193-1218.
- 113. "Structural Change Tests under Heteroskedasticity: Joint Estimation versus Two-Steps Methods," (with Yohei Yamamoto), Journal of Time Series Analysis 43 (2022), 389-411.
- 114. "Robust Testing of Time Trend and Mean with Unknown Integration Order Errors," (with Seong Yeon Chang and Jiawen Xu), Journal of Statistic Computation and Simulation 92 (2022), 3561-3582.

- 115. "Anthropogenic influence on global increase in extreme heat and precipitation with implications for risk hotspots," (with Francisco Estrada and Yohei Yamamoto), *Scientific Reports* 13 (2023), Article number: 35.
- 116. "Simultaneous Bandwidths Determiniation for DK-HAC Estimators and Long-run Variance Estimation in Nonparametric Settings," (with Federico Belotti, Alessandro Casini, Leopoldo Catania and Stefano Grassi), *Econometric Reviews* 42 (2023), 281-306.
- 117. "Forecasting in the Presence of In and Out of Sample Breaks," (with Jiawen Xu), *Empirical Economics* 64 (2023), 3001-3035. Reprinted in Advances in Applied Econometrics, Subal C. Kumbhakar, Robin C. Sickles, Hung-Jen Wan (eds.), Springer Nature Switzerland, 2024.
- 118. "On the Persistence of Near Surface Temperature Dynamics in a Warming World" (with Francisco Estrada and Yohei Yamamoto), Annals of the New York Academy of Sciences 1531 (2024), 69-83.
- 119. "Inference on Conditional Quantile Processes in Partially Linear Models with Applications to the Impact of Unemployment Benefits," (with Zhongjun Qu and Jungmo Yoon), *Review of Economics and Statistics* 106 (2024), 521-541.
- 120. "Estimation in the Presence of Heteroskedasticty of Unknown Form: A Lasso-based Approach," (with Emilio González-Coya), *Journal of Econometric Methods* 13 (2024), 29-48.
- 121. "Prewhitened Long-Run Variance Estimation Robust to Nonstationarity," (with Alessandro Casini), Journal of Econometrics 242 (2024), 105794.
- 122. "Change-Point Analysis of Time Series with Evolutionary Spectra," (with Alessandro Casini), Journal of Econometrics 242 (2024), 105811.

#### BOOKS

*Econometrics, Volume 1: Main Theory and Topics for Cross-Section Data.* Last revision, September 2024. To be published by *Scientific World*.

Econometrics, Volume 2: Topics in Time Series. Last revision, September 2024. To be

# published by *Scientific World*. BOOKS EDITED

- 1. Unit Root and Structural Breaks, P. Perron (ed.). MPDI, Basel, Switzerland, 2018.
- 2. Time Series Econometrics: Volume 1: Unit Roots and Trend Breaks, (Perron, P., ed.), World Scientific, 2019 (with a new introduction), 743 pages.

3. *Time Series Econometrics: Volume 2: Structural Change*, (Perron, P., ed.), World Scientific, 2019 (with a new introduction), 948 pages.

# **BOOK CHAPTERS**

- 1. "Testing for a Random Walk: A Simulation Experiment of Power when the Sampling Interval is Varied," in *Advances in Econometrics and Modeling*, Baldev Raj (ed.), Kluwer Academic Publisher (1989), 47-68.
- "Comments on: A Nine Variable Probabilistic Macroeconomic Forecasting Model by Christopher Sims," in *Business Cycles, Indicators and Forecasting*, J.H. Stock and M.W. Watson (eds.), NBER Studies in Business Cycles, Vol. 28 (1993), The University of Chicago Press, 204-212.
- 3. "Nonstationarities and Nonlinearities in Canadian Inflation," in Economic Behavior and Policy Choice under Price Stability, Bank of Canada, 1994, 235-291 (Also available in french as "Non-stationnarités et non-linéarités dans le processus d'inflation au Canada," in Comportement des agents économiques et formulation des politiques en régime de stabilité des prix, Banque du Canada, 1994, 267-327).
- "Trend, Unit Root and Structural Change in Macroeconomic Time Series," in *Cointegration for the Applied Economist*, B.B. Rao (ed.), 1994, Basingstoke: Macmillan Press, 113-146.
- "Multiple Structural Change Models: A Simulation Analysis," in *Econometric Theory* and Practice: Frontiers of Analysis and Applied Research, (with Jushan Bai), D. Corbea, S. Durlauf and B. E. Hansen (eds.), Cambridge University Press, 2006, 212-237.
- "Dealing with Structural Breaks," in *Palgrave Handbook of Econometrics*, Vol. 1: Econometric Theory, K. Patterson and T.C. Mills (eds.), Palgrave Macmillan, 2006, 278-352.
- "Structural Change" in *The New Palgrave Dictionary of Economics*, 2nd ed, S. Durlauf and L. Blume (eds.), 2008, Palgrave Macmillan. Also in *Macroeconometrics and Time Series Analysis*, S. Durlauf and L. Blume (eds.), 2010, Palgrave Macmillan.
- "A Test for Changes in a Polynomial Trend Function for a Dynamic Time Series," in *Time Series Econometrics: Volume 2: Structural Change*, (Perron, P., ed.), World Scientific, 2019, 1-65.
- "Introduction" in *Time Series Econometrics: Volume 1: Unit Roots and Trend Breaks*, (Perron, P., ed.), World Scientific, 2019, xiii-xx.
- "Introduction" in *Time Series Econometrics: Volume 2: Structural Change*, (Perron, P., ed.), World Scientific, 2019, xiii-xxii.

 "Structural Breaks in Time Series". In Oxford Research Encyclopedia of Economics and Finance. Oxford University Press, 2019 (with Alessandro Casini). doi: http://dx.doi.org /10.1093/acrefore/9780190625979.013.179.

# **COMMENTS (REFEREED)**

- 1. "Statistical Adequacy and the Testing of Trend versus Difference Stationarity: Some Comments," *Econometric Reviews* 22 (2003), 239-245.
- 2. "Testing for Trend in the Presence of Autoregressive Error: A Comment" (with Tomoyoshi Yabu), *Journal of the American Statistical Association* 107 (2012), 844 (with online supplement).
- "Comments on "In-sample Confidence Bands and Out-of-sample Forecast Bands for Time-varying Parameters in Observation Driven Models" (with Jiawen Xu), International Journal of Forecasting 32 (2016), 891-892.

#### EDITORIALS

- "Royal Economic Society Annual Conference 2009 Special Issue on Factor Models: Theoretical and Applied Perspectives" (with Richard Smith), *The Econometrics Journal* 14.1 (2011), Ci-Ciii.
- 2. "Editorial: Unit Roots and Structural Breaks," *Econometrics* 5 (2017), 22, 1-3.
- 3. "Editorial: Time Series Methods Applied to Climate Change," (with Eduardo Zorita), Journal of Time Series Analysis 38 (2017), 69.

## PROCEEDINGS

 "Trend, Unit Root and Structural Change: A Multi-Country Study with Historical Data," *Proceedings of the Business and Economic Statistics Section*, American Statistical Association, 1992, 144-149.

## ARTICLES FORTHCOMING

- 1. "Theory of Low Frequency Contamination from Nonstationarity and Misspecification: Consequences for HAR Inference" (with Alessandro Casini and Taosong Deng), forthcoming in *Econometric Theory*.
- 2. "An Improved Procedure for Retrospectively Dating the Emergence and Collapse of Bubbles," (with Mohitosh Kejriwal and Linh Nguyen), forthcoming in the *Journal of Time Series Analysis*.
- 3. "Continuous Record Asymptotics for Change-Point Models," (with Alessandro Casini), forthcoming in the *Journal of Time Series Analysis*.

# PAPERS SUBMITTED OR UNDER REVISION

- 1. "Synergies Between Current and Future Warming Levels and ENSO Episodes on Extreme Events" (with Francisco Estrada and Yohei Yamamoto), May 2024, submitted.
- 2. "Feasible GLS for Time Series Regression," (with Emilio González-Coya), May 2022, Revised August 2024, Revisions requested by and sent to the *Journal of Econometrics*.
- 3. "mbreaks: R Package for Estimating and Testing Multiple Structural Changes in Linear Regression Models," (with Linh Nguyen and Yohei Yamamoto), January 2023.
- 4. "Uncovering Bias in Uncovered Interest Parity Tests," (with Emilio González-Coya and Marco Olivari), Manuscript, August 2024.
- 5. "GLS-IV for Time Series Regression with Application to the "New Keynesian Phillips Curve" (with Marco Olivari), Manuscript, August 2024, submitted.

## OTHER DOCUMENTS PRODUCED

- 1. "Conditions for OLS and GLS to be Consistent in Models with Serially Correlated Errors," March 2021, revised November 2021.
- 2. "Trigonometric Trend Regressions of Unknown Frequencies with Stationary or Integrated Noise," (with Mototsugu Shintani and Tomoyoshi Yabu), January 2020.
- 3. "An Analytical Evaluation of the Log-periodogram Estimate in the Presence of Level Shifts," (with Zhongjun Qu), June 2004, revised November 2007.
- 4. "Macroeconomics and the Canadian Income-Security System: An Overview," Discussion Paper No. 336, Economic Council of Canada, September 1987.
- 5. "The Evolution of Poverty in Canada, 1970-1985," Discussion Paper No. 343, Economic Council of Canada, February 1988 (with François Vaillancourt).

# ARTICLES REPRINTED (CHAPTER IN BOOKS OR OTHER JOURNALS)

- "Testing the Random Walk Hypothesis: Power versus Frequency of Observation," Economics Letters 18 (1985), 381-386 (with Robert J. Shiller). Reprinted in The International Library of Financial Econometrics, A.W. Lo and S.T. Harris (eds.), Edward Elgar Publishing Ltd (2007).
- "Testing for a Unit Root in Time Series Regression," Biometrika 75 (1988), 335-346 (with Peter C.B. Phillips). Reprinted in Time Series Econometrics (T.C. Mills, ed.), Critical Concepts in Economics, Routledge, 2015.

- The Great Crash, the Oil Price Shock and the Unit Root Hypothesis," Econometrica 57 (1989), 1361-1401. Reprinted in Long Term Trends and Business Cycles (T. C. Mills, ed.), The International Library of Critical Writings in Economics (Series Editor: Mark Blaug), Edward Elgar Publishing (2002).
- The Great Crash, the Oil Price Shock and the Unit Root Hypothesis," Econometrica 57 (1989), 1361-1401. Reprinted in Time Series Econometrics (T.C. Mills, ed.), Critical Concepts in Economics, Routledge, 2015.
- "Racines Unitaires en Macroéconomie: Le Cas d'une Variable," Actualité Économique 68 (1992), 325-356; Reprinted in Macroéconomie: Développements Récents, P. Malgrange and L. Salvas-Bronsard (eds.), Presses de l'Université du Québec (1993).
- "The Humped Shaped Behavior of Macroeconomic Fluctuations," *Empirical Economics* 18 (1993) (special issue), 707-727; Reprinted in *New Developments in Time Series Econometrics*, J.-M. Dufour and B. Raj (eds.), Physica-Verlag Heidelberg (1994), 151-171.
- "A Note on Johansen's Cointegration Procedure when Trends are Present," (with John Y. Campbell), *Empirical Economics* (special issue), 18 (1993), 777-789; Reprinted in *New Developments in Time Series Econometrics*, J.-M. Dufour and B. Raj (eds.), Physica-Verlag Heidelberg, 221-233.
- "Unit Root Tests in ARMA Models With Data Dependent Methods for Selection of the Truncation Lag," (with Serena Ng), Journal of the American Statistical Association 90 (1995), 268-281. Reprinted in Recent Developments in Time Series (P. Newbold and S.J. Leybourne, eds.), The International Library of Critical Writings in Econometrics (Series Editors: M. Blaug and A. Darnell), Edward Elgar Publishing (2003).
- "Estimating and Testing Linear Models with Multiple Structural Changes," (with Jushan Bai), Econometrica 66 (1998), 47-78. Reprinted in The Economics of Structural Change (H. Hagemann, M. Landesmann, and R. Scazzieri, eds.), The International Library of Critical Writings in Economics (Series Editor: Mark Blaug), Edward Elgar Publishing (2003).
- "Estimating and Testing Linear Models with Multiple Structural Changes," (with Jushan Bai), Econometrica 66 (1998), 47-78. Reprinted in Recent Developments in Time Series (P. Newbold and S.L. Leybourne, eds.) The International Library of Critical Writings in Econometrics (Series Editors: Mark Blaug and Adrian Darnell), Edward Elgar Publishing (2003).
- "Additional Tests for a Unit Root Allowing the Possibility of Breaks in the Trend Function," (with T.J. Vogelsang), *International Economic Review* 39 (1998), 1073-1100. Reprinted in *Recent Developments in Time Series* (P. Newbold and S.J. Leybourne,

eds.), The International Library of Critical Writings in Econometrics (Series Editors: M. Blaug and A. Darnell), Edward Elgar Publishing (2003).

- "Lag Length Selection and the Construction of Unit Root Tests With Good Size and Power," (with Serena Ng), *Econometrica 69* (2001), 1519-1554. Reprinted in *Time Series Econometrics* (T.C. Mills, ed.), *Critical Concepts in Economics*, Routledge, 2015.
- 13. GLS Detrending, Efficient Unit Root Tests and Structural Change," (with Gabriel H. Rodriguez), Journal of Econometrics 115 (2003), 1-27. Reprinted in Spanish as: "GLS para eliminiar los componentes determinísticos, estadísticos de raíz unitaria eficientes y cambio estructural," Economía 35 (2012), 174-203.
- "Unit Root Tests Allowing for a Break in the Trend Function Under Both the Null and Alternative Hypotheses," (with Dukpa Kim), Journal of Econometrics 148 (2009), 1-13. Reprinted in Time Series Econometrics (T.C. Mills, ed.), Critical Concepts in Economics, Routledge, 2015.
- "Fractional Unit Root Tests Allowing for a Structural Change in Trend under Both the Null and Alternative Hypotheses" (with Seong Yeon Chang), *Econometrics* 5 (2017), 5, 1-26. Reprinted in *Unit Root and Structural Breaks*, P. Perron (ed.). MPDI, Basel, Switzerland, 2018.
- 16. "L'estimation de modèles avec changements structurels multiples", Actualité Économique 73 (1997), 457-505 (special issue in honour of Lise Salvas Bronsard). Reprinted in Actualité Économique 96 (2020), 789-837. Last issue of the Journal including the "14 best papers published in the journal".
- "Forecasting in the Presence of In and Out of Sample Breaks," (with Jiawen Xu), *Empirical Economics* 64 (2023), 3001-3035. Reprinted in *Advances in Applied Econometrics*, Subal C. Kumbhakar, Robin C. Sickles, Hung-Jen Wan (eds.), Springer Nature Switzerland, 2024.

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