

## **Curriculum Vita**

**Name:** John MacRae Maheu

**Address:**

DeGroote School of Business  
McMaster University  
1280 Main Street West  
Hamilton, ON, Canada  
L8S 4M4  
email: [maheujm@mcmaster.ca](mailto:maheujm@mcmaster.ca)  
phone: 905-525-9140 ext. 26198  
website: <http://profs.degrote.mcmaster.ca/ads/maheujm/>

**Educational Background:**

Ph.D., Economics 1998, Queen's University, Kingston, Ontario, Canada.

M.A., Economics 1993, Queen's University, Kingston, Ontario, Canada.

B.A. Honours Mathematics and Economics, 1992, McMaster University, Hamilton, Ontario, Canada, Summa Cum Laude

**Current Positions:**

Professor of Finance and Business Economics, DeGroote School of Business, McMaster University, 2012-

BMO Financial Group Chair in Capital Markets, McMaster University, 2012-

Associate Faculty, Graduate Program in Statistics, McMaster University, 2012-

Professor (status only), Department of Economics, University of Toronto, 2013-2016

**Professional Organizations:**

Senior Fellow, The Rimini Centre for Economic Analysis, Rimini, Italy, 2007-

**Employment History:**

Professor of Economics, University of Toronto, 2011-2012

Associate Professor of Economics, University of Toronto, 2005-2011

Assistant Professor of Economics, University of Toronto, 2001-2005

Assistant Professor of Economics, University of Alberta, 1998-2001

Lecturer, Queen's University, Kingston Ontario, 1996-1998

**Scholarly and Professional Activities:**

Associate Editor, *Journal of Applied Econometrics*, 2014-

Associate Editor, *Journal of Empirical Finance*, 2012-

Guest Editor, *Computational Statistics and Data Analysis*, 2013-

refereeing 8-12 papers per year for:

*American Economic Review, Canadian Journal of Economics, Economic Modelling, Energy Economics, Journal of the American Statistical Association, Journal of Business and Economic Statistics, Journal of Applied Econometrics, Journal of Econometrics, Journal of Empirical Finance, Journal of Financial Econometrics, Journal of Financial Markets, Review of Economic Studies, Review of Finance, Review of International Economics, Quantitative Finance, Studies in Nonlinear Dynamics and Econometrics,...*

External grant reviews: SSHRC

2000,2001,2002,2005,2006,2014,University of Crete 2010, NSERC 2013

Bayesian Econometrics workshop organizing committee member,  
Rimini Centre for Economic Analysis, 2007-2013.

Bayesian Econometrics workshop, local organizer, Rimini Centre for Economic Analysis, Toronto, August 2012.

**Areas of Interest:**

Time-series Econometrics, Empirical Finance

**Honours:**

The 2012 Arnold Zellner Award for the most significant theoretical paper (Jensen and Maheu 2010) published in the *Journal of Econometrics* in 2010-2011.

Dean's Merit Award, 2010, University of Toronto

Senior Fellow, The Rimini Centre for Economic Analysis, Rimini, Italy, 2007-

Queen's Thesis Bursary, 1997

Queen's Graduate Scholarship, Queen's University at Kingston, 1992-1997

Ontario Graduate Scholarship, 1992,1993

McIvor Medal for highest academic achievement in the faculty of Social Sciences, McMaster University, 1992

Hurd Medal for excellence in economics, McMaster University, 1992

**Courses Taught (last 5 years):**

Undergraduate: Economics 327Y, Quantitative Methods, Specialist in Economics, University of Toronto at Mississauga, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12.

Graduate: Financial Econometrics, Master of Financial Economics, University of Toronto, 2007-08, 2008-09, 2009-10, 2010-11, 2011-12. McMaster, Business E714, F773, MFIN 701

**Supervision:**

**Master:**

Allan Cho 1999, Economics and Finance, University of Alberta

Karolina Klimpotyuk 2002, Economics and Finance, University of Alberta

Po Yee Wong 2002, Economics and Finance, University of Alberta

Haizhou Huang 2000 Economics, University of Alberta

Kevin Orpana 2001 Economics, University of Alberta

Paul Karapanagiotidis, Summer 2010, University of Toronto

Tian Feng, 2012-2013, Statistics, McMaster University

**Ph.D Economics, primary supervision only (initial employment):**

Wing Chan, 2002, Assistant Professor, Wilfred Laurier University, Department of Economics

Chun Liu, 2007, Assistant Professor, Tsinghua University, School of Economics and Management

Zhongfang He, 2009, Bank of Canada

Yong Song, 2011, Postdoc, CenSoC, University of Technology, Sydney

Jin Xin, 2012, Assistant Professor, Shanghai University of Finance and Economics

Qiao Yang, 2012-

Azam Shamsi, 2013-

Jia Liu, 2013-

Robin Li, 2013-

Pengwei Huang, 2014-

**Ph.D, secondary supervision:**

Jun Yang, Economics, 2003

Razvan Sufana, Economics, 2006

Bridget O'Shaughnessy, Economics, 2007

Alonso Gomez, Economics, 2008

Eddie Ng, Electrical and Computer Engineering, 2008-2009

Paul Karapanagiotidis 2012-2014

Arthur Luo, Finance, 2013-

**Undergraduate Supervision:**

Lois Chan, Spring 2005

Ling-wu Shao, Fall 2005

Bilal Mirza, Fall 2005

Jiachen Hu, 2006-07

Adel Amodwala, Summer 2010

**Other Supervision:**

Azam Shamsi, 2012-2013

**Lifetime Research Funding:**

University of Melbourne Research Scholar Grant, 2014

Social Sciences and Humanities Research Council of Canada (SSHRC), Insight Grant, 2014-2018, \$106,950

BMO Financial Group Chair in Capital Markets, McMaster University, 2012,2013, \$20,000

Social Sciences and Humanities Research Council of Canada (SSHRC), Standard Research Grant, 2011-2014, \$61,100

Social Sciences and Humanities Research Council of Canada (SSHRC), Standard Research Grant, 2008-2011, \$44,500

Social Sciences and Humanities Research Council of Canada (SSHRC), Standard Research Grant, 2004-2007, \$56,100

Social Sciences and Humanities Research Council of Canada (SSHRC), Standard Research Grant, 2000-2003, \$41,000

SIG Travel Grant, University of Toronto, 2006.

SSHRC Institutional Research Grant, 2003, 2006

University of Toronto Conference Travel Grant, 2002

Cannaught New Staff Start-up Grant, University of Toronto, 2001

Endowment Fund for the Future - Special Capital Equipment Fund, University of Alberta , 1999

Operating Grant, University of Alberta, 1998

Social Sciences Research Grant, University of Alberta, 1998

Social Sciences Travel Grant, University of Alberta , 1998

Support for the Advancement of Scholarship Research Fund, University of Alberta, 1998

#### **Lifetime Publications, Journals, Refereed:**

Maheu J. M. and T. H. McCurdy "Identifying Bull and Bear Markets in Stock Returns", *Journal of Business and Economic Statistics*, 2000, 18, 1, 100-112.

Maheu J. M. and T. H. McCurdy "Volatility Dynamics under Duration-Dependent Mixing", in a special issue on risk management in the *Journal of Empirical Finance*, 2000, 7, 345-372.

Chan W. H. and J. M. Maheu (2002) “Conditional Jump Dynamics in Stock Market Returns”, *Journal of Business and Economic Statistics*, 20, 3, 377-389

Maheu J. M. and T. H. McCurdy (2002) “Nonlinear Features of Realized FX Volatility”, *Review of Economics and Statistics*, 84, 4, 668-681

Maheu J. M. and T. H. McCurdy (2004) “News Arrival, Jump Dynamics and Volatility Components for Individual Stock Returns”, *Journal of Finance*, 59(2), 755-793.

Maheu J. M. (2005) “Can GARCH Models Capture the Long-Range Dependence?”, *Studies in Nonlinear Dynamics & Econometrics*, 9(4), 43 pages.

Maheu J. M. and T. McCurdy (2007) “Components of Market Risk and Return”, *Journal of Financial Econometrics*, 5(4):560-590

Maheu J. M. and T. McCurdy (2008) “Modeling foreign exchange rates with jumps”, in Forecasting in the Presence of Structural Breaks and Model Uncertainty, Eds David Rapach and Mark Wohar, Emerald

Maheu J. M. and S. Gordon (2008) “Learning, Forecasting and Structural Breaks”, *Journal of Applied Econometrics*, 23(5), 553-583.

Liu, C. and J. M. Maheu (2008) “Are there Structural Breaks in Realized Volatility?”, *Journal of Financial Econometrics*, 6(3), 326-360.

Liu, C. and J. M. Maheu (2009) “Forecasting Realized Volatility: A Bayesian Model Averaging Approach”, *Journal of Applied Econometrics*, 24(5), 709 - 733.

Maheu J. M. and T. McCurdy (2009) “ How useful are historical data for forecasting the long-run equity return distribution?”, *Journal of Business and Economic Statistics*, 27(1), 95-112.

Maheu J. M. and J. J. Reeves and X. Xie (2010) “Forecasting Volatility in the Presence of Model Instability”, *Australian and New Zealand Journal of Statistics*, 52(2), 221-237.

He Z. and J. M. Maheu (2010) “Real Time Detection of Structural Breaks in GARCH Models”, *Computational Statistics & Data Analysis*, 54(11), 2628-2640.

Jensen M. J. and J. M. Maheu (2010) “Bayesian Semiparametric Stochastic Volatility Modeling”, *Journal of Econometrics*, 157(2), 306-316. (Winner of the 2012 Arnold Zellner Award for the most significant theoretical paper published in the Journal of Econometrics, 2010-2011)

Maheu J. M. and T. H. McCurdy (2011) “Do High-frequency Measures of Volatility Improve Forecasts of Return Distributions?”, *Journal of Econometrics*, 160(1), 69-76.

Liu C. and J. M. Maheu (2012) “Intraday Dynamics of Volatility and Duration: Evidence from the Chinese Stock Market”, *Pacific-Basin Finance Journal*, 20, 329-348.

Maheu J. M. and T. H. McCurdy and Y. Song (2012) “Components of bull and bear markets: bull corrections and bear rallies”, *Journal of Business and Economic Statistics*, 30(3), 391-403.

Xin J. and J. M. Maheu (2013) “Modeling Realized Covariances and Returns”, *Journal of Financial Econometrics* 11(2), 335-369

Burda M. and J. M. Maheu (2013) “Bayesian Adaptively Updated Hamiltonian Monte Carlo with an Application to High-Dimensional BEKK GARCH Models”, *Studies in Nonlinear Dynamics & Econometrics*, 17(4), 345-372.

Jensen M. J. and J. M. Maheu (2013) “Bayesian Semiparametric Multivariate GARCH Modeling”, *Journal of Econometrics*, 176, 3-17.

Maheu J. M. and T. H. McCurdy and X. Zhao (2013) “Do Jumps Contribute to the Dynamics of the Equity Premium?”, *Journal of Financial Economics*, 110(2) 457-477.

Jensen M. J. and J. M. Maheu (2014) “Estimating a Semiparametric Asymmetric Stochastic Volatility Model with a Dirichlet Process Mixture”, *Journal of Econometrics*, 178, part 3, 523-538

Maheu J. M. and Y. Song (2014) “A New Structural Break Model with Application to Canadian Inflation Forecasting”, *International Journal of Forecasting*, 30(1), 144-160.

### **Recent Working Papers:**

Jensen M. J. and J. M. Maheu (2013) “Risk, Return and Volatility Feedback: A Bayesian Nonparametric Analysis”

Jin X. and J. M. Maheu (2013) “Modelling Covariance Breakdowns in Multivariate GARCH”

Jin X. and J. M. Maheu (2014) “Bayesian Semiparametric Modeling of Realized Covariance Matrices”

Maheu J.M. and Q. Yang (2014) “An Infinite Hidden Markov Model for Short-term Interest Rates”

### **Presentations at Meetings and Department Seminars:**

“Bayesian Semiparametric Modeling of Realized Covariance Matrices”, Economics Seminar, University of Leicester, December 2014.

“Bayesian Semiparametric Modeling of Realized Covariance Matrices”, CFE’14 Pisa, Italy, December 2014.

“Bayesian Semiparametric Modeling of Realized Covariance Matrices”, European Seminar on Bayesian Econometrics, Paris, France, November 2014.

“Bayesian Semiparametric Modeling of Realized Covariance Matrices”, Econometrics seminar, University of Toronto, October 2014.

“Risk, Return and Volatility Feedback: A Bayesian Nonparametric Analysis”, International Society for Bayesian Analysis World meeting, Cancun, Mexico, July 2014.

“Modelling Covariance Breakdowns in Multivariate GARCH”, The Rimini Conference in Economics and Finance, Rimini, Italy, June 2014.

“Modelling Covariance Breakdowns in Multivariate GARCH”, NBER-NSF Seminar on Bayesian Inference in Econometrics and Statistics (SBIES), Chicago, May 2014.

“Risk, Return and Volatility Feedback: A Bayesian Nonparametric Analysis”, Applied Financial Time Series Workshop, HEC Montreal, February 2014.

“Modelling Covariance Breakdowns in Multivariate GARCH”, CFE’13 London UK, December 2013.

“Risk, Return and Volatility Feedback: A Bayesian Nonparametric Analysis”, Econometrics seminar, University of Toronto, November 2013.

“Bayesian Nonparametrics for Empirical Finance”, Bank of Canada, September 2013.

“Risk, Return and Volatility Feedback: A Bayesian Nonparametric Analysis”, Bayesian Econometrics Workshop, RCEA, June 2013.

“A Bayesian Nonparametric Analysis of the Relationship between Returns and Realized Variance”, NBER-NSF Seminar on Bayesian Inference in Econometrics and Statistics (SBIES), St. Louis, May 2013.

“A Bayesian Nonparametric Analysis of the Relationship between Returns and Realized Variance”, DeGroote, McMaster U., April 2013.

“A Bayesian Nonparametric Analysis of the Relationship between Returns and Realized Variance”, Computational and Financial Econometrics (CFE 2012), Oviedo, Spain, December 2012, invited talk.

“Modelling Realized Covariances and Returns”, Economics Dept., McMaster University, October 2012.

“Bayesian Semiparametric Multivariate GARCH Modeling”, Canadian Econometric Study Group, Kingston, 2012, poster session.

“Components of bull and bear markets: bull corrections and bear rallies”, Bayesian Econometrics in Macroeconomics and Finance, Erasmus University, January, 2012.

“Bayesian Semiparametric Multivariate GARCH Modeling”, European Seminar on Bayesian Econometrics, Brussels, November, 2011.

“Bayesian Semiparametric Multivariate GARCH Modeling”, Computational and Financial Econometrics Conference (CFE’11), London U.K. December 2011.

“Modelling Realized Covariances and Returns”, Bayesian Econometrics Workshop, June, 2011, Rimini Centre for Economic Analysis

“Bayesian Semiparametric Multivariate GARCH Modeling”, Society for Nonlinear Dynamics and Econometrics 19th Annual Symposium, March 2011.

“Modelling Realized Covariances and Returns” Computational and Financial Econometrics Conference (CFE’10), London U.K. December 2010.

“Modeling Correlation Breakdowns”, The Rimini Conference in Economics and Finance, Rimini, June 2010.

“Modeling Realized Covariance”, Applied Financial Time Series, HEC Montreal, 2010

“Extracting Bull and Bear Markets from Stock Returns”, Bayesian Econometrics Workshop, September, 2009, Canadian Econometrics Study Group

“Extracting Bull and Bear Markets from Stock Returns”, Bayesian Econometrics Workshop, July, 2009, Rimini Centre for Economic Analysis

“Do High-frequency Measures of Volatility Improve Forecasts of Return Distributions?”, 11th Annual Financial Econometrics Conference, Institute for Quantitative Finance and Insurance, Waterloo University, March 2009

“Real Time Detection of Structural Breaks in GARCH Models” Bayesian Conference at Rimini Centre for Economic Analysis, Rimini, June 2008

“Forecasting Realized Volatility: A Bayesian Model Averaging Approach” Small Open Economies in a Globalized World, Wilfrid Laurier University, June 2008

“Are there Structural Breaks in Realized Volatility?” Finance Conference at Rimini Centre for Economic Analysis, Rimini, May 2008

“Do High-frequency Measures of Volatility Improve Forecasts of Return Distributions?”, McGill Finance Research Centre Risk Management Conference, March 2008

“ Bayesian semiparametric stochastic volatility modeling” Canadian Econometrics Study Group, 2007

“ Bayesian semiparametric stochastic volatility modeling” Rimini Centre for Economic Analysis, Rimini, 2007

“How useful are historical data for forecasting the long-run equity return distribution?”, Rimini Centre for Economic Analysis, Rimini, 2007

“What do high-frequency measures of volatility add to traditional discrete-time models of returns?”, CIREQ conference on Realized Volatility, Montreal, April 22-23, 2006.

“How useful is the data? Forecasting the long-run equity premium”, (EC)<sup>2</sup> Conference on Econometrics of Financial and Insurance Risks, Istanbul, December 2005.

“The long-run relationship between market risk and return”, Northern Finance Association Meetings, Vancouver, 2005.

“Learning, Forecasting and Structural Breaks”, Meetings of the Canadian Economic Association, McMaster University, 2005.

“Learning, Forecasting and Structural Breaks”, Meetings of the Canadian Econometrics Study Group, York University, September 2004.

“Modeling foreign exchange rates with jumps”, CIRANO conference on Realized Volatility, Montreal, November 2003.

“News Arrival, Jump Dynamics and Volatility Components for Individual Stock Returns”, European Summer Meetings of the Econometric Society, Stockholm, August 2003.

“News Arrival, Jump Dynamics and Volatility Components for Individual Stock Returns”, North American Summer Meetings of the Econometric Society, Los Angeles, June 2002.

“News Arrival, Jump Dynamics and Volatility Components for Individual Stock Returns”, Meetings of the Canadian Econometrics Study Group, Waterloo, September 2001.

“Conditional Jump Dynamics in Stock Market Returns”, North American Summer Meetings of the Econometric Society, Maryland, June 2001.

“Nonlinear Features of Realized FX Volatility”, Meetings of the Canadian Econometrics Study Group, Guelph, September 2000.

“Volatility Dynamics under Duration-Dependent Mixing”, World Congress of the Econometric Society, Seattle, August, 2000.

“Nonlinear Features of Realized FX Volatility”, NBER Summer Institute, Forecasting Seminar, Boston, July 2000.

“A Semi-Markov Approach to Modeling Volatility Dynamics”, Meetings of the Canadian Econometrics Study Group, Montreal, September 1999.

“Duration Dependence and Rational Bubbles in Asset Returns”, Meetings of the Canadian Economics Association, Toronto, May 1999.

“Identifying Bull and Bear Markets in Stock Returns”, Meetings of the Northern Finance Association, Toronto, September 1998.

“The Term Structure of Interest Rates, Risk Premia, Inflation Regimes and Learning”, Meetings of the Canadian Economics Association, Toronto, June 1996.

### **Invited Lectures:**

University of Calgary 2000, University of Victoria 2000, University of Toronto, 2001, University of Laval 2002, University of Guelph 2002, Wilfred Laurier University 2002, Queen’s University 2003, Bank of Canada 2006, HEC Montreal 2006, Federal Reserve Bank of Atlanta 2006, McMaster University 2007, New York University Stern School of Business 2008, McMaster University 2009, Brock University 2009, Ryerson 2009, HEC Montreal 2010, Queen’s University 2010, University of Montreal 2010, Leeds School of Business, University of Colorado 2011, CREATEs Aarhus University 2011, ESOBE Brussels 2011, Erasmus University 2012, McMaster University 2012, CFE’12, Bank of Canada 2013, University of Toronto 2013, Applied Financial Time Series Workshop, HEC Montreal, 2014, University of Toronto 2014, ESOBE Paris 2014, University of Leicester, 2014.

### **Administrative Responsibilities:**

Faculty of Business Tenure and Promotion Committee, McMaster U., 2014-2016

Arts Research Board, McMaster U., 2013-2016.

Seminar Organizer, Finance and Business Economics Area, McMaster U. 2014

Search Committee for Associate Vice-President (Research) position, McMaster U. 2014.

Faculty Research and Awards Committee, DeGroote School of Business, McMaster U., 2012-present.

Computer Committee 2003-2009, University of Toronto.

Co-author of report on research of the department of Economics University of Toronto at Mississauga, 2007.

Co-director of Master in Financial Economics Program 2008-2009, University of Toronto.

Associate Chair, Department of Economics, University of Toronto at Mississauga, 2010-2012.

**External Examining:**

Yin Liao, PhD in Economics, Australian National University, 2011

Cem Cakmakli, PhD in Economics, Erasmus University Rotterdam, 2012

Xun Xu, PhD in Economics, University of Alberta, 2012

Worapree Maneesoonthorn, PhD in Econometrics and Business Statistics, Monash University, 2013.

Rui Gao, PhD in Economics, Queen's University, 2014.

University of Montreal 2009, University of Alberta 2012, Simon Fraser University 2012, Oregon State University 2012, GRIPS, Japan 2013.