Gabriel Rodriguez Rondon

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Education

Ph.D. Economics, McGill University

2019 - Expected **2025**

Comprehensive exams completed:

Macroeconomics, Microeconomics, Econometrics, Monetary Economics

M.A. Economics, McGill University

2018 - 2019

B.A. Economics (Honours), Carleton University

2012 - 2016

Experience

PhD Intern, Bank of Canada

International Economic Analysis Department

Canadian Economic Analysis Department

June 2023 - September 2023

since September 2023

Research Assistant, McGill University

June 2023 - December 2023

for Prof. Francesca Carrieri

Visiting Student, Boston University January 2023 - May 2023

Economics Department

Research Data Scientist, Financial Network Analytics — August 2019 - January 2023

R&D Team

Research Assistant, McGill University

May 2019 - August 2019

for Prof. Jean-Marie Dufour

Research Assistant, Bank of Canada April 2016 - August 2018

Funds Management & Banking Department - Research Team

Working Papers:

- 1. "Monte Carlo Likelihood Ratio Tests for Markov Switching Models" (with Jean-Marie Dufour), 2023
- 2. "Underlying Core Inflation with Multiple Regimes", 2023
- 3. "Testing for the Synchronization of International Business Cycles" (with Jean-Marie Dufour), 2023

- 4. "Estimation and inference for higher-order stochastic volatility models with leverage" (with Jean-Marie Dufour & Md. Nazmul Ahsan), 2023
- 5. "Joint Determination of Counterparty and Liquidity Risk in Payment Systems" (with Jorge Cruz Lopez & Charles M. Kahn), 2021 (Awarded **Best Paper on Risk Management** at the NFA 2019 Conference)
- 6. "MSTest: An R-package for Testing Markov-Switching Models" (with Jean-Marie Dufour), 2023
- 7. "mbreaks: R Package for Estimating and Testing Multiple Structural Changes in Linear Regression Models" (with Linh Nguyen, Pierre Perron, and Yohei Yamamoto), 2023

Work In Progress

- 8. "Identification Through Heteroskedasticity Using Multiple Structural Change Tests" (with Pierre Perron), 2023
- 9. "Simulation and Stress Testing of Large Value Payment Systems" (with Jorge Cruz Lopez), 2022
- 10. "Network Model Simulation and Stress Testing of PvP Systems" (with Jorge Cruz Lopez, Carlos Leon, Giuseppe Matera, & Jordan Cambe), 2022

Policy Notes, Technical Notes, & Conference Proceedings:

- "Simulation-Based Inference for the Synchronization of Business Cycles" (with Jean-Marie Dufour), In JSM Proceedings, Business and Economic Statistics Section. Toronto, ON: American Statistical Association, 2023. DOI: https://doi.org/10.5281/zenodo.10002201
- 12. "Simulation-Based Inference for Markov Switching Models" (with Jean-Marie Dufour), In JSM Proceedings, Business and Economic Statistics Section. Washington, D.C.: American Statistical Association, 2022.
- 13. "The Government of Canada Debt Securities Dataset", with Jeffrey Gao & Francisco Rivadeneyra, Bank of Canada Technical Report, 2017. DOI: https://doi.org/10.34989/tr-112

Software:

- MSTest R package
- bootBtest R package
- mbreaks (v2) R package

Academic Conference & Seminar Presentations

Carleton University Brown Bag Seminar (Scheduled)	2023
NBER-NSF Time Series Conference (Scheduled)	2023
CEMLA - II Conference on Payments and FMIs (Scheduled)	2023
Joint Statistical Meetings	2023
Bank of Canada Brown Bag Seminar	2023
International Association for Applied Econometrics (IAAE) Annual Conference	2023
57th Annual Meetings of the Canadian Economics Association	2023
Boston University Econometrics Seminar	2023
16th International Conference on Computational and Financial Econometrics	2022
Latin American Meetings of The Econometric Society	2022
Joint Statistical Meetings	2022
17th CIREQ Ph.D. Students' Conference	2022
56th Annual Meetings of the Canadian Economics Association	2022
Payments Canada & Bank of Canada Research Symposium	2017
51st Annual Meetings of the Canadian Economics Association	2017

Referee Services

International Statistical Review, Journal of Financial Market Infrastructures

Honours, Grants, & Awards

Fonds de Recherche du Québec - Société et Culture (FRQSC)	2021 - 2024
Graduate Excellence Award	2021 - 2024
International Association for Applied Econometrics Travel Grant	2023
McGill Graduate Mobility Award	2022 - 2023
McGill Graduate Research Enhancement and Travel Awards	2022 - 2023
Canadian Economics Association Travel Grant	2022
Dufour Graduate Award	2020 - 2022
Carleton Academic Scholarship	2012, 2013

Teaching Experience

Teaching Assistant, McGill University:

• ECON 610: Microeconomic Theory (Graduate)	Fall 2022, Fall 2023
• ECON 620: Macroeconomic Theory (Graduate)	Fall 2022, Fall 2023
• ECON 257: Economic Statistics (Honours)	Fall 2020, Winter 2021
• ECON 447: Economics of Information and Uncertainty	Winter 2020
• ECON 319: Economic Crises	Fall 2019
• ECON 219: Current Economic Problems	Winter 2019
• ECON 208: Microeconomic Analysis and Applications	Fall 2018

Member of

American Economic Association, American Finance Association, American Statistical Association, Canadian Economics Association, Econometric Society

Programming & Software Proficiency

R, Python, MATLAB, C++, Linux, STATA

Languages

English, French & Spanish.