October 2024

Endong Wang

CONTACT INFORMATION

McGill University
Department of Economics
855 Sherbrooke Street West
Montréal, QC, Canada H3A 2T7

+1-514-772-7078
endong.wang@mail.mcgill.ca
https://www.endongwang.com/

PLEACEMENT DIRECTORS

Prof. Rui Castro	rui.castro@mcgill.ca	+1-514-398-1226
Prof. Nicolas Gendron-Carrier	nicolas.gendron-carrier@mcgill.ca	+1-514-398-3751

EDUCATION

Ph.D. in Economics, **McGill University**, Montréal, QC, Canada	2019 - 2025 (expected)
M.Sc. in Financial engineering, **Temple University**, Philadelphia, PA, USA	2016
B.Sc. in Finance, **University of Kansas**, Lawrence, KS, USA	2015

RESEARCH FIELDS

Econometrics, Monetary Macroeconomics

DISSERTATION

Essays on generalized impulse responses, causality, and policy intervention in dynamic models
Committee: Prof. Jean-Marie Dufour (Chair), Prof. Victoria Zinde-Walsh (co-supervisor), Prof. Russell Davidson

JOB MARKET PAPER

"Structural counterfactual analysis in macroeconomics: theory and inference." September 2024

We propose a structural model-free methodology to analyze two types of macroeconomic counterfactuals related to policy path deviation: hypothetical trajectory and policy intervention. Our model-free approach is built on a structural vector moving-average (SVMA) model that relies solely on the identification of policy shocks, thereby eliminating the need to specify an entire structural model. Analytical solutions are derived for the counterfactual parameters, and statistical inference for these parameter estimates is provided using the Delta method. By utilizing external instruments, we introduce a projection-based method for the identification, estimation, and inference of these parameters. This approach connects our counterfactual analysis with the Local Projection literature. A simulation-based approach with nonlinear model is provided to add in addressing Lucas' critique. The innovative model-free methodology is applied in three counterfactual studies on the U.S. monetary policy: (1) a historical scenario analysis for a hypothetical interest rate path in the post-pandemic era, (2) a future scenario analysis under either hawkish or dovish interest rate policy, and (3) an evaluation of the policy intervention effect of an oil price shock by zeroing out the systematic responses of the interest rate.

RESEARCH STATEMENT

I am an econometrician with a strong interest in macroeconomics, high-dimensionality, and dynamic models. My current research focuses on developing empirical methodologies and exploring innovative estimation method and statistical inference to reveal dynamic causal mechanisms, potentially in a high dimensional data set. My research agenda addresses the following key areas: (i) empirical structural methods for conducting macroeconomic counterfactuals to explore the causal mechanism of policy interventions; (ii) effective estimation methods and statistical inference for high-dimensional time series; and (iii) "HAC-free" statistical inference for multi-horizon linear projection.

WORKING PAPERS

- "Simple robust two-stage estimation and inference for generalized impulse responses and multiple-horizon causality" with Jean-Marie Dufour (McGill University). September 2024 (**submitted**)
- "Inference in high-dimensional linear projections: multi-horizon Granger causality and network connectedness" with Eugène Dettaa (Université de Montréal). September 2024

- "Causal mechanism and mediation analysis for macroeconomics dynamics" with Jean-Marie Dufour (McGill University). April 2024

Work-in-Progress

- "Estimation and inference on time-varying impulse responses in high dimensional state-dependent VAR." June 2024
- "Generic identification and practical specification for multivariate time series." October 2023
- "The (mis)-identification and estimation of structural impulse responses in sub-space VAR model." May 2023

Teaching Experience

McGill University (Instructor)

ECON 662D2, Econometrics, Winter 2023 (Graduate level, half term)
ECON 742, Empirical Microeconomics, Winter 2023 (Graduate level, half term)

McGill University (Teaching Assistant)

ECON 209, Intro to Macroeconomics, Winter 2024
ECON 661, Applied Time Series & Forecast, Fall 2023
ECON 661, Applied Time Series & Forecast, Winter 2023
ECON 664, Applied Cross-sectional Methods, Winter 2023
ECON 337, Introduction to Econometrics, Fall 2022
ECON 257, Economic Statistics (honour), Winter 2022
ECON 227, Economic Statistics, Fall 2020, Winter 2021, Fall 2021
ECON 209, Intro to Macroeconomics, Winter 2020
ECON 208, Intro to Microeconomics, Fall 2019

Fellowships and Awards

The Fonds de recherche du Québec - Société et culture (FRQSC) 2022 - 2025 (*CAD $54,333, Rank: 3/19, Ph.D. Fellowship*)
Grad Excellence Award, McGill University, 2019 - 2020, 2021 - 2024
Clifford Wong Fellowship, McGill University, 2019 - 2020
Dean Certificate of Excellence, Temple University, 2016
Distinguished Scholar Award, Temple University, 2016
Dean's Tuition Scholarship, Temple University, 2015
The Chartered Financial Analyst (CFA) Scholarship, University of Kansas, 2015
University Honors Society, University of Kansas, 2013 - 2015

Papers presented in seminars and conferences

- "Structural counterfactual analysis in macroeconomics: theory and inference" (**Job Market Paper**)
  - 2025 ES-NAWM, San Francisco, CA, 5-January 2025 (*scheduled*)
  - CIREQ-McGill Lunch Seminar, Montreal, QC, 12-November 2024 (*scheduled*)
  - 2024 Canadian Econometric Study Group Meeting, Toronto, ON, 25-October 2024 (*scheduled*)
  - Dagenais seminar at the Université de Montréal, Montreal, QC, 24-October 2024 (*scheduled*)
  - CIREQ-McGill Lunch Seminar, Montréal, QC, 09-July 2024
  - CESG-CEA annual conference, Toronto, ON, 01-June 2024
  - Graduate Student Poster at CEA annual conference, Toronto, ON, 30-May 2024
  - 19th CIREQ PhD Students' Conference, Montréal, QC, 23-May 2024
- "Causal mechanism and mediation analysis for macroeconomics dynamics" with Jean-Marie Dufour (McGill University)
  - 2024 ES-NAWM, San Antonio, TX, 07-January 2024

- "Simple robust two-stage estimation and inference for generalized impulse responses and multiple-horizon causality" with Jean-Marie Dufour (McGill University)
  - 2024 ES-NASM, Nashville, TN, 13-June 2024
  - CIREQ-McGill Lunch Seminar, Montréal, QC, 27-February 2024
  - Joint Statistical Meetings, Toronto, ON, 09-August 2023
  - IAAE, Oslo, Norway, 29-July 2023
  - Asia Meeting of the Econometric Society, virtual, 30-June, 2023
  - CEA annual Conference, Winnipeg, MB, 03-June 2023
  - CIREQ Colloquium on Econometrics, Montréal, QC, 05-May 2023
  - CMS-CFE conference, virtual, 17-December 2022
  - NBER-NFS Time Series conference, Boston, MA, 24-September 2022
  - CIREQ-McGill Lunch Seminar, Montréal, QC, 5-July 2022
  - 17th CIREQ PhD Students' Conference, Montréal, QC, 07-June 2022
- "Inference in high-dimensional linear projections: multi-horizon Granger causality and network connectedness" with Eugène Dettaa (Université de Montréal)
  - CIREQ-CMP Econometrics Conference in Honor of Eric Ghysels, Montréal, QC, 11-May 2024
- "Generic identification and practical specification for multivariate time series."
  - 18th CIREQ PhD Students' Conference, Montréal, QC, 18-May 2023

SERVICES

Chair, Session on Forecasting II in ES-NASM, Nashville, TN, 2024.
Chair, Session on Time Series and Financial Econometrics in ES-NAWM, San Antonio, TX, 2024.

CERTIFICATE

Passed CFA (Chartered Financial Analysts) Level III Exam

REFEREE

International Statistical Review.

LANGUAGES

Mandarin (native), English (fluent).

SKILLS

R, Matlab, Python, Stata, LaTeX

CITIZENSHIP

China

REFERENCES

Jean-Marie Dufour
William Dow Professor of Economics
Department of Economics
McGill University
+1-514-398-6071
jean-marie.dufour@mcgill.ca

Russell Davidson
Professor & Distinguished James McGill Professor
Department of Economics
McGill University
+1-514-398-6186
russell.davidson@mcgill.ca

Victoria Zinde-Walsh
Emeritus Full Professor (Post-Retirement)
Department of Economics
McGill University
+1-514-398-4400 Ext 09115
victoria.zinde-walsh@mcgill.ca

John W Galbraith (Teaching referee)
Professor
Department of Economics
McGill University
+1-514-398-5167
john.galbraith@mcgill.ca