# Miao Dai

307-6001 Côte-Saint-Luc Road, Hampstead, QC H3X 2G4

**Education** 

09/2017-Present **Ph.D. in Economics** 

McGill University, Montreal, QC

09/2014-06/2016 M.A. in Environmental, Resource and Development Economics

University of Winnipeg, Winnipeg, MB

E-mail: miao.dai@mail.mcgill.ca

438-630-9165 (Cell)

09/2010-06/2014 B.Sc. in Resources, Environment and Urban Planning

Hubei Normal University, Hubei, China

## **Areas of Interest**

Environmental and Resource Economics

- Industrial Organization
- International Trade
- Political Economy

#### **Publications**

• Miao Dai, Hassan Benchekroun, and Ngo Van Long, 2022. "On the profitability of cross-ownership in Cournot oligopolies: Stock size matters." *Journal of Environmental Economics and Management*, Volume 111: 102597.

# **Working Papers**

- Hassan Benchekroun, Miao Dai, and Ngo Van Long, 2021. "The impact of cross-ownership on the value of a clean technology in the energy market." Revised and Resubmitted to *Environmental Modelling and Assessment*.
- Miao Dai, 2022. "The political economy of trade in waste". (Job market paper)

# **Work in Progress**

- The role of pressure groups in international trade in waste: A gravity approach
- Common ownership in a nonrenewable market
- Solving Feedback Nash equilibria with more heterogenous players: using Markov chain approximation method

# Research Experience

10/2018- 08/2021

**Research Assistant,** Department of Economics, McGill University Supervisor: Hassan Benchekroun, Ngo Van Long

• Replicated all the Excel examples and reproduced them using Matlab code, and provided solutions to all the exercise problems using both Matlab and Excel for the textbook of *Resource Economics* (Jon M. Conrad, 2010)

- Conducted literature search in international trade in trash, collecting data and constructing indices for the strength of different pressure groups, and exploring the role of pressure groups in determining trade patterns in trash
- Conducted literature search in resource markets characterized by the presence of large players, e.g., oil and OPEC and other countries; diamond and De Beers; Phosphate, etc.

03/2015-04/2017

**Research Assistant,** Department of Economics, University of Winnipeg Supervisor: Amrita Ray Chaudhuri, Soham Baksi, Manish Pandey

- Conducted panel data regressions to analyze how the composition of electricity affects the electricity prices
- Collected the data for the composition of electricity generation (i.e., hydro, coal, nuclear, renewables, gas, etc.) and the electricity prices for residential, commercial and industrial users by each Canadian province for each year
- Updated the latest data for CO<sub>2</sub> emissions and IEA to support Dr. Ray Chaudhuri's Skywalk Lecture at the Millennium Library, Winnipeg: "International Agreements on Climate Change: Insights from Economics"
- Documented data sources for empirical papers such as *Cross-Border Trade in Electricity by Werner Antweiler*, *The Timing of the Skew: Facts on Canada's Energy Trade by Trevor Tombe*, re-did and verified the analyses
- Tabulated hourly minimum wages for both Canada and US for the past decades

01/2016-02/2016

**Research Assistant,** Public Interest Law Centre/University of Winnipeg Supervisor: Melanie O'Gorman, James Townsend

• Summarized the open-ended questions and assisted with summary statistics of results from community surveys conducted in Manitoba Keewatinowi Okimakanak(MKO) communities regarding their access to Internet in preparation for a hearing at the CRTC

09/2013-11/2013

**Intern,** Shayang Construction Management Bureau of South-to-North Water Diversion Project

- Assisted in cost-benefit analysis for the large-scale water diversion project
- Analyzed the local tourism industry and made recommendations on how to improve and promote tourism into the area after construction was completed

# **Teaching Experience**

Instructor, Department of Economics, University of Winnipeg

• Intermediate Microeconomics (Spring 2017)

Graduate Teaching Assistant, Max Bell School of Public Policy, McGill University

• Global Macroeconomic Policy (Winter 2022, Winter 2021, Winter 2020)

• Microeconomics for Public Policy (Fall 2021, Fall 2020, Fall 2019)

#### Teaching Assistant, Department of Economics, McGill University

- Natural Resource Economics (Winter 2022)
- Advanced Economic Theory Honours (Fall 2021)
- Microeconomic Analysis and Applications (Summer 2021)
- Microeconomic Theory (Winter 2021, Winter 2020, Winter 2018)
- Political Economy of Trade Policy (Winter 2021, Winter 2019)
- Industrial Organization (Fall 2020)
- Public Sector Economics (Fall 2019, Fall 2018)
- Mathematics for Economists (Summer 2019)
- Economics of the Environment (Fall 2017)

#### Lab Demonstrator/Teaching Assistant, Department of Economics, University of Winnipeg

- Intermediate Microeconomics (Winter 2017, Fall 2016, Winter 2016, Fall 2015)
- Introduction to Macroeconomics (Winter 2017)
- Modern Microeconomics for Economics and Business (Winter 2017)
- Mathematical Economics (Fall 2016)
- Introduction to Microeconomics (Fall 2016)
- Introduction to Economic Theory (Fall 2015)

## **Volunteer Experience**

09/2021-	_	Buddy Volunteer, International Student Service, McGill University
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 Help new international students to make a smooth transition to life at McGill

### 01-04/2015, 2016 Income Tax Preparer, Community Volunteer Income Tax Program

 Helped international students and low-income residents to prepare their tax documents, accurately entered data into UFile to successfully refund their income taxes

02/2010-07/2010 **Census Assistant**, 6th National Population Census Program, National Bureau of Statistics (People's Republic of China)

 Distributed and collected questionnaires, investigated and checked the reality, and data entry

# **Presentation at Conferences**

01/2022-04/2022	Montreal Environmental and Natural Resources Economics Workshop
01/2021-04/2021	Montreal Environmental and Natural Resources Economics Workshop
10/2020-12/2020	30th Annual Conference – Canadian Resource and Environmental
	Economics Association (CREEA)

## **Refereeing Activities**

Resource and Energy Economics

## **Administrative Activity**

2019-2021 Post-Graduate Students' Society (PGSS) – Economics Delegate

# Fellowships, Honors, and Awards

2018-2022	STP – Fonds de recherche du Québec Société et culture (FRQSC)
2022	STP – Social Sciences and Humanities Research Council of Canada (SSHRC)
2021	STP – Prof. Long – James McGill Professors
2017-2020	Clifford C F Wong Fellowship- Economics
2019	14th Competition and Regulation European Summer School (CRESSE) Fellowship
2019	International Graduate Mobility Award
2017	Graduate Excellence Award in Economics
2016	Graduate Student of the Highest Distinction

### **Computational Skills**

Matlab, Stata, Mathematica

## Languages

English (Fluent), Chinese (native), French (basic)

## **References**

# Professor Hassan Benchekroun

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Phone: 514-398-4400

#### **Professor Laura Lasio**

Department of Economics, McGill University 855 Sherbrooke West, Montreal, QC, Canada. H3A 2T7 E-mail: laura.lasio@mcgill.ca

Phone: 514-398-2953

#### **Professor Francesco Amodio**

Department of Economics, McGill University 855 Sherbrooke West, Montreal, QC, Canada. H3A 2T7 E-mail: francesco.amodio@mcgill.ca

Phone: 514-398-2184

## **Professor Christopher Ragan**

Max Bell School of Public Policy, McGill University 680 Sherbrooke West, Montreal, QC, Canada. H3A 2M7 E-mail: christopher.ragan@mcgill.ca

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