

# Moudachirou Oumarou

## Office Contact Information

University of Montreal  
Department of Economics  
3150 Jean Brillant Street, C6070-7  
Montreal (Quebec), H3C 3J7, Canada

## Personal Contact Information

Phone (cellular): +1 (514) 260-5909  
Email: [moudachirou.oumarou@umontreal.ca](mailto:moudachirou.oumarou@umontreal.ca)  
<https://oumaroumoudachirou.netlify.app/>  
Linkedin: [in](#) ; Github: [G](#)

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## Research Interests

Primary: Environmental Economics, Macroeconomics.

Secondary: Energy economics, Firms Dynamics.

## Education

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|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Ph.D. candidate in Economics, University of Montreal, Canada                                                                                 | 2018–May 2024 (Expected) |
| MSc in Statistics and Economics, Ecole Nationale de la Statistique et de l'Analyse Economique (ENSAE), <b>summa cum laude</b> , Senegal      | 2015–2018                |
| BSc in Statistics, minor in Applied Economics, Ecole Nationale d'Economie Appliquée et de Management (ENEAM), <b>summa cum laude</b> , Benin | 2012–2015                |

## Research and Publications

### Working Papers

- *Threshold-based-exemption in environmental regulation and firms dynamics (JMP)*

I study the long-run effects of a threshold-based exemption in a carbon tax where firms with emissions below a certain threshold are excluded. I use an industry dynamic model featuring heterogeneous firms and a carbon tax to show that removing the exemption leads to 1.9% output gain due to resource reallocation toward productive firms.

- *Emission offset provision in environmental regulation and firm's size distribution*

What are the macroeconomics implications of using offset credits for regulatory compliance? As a perfect substitute to regular permits, OCs prices are privately negotiated and may lead a relative lower price in line with firms bargaining power. I document that 15-20% of firms comply with OCs, and there's a positive relationship between the share of firms and emission complying with OCs and firm size. Using a general equilibrium model of industry dynamics with heterogeneous firms, I show that allowing OCs as an option of compliance can be welfare enhancing if properly enforced with a TFP gain of 0.10%.

### Work In Progress

- *Did referent credentials really help in the placement of Ph.D. candidates on the job market? Evidence with Covid-19.*

### Policy Reports

Report for Quebec's Ministry of Finances: *Gestion optimale de la dette en réponse à la crise sanitaire de la Covid-19*, with Guillaume Sublet, September 2020.

Report for The World Bank: *COVID-19 impacts on the food system in Guinea*, with Ayala Wineman, Aisatou Ouedraogo and Nouhoum Traore, September 2021.

## Experiences

- **Internship, African Development Bank, AfDB, Country Office of Burkina Faso,** 07/23 – 10/23
  - Analyzed fragility and resilience of G5 Sahel countries with a focus on Niger.
  - Assessed the quality of public institutions to sustain inclusive growth.
- **Consultancy, The World Bank, Poverty and Equity Global Practice, Washington DC,** 03/22 – 06/22
  - Provided policymakers in Guinea with actionable insights on the impact of inflation on poverty by processing and analyzing household data from multiple surveys.
  - Created a concise two-page policy note to simplify the sharing of critical findings.
- **Consultancy, The World Bank, Poverty and Equity Global Practice, Benin,** 03/21 – 09/21
  - Analyzed high-frequency phone survey data on Covid-19 in Benin, Guinea, and Togo to measure its effects on food insecurity and poverty, offering insights for targeted interventions.
  - Analyzed data from various sources to pinpoint key areas for poverty reduction in Benin through collaboration with a multidisciplinary team.
- **Research, Ministry of Finances of Quebec, Canada,** 06/20 – 08/20
  - Developed an award-winning policy proposal on post-lockdown debt management for Quebec, securing a 9000\$ research funding from the Ministry of Finance, jointly with Guillaume Sublet.
- **Research Assistant, Observatoire de la Francophonie Economique (OFE), Canada,** 01/20 – 04/20
  - Reviewed and edited of 100+ conference papers for an international conference on young and women entrepreneurship in French-speaking countries. Accepted papers published [here](#).
  - Analyzed opinions from participants from 20+ countries on employment issues in French-speaking countries through questionnaire design and data collection offering insights for OIF's future policy.
- **Intern, Central Bank, Banque Centrale des Etats de l'Afrique de l'Ouest, BCEAO,** 07/17 – 10/17

## Students Supervision

- Fatimetou Lemine, and Radhy Hamoune, "*La diffusion du secteur informel dans les pays en développement : une approche en économétrie spatiale*", Master in economics and statistics, ENSAE, Senegal, 2021-2022.
- Daniel Baza, and Roosevelt Nguemo, "*Boom des fraudes de cryptomonnaies et stabilité financière : évidence au moyen des méthodes de Machine Learning*", Master in economics and statistics, ENSAE, Senegal, 2022 – 2023.

## Teaching Fellows

- **Lecturer, University of Montreal, Canada**
  - **Introduction to Economics**, Fall (2020), Fall (2022), Fall (2023)
  - **Economic Data Analysis**, Winter (2021)
- **Teaching Assistant, University of Montreal, Canada**
  - **Introduction to Macroeconomics**, Summer (2019), Winter (2022), Summer (2022)
  - **Economics Principles**, Summer (2019), Fall (2020), Winter (2021), Winter (2023)
  - **Quantitative Methods I for Undergraduate**, Fall (2021), Fall (2023)
  - **Quantitative Methods II for Undergraduate**, Fall (2019), Summer (2021), Winter (2022)

## Seminar and Conference Presentations

- Harvard Climate Economics Pipeline Workshop, Harvard university, USA June 2023
- CIREQ Interdisciplinary PhD Student Symposium on Climate Change, Canada June 2023
- 18<sup>th</sup> CIREQ Ph.D. Students' Conference, Canada May 2022
- 17<sup>th</sup> CIREQ Ph.D. Students' Conference, Canada June 2022
- Economics, Statistics, and Finance Ph.D. workshop in Quebec 2020, 2021, 2022, 2023
- Macro workshops group, University of Montreal 2019, 2020, 2021, 2022, 2023

## Research Grants, Scholarships, & Fellowships

- PhD student travel grant, Harvard Climate Workshop 2023
- FRQSC - Doctoral Research Scholarship 2021-2023
- Fund of Quebec's Ministry of finance, 9000\$ 2020
- Ph.D. Fellowship of CIREQ and Department of Economics, University of Montreal 2018-2023
- MSc. in Statistics, Merit Scholarship, Government of Benin 2015-2018
- Full scholarship from Government of Benin 2012-2015
- Prize of Excellence received from the Association of Statisticians of Benin (ASSES Benin) 2014

## Skills and Languages

- **Programming:** MATLAB, Python (advanced), STATA (advanced),  $\LaTeX$
- **Languages:** English (proficiency), French (native)

## References

**Guillaume Sublet (chair)**  
 University of Montreal  
 Department of Economics  
 Montreal, Quebec, Canada  
[sublet.guillaume@umontreal.ca](mailto:sublet.guillaume@umontreal.ca)

**Rui Castro**  
 McGill University  
 Department of Economics  
 Montreal, Quebec, Canada  
[rui.castro@mcgill.ca](mailto:rui.castro@mcgill.ca)

**Emanuela Cardia**  
 University of Montreal  
 Department of Economics  
 Montreal, Quebec, Canada  
[emanuela.cardia@umontreal.ca](mailto:emanuela.cardia@umontreal.ca)