

Florent McIsaac, PhD

9607 Stockwell Lane / Fairfax, VA 22031 / United States

+1 202 510 2223 • fmcisaac@worldbank.org
florent.mcisaac.fr • **Nationality:** French and British

Profile

Economist with close to eight years of experience (not including my doctoral degree) in climate macroeconomic modelling in several regions. Author of strong peer-reviewed technical work on the interface between climate change and public investment, fiscal risks, taxation, employment, debt, financial stability and long-term sustainable growth. Experienced in team coordination and capacity building.

Current position and affiliations

- **The World Bank, Climate Change Group** **Paris**
Economist *2021–present*
 - Member of the CCDCR core team for which I am the macroeconomic technical focal point. A key part of my role is to advise on the tools and approaches that CCDCR teams can mobilize to conduct their CCDCRs and to review most CCDCRs, particularly the macro chapters and the integration of sectoral analysis into macro chapters, at each stage of the process (CN, QER, and DM).
 - Member of MTI's macro modeling unit for which I am developing climate-aware macro-structural MFMod for various CCDCR countries for FY22-23 (Tunisia, Côte d'Ivoire, Türkiye, G5 Sahel, Morocco, Pakistan).
- **French Development Agency (AFD), Chief Economist Office** **Paris**
Economist *2015–2021*
 - Core member of the development team of an applied climate macro-model integrating the impacts of climate change on financial sector stability and debt trajectories for developing countries and emerging markets.
 - Developed a global model with a transparent online interface for policy makers and national level applications for several developing countries. Project manager in Brazil and the Ivory Coast; core team member in Colombia, Tunisia, and Vietnam.
 - Organized numerous technical trainings on climate macroeconomics in developing countries, building partnerships with local government officials and researchers who now use co-developed tools as part of climate macroeconomics work for short- and long-term projections and policy scenarios.
 - Gained extensive experience collaborating on climate change with sectoral departments and operations.
- **Chair Energy and Prosperity, École Normale Supérieure & X-Polytechnique** **Paris**
Associate Researcher *2016–2021*

Agenda:

- Developed a continuous-time macroeconomic tool that integrates financial dynamics (including debts and stocks) by implementing continuous-time ARMA models at the country-level.
- Built a theoretical model to study the stability of debt dynamics for economies with substantial informal markets.

Education

- **PhD, Applied Mathematics,**
Université Paris 1–Panthéon-Sorbonne 2016

Dissertation title: Energy and Money in New Frameworks for Macro-dynamics
Summary: A macroeconomic analysis of the impacts of climate policy on worldwide growth and financial stability
- **MS, Mathematical Methods and Modelling in Economics and Finance,**
Université Paris 1–Panthéon-Sorbonne 2012
- **BS, Applied Mathematics,**
Université Paris 1–Panthéon-Sorbonne 2010

Publications (select)

- **Macroeconomic Consequences of Natural Disasters: A Modeling Proposal and Application to Floods and Earthquakes in Turkey**, *Policy Research working paper, no. WPS 9943* with Stephane Hallegatte and Charl Jooste
- **Côte d’Ivoire’s electricity challenge in 2050: Reconciling economic development and climate commitments**, *Energy Policy, Volume 160, January 2022 - Forthcoming* with EdiAssoumou
- **A Representation of the World Population Dynamics for Integrated Assessment Models**, *Environmental Modeling & Assessment, Volume 25, March 2020 - Forthcoming* with Victor Court
- **Financial Impacts of Climate Change Mitigation Policies and their Macroeconomic Implications**, *Climate Policy, Volume 20, 2020 - Issue 2* with Gaël Giraud and Emmanuel Bovari
- **Reaching Brazil’s NDC: An Assessment of the Key Transitions in Final Demand and Employment**, *Energy Policy, Volume 135, December 2019* with Daniel Bastidas
- **Coping with Collapse: A Stock-Flow Consistent Monetary Macrodynamics of Global Warming**, *Ecological Economics, Volume 147, January 2018* with Gaël Giraud and Emmanuel Bovari

- **Debt and Damages: What are the chances of staying under the +2C warming threshold?**, *International Economics, Volume 155, October 2018*
with Oskar Lecuyer and Emmanuel Bovari
- **The Effects of Oil Price Shocks in a New-Keynesian Framework with Capital Accumulation**, *Energy Policy, Volume 86, November 2015*
with Veronica Acurio, Gaël Giraud, and Ngoc Sang Pham

Working papers.....

- **The 2050 Electricity Challenge in the Ivory Coast: Conciliate Economic Growth and International Climate Agreement through Fiscal Policy**, *AFD Working paper, 2020 – Forthcoming*
with Edi Assoumou
- **Employment and Low-carbon Transition: Analysis of Brazil, Vietnam, and the Ivory Coast using MRIO tables**, *AFD Working paper, 2020 – Forthcoming*
with Daniel Bastidas
- **An Input-Output Analysis: What Would a Low-Carbon Economy for Brazil Mean?**, *AFD Working paper, 2017*
with Daniel Bastidas
- **Testing Goodwin with a Stochastic Differential Approach—The United-States 1948-2017**, *AFD Working paper, 2017*
- **Influence of Weather Variability on Orange Juice Prices**, *SSRN*
with Marius Frunza and Frank Laudicina

Conference presentations (select)

- **The Effects of Oil Price Shocks in a New-Keynesian Framework with Capital Accumulation**
October 2019, Washington, D.C., World Bank
- **Financial Impacts of Climate Change Mitigation Policies and the Role of Public Investment**
January 2019, Toronto, Fields Institute–OECD seminar: 10 Years After the Crisis
- **The Role of Development Banks in the Social Acceptance of Carbon Pricing**
December 2018, Poland, United Nations Conference of Parties, COP24
- **Macroeconomic Modeling of Carbon Pricing in the Ivory Coast**
October 2018, Côte d’Ivoire, World Bank
- **Financial Impacts of Climate Change Mitigation Policies and the Role of Public Investment**
November 2017, Amsterdam, CEP Workshop hosted at the De Nederlandsche Bank
- **An Input-Output Analysis: What Would A Low-Carbon Economy For Brazil Mean?**
October 2017, Paris, Workshop Green Finance–France Stratégie

Teaching experience (select)

- **Centrale Marseille and Université de Lorraine (Lecturer)** 2020-2021
 - *Macro-Financial Stability and Climate Policies*
- **X-Polytechnique Paris (Lecturer)** 2018-2021
 - *Environmental Macroeconomic Modeling and Climate Policies*
- **Université Paris 13—Erasmus Mundus (Lecturer)** 2016-20
 - *Environmental Macroeconomic Modeling*
- **Ecole Normale des Ponts et Chaussées-PARITECH (Lecturer)** 2015-9
 - *Environmental Macroeconomic Modeling*

Computer skills

- **Programming and Mathematical Languages:** Python, MySQL, TeX, R, Matlab, C, C++, Java, PHP, JavaScript, HTML
- **Software Skills:** Microsoft Office, G Suite

Languages

- **French:** Native speaker
- **English:** Native level
- **Spanish:** Basic