

Florent Mc Isaac | Economist

5 Rue Roland Barthes, 75012 – Paris – France

☎ +33 666 79 50 37 • ✉ florent.mcisaac@gmail.com

🌐 florent.mcisaac.fr • 🇫🇷 **Nationality:** French

Current positions and affiliations

- **French Development Agency (AFD)** **Paris**
Economist, Macroeconomic Modeling *2015–present*

Member of the macroeconomic modelling program GEMMES (GEneralized Monetary Macrodynamics Multisectoral for the Ecological Shift) in the research department of the AFD.

Head of projects in macroeconomic modelling:

- *Brazil*: Partnership between AFD-IPEA (Research Institution in Applied Economics) on financing the energy shift. This collaborative project aims to build a calibrated macroeconomic stock-flow consistent model applied to Brazil that incorporates financial imbalances of energy shift scenarios.
- *Ivory Coast*: Partnership between AFD-CAPEC (Research laboratory in Economics) that models macroeconomic dynamics of the informal economy and assesses fiscal risks associated with commodity prices volatility. The project seeks to build an accountable-type macroeconomic model that focuses on public debt and balance of payments dynamics compatible with industrialization and international environmental agreements.

- **Energy and Prosperity Academic Committee** **Paris**
Associate researcher, (ENS ULM, X, ENSAE) *2016–present*

Research topics: macroeconomic modelling, macroeconometrics, energy shift, finance, economy and climate interactions, estimation and simulation of continuous-time stochastic processes, system dynamics.

Research agenda:

- Develop a continuous-time macro-econometric modelling tool with the ability to integrate financial dynamics (including debts and stocks) by using continuous-time ARMA models at the country-level.
- Build a theoretical model to study the stability of debt dynamics for an economy characterized by a high level of informal markets.
- Extend the Ramsey model with various environmental constraints and solve the optimization program via variational principles (with Ivar Ekeland).

Education

- **PhD in Applied Mathematics at Université de Paris 1–Panthéon-Sorbonne** *2016*
Title: Energy and Money in New Frameworks for Macro-dynamics,

Ph.D. committee: **G. Giraud** (CNRS-Advisor), **M. Grasselli** (McMaster University), **M. Lavoie** (Ottawa University), **S. Keen** (Kingston University), **I. Ekeland** (Université de Paris Dauphine), **A. Nguyen-Huu** (Université de Montpellier), **C. Chorro** (Université de Paris Panthéon-Sorbonne)

Study of several types of macro-models used in analyzing climate policy, including SFC, CGE, and macrostructural models.

- **MS in Modelisation and Mathematical Methods in Economics and Finance**
at Université de Paris 1, Panthéon-Sorbonne 2012
- **BS in Applied Mathematics**
at Université de Paris 1, Panthéon-Sorbonne 2010

Publications

- **“The Effects of Oil Price Shocks in a New-Keynesian Framework with Capital Accumulation”**
Energy Policy, Volume 86, November 2015, Pages 844–854
with Veronica Acurio, Gaël Giraud, and Ngoc Sang Pham
- **“Coping with Collapse: A Stock-Flow Consistent Monetary Macrodynamics of Global Warming”**
Ecological Economics, Volume 147, January 2018, Pages 383-398
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, Pages 92-108
with Gaël Giraud, and Emmanuel Bovari
- **“Minskyan Classical Growth Cycles: Stability Analysis of a Stock-Flow Consistent Model”**
Mathematics and Financial Economics, Volume 13, June 2019, Pages 359–391
with Daniel Bastidas and Adrien Fabre

Working papers.....

- **“A Phenomenological Model for Human Population Dynamics”**
Working Paper, Available on demand
with Victor Court
- **“Carbon Pricing and Global Warming: A Stock-flow Consistent Macro-dynamic Approach”**
Working Paper, Available here
with Gaël Giraud, and Emmanuel Bovari
- **“An Input-Output Analysis: What Would A Low-Carbon Economy For Brazil Mean?”**
Working Paper, Available here
with Daniel Bastidas
- **“Testing Goodwin with a Stochastic Differential Approach—The United-States 1948-2015”**
Working Paper, Available in the Ph.D. Thesis

- **“An Augmented Net Oil Price”**
Working Paper, Available on demand
- **“Influence of Weather Variability on Orange Juice Prices”**
Working Paper, Available in SSRN
with Marius Frunza, and Frank Laudicina
- **“La dette publique française justifie-t-elle l’austérité budgétaire ?”**
Working Paper, Available in CES Working Paper
with Gaël Giraud, and Rossi Abi-Rafeh

Conference presentations.....

- **“Coping with Collapse”**
January, 2019/Toronto, Canada, Fields Institute–OECD seminar: 10 Years After the Crisis
- **“Coping with Collapse”**
November, 2018/Amsterdam, Netherlands, CEP Workshop hosted at the DNB (Deutch Central Bank)
- **“An Input-Output Analysis: What Would A Low-Carbon Economy For Brazil Mean?”**
26 June, 2018/Juiz de Fora, Brazil, International Conference of Input-Output Association
- **“An Input-Output Analysis: What Would A Low-Carbon Economy For Brazil Mean?”**
25 May, 2018/Paris, France, 6th International Symposium on Environment & Energy Finance Issues
- **“Coping with Collapse”**
23 November, 2017/Amsterdam, Netherlands, CEP Workshop hosted at the DNB
- **“An Input-Output Analysis: What Would A Low-Carbon Economy For Brazil Mean?”**
11 October, 2017/Paris, France, Workshop Green Finance–Energy and Prosperity Academic Committee
- **“Coping with Collapse”**
20 January, 2017/Paris, France, Energy and Prosperity Academic Committee
- **“Testing Goodwin with a Stochastic Differential Approach—The United-States 1948-2015”**
25-26 November, 2016/Cernay, France, Energy and Prosperity Academic Committee
- **“An Augmented Net Oil Price”**
25-27 October, 2015/Pittsburg, USA, International Association for Energy Economics
- **“An Augmented Net Oil Price”**
25-27 May, 2015/Antalya, Turkey, International Association for Energy Economics
- **“Oil and Debts: Are they Substitutes?”**
28-31 October, 2014/Rome, Italy, European International Association for Energy Economics
- **“The effects of Oil Price Shocks in a New-Keynesian Framework with Capital Accumulation”**
19-21 September, 2014/Beijing, China, Asian International Association for Energy Economics
- **“The effects of Oil Price Shocks in a New-Keynesian Framework with Capital Accumulation”**
27-29 June, 2013/Istanbul, Turkey, International Conference on Applied Economics

- “Oil and Debts: Are they Substitutes?”
6-8 June, 2013/Paris, France, Financial Engineering and Banking Society

Teaching experience

- Polytechnique (Lecturer) 2018-2020
○ *Macroeconomic modeling*,
- ENPC- PARITECH (Lecturer) 2015-9
○ *Macroeconomic modeling*, Professor: Gaël Giraud
- Université Paris 13—Erasmus Mundus (Lecturer) 2016-9
○ *Macroeconomic modeling*, Professor: Gaël Giraud
- UFR 27: Mathematics – Université de Paris Panthéon-Sorbonne (TA) 2013-5
○ *Analysis S5 (Topology and Differential Calculus) for L3 MASS*
Professors: Denis Pennequin and Moncef Meddeb
- UFR 27: Mathematics – Université de Paris Panthéon-Sorbonne (TA) 2013-5
○ *Corporate Finance for M1 MAEF*
Professor: Duc Khuong Nguyen
- UFR 02: Economics - Université de Paris Panthéon-Sorbonne (TA) 2012-3
○ *Mathematics for L1 Economie*
Professor: Claude Bressand
- UFR 02: Economics - Université de Paris Panthéon-Sorbonne (TA) 2012-3
○ *Financial Markets for M1 Finance*
Lecturer: Benjamin Hamidi

Software skills

- **Programming and Mathematical Languages:** TeX, R, Matlab, C, C++, Java, PHP, JavaScript, HTML.
- **Industry Software Skills:** Word, Excel, Power-point.

Languages

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