Julien Thavard

University of Lorraine, Bureau d'Economie et Théorique et Appliquée (BETA) 23-25 rue Baron Louis 54000 Nancy France

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Current Positions

Teaching and Research Assistant (ATER)

Bureau d'Economie Théorique et Apliquée, University of Lorraine, Nancy

Nancy, France Since Sept. 2023–

RESEARCH INTERESTS

Climate Finance, Physical and Biodiversity risks, El Niño-Southern Oscillation (ENSO), Banking and Financial Economics, Microprudential and Macroprudential policies and Applied Econometrics (LP and Panel)

EDUCATION

PhD in Economics

Nancy, France

Bureau d'Economie Théorique et Apliquée, University of Lorraine, Nancy Oct. 2019–Nov. 2024

<u>Thesis title:</u> How to Assess Financial Risks Associated with Extreme Climate Events:

The Case of Latin American Countries

Supervisors: Olivier Damette (University of Lorraine) and

Clément Mathonnat (University of Lorraine)

Jury: M. Brei (referee, University of Lille), S. Dees (referee, Banque de France),

C. Couharde (president, Paris 10 Nanterre University), T. Yamina (University of Lorraine)

Master's Degree in Applied Economics

ECONOMIX, University of Paris 10 Nanterre

Paris, France Sept. 2018–June 2019

Master's Degree in Theoretical and Empirical Economics

Marseille School of Economics (AMSE), Marseille

Marseille, France

Sept. 2016–June 2018

Bachelor's Degree in Economics and Management

University of Bordeaux, Bordeaux

Bordeaux, France Sept. 2015–June 2016

Research

Publications

• Climate and sovereign risk: the Latin American experience with Strong ENSO events, with Olivier Damette and Clément Mathonnat, World Development (SJR: Q1, HCERES: A, CNRS: 1), 2024

Working papers

• How climate physical risks affect banking stability? The Latin American experience with strong ENSO events, with Olivier Damette and Clément Mathonnat, Currently under review at the Journal of Environmental Economics and Management (SJR: Q1, HCERES: A, CNRS: 1), 2024

• Le cercle vicieux financier climatique : concepts et enjeux, 2024, Mimeo

Works in progress

- Indian Ocean Dipole event and Financial Risks, avec Olivier Damette
- Climate, Bank Governance and Risk-Taking: International Evidence with Strong ENSO Events

RESEARCH ACTIVITIES

Conferences and Seminars:	
6th EMME Workshop, Emerging Market MacroEconomics Bordeaux school of economics, Bordeaux, France	Mar. 2025
ADRES, Job Market Conference University of Strasbourg, Strasbourg, France	Jan. 2025
2 nd International Conference on the Climate-Macro-Finance Interface: New Environmental Challenges for Fiscal, Monetary, and Macroprudential Policies Bayes Business School, London, United Kingdom	Jan. 2025
Seminar on "Macroeconomics & Public Policies" BETA, University of Lorraine, Nancy, France	Dec. 2024
International Symposium on Climate, Finance, and Sustainability (ISCFS) Paris Dauphine University - PSL (Climate Economics Chair), Paris, France	Nov. 2024
World Finance Conference European University of Cyprus, Cyprus	July 2024
The 40th GdRE International Symposium on Money, Banking and Finance University of Orléans, France	July 2024
The 72nd Congress of the French Economic Association (AFSE) Bordeaux, France	June 2024
Seminar on "Macroeconomics & Public Policies" BETA, University of Lorraine, Nancy, France	Feb. 2024
Research seminar "Frontiers in environmental economics research" Chair for Natural Resources and Local Economy (RENEL), Nancy, France	Jan. 2024
Doctoral Seminar on "Macroeconomics & Public Policies" (MPP) BETA, University of Lorraine, Nancy, France	Dec. 2023
8 th International Conference on "The Green Finance Research Advances" (GFRA) Banque de France and Institut Louis Bachelier, Paris, France	Dec. 2023
International Conference on "Public Debt and Policy Mix: Current Challenges" CEREFIGE, University of Lorraine, Nancy, France	Nov. 2023
Conference on "Climate and Energy Finance" Leibniz University Hannover, Hannover, Germany	Nov. 2023
Workshop on "Global Changes, International Trade, and Health" Bordeaux School of Economics, Bordeaux, France	Oct. 2023
Poster session at "CLIFIRIUM 2023" International Workshop Banque de France, Paris, France	Oct. 2023
5 th Annual PANORisk Conference Le Mans University, Le Mans, France	Nov. 2021

Doctoral Seminar May 2021 BETA, University of Lorraine, Nancy, France **Doctoral Seminar** May 2020 BETA, University of Lorraine, Nancy, France Organization: Conference "Louis-André Gérard-Varet" (LAGV) (Organizational Support) 2018 Aix-Marseille School of Economics Treasurer of the Association "Junior Data Analysts" Sept. 2017 -Aug. 2018 Aix-Marseille School of Economics Refereeing Activities: Journal of International Financial Markets, Institutions & Money 2024 Revue d'Économie Industrielle 2024

Research Funding

ADRES Funding

Association for the Development of Research in Economics and Statistics (ADRES), €400

LABEX Louis Bachelier Grant

LABEX Louis Bachelier, Institut Europlace de Finance, €10,000 (with Olivier Damette)

Doctoral Contract

Cot. 2019 -Aug. 2022

Ecole Doctorale Sciences Juridiques, Politiques, Economiques et de Gestion (ED SJPEG),

Bureau d'Economie et Théorique et Apliquée (BETA), University of Lorraine, Nancy

TEACHING EXPERIENCES

Academic Year 2024-2025 (192 hours)

Development and Sustainability in Economics and Finance

- Macroeconomics (Tutorials), University of Lorraine, Undergraduate (Economics, Year 1)
- The Economics of Money and Banking (Tutorials), University of Lorraine, Undergraduate (Economics, Year 2)
- Financial Markets and Assets (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)
- Macroeconomic Data Processing (Tutorials), University of Lorraine, Undergraduate (Economics, Year 2)

Academic Year 2023-2024 (96 hours)

- The Economics of Money and Banking (Tutorials), University of Lorraine, Undergraduate (Economics, Year 2)
- Financial Markets and Assets (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)

Academic Year 2021-2022 (64 hours)

- Macroeconomics (Tutorials), University of Lorraine, Undergraduate (Economics, Year 1)
- Economic Growth (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)
- Advanced Macroeconomics (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)

2024

Academic Year 2020-2021 (64 hours)

- Macroeconomics (Tutorials), University of Lorraine, Undergraduate (Economics, Year 1)
- Economic Growth (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)
- Advanced Macroeconomics (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)

Academic Year 2019-2020 (24 hours)

• Economic Growth (Tutorials), University of Lorraine, Undergraduate (Economics, Year 3)

LANGUAGE AND COMPUTER SKILLS

Programming: R, EViews, Matlab, Dynare, Stata, LATEX, MS Office

Databases: Bloomberg, BankFocus, NOAA Climate Database (weather stations)
Languages: French (Mother tongue), English (Fluent), Spanish (Beginner)

REFERENCES

Prof. Olivier Damette

Professor - HDR
University of Lorraine
olivier.damette@univ-lorraine.fr

Prof. Michael Brei

Professor - HDR University of Lille michael.brei@univ-lille.fr

Dr. Clément Mathonnat

Associate Professor - HDR
University of Lorraine
clement.mathonnat@banque-france.fr

Dr. Stéphane Dees

Associate Professor – HDR Senior Economist, Banque de France Head of the Climate Economics Unit Stephane.DEES@banque-france.fr

1. How climate physical risks affect banking stability? The Latin American experience with strong ENSO events

This paper investigates how climate shocks affect banking stability in a large panel of 1208 banks observed at annual frequency over the period 2005-2019 for 16 Latin American countries. We use strong El Niño Southern Oscillation (ENSO) events as a natural experiment for climate shocks related to climate change, as they produce quasi-periodic climate oscillations that can lead to unpredictable natural disasters. Our results show that, when considering Latin American countries, weather shocks associated with strong ENSO events can have adverse financial consequences that lead to a decline in banking stability. We also reveal that strong El Niño and La Niña shocks have asymmetrical effects on banking stability. Strong El Niño shocks are associated with lower banks' stability, resulting from decreased performances associated with increased credit and liquidity risks. In contrast, strong La Niña shocks appear to have economic benefits, with no significant impact on banking stability, but higher banks' performances and lower credit risk. Finally, further estimates identify some key characteristics of "climate-resilient banks". Banks with a larger size, a higher capital ratio, and less market-oriented activities are more resilient to adverse climate shocks resulting from ENSO events. As climate change should intensify the frequency and magnitude of ENSO's cyclical pattern, these findings can help estimate the potential adverse effects of climate change-induced physical risks on banking stability and inform future mitigation and adaptation policies.

2. Climate and sovereign risk: the Latin American experience with Strong ENSO events

Using monthly panel data over the period 2007–2019 for seven Latin American countries, we empirically test the impact of climate shocks, here strong ENSO events (El Niño Southern Oscillations), on sovereign risk. Local Projections are computed to assess the dynamic response of sovereign spreads to ENSO events. Results show that strong El Niño and La Niña shocks lead to a significant increase in sovereign spreads, but with different timing. Strong El Niño shocks are associated with a significant short-term increase in sovereign spreads, while strong La Niña events are associated with a delayed but significant increase in sovereign spreads after a short-term decrease. Thus, our results suggest a potential asymmetry in the effect of these strong ENSO events on sovereign risk. We also highlight high volatility in the dynamics of sovereign spreads, which may reflect an overreaction of investors faced with the high degree of uncertainty generated by the economic and financial consequences associated with strong ENSO events. Complementary time-series estimates suggest that Costa Rica and Peru are especially subject to these effects. Overall, our results provide a warning about the fact that, in the case of Latin American countries, weather shocks associated with strong ENSO events have adverse macroeconomic and financial consequences that can lead to an increase in sovereign risk, hinder their government's ability to act as a 'climate rescuer' of last resort, and may be aggravated in the future by climate change.

3. The Climate Financial Vicious Circle: Concepts and Challenges (Original title in French: Le cercle vicieux financier climatique : concepts et enjeux

This paper presents a review of the empirical literature highlights how climate risks affect the stability of financial institutions through their interaction with financial risks. Banking instability arises due to the intensification of financial risks related to climate hazards, which are further exacerbated by factors such as economic development, prudential regulation, and the specific characteristics of banks and their counterparties. In the second part, aligned with the principles of the financial accelerator theory, my findings reveal that banking instability prompts financial institutions to impose tighter credit constraints on agents most vulnerable to these shocks. This, in turn, triggers a slowdown in economic activity. Consequently, a vicious cycle emerges: a self-reinforcing contraction in access to credit markets leads to underinvestment in climate adaptation and mitigation projects. Moreover, the most vulnerable agents, heavily reliant on bank financing, risk becoming trapped in a 'climate vulnerability trap.'

1. Macroeconomics (Undergraduate Year 1 – Course in French)

Course Coordinator: Dr. Gnimassoun (blaise.gnimassoun@univ-lorraine.fr)

Summary: This course introduces first-year undergraduate students to macroeconomic analysis. It begins with an introductory section explaining the scope and key concepts of macroeconomics. Subsequently, it examines behavioral relationships in economics, focusing on consumption and investment functions, along with the controversies surrounding them. The course also briefly explores the role of government expenditure and the connection between fiscal policy and public debt. Finally, it concludes with a synthetic section on short-term macroeconomic equilibrium based on IS-LM models. This final section not only synthesizes the preceding parts but also serves as an introduction to the second-year macroeconomics course.

Organization: 10 tutorial sessions, each lasting 1 hour and 30 minutes.

2. The Economics of Money and Banking (Undergraduate Year 2 – Course in French)

Course Coordinator: Dr. Mathonnat (clement.mathonnat@univ-lorraine.fr)

Summary: This course provides an introduction to monetary, banking, and financial economics. Topics include contemporary financial systems and the role of banks. The course then examines money, its characteristics, historical forms, measurement, and monetary creation. The third section focuses on the specifics of banking activities and their role in monetary creation. It also analyzes monetary theories (classical, neoclassical, Keynesian, and monetarist), particularly regarding money demand and its impact on the economy. Lastly, the course explores financial and banking crises, their causes, and the economic policies that can mitigate their consequences of financial crises.

Organization: 10 tutorial sessions, each lasting 1 hour and 30 minutes.

3. Financial Markets and Assets (Undergraduate Year 3 – Course in French)

Course Coordinator: Pr. Eboue (chicot.eboue@univ-lorraine.fr)

Summary: This course introduces theoretical concepts related to financial markets and assets. Topics covered include portfolio choices (portfolio diversification), financial asset valuation (CAPM), and valuation of options and derivatives (Black-Scholes model).

Organization: 8 tutorial sessions, each lasting 1 hour and 30 minutes.

4. Economic Growth (Undergraduate Year 3 - Course in French)

Course Coordinator: Dr. Acurio Vasconez (veronica.acurio-vasconez@univ-lorraine.fr)

Summary: This course addresses questions such as: why do some countries grow faster than others? Can a developing country catch up with a developed one? The course presents key economic theories of growth, offering students a framework for critically understanding how economists analyze this phenomenon. The focus is on the Solow-Swan growth model and endogenous growth theory, which form the foundation of modern economic growth analysis.

Organization: 8 tutorial sessions, each lasting 1 hour and 30 minutes.

5. Advanced Macroeconomic (Undergraduate Year 3 – Course in French)

Course Coordinator: Dr. Acurio Vasconez (veronica.acurio-vasconez@univ-lorraine.fr)

Summary: This course presents key economic theories related to economic fluctuations. It explores the microeconomic and macroeconomic foundations of macroeconomic models, focusing on real business cycle theories, such as the Real Business Cycles (RBC) model. Understanding these theories provides students with a framework to critically analyze short-term economic fluctuations and cycles.

Organization: 8 tutorial sessions, each lasting 1 hour and 30 minutes.