

Franck Xavier SIGNE

Curriculum Vitae

Yaounde
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Award of Conference Grant

- 2025 **Lindau Nobel price Meeting, Germany**
- 2023 **ICDE Paris School of Economics, France**
- 2023 **Africa Meeting of the Econometric Society , Nairobi, Kenya**
- 2023 **CSAE University of Oxford, United Kingdom**

RESEARCH INTERESTS

, *Dynamic Stochastic Model, econometrics, macroeconomic policies, machine learning, deep learning, finance, climate change and inequality in developed and developing countries*

EDUCATION AND CERTIFICATE

- 2019-2023 **Doctorate in Economics, Option: Economic and Financial Engineering. First class honours , CREM research unit (6211 UMR CNRS) Centre for Research in Economics and Management, University of Rennes and University of Yaounde II, Thesis title: "Three Essays on Monetary Policy with Heterogeneous Agent: Analysis using a DSGE model"**, supervised by **Professor Jean Christophe POUTINEAU and Professor Jean-Marie GANKOU** , Link : <https://theses.hal.science/tel-04909306/>
- 2016-2017 **Master's degree in Banking and Finance, option: Economic and Financial Engineering, University of Rennes 1. With honours**
- 2015-2017 **Master's degree in Applied Economics, option: Economic and Financial Engineering, University of Yaounde II Soa. With honours**
- 2012-2015 **Bachelor in economics and management, option: Economic and Financial Engineering, University of Yaounde II. With honours**
- 2011-2012 **Mathematics and Physical Sciences Baccalaureate, Lycée de Ngouesso Ngoulmekong**

PROFESSIONAL EXPERIENCES

EDUCATION

- 2025-present **Assistant Lecturer, National Advanced School of Engineering, Department: Modeling and Industrial Applications , University of Yaounde I.**
- 2018-present **Practical Software and Programming Seminar DSGE, Master 2 Mathematical Economics and Econometrics, option: Economic and Financial Engineering , Faculty of Economics and Management University of Yaounde II Soa.**

- 2019-2020 **Instructors in quantitative techniques, Faculty of Economics and Management , University of Yaounde II Soa, Cameroon.**

Bachelor 1, Introduction to computer programming; Descriptive statistics.

Bachelor 2, Computer programming; Mathematics algebra and analysis; Inferential statistics.

Bachelor 3, Financial mathematics; Dynamic mathematics; Stock market; Macrodynamics.

- 2018-2019 **Lecturer in dynamic mathematics , Yaounde Higher School of Economics and Management**

PRATICS

- 2025 **Selected to 8th Lindeau Nobel Price Meeting in Economic Sciences**

- 2024 **Reviewer, Computational Economics review**

- 2024 **Selected of Econometric Society Summer School in Dynamic Structural Econometrics (University of Wisconsin-Madison US), Course Program Policy Evaluation and Heterogeneity Measurement**

- 2023 **Econometric Society Summer School in Dynamic Structural Econometrics (University of Lausanne Switzerland)**, *The aim of this school was to train the best modelling students in the world in the use of Artificial Intelligence in the construction, resolution and estimation of structural econometric models.*
- 2019-2023 **CREM (University of Rennes, France)** , *Modelling and estimation of DSGE models, As part of our thesis, we built and estimated three DSGE models, for the Euro area, CEMAC and the US, at the Centre de Recherche en Economie et Management (CREM) of the University Bretagne Loire*
- 2023-2026 **Member of the Econometry Society**
- 2023 **World Bank Offices in Yaounde**, *Workshop on the evaluation of the impact of the adaptive social safety nets and economic inclusion project , This study made it possible to carry out an evaluation of the impact of the financial support that the World Bank can provide to improve the incomes of young Cameroonian*
- 2021 **Dynare Summer School 2021 (Ecole Normale de Paris)**, *The aim of this school was to train PhD students in macroeconomics in the modelling and estimation of DSGE models. More specifically, it focused on perfect forecasting of DSGE models, approximation methods, parameter identification techniques, estimation methods and non-linear parameter filters, methods for analysing the identification and sensitivity of DSGE models and, finally, macroeconomic processes.*

LABORATORY

- 2018-2024 **Associate researcher at Centre de Recherche en Economie et Management (CREM) University of Rennes.**
- 2018-present **Associate researcher at the Laboratoire d'Analyses et de Recherche en Economie Mathematique (LAREM) University of Yaounde II**

RESEARCH

PUBLISH

- 1 **The role of income inequality in the conduct of monetary policy in the CEMAC zone : what can DSGE models with heterogeneous agents teach us ?** Revue d'économie du développement Volume 35, Issue 3-4, July 2023 with Jean Christophe POUTINEAU and Jean-Marie GANKOU
- 2 **Impact of productivity shock on household welfare in AfCFTA : a GSSA method.** SN Bus Econ 5, 50 (2025). <https://doi.org/10.1007/s43546-025-00817-8>

WORKING PAPERS

- 3 **Tax Policy with Heterogeneous Agents, Corruption and Tax Evasion in Developing Countries : case of Cameroon.** Submitted
- 4 **Monetary policy in a small open economy with climate concerns: the consequences of household heterogeneity.** with Jean Christophe POUTINEAU
- 5 **Monetary Policy with Heterogeneous Agents in developing countries : The Case of CEMAC zone.** with Jean Christophe POUTINEAU and Jean-Marie GANKOU. Revised and Resubmitted
- 6 **An Estimated Two-Country DSGE Model to Analyse Monetary Policy with Heterogeneous Agents : Euro Area and the US Economy.** with Jean Christophe POUTINEAU and Jean-Marie GANKOU.

WORK IN PROGRESS

- 7 **Exploring Machine Learning Models to Analyse Financial Inclusion in Africa.**
- 8 **A DSGE model to analyze monetary policy in CEMAC area : what does Deep Learning bring?**
- 9 **An agent-based model to analyse Climate Change in the Continental Free Trade Area (AfCFTA).**

INVITATION TO PRESENT CONFERENCE PAPERS

- 2022 **Institute of Statistical, Social and Economic Research [ISSER], University of Ghana and the Centre for the Study of African Economies [CSAE], University of Oxford**
- 2023 **Africa Meeting of the Econometric Society, Nairobi, Kenya**
- 2023 **CSAE Conference 2023: Economic Development in Africa Centre for the Study of African Economies, University of Oxford**

- 2023 International Conference on Development Economics (ICDE), Paris School of Economics
- 2024 World Bank Land Conference 2024, World Bank Group
- 2024 French/Japanese Conference on Asian and International Economies in an Era of Globalization, Aix Marseille School of Economics
- 2024 Deuxieme edition de la Conference Internationale euro africaine. Université Cheikh Anta Diop de Dakar

SELECTION CONFERENCES AND WORKSHOPS

- 1 2021, Dynare Summer School 2021, Dynare Summer School
- 2 2022, Economic Development in Africa, Institute of Statistical, Social and Economic Research [ISSER], University of Ghana and the Centre for the Study of African Economies [CSAE], University of Oxford
- 3 2023, World Bank Offices in Yaounde
- 4 2023, CSAE Conference : Economic Development in Africa, University of Oxford
- 5 2023, Africa Meeting of the Econometric Society, Nairobi
- 6 2023, International Conference on Development Economics (ICDE), Paris School of Economics
- 7 2023, Econometric Society Summer School in Dynamic Structural Econometrics
- 8 2024, World Bank Land Conference 2024
- 9 2024, French/Japanese Conference on Asian and International Economies in an Era of Globalization
- 10 2024, Econometric Society Summer School in Dynamic Structural Econometrics
- 11 2024, 2eme edition de la Conference Internationale euro africaine Dakar
- 12 2025, I have been selected to participate to 8th Linseau Nobel Price Meeting

SKILLS

COMPUTING

Program: Matlab, Dynare, VBA, Python and Jupyter notebook

Other: Latex

Office: Word, Excel and Power Point

Browsers: Internet Explorer, Firefox Mozilla and Google Chrome

TECHNICAL

- Collecting relevant economic information and building and managing databases.
- Analysing and forecasting economic and market trends (commodities, foreign exchange, financial assets, etc.) using the tools and frameworks of macroeconomics and financial markets.
- Carrying out economic (macro, sectoral, etc.) and financial studies and forecasts with a view to informing the strategic decisions of their own department and/or their clients.
- Carry out appropriate statistical processing (data analysis, econometrics, etc.)
- Monitor technological developments in economic and financial theory, statistical data processing and modelling methods.
- Presenting and discussing macro-economic and financial scenarios with customers and departments within the bank, customising analyses and forecasts for decision-making purposes.
- Follow methodological processes that respect the constraints of the scientific approach.
- Quantitatively assessing credit risks to assist in the decision to grant credit within the framework of prudential regulations for banks (Basel)
- Analysing, monitoring and managing the bank's overall risks (ALM)

BEHAVIOURAL

- Good quality of understanding

- **Strong discipline and love the job**
- **Good analytical and summarising skills**

TIME PASS

Good quality of understanding
Strong discipline and love the job

LANGUAGE

French : Mother tongue

English : Fluent

REFERENCES

Professor Jean-Christophe POUTINEAU , University of Rennes , Phone : +33 223233358 / Email : jean-christophe.poutineau@univ-rennes1.fr

Professor Christophe TAVERA , University of Rennes , Phone : +33 223233522 / Email : christophe.tavera@univ-rennes1.fr

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