ALEXANDRE CARRIER

Curriculum Vitae

Personal Information

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RESEARCH INTERESTS

Monetary Economics & Macroeconomics, Heterogeneous Agents, Bounded Rationality

EDUCATION

Bielefeld University and University of Amsterdam *2019 - 2024*
Joint PhD in Economics
Supervisors: Prof. Herbert Dawid (Bielefeld University)
Prof. Cars Hommes (University of Amsterdam and Bank of Canada)

Paris-Dauphine University *2018 - 2019*
Master in Monetary and Financial Economics *with highest honours*: 17/20

Paris-Dauphine University *2017 - 2018*
Master in Economics and Financial Engineering

Goethe University, Frankfurt-am-Main - Paris-Dauphine University *2014 - 2017*
Bachelor in Applied Economics - Double-Degree

RELEVANT WORK EXPERIENCE

De Nederlandsche Bank *September 2023 - August 2024*

Research analyst in monetary policy research:

- Development of a suite of monetary policy models, to provide analysis and counterfactuals supporting policy discussions, under the supervision of Guido Ascari.
- Preparation of internal policy notes.

European Central Bank *August 2022 - August 2023*

PhD traineeship in the Directorate General Monetary Policy, within Senior Management

- Enhancing internal modelling tools: conducting policy analysis by generating counterfactual scenarios using a range of models (DSGE, VAR, models with de-anchored expectations).
- Supporting Senior Management in the preparation of policy work for the Governing Council.
- Assisting Senior Management for the content and design of external speeches and publications.

CEPII *April - July 2019*

Research assistant in the International Macroeconomics and Finance Department:

- Descriptive analysis of household surveys (HFCS, SCF).
- Assistance in the design of a heterogeneous agent model in continuous time.

TALKS

2023: ECB, Strategic Issue Section (*Frankfurt-am-Main*)
DNB internal seminar series (*scheduled*)

2022: AFSE annual congress (*Dijon*)
4th Behavioral Macro Workshop (*Bamberg*)
16th annual Dynare Conference (*Lancaster*)

2021: Computing in Economics and Finance (CEF 2021, *online*)
International Conference on Economic Modeling and Data Science (EcoMod 2021, *online*)
Center for Non-Linear Dynamics in Economics and Finance Seminar (*Amsterdam*)
PhD in Economics and Business seminar (*Amsterdam*)
Bielefeld Graduate School of Economics and Management (BiGSEM) colloquium

2020: Bielefeld Graduate School of Economics and Management (BiGSEM) colloquium

2019: CEPII Seminar, International Macroeconomics and Finance Department

JOB MARKET PAPER

"Assessing the aggregate and distributional implications of large-scale bond purchases in the euro area"

Abstract: This paper studies how central bank large-scale bond purchases (namely *Quantitative Easing*) affected euro area economic activity and income inequality, within a New Keynesian model with limited asset market participation. I estimate the model using Bayesian methods, considering the occasionally binding constraint on the policy rate and the *public sector purchase programme* (PSPP) implemented by the ECB in 2015. The results suggest that the PSPP has effectively affected both output and inflation. On income inequality, the impact was modest on average. However, it was non-linear, income inequality increased during the early stages of the program due to asset price effects. In contrast, the medium-term impact on income inequality was characterized by growth in labor income, which became the main driver. These results show that the distributional impact of QE is time-varying, due to differences in the responsiveness of income components.

WORK IN PROGRESS

"Optimal normalization policy under behavioral expectations"
joint with Kostas Mavromatis, (*De Nederlandsche Bank & University of Amsterdam*)

Abstract: In this paper, we analyze the optimal strategy for a central bank's normalization policy in response to a persistent inflationary shock within a model in which agents' expectations can become de-anchored. We show analytically that, when designing optimal policy, the trade-off changes when expectations are de-anchored and is more costly for economic activity. We characterize optimal policy rules using sufficient statistics, which map the causal effects of policy instruments on each target of the policymaker. Through the use of simulations, we derive optimal interest rates and Quantitative Tightening (QT henceforth) trajectories. We find that QT is less effective than the policy rate to stabilize inflation, and more costly for the output gap. When jointly determining interest rates and QT, we demonstrate that expectations have a limited impact on QT trajectories but a more significant influence on interest rates.

"Behavioral learning equilibria in a bond market with asset purchases"
joint with Cars Hommes (*University of Amsterdam & Bank of Canada*)

Abstract: This paper studies the effects of central banks' asset purchases on long-term government bond yields, in a model featuring investors who adopt a simple yet optimal AR(1) forecasting rule based on past data. By examining the convergence dynamics of agents towards a specific Behavioral Learning Equilibrium (BLE), we uncover the factors that shape the efficacy of these policies: financial market volatility and short-term interest rates. In periods characterised by low financial stress, agents' learning process leads to stable convergence, with forecasts exhibiting a near-unit root first-order autocorrelation coefficient. As a consequence, quantitative easing (QE) demonstrates significant and persistent effects on bond yields. However, in times of heightened financial volatility, multiple equilibria emerge, leading QE to have effects that vary from high to low persistence.

ADDITIONAL COURSEWORK

2021: **University of Oxford**, Tools for Macroeconomists (*Summer School*)
Tinbergen Institute, Advanced Topics in Macro I
(*Course on computational methods for incomplete market and HANK models*)
2020: **Tinbergen Institute**, Behavioral Macroeconomics and Complexity (*Summer School*)

PERSONAL SKILLS AND COMPETENCES

Languages: French (Native)
English (Fluent)
German (Working knowledge)

Computer skills: Matlab, Dynare, IRIS, Stata, Julia, Python, SAS, Eviews
Microsoft Office, LaTeX

REFERENCES

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