

Alessia Cafferata

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Date of birth: January 20th,
1991

Nationality: Italian

Current position: Assistant Professor (RTDa), University of Turin.

Research Experience

- 2020- Current Assistant Professor (RTdA), Department of Management, University of Turin.
- 2019-20 Post-doctoral research fellow, University of Siena. Project: “financial fragility and dynamic instability of the economic system”. Advisor: Prof. Serena Sordi. SSD: SECS-P/01.
- 2019 Research fellow, Liguria Ricerche S.p.A. Project: “social analysis of the impact of pathological gambling in Liguria”. Advisor: Prof. Luca Gandullia.

Education and Academic Qualifications

- 2023-2034 Italian National Scientific Qualification (Abilitazione Scientifica Nazionale) as Associate Professor of Economics, SECS-P/01 (from 05/06/2023 to 05/06/2034)
- 2015-2018 PhD in Economics, University of Genoa. Graduated in May 2019. Specialization: financial mathematics, computational finance, non-linear dynamics in economics. Dissertation title: *Quantitative Analyses on non-linearities in financial markets*. Supervisors: Prof. Marina Resta and Prof. Fabio Tramontana.
- 2013 – 2015 MSc in Economics and Finance, Economics track, University of Pavia. Graduated with distinction in July 2015. Dissertation title: “*A behavioural macromodel on the interactions between real and financial markets*”. Supervisor: Prof. Fabio Tramontana.

2010 – 2013 BSc in Business Sciences, University of Genoa. Graduated in October 2013. Dissertation title: “*ECB and FED: a comparison of the two institutions on the post-crisis policies*”. Supervisor: Prof. Marco Mazzoli.

Visiting Appointments

- Oct 23 Visiting scholar, CeNDEF, University of Amsterdam (The Netherlands).
- 2022 Visiting scholar, Economics School of Louvain, Catholic University of Louvain-la-Neuve (Belgium).
- 2017-2018 Visiting PhD student at CeNDEF, University of Amsterdam (The Netherlands).

Publications

Top-ranked publications (FASCIA A ANVUR - AREA 13)

- 2023 How robust is the natalist bias of pollution control?, with Marwil Dávila Fernandez, forthcoming on *Annals of Operations Research*. DOI: 10.1007/s10479-023-05448-6
- 2023 Taxation, health system endowment and institutional quality: “social media” perceptions across Europe, with Gianluca Cerruti and Giulio Mazzone, on *Journal of Economic Behaviour and Organization*, forthcoming.
- 2023 “How do you feel about going green? Modelling environmental sentiments in a growing open economy”, with Marwil Dávila Fernandez and Serena Sordi, on *Journal of Economic Interaction and Coordination*. DOI: 10.1007/s11403-022-00376-3.
- 2023 “Financial Fragility and Credit Risk: A Simulation Model”, with Simone Casellina, Simone Landini and Mariacristina Uberti, on *Communications in Nonlinear Science and Numerical Simulation*, 116, 106879. DOI: 10.1016/j.cnsns.2022.106879

- 2021 “(Ir)rational explorers in the financial jungle: modelling Minsky with heterogeneous agents“, with Marwil Dávila Fernandez and Serena Sordi, on *Journal of Evolutionary Economics*, 31(4), pp. 1157-1188. DOI: [10.1007/s00191-021-00743-6](https://doi.org/10.1007/s00191-021-00743-6);
- 2021 “Seeing what can(not) be seen: confirmation bias, employment dynamics and climate change“, with Marwil Dávila Fernandez and Serena Sordi, on *Journal of Economic Behavior and Organization*, 189, pp 567-586. DOI: [10.1016/j.jebo.2021.07.004](https://doi.org/10.1016/j.jebo.2021.07.004);
- 2019 “A financial market model with confirmation bias“, with Fabio Tramontana, on *Structural Change and Economic Dynamics*, December 2019, pp 252-259. DOI: [10.1016/j.strueco.2019.08.004](https://doi.org/10.1016/j.strueco.2019.08.004);

Publications in international scientific journals

- 2020 “Financial bubbles: A study of Co-Explosivity in the Cryptocurrency Market“, with Arianna Agosto, on *Risks*, 8(2), 34. DOI: [10.3390/risks8020034](https://doi.org/10.3390/risks8020034);
- Granted the second prize of the Risks 2021 Best Paper Awards.
- 2018 “Yield curve estimation under extreme conditions: do RBF networks perform better?“, with Pier Giuseppe Giribone, Marco Neffelli, Marina Resta, on Anna Esposito, Marcos Faundez-Zanuy, Carlo Francesco Morabito, Eros Pasero Edrs, *Multidisciplinary Approaches to Neural Computing/Vol. 69/ WIRN 2017*. DOI: [10.1007/978-3-319-95098-3_22](https://doi.org/10.1007/978-3-319-95098-3_22);
- 2017 “Yield curve estimation under extreme conditions: do RBF networks perform better?“, with Pier Giuseppe Giribone, Marco Neffelli, Marina Resta, on *Neural Advances in Processing Nonlinear Dynamic Signals*, Springer International Publishing.

Working papers

- 2022 Disposition effects in a financial market model with heterogeneous agents, with Fabio Tramontana, MPRA Paper number 113904. Submitted to *Economic Modeling*, under review.

Work in progress

- 2023 Heterogeneous expectations and heterogeneous anchoring in a NK framework, with N. Blampied and D. Radi.
- 2023 Inter-generational inequalities and endogenous growth: the role of informal job networks, with D. Ravasi and D. Radi.
- 2021 Learning to forecast: a lab-in-the field experiment with financial professionals, with C. Hommes, A. Bottasso and E. Guerci

Teaching experience

- 2022 Visiting Professor of *Population and Family Economics* (Master of Arts in Economics, class of 5 students), 12 hours, Economics School of Louvain, Catholic University of Louvain-la-Neuve.
- 2021-Currently Guest Lecturer of *Discrete Dynamical Systems in Economics* (1st year PhD course, program in Economics and Quantitative methods, class of ~ 8 students), 10 hours, Department of Economics, University of Genoa.
- 2020-Currently Lecturer of *Mathematics for Business* (undergraduate course, bachelor program in Business and Management, classes of ~ 270 students), Module of Financial Mathematics (5 CFU), Department of Management, University of Turin.
- 2021 Lecturer of *Mathematics for Business* (undergraduate course, bachelor program in Business and Management, classes of ~ 270 students), Module of Mathematics (5 CFU), Department of Management, University of Turin.
- 2019-2020 Teaching Assistant of *Mathematics for Business and Economics* (undergraduate course, bachelor program in Business and Management, class of ~ 60 students), SAA, University of Turin.
- 2018-2020 Adjunct Professor of *Political Economy* (undergraduate course, bachelor program in Law, classes of ~ 45 students), 6 CFU, Department of Law, University of Genoa.
- 2018 Teaching assistant of *Macroeconomics* (undergraduate course, bachelor program in Business Sciences and Economics, classes of ~ 250 students), Department of Economics, University of Genoa.

2016 – 2017 Teaching assistant of *Microeconomics* (undergraduate course, bachelor program in Business Sciences and Economics, classes of ~ 250 students), Department of Economics, University of Genoa.

Conferences, workshops and seminars

Presentations as a speaker

- 2023 XLVII AMASES- Italian Association for Mathematics Applied to Social and Economic Sciences- Annual meeting, University of Milano Bicocca. Contribution: *“Heterogenous expectations and heterogenous anchoring in a NK framework”*
- 2023 13th NED (Nonlinear Economic Dynamics) Bi-annual Conference, University of Agder (Norway). Contribution: *“Managing greenflation in an environmental DSGE model with heterogeneous expectations”*.
- 2022 63rd Annual Conference – Italian Economic Association Conference, University of Turin. Contribution: *“Learning equilibria with memory”*.
- 2022 Florence Workshop on Climate change and ecological behavior, University of Florence. Contribution: *“How robust is the natalist bias of pollution control?”*
- 2022 XLVI AMASES - Italian Association for Mathematics Applied to Social and Economic Sciences- Annual meeting, University of Palermo. Contribution: *“How robust is the natalist bias of pollution control?”*
- 2022 XI MDEF (Dynamic Models in Economics and Finance) Workshop, University of Urbino Carlo Bo. Contribution: *“How robust is the natalist bias of pollution control?”*
- 2022 DESF (Department of Economics, Statistics and Finance) Webinar, University of Calabria. Contribution: *“Disposition Effects and its Outcome on Endogenous Price fluctuations”*.

- 2021 62nd Annual Conference – Italian Economic Association Conference online. Contribution: *“Wealth taxation, health system endowment and quality of institutions: a “social” perception across Europe”*.
- 2021 XLV AMASES - Italian Association for Mathematics Applied to Social and Economic Sciences- Annual conference, remote mode. Contribution: *“Learning equilibria with memory”*.
- 2021 12 NED – Nonlinear Economic Dynamics- Conference, Catholic University of the Sacred Heart-Milan. Contribution: *“Learning equilibria with memory”*.
- 2020 61st Annual Conference – Italian Economic Association Conference online. Contribution: *“Seeing what can(not) be seen: confirmation bias, climate change and employment dynamics.”*
- 2019 “Minsky at 100: Revisiting the Financial Instability”, Catholic University of the Sacred Heart-Milan. Contribution: *“(Ir)rational explorers in the financial jungle: modelling Minsky with heterogeneous agents”*
- 2019 XLIII AMASES-Italian Association for Mathematics Applied to Social and Economic Sciences- Meeting, University of Perugia. Contribution: *“Disposition effects in a financial market model with heterogeneous agents”*
- 2018 X MDEF (Dynamic Models in Economics and Finance) Workshop, University of Urbino Carlo Bo. Contribution: *“A financial market model with confirmation bias”*
- 2018 CeNDEF Lunch Seminar, University of Amsterdam. Contribution: *“A financial market model with confirmation bias”*
- 2018 XVIII Quantitative Finance Workshop, University of Roma 3. Contribution: *“Interest rates term structure models and their impact on actuarial forecasting”*

Organization of scientific events

Co-organizer of the 13th Progress on Difference Equations (PODE) Conference, Catholic University of the Sacred Heart and University of Turin, Milan, 29-31 May 2023.

Co-organizer of the 18th SICC Tutorial Workshop “Topics in nonlinear dynamics: Smooth and Nonsmooth Maps” Catholic University of the Sacred Heart, University of Turin and Politecnico of Milan, 1 June 2023.

Member of the local organizing committee of the 12th Non-linear Economic Dynamics (NED) Conference, Catholic University of the Sacred Heart, Milan, 13-15 September 2021.

Summer Schools

- 2018 Summer School in “Modelling Emotion with Economic Theory – Psychological Game Theory”, International Association for Research In Economic Psychology (IAREP) e Society for the Advancement of Behavioural Economics (SABE).
- 2017 Summer School in “Machine Learning and Computational Intelligence”, DIBRIS, University of Genoa. Presentation of the contribution: “*Applications of Kohonen Maps in financial markets: design of an automatic system for the detection of pricing anomalies*”.
- 2017 Summer school in “Computational Econometrics”, Department of Economics, University of Salento.
- 2016 Summer school in “Panel Data Econometrics: Theory and Applications”, Italian Econometrics Society, Bertinoro.

Undergraduate and post-graduate supervision

- 2022 Supervisor of Nicolás Blampied, project fellow on the topic of “Macroeconomic models for financial instability and monetary policies” , University of Turin. SSD: SECS-S/06.
- 2022 Co-supervisor of Daniele Ravasi, PhD program in Economics and Political Economy, University of Genoa. SSD: SECS-S/06.
- 2020 Supervisor of Damien Grassi, bachelor’s degree in business law, University of Genoa. Dissertation title: “A comparison between MES

and Recovery Fund as non-conventional policy measures”.

Ad hoc reviewer

Review Editor on the Editorial Board of Artificial Intelligence in Finance.

Reviewers for Journal of Economic Psychology, Frontiers in Artificial Intelligence, Energies, International Economic Journal, Global Environmental Change.

Awards

- 2022 Winner of the Grant for Internationalization, University of Turin.
Research project: “Sviluppo di modelli finalizzati allo studio del rischio sistemico collegato al credito ed alla finanza”. Amount of the grant: 26.868,23 euros.
- 2022 Second prize of the Risks 2021 Best Paper Awards, MDPI.
- 2020 Best PhD dissertation award – School of Social sciences, University of Genoa.
- 2018 PSY-Games Experiment Grant Psychological Game Theory Summer School
- 2018 Winner of the IAREP/SABE scholarship for accommodation costs during Summer School in “Modelling Emotion with Economic Theory”, winner of the first prize of team-works competition.

Computer skills

Programming languages: Matlab, R.
Software: LaTeX, oTree, Chaos E&F, EViews.

Other professional experience

- 2015 – 2016 Intern, Financial Engineering Office, Carige Bank, Genoa. Tasks:

option and derivatives pricing, financial margin analysis,
financial modeling

Last update: September 28, 2023

Alexia Cofferato

