

# Alessia Cafferata

Email: [alessia.cafferata@unisi.it](mailto:alessia.cafferata@unisi.it)

Date of birth: January 20<sup>th</sup>, 1991

Nationality: Italian

## Education

- 2015-2018 PhD in Economics, University of Genoa. Graduated in May 2019. Specialization: financial mathematics, computational finance, non-linear dynamics in economics. Thesis title: *Quantitative Analyses on non-linearities in financial markets*. Supervisors: Dott. Marina Resta and Prof. Fabio Tramontana.
- 2017-2018 Visiting PhD student at CeNDEF, University of Amsterdam. Invitation of Professor Cars Hommes.
- 2013 - 2015 MSc in Economics and Finance, Economics track, University of Pavia. Graduated with distinction in July 2015. Thesis 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. Thesis title: *“ECB and FED: a comparison of the two institutions on the post-crisis policies”*. Supervisor: Prof. Marco Mazzoli.
- 2018 TOEFL iBT test, final score 93/120.

## Research interests

Experimental economics, nonlinear dynamics, computational finance, agent based models.

## Publications

- 2019 “*A financial market model with confirmation bias*”, with Fabio Tramontana, on “Structural Change and Economic Dynamics”, on December 2019, pages 252-259. DOI: [10.1016/j.strueco.2019.08.004](https://doi.org/10.1016/j.strueco.2019.08.004);
- 2017 “*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 *“The effects of negative nominal risk rates on the pricing of American Calls: some theoretical and numerical insights”*, with Pier Giuseppe Giribone and Marina Resta, on *Modern Economy* 8(7), July 2017, pp 878-887. DOI: [10.4236/me.2017.87061](https://doi.org/10.4236/me.2017.87061);

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 paper

2019 *(Ir)rational explorers in the financial jungle: modelling Minsky with heterogeneous agents* with M. Davila-Fernandez and S. Sordi.

2019 *“Disposition effects in a financial market model with heterogeneous agents”*, with Fabio Tramontana.

## Conferences, workshops and seminars

### Presentations

2019 XLIII AMASES-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 XVIII Quantitative Finance Workshop, University of Roma 3, contribution: *“Interest rates term structure models and their impact on actuarial forecasting”*

2017 27th Italian Workshop on Neural Networks, Vietri sul Mare, Salerno, Italy, contribution: *“Yield curve estimation under extreme conditions: do RBF networks perform better?”*.

## Summer Schools

- 2016 Summer School in “Modelling Emotion with Economic Theory”, International Association for Research In Economic Psychology (IAREP) e Society for the Advancement of Behavioural Economics (SABE). Winner of the IAREP/SABE scholarship for accomodation costs and winner of the first prize of team-works competition.
- 2017 Summer School in Machine Learning and Computational Intelligence, DIBRIS, University of Genoa, 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 "Panel Data Econometrics: Theory and Applications", Italian Econometrics Society, Bertinoro.

## Teaching experience

- 2019-2020 Adjunct Professor of Political Economy, Department of Law, University of Genoa.
- 2016 – 2017 Teaching assistant for Microeconomics (BSc Business Sciences- Economics Sciences)

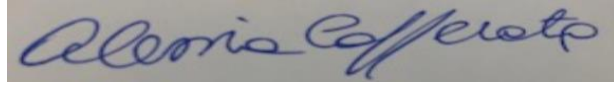
## Work experience

- 2019 Research fellow, Liguria Ricerche S.p.A. and University of Genoa. Task: social analysis of the impact of pathological gambling in Liguria. Advisor: Prof. Luca Gandullia.
- 2015 – 2016 Intern, Financial Engineering Office, Carige Bank, Genoa. Tasks: option and derivatives pricing, financial margin analysis, financial modelling.

## Computer skills

User of Matlab, R and Microsoft Excel. Basic user of Chaos E&F, oTree and Gretl.

Last updated: October 21th,  
2019



Alena Coffey

