

# Gerardo Ferrara

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## Professional Activities

PhD Economist, Capital Market Division, Bank of England, London, 2018-Present  
Associate Editor, Bank Underground, Bank of England, London, 2019-Present  
PhD Economist (secondment), International Directorate, Bank of England, London, 2018  
Research Economist (secondment), Research Hub, Bank of England, London, 2017-2018  
PhD Economist, Financial Market Infrastructure Directorate, Bank of England, London, 2014-2018  
PhD Intern, Macro-Financial Risks Division, Bank of England, London, 2014  
Fixed Term Contractor, Old Mutual, Financial Crime Prevention Group, London, 2014  
Quantitative Analyst, Sella Servizi Bancari, Milan, 2009-2010

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## Fields of Expertise

Macroprudential and microprudential policies and their interactions, international macroeconomics, market infrastructures, international financial integration, banking, systemic risk, political economy

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## Education

PhD, Statistics and Applied Mathematics, Vilfredo Pareto Doctorate in Economics, University of Turin & Collegio Carlo Alberto, 2014  
Special Student, Humanities and Social Sciences, California Institute of Technology, 2011  
MSc, Finance, Coripe Piemonte, 2009  
MSc, Finance and Banking, *Summa Cum Laude*, University of Rome Tor Vergata, 2007  
BA, Economics and Finance, *Summa Cum Laude*, University of Palermo, 2005

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## Academic Activities

### *Referee work*

Journal of Economic Dynamics and Control

### *Teaching Experience*

Lecturer, Network Analysis, Master in Complexity, Collegio Carlo Alberto, 2014

Lecturer, Statistical and Programming Tools for Economics Applications, PhD in Economics & Master in Complexity, Collegio Carlo Alberto, 2013

Faculty member in the Economics and Complexity Master program, University of Turin, 2013

Teaching Assistant, Macroeconomics, PhD & Master in Economics, Collegio Carlo Alberto, 2013

Lecturer, Mathematics for Economics, PhD in Economics, Collegio Carlo Alberto, 2012

### *Research Experience*

Research Assistant, "Wealth at retirement and savings adequacy project", Center for Research on Pension and Welfare Policies (CeRP) and European Commission, 2013-2014

Research Assistant, Prof. Giovanna Nicodano, University of Turin, 2013-2014

Co-organizer of the 6<sup>th</sup> Italian Doctoral Workshop in Applied Economics, University of Turin, 2013

Visiting Student Researcher, Prof. Marciano Siniscalchi, Northwestern University, 2011-2012

Visiting Student Researcher, Prof. Peter Bossaerts, California Institute of Technology, 2011

Research Assistant, University of Rome Tor Vergata and CASPUR, 2007

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## Papers

### *Publications*

"Multiplex network analysis of the UK OTC derivatives market", with Marco Bardoscia and Ginestra Bianconi, *International Journal of Finance & Economics*, 2019

"Systemic illiquidity in the interbank network", with Sam Langfield, Zijun Liu and Tomohiro Ota, *Quantitative Finance*, 2019

"The impact of de-tiering in CHAPS", with Evangelos Benos and Pedro Gurrola-Perez, *Journal of Financial Market Infrastructures*, 2018

"The small bank failures of the early 1990s: Lessons for today from a story of boom and bust", with Kushal Balluck, Artus Galiay and Glenn Hoggarth, *Bank of England Quarterly Bulletin*, 2016

*Working Papers*

- "Simulating liquidity stress in the derivatives market", with Marco Bardoscia, Nick Vause and Michael Yoganayagam, *Bank of England Working Paper Series*, 2019
- "Full payment algorithm", with Marco Bardoscia, Nick Vause and Michael Yoganayagam, *Working Paper*, 2019
- "The impact of leverage ratio on client clearing", with Francesc Rodriguez-Tous and Jonathan Smith, *Bank of England Working Paper Series*, under journal review, 2018
- "Central counterparty's auction design", with Xin Li and Daniel Marszalec, *Working Paper, Bank of England Working Paper Series*, under journal review, 2017
- "How Trade Matching Forms in the Credit Default Swap Market", with Jun Sung Kim, Bonsoo Koo and Zijun Liu, *Working Paper*, under journal review, 2017
- "Portfolio optimization under model uncertainty", *Job Market Paper*, 2013

*Work in Progress*

- "Understanding the equity swap market", with Christian T. Lundblad and Matt Roberts-Sklar, *Work in Progress*, 2019
- "Modelling System-Wide Fire Sales Contagion: Systemic Risk in Banks and Non-Banks", with Fabio Caccioli and Amanah Ramadiah, *Work in Progress*, 2019
- "The Cost of Insurance Regulation", with Angelo Ranaldo and Sven Klingler, *Work in Progress*, 2019

*Other Publications*

- "Margin calls! Cash shortfalls?", with Marco Bardoscia, Nick Vause and Michael Yoganayagam, *Bank Underground*, 2020
- "Macroprudential liquidity requirements", with Iñaki Aldasoro, Sam Langfield, Zijun Liu and Tomohiro Ota, *VOX CEPR Policy Portal*, 2019
- "Does the reliance of principal trading firms on banks pose a risk to UK financial stability?", with Jack Worlidge and Magda Rutkowska, *Bank Underground*, 2019
- "CCP porting, are there lessons to be learnt from elsewhere?", with Fernando Cerezetti, *Bank Underground*, 2019
- "New banking regulation: is it affecting the clearing of derivatives?", with Jonathan Smith, *Bank Underground*, 2019
- "Financial Stability Report and Record (July)", 2019
- "Analysis of central clearing interdependencies (2018)", jointly with BIS, FSB, IOSCO, 2018
- "FSB consults on the effects of reforms on infrastructure finance", FSB, 2018
- "Analysis of central clearing interdependencies (2017)", jointly with BIS, FSB, IOSCO, 2017
- "Bank liquidity requirements: How to get more bang for your buck", with Iñaki Aldasoro, Ester Faia, Sam Langfield, Zijun Liu and Tomohiro Ota, *Bank Underground*, 2016
- "International economics and finance, Lehman Brothers, Bernard Madoff, Freddie Mac, subprime

mortgage, financial derivatives, sovereign funds and Euro", *Grande Encyclopaedia GEDEA and Encyclopaedia Nova UTET, Novara, De Agostini, 2011*

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## Panel Discussions, Conferences, and Seminars

- 2019 OTC Derivative Regulatory Forum, Federal Reserve Bank of Chicago, Chicago (*Forthcoming*); LSE Systemic Risk Centre Seminar, London School of Economics, London; Cambridge Finance Seminar, University of Cambridge, Cambridge; Workshop on Systemic Risk, Banking and Insurance, and the Role of their Shadow Entities, Cass Business School, London; Conference on Impact of regulation in a changing world: innovations and new risks, Bank for International Settlements, Basel; 5<sup>th</sup> Symposium on Quantitative Finance and Risk Analysis, Kos; Analytical Tools for Financial Supervision and Risk Management, Centre for Central Banking Studies, Bank of England, London; Systemic risk assessment: identification and monitoring, Centre for Central Banking Studies, Bank of England, London; Managing Liquidity and Funding Risk, Centre for Central Banking Studies, Bank of England, London; Structure of Financial Markets, Centre for Central Banking Studies, Bank of England, London
- 2018 Paris Financial Management Conference, Paris; Conference on Economics of Payments IX, Bank for International Settlements, Basel; 4<sup>th</sup> Symposium on Quantitative Finance and Risk Analysis, Mikonos; Analytical Tools for Financial Supervision and Risk Management, Centre for Central Banking Studies, Bank of England, London; Internal Seminar, Bank for International Settlements, Basel; Financial Mathematics Practitioners Seminar, University College London, London; Modelling in the Bank, Bank of England, London
- 2017 Systemic Risk in the Interbank Network, South African Reserve Bank, Pretoria; Systemic Risk Assessment: Identification and Monitoring, Centre for Central Banking Studies, Bank of England, London; Analytical Tools for Financial Supervision and Risk Management, Centre for Central Banking Studies, Bank of England, London
- 2016 Financial Stability Team Presentation, HM Treasury, London; Workshop on the Modelling and Simulation of Payments and Other Financial System Infrastructures, Bank of Canada and the Canadian Payments Association, Ottawa; Structure of Financial Markets, Centre for Central Banking Studies, Bank of England, London; Showcase Event for Policy Makers, Bank of England, London
- 2015 9<sup>th</sup> International Conference on Computational and Financial Econometrics, London; 1<sup>st</sup> International Conference on Payments and Settlement, Bundesbank, Frankfurt; 13<sup>th</sup> Simulator Seminar on Quantitative Analysis of the Payment and Securities Settlement Systems, Bank of Finland, Helsinki; Systemic Risk Assessment: Identification and Monitoring, Centre for Central Banking Studies, Bank of England, London; 2<sup>nd</sup> International Conference of the Society for Economic Measurement, OECD, Paris; Lunch Seminar, Department of Computer Science, University College London, London
- 2014 Internal PhD Seminar, Financial Stability, Strategy and Risk Division, Bank of England, 2014
- 2013 Monday Lunch Seminar, Collegio Carlo Alberto, Turin; Lyon Workshop in Economics, Ecole Doctorale & Vilfredo Pareto Doctorate, Lyon
- 2011 Copula with Fractal Support, Dept. of Mathematics, California Institute of Technology, Pasadena; Stochastic Control, Department of Mathematics, University of Turin, Turin

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## **Training**

Panel Data Methods course with Jeffrey M. Wooldridge, UCL Economics Department, 2019  
ECB-Global model for the euro area, the US, the UK, Japan, China, oil-producing economies and the rest of the world, International Directorate, Bank of England, 2018  
Spanish course, Instituto Cervantes, 2017-Present  
Bank capital management, Adeva & Hemsley Fraser, 2017  
Microeconometrics summer school, Barcelona Graduate School of Economics, 2016  
Summer academy on advanced stochastic methods to model risk, Ulm University, 2012  
Advanced risk and portfolio management bootcamp, New York Univeristy, 2010  
Advanced statistics and data mining summer school, Universidad Politécnica de Madrid, 2010

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## **Honors, Awards, and Fellowships**

Best paper on regulation, 27th finance forum, 2019  
Junior Research Fellow, Netspar, Tilburg, 2013-2014  
Doctoral Scholarship, University of Turin, 2010-2012  
DAAD Scholarship funded by the German Foreign Office, University of Ulm, 2012  
Master in Finance Scholarship, Coripe Piemonte, 2008-2009  
Master of Science Scholarship, University of Rome Tor Vergata, 2005-2007

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## **Additional Skills**

Languages: Italian (native speaker), English (fluent), and Spanish (advanced level)  
Software: Matlab, Bloomberg, MS Office, VBA, EViews, SPSS, Stata, R, and Python