Contacts

Email: m.barigozzi@lse.ac.uk

Webpage: http://www.barigozzi.eu

Office: Department of Statistics, London School of Economics and Political Science
Houghton Street, WC2A 2AE, London, United Kingdom

Personal details

Place of birth: Milano, Italy Citizenship: Italian

Present

London School of Economics and Political Science (LSE), Department of Statistics, Aug 2017-today
Associate Professor

Past

London School of Economics and Political Science (LSE), Department of Statistics, Sep 2010-Jul 2017
Assistant Professor

Université libre de Bruxelles, European Center for Advanced Research in Economics and Statistics (ECARES), Dec 2008-Aug 2010
Post-doctoral Researcher

Max Planck Institut für Ökonomik, Evolutionary Economics Group, Jena, May-Oct 2008
Post-doctoral Researcher

Sant'Anna School for Advanced Studies, Laboratory of Economics and Management (LEM), Pisa, Oct 2005-Feb 2008
Research Fellow ("Assegno di ricerca")

Università la Sapienza, Dipartimento di Scienze Economiche, Roma, Oct 2007-Mar 2008
Research Assistant

Free University of Bözen, School of Economics and Management, May-Sep 2004
Research Assistant

Education

Ph.D. Economics (supervisor: Marco Lippi), Apr 2008
Sant'Anna School for Advanced Studies, Istituto di Economia, Pisa

M.Sc. Modelling and Simulation of Complex Realities, Sep 2003
International School for Advanced Studies (ISAS) and International Center for Theoretical Physics (ICTP), Trieste

M.Sc. ("Laurea") in Physics (Mathematical Physics and Astrophysics), May 2002
Università degli studi di Milano

Visiting

Università Bocconi, Bocconi Institute for Data Science and Analytics (BIDSA), Milano, Sep-Dec 2017, Apr 2018
Università di Bologna, Dipartimento di Scienze Statistiche "Paolo Fortunati", Oct 2017
Princeton University, Department of Operational Research and Financial Engineering (ORFE), Oct-Nov 2013
Universitat Pompeu Fabra, Departament d'Economia i Empresa, Barcelona, Sep 2013
Universiteit Maastricht, Department of Quantitative Economics, Feb 2010
Columbia University, Business School, New York, Oct 2006-Apr 2007
Universidad Carlos III, Departamento de Estadística, Madrid, Oct-Dec 2005

Short visits

Isaac Newton Institute for Mathematical Sciences, Cambridge, Aug 2016; The Chinese University of Hong Kong, Department of Statistics, Jun 2016; Federal Reserve Board of Governors, Washington, DC, May 2016, May 2017; Southwestern University of Finance and Economics, Chengdu, May 2015; University of Pennsylvania, Department of Economics, Philadelphia, Oct 2013; Institut für Höhere Studien (IHS), Vienna, Mar 2013; National University of Singapore, Institute for Mathematical Sciences, Jun 2012

Professional qualifications

Qualification to Full Professor by the Italian Ministry of Education ("Abilitazione Scientifica Nazionale" Prima Fascia, Settori 13/A5 Econometria, Mar 2018; 13/D2 Statistica Economica, Aug 2018; 13/A2 Politica Economica, Aug 2018); Postgraduate Certificate in Higher Education by the UK Higher Education Academy, Dec 2013

External faculty

Université libre de Bruxelles, ECARES, 2010-today; Sant'Anna School for Advanced Studies, Istituto di Economia, Pisa, 2016-2018; African Institute for Mathematical Sciences (AIMS), Senegal, 2016; Sciences Po, Paris School of International Affairs, 2014-2015

Other affiliations and professional roles

International Statistical Institute (ISI), elected member; Euro Area Business Cycle Network (EABCN), fellow

Publications in journals

"NETS: Network Estimation for Time Series", with C. Brownlees, *Journal of Applied Econometrics*, 2018, forthcoming

"Power-Law Partial Correlation Network Models", with C. Brownlees, G. Lugosi, *Electronic Journal of Statistics*, 2018, 12(2), 2905-2929. https://doi.org/10.1214/18-EJS1478

"Simultaneous Multiple Change-Point and Factor Analysis for High-Dimensional Time Series", with H. Cho, P. Fryzlewicz, *Journal of Econometrics*, 2018, 206(1), 187-225. https://doi.org/10.1016/j.jeconom.2018.05.003

"Identification of Global and Local Shocks in International Financial Markets via General Dynamic Factor Models", with M. Hallin, S. Soccorsi, *Journal of Financial Econometrics*, 2018, available online. https://doi.org/10.1093/jjfinec/nby006

"Intellectual Property Rights, Imitation, and Development. The Effect on Cross-Border Mergers and Acquisitions", with M. Campi, M. Dueñas, G. Fagiolo, *The Journal of International Trade & Economic Development*, 2018, available online. https://doi.org/10.1080/09638199.2018.1518477

"On the Stability of Euro Area Money Demand and its Implications for Monetary Policy", with A. Conti, *Oxford Bulletin of Economics and Statistics*, 2018, 80(4), 755-787. https://doi.org/10.1111/obes.12239

"Spatio-Temporal Patterns of the International Merger and Acquisition Network", with M. Dueñas, R. Mastrandrea, G. Fagiolo, *Scientific Reports*, 2017, 7(1), 10789. https://doi.org/10.1038/s41598-017-10779-z

"Generalized Dynamic Factor Models and Volatilities: Estimation and Forecasting", with M. Hallin, *Journal of Econometrics*, 2017, 201(2), 307-321. https://doi.org/10.1016/j.jeconom.2017.08.010

"A Network Analysis of the Volatility of High-Dimensional Financial Series", with M. Hallin, *Journal of the Royal Statistical Society - series* C, 2017, 66(3), 581-605. https://doi.org/10.1111/rssc.12177

"Identifying the Independent Sources of Consumption Variation", with A. Moneta, *Journal of Applied Econometrics*, 2016, 31(2), 420-449. https://doi.org/10.1002/jae.2441

"Generalized Dynamic Factor Models and Volatilities: Recovering the Market Volatility Shocks", with M. Hallin, *The Econometrics Journal*, 2016, 19(1), C33-C60. https://doi.org/10.1111/ectj.12047

"Disentangling Systematic and Idiosyncratic Dynamics in Panels of Volatility Measures", with C. Brownlees, G. Gallo, D. Veredas, *Journal of Econometrics*, 2014, 182(2), 364-384. https://doi.org/10.1016/j.jeconom.2014.05.017

"Do Euro Area Countries Respond Asymmetrically to the Common Monetary Policy?", with A. Conti, M. Luciani, *Oxford Bulletin of Economics and Statistics*, 2014, 76(5), 693-714. https://doi.org/10.1111/obes.12038

"The Common Component of Firm Growth", with L. Alessi, M. Capasso, *Structural Change and Economic Dynamics*, 2013, 26, 73-82. https://doi.org/10.1016/j.strueco.2012.11.002

"The Distribution of Consumption-Expenditure Budget Shares", with L. Alessi, M. Capasso, G. Fagiolo, *Structural Change and Economic Dynamics*, 2012, 23, 69-91. https://doi.org/10.1016/j.strueco.2011.09.003

"Non-Fundamentalness in Structural Econometric Models: A Review", with L. Alessi, M. Capasso, *International Statistical Review*, 2011, 79(1), 16-47. https://doi.org/10.1111/j.1751-5823.2011.00131.x

"Identifying the Community Structure of the International Trade Multi Network", with G. Fagiolo, G. Mangioni, *Physica A*, 2011, 390(11), 2051-2066. https://doi.org/10.1016/j.physa.2011.02.004

"Immigrant's Legal Status, Permanence in the Destination Country and the Distribution of Consumption Expenditure", with B. Speciale, *Applied Economics Letters*, 2011, 18(14), 1341-1347. https://doi.org/10.1080/13504851.2010.537618

"Improving Penalization when Determining the Number of Factors in Approximate Static Factor Models", with L. Alessi, M. Capasso, *Statistics and Probability Letters*, 2010, 80(23-24), 1806-1813. https://doi.org/10.1016/j.spl.2010.08.005

"The Multi-Network of International Trade: A Commodity-Specific Analysis", with G. Fagiolo, D. Garlaschelli, *Physical Review E*, 2010, 81(4), 046104. https://doi.org/10.1103/PhysRevE.81.046104

"On the Distributional Properties of Household Consumption Expenditures: The Case of Italy", with L. Alessi, M. Capasso, G. Fagiolo, *Empirical Economics*, 2010, 38(3), 717-741. https://doi.org/10.1007/s00181-009-0287-5

"On Approximating the Distributions of Goodness-of-fit Test Statistics Based on the Empirical Distribution Function: The Case of Unknown Parameters", with L. Alessi, M. Capasso, G. Fagiolo, *Advances in Complex Systems*, 2009, 12(2), 157-167. https://doi.org/10.1142/S0219525909002131

Publications in conference proceedings

"Networks Estimation in Econometrics", with Christian Brownlees, in Advances in Latent Variables, 2013, Vita e Pensiero, Milan, Italy, Proceedings of Convegno Società Italiana di Statistica, Brescia. ISBN 978-88-343-2556-8

"Community Structure in the Multi-Network of International Trade", with Giorgio Fagiolo, Giuseppe Mangioni, in Complex Networks, Communications in Computer and Information Science, vol 116, 2010, Springer, Berlin, Heidelberg, Proceedings of Second International Workshop, CompleNet 2010, Rio de Janeiro, Brazil. https://doi.org/10.1007/978-3-642-25501-4

"Dynamic Factor Models for Forecasting and Structural Identification", in Mathematisches Forschungsinstitut Oberwolfach Reports 05, 2010, European Mathematical Society, Zürich. https://doi.org/10.4171/OWR/2010/05

Working papers (*submitted)

"Measuring US Aggregate Output and Output Gap Using Large Datasets" *, with M. Luciani

"Determining the Dimension of Factor Structures in Non-Stationary Large Datasets" *, with L. Trapani

"Sequential Testing for Structural Stability in Approximate Factor Models" *, with L. Trapani

"Non-Stationary Dynamic Factor Models for Large Datasets" *, with M. Lippi, M. Luciani, Finance and Economics Discussion Series 2016-024, Board of Governors of the Federal Reserve System. http://dx.doi.org/10.17016/FEDS.2016.024

"Dynamic Factor Models, Cointegration, and Error Correction Mechanisms" *, with M. Lippi, M. Luciani, Finance and Economics Discussion Series 2016-018, Board of Governors of the Federal Reserve System. http://dx.doi.org/10.17016/FEDS.2016.018

"Estimation and Forecasting in Large Datasets with Conditionally Heteroskedastic Dynamic Common Factors", with L. Alessi, M. Capasso, European Central Bank Working Paper, No. 1115, 2009. ISSN 1725-2806

Policy notes

"Do National Account Statistics Underestimate US Real Output Growth?", with M. Luciani, FEDS Notes, Board of Governors of the Federal Reserve System, Washington, 2018. https://doi.org/10.17016/2380-7172.2116

"There is a Significant Divide in How Countries of the Eurozone's North and South React to Changes in Monetary Policy", European Politics and Policy, European Institute, LSE, 2013. http://bit.ly/1bMtF7f

Conferences and workshops (*invited)

2018

II Conference on Forecasting at Central Banks, Bank of England, London; Joint meeting of the Italian Mathematical Union and the Polish Mathematical Society, Wrocław*, Sep 2018; IV Conference of the International Society of Non-Parametric Statistics*, Salerno, June 2018; Macroeconomic and Financial Time Series Analysis Workshop, Lancaster University Management School*, May 2018; Big Data in Financial Markets, INET, Cambridge University*, May 2018

2017

New Developments in Econometrics and Time Series, EIEF, Roma*, Nov 2017; European Meeting of Statisticians (EMS), University of Helsinki*, Jul 2017; III Vienna Workshop for High Dimensional Time Series in Macroeconomics and Finance, IHS, Vienna, Jun 2017; Big Data in Predictive Dynamic Econometric Modeling, University of Pennsylvania, Philadelphia*, May 2017; Inference in Large Econometric Models, CIREQ, Montréal*, May, 2017

2016

X International Conference on Computational Financial Econometrics (CFE), Sevilla*, Dec, 2016; V International Conference in Memory of Carlo Giannini, Università di Bergamo, Nov 2016; Network Science and its Applications, Isaac Newton Institute for Mathematical Sciences, Cambridge*, Aug 2016; IV Institute of Mathematical Statistics Asia Pacific Rim Meeting (IMS-APRM), The Chinese University of Hong Kong*, Jun 2016; New Trends and Developments in Econometrics, Banco de Portugal, Lisbon, Jun 2016

2015

IX International ERCIM Conference on Computational and Methodological Statistics, London*, Dec, 2015; Econometrics of Networks, INET, Cambridge University*, Jun 2015; Statistical Finance, Southwestern University in Finance and Economics, Chengdu*, May 2015; Modeling High-Dimensional Dynamic Networks in Economics and Finance, University of Pennsylvania, Philadelphia*, Mar 2015; VI Conference on Complex Networks, New York, Mar 2015

2014
VIII International Conference on Computational Financial Econometrics (CFE), Pisa*, Dec 2014; Nonlinear Time Series Analysis Thresholding and Beyond, in celebration of Howell Tong's 70th birthday, LSE*, Sep 2014; Dynamic Factor Models and Structural VAR Analysis, in celebration of Marco Lippi's 70th birthday, EIEF, Roma*, Sep 2014; X BMRC-DEMS Conference on Macro and Financial Econometrics, Brunel University, London, May 2014; IV Conference in Memory of Carlo Giannini, Università di Pavia, Mar 2014
2013
New Developments in Econometrics and Time Series, ECARES, Université libre de Bruxelles*, Sep 2013; Advances in Latent Variables, Methods, Models and Applications, Società Italiana di Statistica, Università di Brescia*, Jun 2013; V Italian Congress of Econometrics and Empirical Economics (ICEEE), Università di Genova, Jan 2013
2012
New Developments in Econometrics and Time Series, EIEF, Roma*, Sep 2012; Financial Time Series, National University of Singapore*, Jun 2012; Statistical Models for Financial Data, Technische Universität Graz*, May 2012; III Conference in Memory of Carlo Giannini, Banca d'Italia, Roma, Apr 2012
2011
Workshop on Factor Models, Universitat Autònoma de Barcelona*, Dec 2011; V International Conference on Computational Financial Econometrics (CFE), London*, Dec 2011; Econometric and Statistical Modelling of Multivariate Time Series, Université catholique de Louvain-la-Neuve*, May 2011; Royal Economic Society Conference, Royal Holloway University, London, Apr 2011; IV Italian Congress of Econometrics and Empirical Economics (ICEEE), Università di Pisa, Jan 2011
2010
IV International Conference on Computational Financial Econometrics (CFE), London*, Dec 2010; XVI International Conference on Computing in Economics and Finance (CEF), City University, London, Jul 2010; Sir Clive Granger Memorial Conference, University of Nottingham, May 2010; Workshop on Semiparametric Modelling of Multivariate Time Series, Mathematisches Forschunginstitut Oberwolfach*, Jan 2010
2009
Interuniversity Attraction Pole Meeting, Katholike Universiteit Leuven*, Jul 2009; IV Bruxelles-Waseda Seminar on Time Series and Financial Statistics, ENSAI, Rennes*, Jun 2009; Workshop on Trade Networks, Sant'Anna School for Advanced Studies, Pisa*, Jan 2009
2008
International Conference on Factor Structures for Panel and Multivariate Time Series Data, Universiteit Maastricht, Sep 2008; XIV International Conference on Computing in Economics and Finance (CEF), Université de la Sorbonne, Paris, Jul 2008
2007
Multivariate Volatility Models, Universidad do Algarve, Faro, Jun 2007
2006
XXVI International Symposium on Forecasting, Santander, Jun 2006; Italian Congress on Time Series, Roma, Apr 2006

Seminar talks
2019
Economics Department, University of Southampton, Jan 2019
2018
Dipartimento di Politica Economica, Università Cattolica di Milano, Dec 2018; Essex Centre for Financial and Macro Econometrics, University of Essex, Nov 2018; Joint Research Centre, European Commission, Ispra, Nov 2018; Granger Centre for Time Series Econometrics, University of Nottingham, Oct 2018; Tinbergen Institute, University of Amsterdam and Vrije Universiteit Amsterdam, Oct 2018; Department of Economics, Lancaster University, May 2018; The Alan Turing Institute, London, Apr 2018; Banca d'Italia, Roma, Apr 2018; CREST, École Nationale de la Statistique et de l'Administration Économique, Paris, Feb 2018
2017
Dipartimento di Matematica, Università degli Studi di Milano, Nov 2017; Joint Research Centre, European Commission, Ispra, Nov 2017; Dipartimento di Economia, Università Ca' Foscari, Venezia, Nov 2017; Dipartimento di Scienze Statistiche, Università di Bologna, Oct 2017; Dipartimento di Economia, Università Bocconi, Oct 2017; Departamento de Estadística, Universidad Carlos III, Madrid, Apr 2017; CEIS, Università degli studi di Tor Vergata, Roma, Apr 2017; Cass Business School, City University of London, Mar 2017; Southampton Statistical Sciences Research Institute, S3RI, University of Southampton, Feb 2017; Economic Modelling and Forecasting Group, Warwick Business School, University of Warwick, Feb 2017; Now-Casting Economics Ltd., London, Jan 2017
2016
School of Economics and Finance, Queen Mary University of London, Dec 2016; Faculté d'Économie et Management, Université de Genève, Dec 2016
2015
Faculty of Mathematics and Statistics, Universität St.Gallen, May 2015; Department of Economics, University of Pennsylvania, Philadelphia, Mar 2015; Department of Mathematics, University of Bristol, Mar 2015
2014
Department of Economics, Mathematics and Statistics, Birkbeck College, London, May 2014; CASE, Humboldt-Universität zu Berlin, May 2014; Dipartimento di Economia, Università di Genova, Apr 2014; Dipartimento di Economia e Statistica, Università di Salerno, Apr 2014; Dipartimento di Economia, Università di Verona, Mar 2014

2013
ORFE, Princeton Unversity, Nov 2013; Departamento de Fundamentos del Análisis Económico, Universidad de Alicante, May 2013; Dipartimento di Economia, Università di Pisa, Apr 2013; IHS, Vienna, Mar 2013; Department of Medical Statistics, London School of Hygiene and Tropical Medicine, Mar 2013; Institut de Recherche en Statistique, Université libre de Bruxelles, Feb 2013
2012
Istituto di Economia, Sant'Anna School for Advanced Studies, Pisa, Sep 2012; Departament d'Economia i Empresa, Universitat Pompeu Fabra, Barcelona, May 2012; Department of Economics, University of Manchester, Mar 2012
2011
Departamento de Fundamentos del Análisis Económico, Universidad de Alicante, May 2011; Dipartimento di Economia, Università dell'Insubria, Varese, Mar 2011; Departments of Economics and of Statistics, LSE, Feb 2011
2010
ECARES, Université libre de Bruxelles, Mar 2010; Department of Statistics, LSE, Mar 2010; Institut de Recherche en Statistique, Université libre de Bruxelles, Feb 2010
2009
CORE, Université catholique de Louvain-la-Neuve, Oct 2009; Department of Quantitative Economics, Universiteit Maastricht, May 2009
2008
Institut de Recherche en Statistique, Université libre de Bruxelles, Dec 2008; Dipartimento di Matematica, Università degli Studi di Milano, Apr 2008; Chair of System Design, ETH, Zürich, Jan 2008; Evo Group, Max Planck Institut für Ökonomik, Jena, Jan 2008
2007
ECARES, Université libre de Bruxelles, Nov 2007

Teaching
PhD
Time Series (25hrs), Doctoral program in Economics, Sant'Anna School for Advanced Studies, Pisa, 2016-2017; Factor Models in Time Series (10hrs): Doctoral program in Economics, Sant'Anna School for Advanced Studies, Pisa, 2018, Doctoral program in Mathematics and Statistics, London Taught Course Centre, 2014-2015, Doctoral program in Economics, Universidad de Alicante, 2013; Dynamic Factor Models with Matlab (4hrs): Doctoral program in Statistics, The Chinese University of Hong Kong, 2016, Doctoral program in Economics, IHS, Vienna, 2013; Trade Networks (3hrs), Doctoral program in Economics, Universidad de Alicante, 2011; Modelling Volatility in Time Series (10hrs), Doctoral summer school of Econometrics, CIDE, Bertinoro, 2012-2014; Advanced Calculus (20hrs), Doctoral program in Economics, Sant'Anna School for Advanced Studies, Pisa, 2008
MSc
Factor Models in Time Series with Applications in Macroeconomics and Finance (15hrs), Methods Summer Programme, LSE, 2014-2016; Applied Econometrics (24hrs), Master in International Economic Policy, Paris School of International Affairs, Sciences Po, 2014-2015; Generalised Linear Modelling and Survival Analysis (20hrs), Master in Statistics, LSE, 2011-2014
Undergraduate
Time Series and Forecasting (20hrs), LSE, 2015-today; Probability, Distribution Theory, and Inference (20hrs), LSE, 2010-today

Referee (*multiple times)
The Annals of Statistics*, Journal of the American Statistical Association*, Journal of the Royal Statistical Society (series B* and C*), Journal of Econometrics*, The Review of Economics and Statistics, Biometrika, Statistica Sinica*, Journal of Banking and Finance, Journal of Business and Economic Statistics*, Journal of Applied Econometrics*, Econometrics Journal, Journal of Financial Econometrics*, Oxford Bulletin of Economics and Statistics*, Studies in Nonlinear Dynamics and Econometrics*, Scandinavian Journal of Statistics, Computational Statistics and Data Analysis*, Journal of Statistical Planning and Inference, Journal of Forecasting, Econometric Reviews*, International Journal of Forecasting*, Economics Bulletin*, Industrial and Corporate Change, Physica A, Journal of Korean Statistical Society, Statistical Papers, Econometrics and Statistics, North American Journal of Economics and Finance, Journal of Economic Interaction and Coordination

Editor
Associate Editor, Journal of Korean Statistical Society, 2014-2018

Scholarships and awards
Carlo Giannini Prize for the best paper in Macroeconometrics and Financial Econometrics, 2011; Bourse d'Excellence Wallonie Bruxelles International, 2008-2010; Doctoral Scholarship by Italian Ministry of Education, 2003-2006; Scholarship from International School for Advanced Studies (ISAS-SISSA), Trieste, 2002-2003

Conferences scientific committee and/or organizer
Workshop on High Dimensional Time Series in Macroeconomics and Finance, IHS, Vienna, scientific committee, 2019; Invited session "Econometric Analysis of the Business Cycle", CFE, Pisa, 2018; Workshop on High Dimensional Time Series in Macroeconomics and Finance, IHS, Vienna, scientific committee, 2017; International work-conference on Time Series, Universidad de Granada, scientific committee, 2017; Invited session "Macroeconometrics and Time Series", CFE, Sevilla, 2016; Invited session "High-Dimensional Models and Networks in Macroeconomics and Finance", CFE, London, 2015; Workshop on Complex Systems and Times Series, LSE, organiser, 2015; Workshop on High Dimensional Time Series in Macroeconomics and Finance, IHS, Vienna, scientific committee, 2015

Departmental duties

Organizer of the Joint Econometrics and Statistics Workshops, LSE, 2011-2018; Organizer of the Statistics Seminars, LSE, 2011-2012, 2018-2019; Responsible for MSc Admissions, LSE, 2016-today; Responsible for BSc Admissions, LSE, 2010-today

Referee for research centers

Ministero dell'Istruzione, dell'Universitá e della Ricerca (MIUR), Italia; Agence Nationale de la Recherche (ANR), France; Hong Kong Research Grants Council (RGC); Austrian Science Fund (FWF); Natural Sciences and Engineering Research Council of Canada (NSERC); National Center of Science and Technology Evaluation of Kazakhstan

Languages

Italian (native), English, French, Spanish

Programming skills

Matlab, R, Mathematica, EViews, Stata, Gauss, SPSS

PhD Students

Ali Habibnia, LSE, 2012-2017 (then Assistant Professor at Virginia Tech); Ragvir Sabharwal, LSE, 2015-2018 (expected); Filippo Pellegrino, LSE, 2017-2020 (expected); Gianluca Giudice, LSE, 2018-2021 (expected)