ANNEX A

UNIVERSITY OF MILAN

Selection procedure for recruiting full professors under art.18, paragraph 1 and 4, of Law No.240/2010 for competition sector13/D1 - Statistica, (scientific-disciplinary sector SECS-S/01 - Statistica) at the Department of Economics, Management and Quantitative Methods, (announcement published in Official Gazette No 93 of 5/12/2023) - Competition code 5428

MATTEO BARIGOZZI
CURRICULUM VITAE

PERSONAL DATA (DO NOT INCLUDE YOUR PERSONAL ADDRESS AND LANDLINE OR MOBILE PHONE NUMBER)

SURNAME	BARIGOZZI
NAME	MATTEO
DATE OF BIRTH	31/07/1975

QUALIFICATIONS

DOCTORAL DEGREE OR EQUIVALENT QUALIFICATION EARNED IN ITALY OR ABROAD

April 2008 Ph.D. Economics and Management. Scuola Superiore Sant'Anna, Istituto di Economia, Pisa.

DEGREE

May 2002 Laurea (Vecchio ordinamento) in Physics. Università degli studi di Milano.

Aug 2003 Diploma in Modelling and Simulation of Complex Realities.
International School for Advanced Studies (isas) and International Center for Theoretical Physics (ICTP), Trieste.

EMPLOYMENT

Dec 2019 – today Full Professor of Political Economy – Department of Economics, Università di Bologna.

Aug 2017-Dec 2019 – Associate Professor of Statistics – Department of Statistics, London School of Economics (LSE).

Sep 2010-Jul 2017 – Assistant Professor of Statistics – Department of Statistics, London School of Economics (LSE).

Dec 2008-Aug 2010 – PostDoc in Statistics – European Center of for Advanced Research in Economics and Statistics (ECARES), Université libre de Bruxelles.

TEACHING ACTIVITIES

CLASSES AND MODULES

Big Data Applications (40 hrs) Undergraduate Economics, Università di Bologna, Academic year 23-24

Macroeconomia (60hrs), Undergraduate Management, Università di Bologna, Academic years from 20-21 to 22-23

Time Series and Forecasting (30hrs), Undergraduate Statistics, LSE, Academic years from 15-16 to 18-19

Probability, Distribution Theory, and Inference (30hrs), Undergraduate Statistics, LSE, Academic years from 10-11 to 18-19

Econometric Methods (30hrs), Master Economics and Econometrics, Università di Bologna, Academic years from 20-21 to 23-24

Machine Learning for Economists (30hrs), Master Economics and Econometrics, Università di Bologna, Academic years from 21-22 to 23-24

Applied Econometrics (48hrs), Master Economics, Paris School of International Affairs, Sciences Po, Academic years 14-15 and 15-16

Generalised Linear Modelling and Survival Analysis (30hrs), Master Statistics, LSE, Academic years from 10-11 to 13-14

Advanced Statistics for Economics (10hrs), Doctoral, Università di Bologna, Academic years from 20-21 to 23-24

Linear Algebra (10hrs), Doctoral, Università di Bologna, Academic year 23-24

Time Series (25hrs), Doctoral, Scuola Superiore Sant'Anna, Pisa, Academic years 15-16, 16-17

Time Series (25hrs), Doctoral, Università Bocconi Milano, Academic year 19-20

COMPLEMENTARY TEACHING ACTIVITIES AND SERVICE ACTIVITIES TO STUDENTS

MENTORING

Supervised PHD students (completed)
Gianluca Giudice, LSE, 2018-2023 (then at ubs);
Ragvir Sabharwal, LSE, 2015-2023 (then Teaching Fellow at LSE);
Filippo Pellegrino, LSE, 2017-2023 (then Post-Doc at Imperial College);
Ali Habibnia, LSE, 2012-2017 (then Assistant Professor at Virginia Tech).

Supervised PHD students (on-going)
Claudio Lissona, Università di Bologna, since 2021;
Alessandro Morico, Università di Bologna, since 2021;
Matteo Santi, Università di Bologna, since 2020

Supervised MSc students (selected)
Angela Abbate, Università di Pisa, 2011 (then PhD student at European University Institute);
Mengyi Gong, LSE, 2012 (then PhD student at Glasgow University);
Claudio Lissona, Università di Bologna, 2021 (then PhD student at Universit`a di Bologna);
Aurora Vancini, Università di Bologna, 2023 (then at ECB);
Alonso Zuniga, Università di Bologna, 2023 (then PhD student at Universit¨at St.Gallen).

SCIENTIFIC RESEARCH ACTIVITIES

SCIENTIFIC PUBLICATIONS

35. “fnets: Factor-Adjusted Network Estimation and Forecasting for High-Dimensional Time Series”, M. Barigozzi, H. Cho, D. Owens, Journal of Business & Economic Statistics, 2023+, available online. doi.org/10.1080/07350015.2023.2257270

34. “fnets: An R Package for Network Estimation and Forecasting via Factor-Adjusted VAR Modelling”, D. Owens, H. Cho, M. Barigozzi, The R Journal, 2023+, forthcoming.

33. “Inferential Theory for Generalized Dynamic Factor Models”, M. Barigozzi, M. Hallin, M. Luciani, P. Zaffaroni, Journal of Econo- metrics, 2023+, available online. doi.org/10.1016/j.jeconom.2023.02.003

32. “Inference in Heavy-Tailed Non-Stationary Multivariate Time Series”, M. Barigozzi, G. Cavaliere, L. Trapani, Journal of the American Statistical Association, 2022+, available online. doi.org/10.1080/01621459.2022.2128807

31. “An Algebraic Estimator for Large Spectral Density Matrices”, M. Barigozzi, M. Farnè, Journal of the American Statistical Association, 2022+, available online. doi.org/10.1080/01621459.2022.2126780

30. “Measuring the Output Gap Using Large Datasets”, M. Barigozzi, M. Luciani, The Review of Economics and Statistics, 2023, 105(6), 1500-1514. doi.org/10.1162/rest_a_01119

29. “Testing for Common Trends in Non-Stationary Large Datasets”, M. Barigozzi, L. Trapani, Journal of Business & Economic Statistics, 2022, 40(3), 1107-1122. doi.org/10.1080/07350015.2021.1901719

28. “Time-Varying General Dynamic Factor Models and the Measurement of Financial Connectedness”, M. Barigozzi, M. Hallin, S. Soccorsi, R. von Sachs, Journal of Econometrics, 2021, 222(1B), 324 -343. doi.org/10.1016/j.jeconom.2020.07.004

27. “Large-Dimensional Dynamic Factor Models: Estimation of Impulse-Response Functions with I(1) Cointegrated Factors”, M. Barigozzi, M. Lippi, M. Luciani, Journal of Econometrics, 2021, 221(2), 455-482. doi.org/10.1016/j.jeconom.2020.05.004

26. “Consistent Estimation of High-Dimensional Factor Models when the Factor Number is Over-Estimated”, M. Barigozzi, H. Cho, Electronic Journal of Statistics, 2020, 14(2), 2892-2921 doi.org/10.1214/20 -EJS1741

25. “Sequential Testing for Structural Stability in Approximate Factor Models”, M. Barigozzi, L. Trapani, Stochastic Processes and their Applications, 2020, 130(8), 5149 -5187. doi.org/10.1016/j.spa.2020.03.003

24. “Generalized Dynamic Factor Models and Volatilities: Consistency, Rates, and Prediction Intervals”, M. Barigozzi, M. Hallin, Journal of Econometrics, 2020, 216(1), 4 -34. doi.org/10.1016/j.jeconom.2020.01.003

23.“CointegrationandErrorCorrectionMechanismsforSingularStochasticVectors”,M.Barigozzi,M.Lippi,M.Luciani,Econometrics, 2020, 8(3), 1-23. doi.org/10.3390/econometrics8010003

22. “nets: Network Estimation for Time Series”, M. Barigozzi, C. Brownlees, Journal of Applied Econometrics, 2019, 34(3), 347-364. doi.org/10.1002/jae.2676

21. “Identification of Global and Local Shocks in International Financial Markets via General Dynamic Factor Models”, M. Barigozzi, M. Hallin, S. Soccorsi, Journal of Financial Econometrics, 2019, 17(3), 462-494. doi.org/10.1093/jjfinec/nby006

20. “Intellectual Property Rights, Imitation, and Development. The Effect on Cross-Border Mergers and Acquisitions”, M. Campi, M. Dueñas, M. Barigozzi, G. Fagiolo, The Journal of International Trade & Economic Development, 2019, 28(2), 230-256. doi.org/10.1080/09638199.2018.1518477

19. “Power-Law Partial Correlation Network Models”, M. Barigozzi, C. Brownlees, G. Lugosi, Electronic Journal of Statistics, 2018, 12(2), 2905-2929. doi.org/10.1214/18-EJS1478

18. “Simultaneous Multiple Change-Point and Factor Analysis for High-Dimensional Time Series”, M. Barigozzi, H. Cho, P. Fryzlewicz, Journal of Econometrics, 2018, 206(1), 187-225. doi.org/10.1016/j.jeconom.2018.05.003

17. “On the Stability of Euro Area Money Demand and its Implications for Monetary Policy”, M. Barigozzi, A. Conti, Oxford Bulletin of Economics and Statistics, 2018, 80(4), 755-787. doi.org/10.1111/obes.12239

16. “Spatio-Temporal Patterns of the International Merger and Acquisition Network”, M. Dueñas, R. Mastrandrea, M. Barigozzi, G. Fagiolo, Scientific Reports, 2017, 7(1), 10789. doi.org/10.1038/s41598-017-10779 -z

15.“GeneralizedDynamicFactorModelsandVolatilities:EstimationandForecasting”,M.Barigozzi,M.Hallin,JournalofEconometrics, 2017, 201(2), 307-321. doi.org/10.1016/j.jeconom.2017.08.010

14. “A Network Analysis of the Volatility of High-Dimensional Financial Series”, M. Barigozzi, M. Hallin, Journal of the Royal Statistical Society - series c, 2017, 66(3), 581-605. doi.org/10.1111/rssc.12177

13. “Identifying the Independent Sources of Consumption Variation”, M. Barigozzi, A. Moneta, Journal of Applied Econometrics, 2016, 31(2), 420 -449. doi.org/10.1002/jae.2441

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

11. “Disentangling Systematic and Idiosyncratic Dynamics in Panels of Volatility Measures”, M. Barigozzi, C. Brownlees, G. Gallo, D. Veredas, Journal of Econometrics, 2014, 182(2), 364 -384. doi.org/10.1016/j.jeconom.2014.05.017

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

9. “The Common Component of Firm Growth”, L. Alessi, M. Barigozzi, M. Capasso, Structural Change and Economic Dynamics, 2013, 26, 73-82. doi.org/10.1016/j.strueco.2012.11.002

8. “The Distribution of Consumption-Expenditure Budget Shares”, M. Barigozzi, L. Alessi, M. Capasso, G. Fagiolo, Structural Change and Economic Dynamics, 2012, 23, 69 -91. doi.org/10.1016/j.strueco.2011.09.003

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

6. “Identifying the Community Structure of the International Trade Multi Network”, M. Barigozzi, G. Fagiolo, G. Mangioni, Physica A: Statistical Mechanics and its Applications, 2011, 390(11), 2051-2066. doi.org/10.1016/j.physa.2011.02.004

5. “Immigrant’s Legal Status, Permanence in the Destination Country and the Distribution of Consumption Expenditure”, M. Barigozzi, B. Speciale, Applied Economics Letters, 2011, 18(14), 1341-1347. doi.org/10.1080/13504851.2010.537618

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

3. “The Multi-Network of International Trade: A Commodity-Specific Analysis”, M. Barigozzi, G. Fagiolo, D. Garlaschelli, Physical Review E, 2010, 81(4), 046104. doi.org/10.1103/PhysRevE.81.046104

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

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

PARTICIPATION IN PUBLISHING COMMITTEES OF SCIENTIFIC MAGAZINES

Associate editor for
Econometrics Journal, from 2023;
Statistical Inference for Stochastic Processes, from 2019;
International Journal of Forecasting, 2019 -2022;
Journal of Korean Statistical Society, 2014 -2019.

NATIONAL AND INTERNATIONAL AWARDS AND GRANTS

Grants
prin 2022: "Climate Risk Uncertainty", 3yrs (member of research unit);
prin 2020: "High-Dimensional Time Series for Structural Macroeconomic Analysis in Times of Pandemic", 3yrs (head of research unit);
prin 2017: "Econometric Analysis of High Dimensional Models with Network Structures in Macroeconomics and Finance", 3yrs (member of research unit).

Awards
Carlo Giannini Prize for the best paper in Macroeconometrics and Financial Econometrics awarded by Società Italiana di Econometria, 2011.

ORGANIZATION OF WORKSHOPS AND CONFERENCES

Program chair
iii Italian Workshop of Econometrics and Empirical Economics (iweee), Rimini (keynotes: S. Ng, A. Onatski), 2022;
Workshop on Complex Systems and Times Series, lse (keynotes: E. Kolaczyk, O. Ledoit, W. H ̈ardle), 2015.

Session organizer
Bernoulli-ims xi World Congress in Probability and Statistics, Bochum, contributed session "Recent Developments in Tail-Robust Estimation and Inference" 2024;
Institute of Mathematical Statistics (ims) annual meeting, London, contributed session "Recent Developments in High-Dimensional Time Series", 2022;
cfe, Pisa, invited session "Econometric Analysis of the Business Cycle", 2018;
cfe, Sevilla, invited session "Macroeconometrics and Time Series", 2016;
cfe, London, invited session "High-Dimensional Models and Networks in Macroeconomics and Finance", 2015.

Scientific committee
x Italian Congress of Econometrics and Empirical Economics (iceee), Cagliari, 2023;
eea-esem, Universit`a Bocconi, Milano, scientific committee, 2022;
Workshop on High Dimensional Time Series in Macroeconomics and Finance, ihs, Vienna, scientific committee, 2022-2019-2017-2015.

SPEAKING AT CONFERENCES AND CONVENTIONS OF INTERNATIONAL INTEREST (ONLY INVITED)

2024
Bernoulli-IMS xi World Congress in Probability and Statistics, Bochum;
vi Vienna Workshop for High Dimensional Time Series in Macroeconomics and Finance, ihs, Vienna (keynote).

2023
Workshop on Factor Modelling for Complex Time Series Data and Tensors, University of Bristol; Joint Statistical Meetings, Toronto;
ecares@30, Bruxelles;
Society of Economic Measurement, Università degli studi di Milano-Bicocca;
Barcelona Summer Forum, Macroeconometrics and Policy Evaluation, Barcelona School of Economics.

2022
xvi cfe, London;
Bologna-Waseda International Time Series Symposium;
Rome-Waseda International Time Series Symposium;
xlii International Symposium on Forecasting, University of Oxford;
ii Workshop on Dimensionality Reduction and Inference in High-Dimensional Time Series, Universiteit Maastricht (keynote).;
xii Workshop in Time Series Econometrics, Universidad de Zaragoza (keynote).

2021
Workshop on Financial Econometrics, Universidade Federal do Rio Grande do Sul, Porto Alegre;
i Workshop on Dimensionality Reduction and Inference in High-Dimensional Time Series, Universiteit Maastricht (keynote).

2019
Galatina Summer Forum, Universitat Pompeu Fabra;
Panel Data Forecasting Conference, inet, University of Southern California, Los Angeles.

2018
oint meeting of the Italian Mathematical Union and the Polish Mathematical Society, Wroclaw;
iv Conference of the International Society of Non-Parametric Statistics, Salerno;
Macroeconomic and Financial Time Series Analysis Workshop, Lancaster University Management School;
Big Data in Financial Markets, inet, Cambridge University (keynote).

2017
New Developments in Econometrics and Time Series, eief, Roma;
European Meeting of Statisticians, University of Helsinki;
Big Data in Predictive Dynamic Econometric Modeling, University of Pennsylvania, Philadelphia;
Inference in Large Econometric Models, cireq, Montreal.

2016
x cfe, Sevilla;
Network Science and its Applications, Isaac Newton Institute for Mathematical Sciences, Cambridge (keynote);
iv ims-aprm, The Chinese University of Hong Kong.

2015
ix ercim, London;
Econometrics of Networks, inet, Cambridge University (keynote);
Statistical Finance, Southwestern University in Finance and Economics, Chengdu (keynote);

2014
viii cfe, Pisa;
Nonlinear Time Series Analysis Thresholding and Beyond, in celebration of Howell Tong's 70th birthday, LSE;
Dynamic Factor Models and Structural var Analysis, in celebration of Marco Lippi's 70th birthday, eief, Roma.

2013
New Developments in Econometrics and Time Series, ecares, Université libre de Bruxelles;
Advances in Latent Variables, Methods, Models and Applications, Società Italiana di Statistica, Università di Brescia.

2012
New Developments in Econometrics and Time Series, eief, Roma;
Financial Time Series, National University of Singapore;
Statistical Models for Financial Data, Technische Universitat Graz.

2011
v cfe, London;
Econometric and Statistical Modelling of Multivariate Time Series, Universit´e catholique de Louvain-la-Neuve (keynote);

2010
iv cfe, London;
Workshop on Semiparametric Modelling of Multivariate Time Series, Mathematisches Forschunginstitut Oberwolfach.

2009
iv Bruxelles-Waseda Seminar on Time Series and Financial Statistics, ensai, Rennes;
Workshop on Trade Networks, Scuola Superiore Sant'Anna, Pisa.

SEMINARS

2023
Department of Economics, Københavns Universitet;
Department of Economics and Business Economics, Aarush Universitet;
Virtual Time Series Seminar (vtss), London;
School of Economics and Management, Lunds Universitet;
Department of Statistics, itam, Ciudad de Mexico;
Department of Applied Mathematics, Waseda University, Tokyo.

2022
Institute for Financial Studies, Shandong University;
Chair of Econometrics, Universitat Regensburg;
Centre for Econometrics and Business Analytics, St. Petersburg University;
Output Gap Working Group, European Commission, Bruxelles.

2021
Department of Economics, Universitat Mannheim;
Dipartimento di Scienze Statistiche, Università di Bologna;
StatScale, Lancaster University.

2020
Royal Statistical Society, London;
King's Business School, King's College London;
Faculty of Economics, Cambridge University.

2019
ecares, Université libre de Bruxelles;
Department of Economics and Finance, Durham University;
Now-Casting Economics Ltd., London;
Econometric Institute, Erasmus University Rotterdam;
Department of Mathematics, University of York;
crest, ensae, Paris;
Economics Department, University of Southampton.

2018
Dipartimento di Politica Economica, Universit`a Cattolica di Milano;
Essex Centre for Financial and Macro Econometrics, University of Essex;
Joint Research Centre, European Commission, Ispra;
Granger Centre for Time Series Econometrics, University of Nottingham; \
Tinbergen Institute, University of Amsterdam and Vrije Universiteit Amsterdam;

Department of Economics, Lancaster University;
The Alan Turing Institute, London;
Banca d'Italia, Roma;
crest, ensae, Paris.

2017
Dipartimento di Matematica, Università degli Studi di Milano;
Joint Research Centre, European Commission, Ispra;
Dipartimento di Economia, Università Ca' Foscari, Venezia;
Dipartimento di Scienze Statistiche, Università di Bologna;
Dipartimento di Economia, Università Bocconi;
Departamento de Estadiistica, Universidad Carlos iii, Madrid;
ceis, Università degli studi di Tor Vergata, Roma;
Cass Business School, City University of London;
Statistics, University of Southampton;
Economic Modelling and Forecasting Group, Warwick Business School, University of Warwick;
Now-Casting Economics Ltd., London.

2016
School of Economics and Finance, Queen Mary University of London;e
Facultè d'Economie et Management, Universitè de Geneve.

2015
Faculty of Mathematics and Statistics, Universitat St.Gallen;
Department of Economics, University of Pennsylvania, Philadelphia;
Department of Mathematics, University of Bristol.

2014
Department of Economics, Mathematics and Statistics, Birkbeck College, London;
case, Humboldt-Universitat zu Berlin;
Dipartimento di Economia, Università di Genova;
Dipartimento di Economia e Statistica, Università di Salerno;
Dipartimento di Economia, Università di Verona.

2013
orfe, Princeton Unversity;
Departamento de Fundamentos del Analisis Economico, Universidad de Alicante;
Dipartimento di Economia, Università di Pisa;
ihs, Vienna;
Department of Medical Statistics, London School of Hygiene and Tropical Medicine;
Institut de Recherche en Statistique, Université libre de Bruxelles.

2012
Istituto di Economia, Scuola Superiore Sant'Anna, Pisa;
Departament d'Economia i Empresa, Universitat Pompeu Fabra, Barcelona;
Department of Economics, University of Manchester.

2011
Departamento de Fundamentos del Analisis Economico, Universidad de Alicante;
Dipartimento di Economia, Università dell'Insubria, Varese;
Departments of Economics and of Statistics, LSE.

MANAGING, ORGANISATIONAL, AND SERVICE ACTIVITIES

ANNEX A

MANAGING TASKS AND DUTIES UNDERTAKEN AT COLLEGIATE BODIES AND COMMITTEES, AT CONSIDERABLE PUBLIC AND PRIVATE INSTITUTIONS AND SCIENTIFIC AND CULTURAL ORGANISATIONS, OR AT THE UNIVERSITY OF MILAN OR AT OTHER UNIVERSITIES

Deputy director PhD program in Economics, Università di Bologna, from 2022.

PhD admissions president of committee, Università di Bologna, 2022-2023-2024.

MSc admissions committee, Università di Bologna, 2020-2021-2022.

Undergraduate admissions, president of committee, Statistics, LSE, from 2010 to 2019.

Joint statistics and econometrics seminars, organizer, Statistics, LSE, from 2010 to 2019.

Date 19/12/2023 Place Bologna

Autorizzo il trattamento dei miei dati personali ai sensi del Dlgs 196 del 30 giugno 2003 e dell'art. 13 GDPR (Regolamento UE 2016/679)