Curriculum Vitae

;

Personal data

Name: Mauro Costantini

Address: Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy Email: mauro.costantini@univaq.it Nationality: Italian

Employment

1/10/2022- Professor of Statistics, Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy 1/04/2021-30/9/2022 Professor of Economic Statistics, Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

1/10/2018-31/03/2021 Associate Professor of Economic Statistics, Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

1/8/2012-September 2018 Senior Lecturer (Associate professor) in Economics, Department of Economics and Finance, Brunel University London, UK

1/7/2011-31/7/2012 Lecturer in Economics, Department of Economics and Finance, Brunel University, London, UK

1/9/2008-1/6/2011Assistant Professor in Economics, Department of Economics, University of Vienna, Vienna, Austria

2005-2008 Post-doctorate, Institute for Studies and Economic Analyses, Area

of research: Forecasting models, Piazza dell'Indipendenza, 4, 00185, Rome, Italy

2002-2004 Post-doctorate. Area of research: Econometric of Growth. Cross-Section and Panel Data Analysis, Department of Economic Theory and Quantitative Methods, University of Rome, "La Sapienza". Italy.

Education

2003 (20/03) Ph.D in "Mathematics, Statistics and Economics", University of Rome, "La Sapienza". Thesis title: "Common Trends and Common Cycles in European Labour Market", supervised by F. Giusti 1996 Degree, Political Science, Political economy, University of Rome "La Sapienza", Awarded cum Laude.

Awards

Winner of the Student Led Teaching Awards, Brunel University London, 2015.

Academic Training

2008 Attended courses at ISAE: "Monte Carlo Methods and Bootstrap", Prof. S. Fachin.

2001 (15-17/11) School of Econometrics: "Time Series Analysis: Arima Models, Cointegration and Stochastic Volatility", Greta Associati and University of Venice, Venice, Italy

2000-2001: Attended courses; Statistics, Probability, Stochastic process, Statistical Inference, Nonparametric statistics, Time Series Analysis, Panel Data, Simulation methods, Master in Quantitative Methods, University of Rome Tor Vergata, Rome, Italy

2000 (5-16/6) Summer School of Econometrics: "Econometric Theory", "Time Series Analysis Application", CIDE (Centro Interuniversitario di Econome-

tria), Bertinoro, Forlì, Italy

2000 (19-22/9) Summer School of Statistics and Econometrics: "Non-linear Time Series: Theory and Applications". Italian School of Statistics, Salerno, Italy

1998-1999 School of economics: "Credit risk and Monetary Economics", Department of Public Economy, University of Rome, "La Sapienza", Rome, Italy.

Teaching Experience

2022-2023 Advanced Statistics with Matlab, Student excellence path (postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2021-2022 Statistics for Business and Economics (Postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2021-2022 Statistics (second year undergraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2021-2022 Advanced Statistics with Matlab, Student excellence path (postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2020-2021 Statistics for Business and Economics (Postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2020-2021 Statistics (second year undergraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2020-2021 Advanced Statistics with Matlab, Student excellence path (postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2019-2020 Statistics for Business and Economics (Postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2019-2020 Statistics (second year undergraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2019-2020 Statistics with Matlab, Student excellence path (postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2018-2019 Statistics for Economics and Finance (Postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2018-2019 Statistics (second year undergraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2018-2019 Introduction to Matlab and Stata (Statistics), Student excellence path (postgraduate), Department of Industrial and Information Engineering and Economics, University of L'Aquila, L'Aquila, Italy

2014-2018 Risk Management (Empirical finance)(third year undergraduate), Department of Economics and Finance, Brunel University London, London, UK

2012-2018 Econometrics (third year undergraduate), Department of Economics and Finance, Brunel University London

2012-2014 Statistics for Economics and Finance (first year undergraduate), School of Social Sciences, Department of Economics and Finance, Brunel University London, London, UK

2011-2012 Introduction to Quantitative Methods, Master in Business and Finance, School of Social Sciences, Department of Economics and Finance, Brunel University, London, UK

2008-2011 Forecasting Time Series, Master in Applied Econometrics, School of Finance and Economics, Rome, Italy

2009-2011 Macro panels, Master in Economics, University of Vienna

2008-2011 Introduction to Econometrics (first year undergraduate), University of Vienna, Faculty of Economics, Vienna, Austria

2007-2011 Macro Panels, Master in Applied Econometrics, School of Finance

and Economics, Rome, Italy

2003 Models for High Frequency Data, Master in Economics and Finance, Coordinator Prof. G. Szego, Ernest & Young Business School, Rome, Italy.

Visiting positions

11/2019-1/2020 Visiting Scholar, Southampton Business School, University of Southampton.

Professional services

2020- Associate editor, Empirical Economics 2020- Associate editor, Forecasting.

Research grants

Research grant from the Central Bank of Austria, "Forecasting returns in the foreign exchange market using macroeconomic models", January 2013-December 2014, 90,000 Euro.

Visiting student

1/10/2019-9/12/2019 Eirini Bersimi (Research Student, Kent Business School, University of Kent, UK), Department of Industrial and Information Engineering and Economics, Giuseppe Mezzanotte road, 67100, University of L'Aquila, L'Aquila, Italy.

PhD supervision

Habiba Al, completed 2016, Brunel University London, UK Francis Atsu, completed 2016, Brunel University London, UK Clarisse Wuttidma, completed 2015, Brunel University London, UK.

Eternal examiner

PhD in Management, University of Surrey, Surrey, UK, 2017

PhD in Economics, Cardiff University, Cardiff, UK, 2017

PhD in Economics, Cardiff University, Cardiff, UK, 2015

PhD in Finance, University of Surrey, Surrey, UK, 2015.

University administrative duties and others

2022 Committee Path of Excellence for Students 2021 Committee Path of Excellence for Students 2021 Election Committee CAD 2020 Stakeholder report, University of L'Aquila, L'Aquila, Italy 2019-2020 Collaboration with the Observatory of Statistics, University of L'Aquila, L'Aquila, Italy 2019 Report on sustainability, Statistical analysis of Education data, University of L'aquila, L'Aquila, Italy 2017-2018 Exam convenor, Brunel University London, UK 2016-2017 Exam convenor and GTA coordinator, Brunel University London, London, UK 2015-2016 Team Leader Mitigating Circumstances, Brunel University London, London, UK 2014-2015 Senior Tutor, Brunel University London, London, UK 2012-2014 PhD Admission, Brunel University, London, UK 2011-2012 MSc/MRes Convenor, Brunel University, London, UK.

Other working experiences

2005 Ministry of Labour. Research project: "The impact of social transfers on Italian municipality"

2002-2003 MURST 2000 Research Program: "Some Aspects of the Relationship Between Demographic Evolution and Social and Economic Development", coordinator: Prof. Marcello Natale, Department of Demographic Analysis, University of Rome, La Sapienza.

Publications

- "Bayesian nonparametric panel Markov-switching GARCH models", with R. Casarin and A. Osuntuyi, *Journal of Business & Economic Statistics*, 2023, forthcoming.
- "A comparative study on p value combination tests for the panel unit root hypothesis", with Claudio Lupi *Communications in Statistics -Simulation and Computation*, 2023, forthcoming.
- "Estimating uncertainty spillover effects across euro area using a regime dependent VAR model", with G. Angelini and J. Easaw, *Studies in Nonlinear Dynamics & Econometrics*, 1-23, 2022
- "What Uncertainty Does to Euro Area Sovereign Bond Markets: Flight to Safety and Flight to Quality", with R. Sousa, *Journal of International Money and Finance*, 122, 102574, 2022
- "On the role of dependence in sticky price and sticky information Phillips curve: Modelling and forecasting", with R. Casarin and A. Paradiso, *Economic modelling*, 105, 105644, 2021
- "On using predictive-ability tests in the selection of time-series prediction models: A Monte Carlo evaluation", with R. Kunst, *International Journal of Forecasting*, 445-460,37,2021
- "Consumption, asset wealth, equity premium, term spread and flight to quality", with R. Sousa, *European Financial Management*, 778-807, 26, 2020
- "Panel stationary tests against changes in persistence", with R. Cerqueti, L. Gutierrez, and J. Westerlund, *Statistical papers*, 60, 1079-1100, 2019

- 9. "What do panel data say on inequality and GDP? New evidence at US state-level with A. Paradiso, *Economics Letters*, 168, 115-117, 2018.
- "Do inequality, unemployment, and deterrence affect crime over the long run", with I. Meco and A. Paradiso, *Regional Studies*, 52, 558-571, 2018.
- "Forecast combinations in a DSGE-VAR lab", with Ulrich Gunter and R. Kunst, *Journal of forecasting*, 36, 305–324, 2017.
- "A Simple Testing Procedure for Unit Root and Model Specification", with A. Sen, *Computational Statistics and Data Analysis*, 102, 37-54, 2016.
- "Forecasting errors, directional accuracy and profitability of currency trading: The case of EUR/USD exchange rate, with J. Crespo Cuaresma and J. Hlouskova, *Journal of Forecasting*, 35, 652-668, 2016.
- "Identifying Stationary Series in Panels: A Monte Carlo Evaluation of Sequential Panel Selection Methods", with C. Lupi, *Economics Letters*, 130, 9-14, 2016.
- 15. "How accurate are the professional forecasts in Asia. Evidence from ten countries", with Q. Chen and B. Deschamps, *International Journal of Forecasting*, 32, 154-167, 2016.
- "Housing wealth, Financial wealth, and consumption: new evidence for Italy and the UK", with R. Barrell and I. Meco, *International Review* of Financial Analysis, 42, 316-323, 2015.
- "Small-Sample Improved Seasonal Unit Root Tests for Trending and Breaking Series", with P.K. Narayan, S. Popp and J. Westerlund, Communications in Statistics - Simulation and Computation, 44, 868-877, 2015.
- "Determinants of Sovereign Bond Yield Spreads in the EMU. An Optimal Currency Area Perspective", with M. Fragetta and G. Melina, *European Economic Review*, 70, 337-349, 2014.

- "On the usefulness of cross-validation for directional forecast evaluation", with C. Bergmeir and J. M. Benítez, *Computational Statistics* and Data Analysis, 76, 132-143, 2014.
- "A Simple Panel-CADF Test for Unit Roots", with C. Lupi, Oxford Bulletin of Economics and Statistics, 75, 276-296, 2013.
- "The role of monitoring of corruption in a simple endogenous growth model", with R. Coppier and G. Piga, *Economic Inquiry*, 51, 1972-1985, 2013.
- 22. "Re-examining the Decline in the US Saving Rate: The Impact of Mortgage Equity Withdrawals", with G. Caporale and A. Paradiso, Journal of International Financial Markets, Institutions & Money, 26, 215-225, 2013.
- 23. "Forecasting industrial production using factor models and business survey data", *Journal of Applied Statistics*, 40, 2275-2289, 2013.
- 24. "New results on the convergence of random matrices", with R. Cerqueti, *Statistics*, 4, 663-671, 2013.
- "Capital mobility and global factor shocks", with L. Gutierrez, *Economic Letters*, 10, 513-515, 2013.
- "Financial Restraints and Private Investment: Evidence from a Nonstationary Panel", with P. Demetriades, G. James and K. Lee, *Economic Inquiry*, 51, 1, 248-259, 2013.
- 27. "Bootstrap innovational outlier unit root tests in dependent panels", with L. Gutierrez, *Economics Letters*, 117, 817-819, 2012.
- "On the Asymptotic Distribution of a Simple Test for Trending and Breaking Series", with A. Sen, *Journal of Statistical Planning and Inference*, 142, 1690-1697, 2012.

- "New Evidence on the Convergence of International Income from a Group of 29 Countries", with A. Sen, *Applied Economics Letters*, 19, 425-429, 2012.
- "A note on the asymptotic distribution of a perron-type innovational outlier unit root tests with a break", with S. Popp, *Statistical Papers*, 52, 677-682, 2011.
- "Testing for rational bubbles in the presence of structural breaks: evidence from nonstationary panels", with R. Cerqueti, *Journal of Bank*ing and Finance, 35, 2598-2605, 2011.
- "Combining forecasts based on multiple encompassing tests in a macroeconomic core system", with R. Kunst, *Journal of Forecasting*, 30, 579-596, 2011.
- 33. "A hierarchical procedure for the combination of forecasts", with C. Pappalardo, *International Journal of Forecasting*, 26, 725-743, 2010.
- "Some nonparametric asymptotic results for a class of stochastic processes", with R. Cerqueti, *Communications in Statistics - Theory and Methods*, 39, 2552-2560, 2010.
- "A panel cointegration approach to estimating substitution elasticities in consumption", with M. Auteri, *Economic Modelling*, 27, 782-787, 2010.
- 36. "Asymptotic solutions of a generalized eigenvalue problem", with R. Cerqueti, *Applied Mathematical Sciences*, 3, 2985-2999, 2009.
- 37. "Panel Cointegration and the Neutrality of Money", with J. Westerlund, *Empirical Economics*, 36, 1-26, 2009.
- "Cointegration Analysis for Cross-sectionally Dependent Panels. The Case of Regional Production Functions", with S. Destefanis, *Economic Modelling*, 26, 320-327, 2009.

- "On the Asymptotic Behavior of Random Matrices in a Multivariate Statistical Model", with R. Cerqueti, *Statistics and Probability Letters*, 78, 2039-2045, 2008.
- "Simple Panel Unit Root Tests to Detect Changes in Persistence", with L. Gutierrez, *Economics Letters*, 96, 363-368, 2007.
- "An Analysis of Inflation and Interest Rates. New Panel Unit Root Results in the Presence of Structural breaks", with C. Lupi, *Economics Letters*, 95, 408-414, 2007.
- "Co-movements and Correlations in International Stock Market", with R. D'Ecclesia, *The European Journal of Finance*, 12, 567-582, 2006.
- "Divergence and Long-Run Equilibria in Italian Regional Unemployment Rates", with C. Lupi, *Applied Economics letters*, 13, 899-904, 2006.
- 44. "Testing the Stochastic Convergence of Italian Regions using panel data", with G. Arbia, *Applied Economics letters*, 13, 775-783, 2006.
- 45. "Stochastic convergence among European economies", with C. Lupi, *Economics Bulletin*, 3, 1-17, 2005.
- 46. "Fiscal Policy and Economic Growth: the Case of Italian Regions", with M. Auteri, *The Review of Regional Studies*, 34, 72-93, 2004.
- 47. "Is Social Protection a Necessity or Luxury good? New Multivariate Cointegration Panel Data Results", with M. Auteri, Applied Economics, 36, 1887-1998, 2004.

Proceedings

 "A Characterization of the Dickey-Fuller Distribution With Some Extensions to the Multivariate Case" (with R. Cerqueti and C. Lupi), *American Statistical Association*, Business and Economic Statistics Section, 2009.

Revised and Resubmitted

"Bitcoin Market Networks and Cyberattacks", with A. Maaitah, T. Mishra, and R. Sousa (Physica A: Statistical Mechanics and its Applications)

Under Review

"Directional forecasting volatility in the US Market", with E. Bersimi and E. Panopoulou

"On the performance of small scale DGSE models for directional forecast accuracy", with G. Angelini

Work in Progress

"A dynamic stochastic block model with degree correction and infinite communities", with O. Baltodano and R. Casarin

"On the use of mean square error and directional forecast accuracy for model selection: a Monte Carlo investigation, with R. Kunst

Presentations at conferences

2020 (19-2/12) "DGSE models with expectations correction and directional forecast accuracy, CFE conference (virtual)

2020 (29-30/10) "DGSE models with expectations correction and directional forecast accuracy, 2nd Vienna Workshop on Economic Forecasting

2019 (14-16/12) "DGSE model with expectations correction: Misspecification, forecasting errors and directional accuracy, CFE conference,London, UK

2018 (14-16/12) "DGSE model with expectations correction: Misspecification, forecasting errors and directional accuracy, CFE conference, Pisa, Italy

2014 (26-28/6) "Identifying I(0) Series in Macro-panels: Are Sequential Panel Selection Methods Useful? first annual meeting of the International Association for Applied Econometrics, Queen Mary, London, UK

2013 (14-16/12) "On the usefulness of cross-validation for directional forecast evaluation", CFE conference, London, UK.

2013 (14-16/12) "Identifying I(0) Series in Macro-panels: Are Sequential Panel Selection Methods Useful?, CFE conference, London, UK.

2011 (25-29/8) "On the usefulness of the Diebold-Mariano test in the selection of predictions models: Some Monte Carlo evidence", 65th European Meeting of the Econometric Society, Oslo, Norway

2010 (10-12/12) "On the usefulness of the Diebold-Mariano test in the selection of predictions models: Some Monte Carlo evidence", 4th CSDA International Conference on Computational and Financial Econometrics, University College London, London, UK

2009 (28/3) "Combining forecasts based on multiple encompassing tests in a macroeconomic core system", First Macroeconomic Forecasting Conference, Rome, Italy

2009 (28/3) "A Hierarchical procedure for the combination of forecasts", First Macroeconomic Forecasting Conference, Rome, Italy

2009 (30-31/1) "A Panel-CADF Test for Unit Roots with an application to PPP", Third Italian Congress of Econometrics and Empirical Economic, Ancona, Italy

2008 (22-25/6) "Combination of forecast methods using encompassing tests: An algorithm-based procedure", International Symposium on Forecasting, ISF, Nice, France

2008 (25-26/1) "Change in persistence tests for panels", "Recent Developments in Econometric Methodology", First International Conference in Memory of Carlo Giannini, Bergamo, Italy

2007 (23/2) "Nonparametric Fractional Cointegration Analysis, 2nd Tinbergen Institute Conference "20 Years of Cointegration: Theory and Practice in Prospect and Retrospect", Rotterdam, Netherlands

2007 (25/1) "Unit root and cointegration tests for cross-sectionally correlated panels. Estimating regional production functions", Second Italian Congress

of Econometrics and Empirical Economics, Rimini, Italy

2007 (25/1) "Panel Cointegration and the Neutrality of Money", Second Italian Congress of Econometrics and Empirical Economics, Rimini, Italy

2007 (25/1) "Nonparametric Fractional Cointegration Analysis", Second Italian Congress of Econometrics and Empirical Economics, Rimini, Italy

2006 (2/9) "Panel Cointegration and the Neutrality of Money", International conference for the management of risk factors in economically relevant human activities II, Rome, Italy

2005 (29-9/1-10) "Generalization of a nonparametric co-integration analysis for multivariate integrated process of an integer order", Unit root and cointegration testing, International conference, University of Algarve, Faro, Portugal

2005 (16/9) "Intratemporal substitution and government spending: unit root and cointegration tests in a cross section correlated panel", Public sector, XVI Scientific Conference of Italian Society of Public Economy, University of Pavia, Pavia, Italy

2005 (10/6) "Do European Economies Converge? A Nonstationary Panel Data Analysis", First Workshop on Dynamic Econometrics, in memory of Carlo Giannini, Pavia, Italy

2004 (4/4) "A Correlation Among Stock Market Principal Component Analysis", Conference on Computational Econometrics and Statistics", Neuchàtel, Switzerland

2004 (3/4) "Testing the Stochastic Convergence of Italian Regions using panel data", Conference on Computational Econometrics and Statistics", Neuchâtel, Switzerland

2003 (7/7) "Co-movements and Correlation in International Stock Market", International Forum of Operational Research, Bogazici University, Department of Industrial Engineering, Istanbul, Turkey.

Seminars

2019 (11/12) "Uncertainty and spillover effects across the Euro Area", Department of Economics, University of Reading, Reading, UK

2016 (19/12) "Modelling corporate failure dependence of UK public listed firms", Department of Economics, University of Venice, Venice, Italy

2016 (24/11) "Modelling corporate failure dependence of UK public listed firms", Department of Statistics, University of Bologna, Bologna, Italy

2012 (23/4) "The Feldstein-Horioka puzzle: common or idiosyncratic tales?", Department of Economics, University of Reading, UK

2012 (4/4) "The Feldstein-Horioka puzzle: common or idiosyncratic tales?", Department of Public Institutions, Economics and Society, University of Rome Three, Rome, Italy

2010 (30/3) "A panel cointegration approach to estimating substitution elasticities in consumption", Department of Public Institutions, Economics and Society, University of Roma Three, Italy

2008~(20/11) "A Panel-CADF Test for Unit Roots with an application to PPP", Institute for Advanced Studies, Vienna, Austria

2008~(1/10) "Change in persistence tests for panels", University of Leicester, Department of Economics, Leicester, UK

2008~(6/2) "Change in persistence tests for panels", University of Vienna, Department of Economics, Austria

2007(30/5) "Change in persistence tests for panels", Faculty of Economics, University of Molise, Department SEGeS, Campobasso, Italy

2007 (30/5) "Detecting bubbles in stock market: new international evidence", Faculty of Economics, University of Molise, Department SEGeS, Campobasso, Italy

2006 (23/3) "Simple Panel Unit Root to Detect Changes in Persistence", Faculty of Economics, University of Molise, Department SEGeS, Campobasso, Italy

2006 (16/3) "Simple Panel Unit Root to Detect Changes in Persistence", Ente Einaudi, Rome, Italy

2005 (23/11) "Generalization of a nonparametric co-integration analysis for multivariate integrated process of an integer order", Faculty of Economics, Department of Statistics, Ca' Foscari University, Venice, Italy.

Referee assignments

Annals of Operational Research, Annals of Regional Science, Applied Economics, Applied Economics Letters, Applied Financial Economics, American Journal of Economics and Sociology, Bulletin of Economic Research, Communications in Statistics–Simulation and Computation, Communications in Statistics–Theory and Methods, Computational Statistics and Data Analysis, Computational Economics, Econometrics and Statistics, Econometrics, Economics Bulletin, Economic Inquiry, Economics Letters, Economic Modeling, Empirical Economics, Energy Journal, European Journal of Finance, European Journal of Operational Research, European Review of Agricultural Economics, Health Economic Review, Information Science, International Economics, International Journal of Approximate Reasoning, International Journal of Finance and Economics, International Journal of Forecasting, International Journal of Production Research, Information Science, International Review of Economics and Finance, Italian Journal of Regional Science, International Review of Financial Analysis, Journal of Applied Statistics, Journal of Asian Economics, Journal of Banking & Finance, Journal of Corporate Finance, Journal of Economic Studies, Journal of Economics Dynamics and Control, Journal of Macroeconomics, Journal of Forecasting, Journal of the Royal Statistical Society, Journal of Statistical Software, Journal of Time Series Econometrics, Leverhulme Trust Grant, Manchester School, National Science Foundation, National Science Center, North American Journal of Economics and Finance, Oxford Bulletin of Economics and Statistics, Regional Science and Urban Economics, Regional Studies, Review of financial Economics, Review of Income and Wealth, Social Sciences and Humanities Research Council of Canada, Statistical Papers, Statistical Methods and Applications, Technological Forecasting & Social Change.

Research Interests

Panel data analysis, Time Series Analysis, Forecasting, Empirical finance.

Computer Skills

Software: Word, Excel, Power Point, Latex Econometric and Statistical Package: Gauss, Matlab, Stata.

Languages

Italian: Native English: Fluent Spanish: Fluent.