

# Curriculum Vitae

## Personal data

Name: Mauro Costantini

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## Employment

### Current position

Associate Professor in Economic Statistics, University of L'Aquila, Department of Industrial and Information Engineering and Economics.

### Previous positions

2012- 2018 Senior Lecturer (Associate Professor) in Economics, Department of Economics and Finance, Brunel University London, UK.

2011-2012 Lecturer in Economics , Department of Economics and Finance, Brunel University, London, UK.

2008-2011 Assistant Professor in Economics, Department of Economics, University of Vienna, Vienna, Austria.

2005-2008 Post-doctorate, Institute for Studies and Economic Analyses, Area of research: Econometric Modelling and Forecasting, 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.

## Visiting positions

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

## 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 economy, University of Rome “La Sapienza”, Awarded cum Laude.

## Awards

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

## Academic Training

2008 (June-July) Attended courses at ISAE: “Monte Carlo Methods and Bootstrap”, Prof. S. Fachin.

2002 (30/08) Seminar: “The Future of Economic Forecasting”, Clive Granger, Department of Statistics, University of Florence.

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

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

2000(5-16/6) Summer School of Econometrics: “Econometric Theory”, “Time

Series Analysis Application”, CIDE (Centro Interuniversitario di Econometria). 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

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.

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.

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

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

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

2011 Introduction to Quantitative Methods, Master in Business and Finance, School of Social Sciences, Department of Economics and Finance, Brunel Uni-

versity, London, UK.

2008-2011 Forecasting Macroeconomic 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.

2008-2011 Macro 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.

2004-2005 Econometrics (first year undergraduate course), Faculty of Economics, University of Rome “La Sapienza”.

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

## **Professional services**

2020- Associate editor, Empirical Economics

## **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.

## **PhD Supervision**

Habiba Al (Brunel University London), completed in 2016.

Francis Atsu (Brunel University London), completed in 201.

Clarisse Wuttidma (Brunel University London), completed 2015.

## **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.

## **Working experience**

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.

1999(1-4/31-7) Economic Research program: “The Twin Deficit Hypothesis: an Empirical Analysis”, LUISS, University of Rome.

1995-1996 Demographic Research Program: “Forecasting Italian Population Growth Rate in 1991-202”, coordinator P. Giacomello, Department of Economic Theory and Quantitative Methods, University of Rome, La Sapienza.

## **University administrative duties and others**

2019- Collaboration with the Observatory of Statistics, University of L’Aquila, L’Aquila, Italy. 2019 Report on sustainability, Statistical analysis of data on education, 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.

## Publications

1. “On using predictive-ability tests in the selection of time-series prediction models: A Monte Carlo evaluation”, with R. Kunst, *International Journal of Forecasting*, forthcoming
2. “Consumption, asset wealth, equity premium, term spread and flight to quality”, with R. Sousa, *European Financial Management*, 778-807, 26, 2020
3. “Panel stationary tests against changes in persistence”, with R. Cerqueti, L. Gutierrez, and J. Westerlund, *Statistical papers*, 60, 1079-1100, 2019
4. “What do panel data say on inequality and GDP? New evidence at US state-level with A. Paradiso, *Economics Letters*, 168, 115-117, 2018.
5. “Do inequality, unemployment, and deterrence affect crime over the long run”, with I. Meco and A. Paradiso, *Regional Studies*, 52, 558-571, 2018.
6. “Forecast combinations in a DSGE-VAR lab”, with Ulrich Gunter and R. Kunst, *Journal of forecasting*, 36, 305–324, 2017.
7. “A Simple Testing Procedure for Unit Root and Model Specification”, with A. Sen, *Computational Statistics and Data Analysis*, 102, 37-54, 2016.
8. “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.
9. “Identifying Stationary Series in Panels: A Monte Carlo Evaluation of Sequential Panel Selection Methods”, with C. Lupi, *Economics Letters*, 130, 9-14, 2016.

10. “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.
11. “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.
12. “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.
13. “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.
14. “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.
15. “A Simple Panel-CADF Test for Unit Roots”, with C. Lupi, *Oxford Bulletin of Economics and Statistics*, 75, 276-296, 2013.
16. “The role of monitoring of corruption in a simple endogenous growth model”, with R. Coppier and G. Piga, *Economic Inquiry*, 51, 1972-1985, 2013.
17. “ 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.
18. “Forecasting industrial production using factor models and business survey data”, *Journal of Applied Statistics*, 40, 2275-2289, 2013.
19. “Capital mobility and global factor shocks”, with L. Gutierrez, *Economic Letters*, 10, 513-515, 2013.

20. “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.
21. “Bootstrap innovational outlier unit root tests in dependent panels”, with L. Gutierrez, *Economics Letters*, 117, 817-819, 2012.
22. “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.
23. “New results on the convergence of random matrices”, with R. Cerqueti, *Statistics*, 1, 1-9, 2012
24. “New Evidence on the Convergence of International Income from a Group of 29 Countries”, with A. Sen, *Applied Economics Letters*, 19, 425-429, 2012.
25. “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 .
26. “Testing for rational bubbles in the presence of structural breaks: evidence from nonstationary panels”, with R. Cerqueti, *Journal of Banking and Finance*, 35, 2598-2605, 2011.
27. “Combining forecasts based on multiple encompassing tests in a macroeconomic core system”, with R. Kunst, *Journal of Forecasting*, 30, 579-596, 2011.
28. “Hierarchical procedure for the combination of forecasts”, with C. Papalardo, *International Journal of Forecasting*, 26, 725-743, 2010.
29. “Some nonparametric asymptotic results for a class of stochastic processes”, with R. Cerqueti, *Communications in Statistics - Theory and Methods*, 39, 2552-2560, 2010.



30. "A panel cointegration approach to estimating substitution elasticities in consumption", with M. Auteri, *Economic Modelling*, 27, 782-787, 2010.
31. "Asymptotic solutions of a generalized eigenvalue problem", with R. Cerqueti, *Applied Mathematical Sciences*, 3, 2985-2999, 2009.
32. "Panel Cointegration and the Neutrality of Money", with J. Westerlund, *Empirical Economics*, 36, 1-26, 2009.
33. "Cointegration Analysis for Cross-sectionally Dependent Panels. The Case of Regional Production Functions", with S. Destefanis, *Economic Modelling*, 26, 320-327, 2009.
34. "On the Asymptotic Behavior of Random Matrices in a Multivariate Statistical Model", with R. Cerqueti, *Statistics and Probability Letters*, 78, 2039-2045, 2008.
35. "Simple Panel Unit Root Tests to Detect Changes in Persistence", with L. Gutierrez, *Economics Letters*, 96, 363-368, 2007.
36. "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.
37. "Co-movements and Correlations in International Stock Market", with R. D'Ecclesia, *The European Journal of Finance*, 12, 567-582, 2006.
38. "Divergence and Long-Run Equilibria in Italian Regional Unemployment Rates", with C. Lupi, *Applied Economics letters*, 13, 899-904, 2006.
39. "Testing the Stochastic Convergence of Italian Regions using panel data", with G. Arbia, *Applied Economics letters*, 13, 775-783, 2006.
40. "Stochastic convergence among European economies", with C. Lupi, *Economics Bulletin*, 3, 1-17, 2005.

41. “Fiscal Policy and Economic Growth: the Case of Italian Regions”, with M. Auteri, *The Review of Regional Studies*, 34, 72-93, 2004.
42. “Is Social Protection a Necessity or Luxury good? New Multivariate Cointegration Panel Data Results”, with M. Auteri, *Applied Economics*, 36, 1887-1998, 2004.

## Proceedings

1. “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

## Under Review

- “Uncertainty and spillover effects across the Euro Area, with G. Angelini and J. Easaw
- “A comparison of some p value combination test of the unit root hypothesis in panels of time series, with C. Lupi
- “Does Uncertainty matters the economy in China, with B. Deschamps and Y. Jiang

## Work in Progress

- “Sticky prices and sticky information in Phillips curve: The role of dependence in a secular stability analysis”, with R. Casarin and A. Paradiso.
- “DGSE models with expectations correction: Misspecification, forecasting errors and directional accuracy, G. Angelini.
- “Do forecast combinations help improve directional accuracy of volatility? Some evidence”, with E. Bersimi and E. Panopoulou.
- “A secular analysis of spillovers and connectedness across agricultural mar-

kets: evidence from Italian cities (1784-1885), M. Costola, L. Ferranna, and A. Paradiso.

## Conference presentations

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.

2011 (21-26/8) “On the usefulness of the Diebold-Mariano test in the selection of predictions models: Some Monte Carlo evidence”, ISI, 58th Congress, Dublin, Ireland.

2011 (1-2/8) “FDR Control in the Presence of an Unknown Correlation Structure, Conference in Honour of Professor Hashem Pesaran, Trinity College, Cambridge, UK.

2011 (26-29/6) “On the usefulness of the Diebold-Mariano test in the selection of predictions models: Some Monte Carlo evidence”, 31st International Symposium on Forecasting, Prague, Czech Republic.

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.

2010 (20-23/6) “Forecast combination based on multiple encompassing tests in a macroeconomic DSGE system”, (U. Gunter), 30th Annual International Symposium on Forecasting, San Diego, USA.

2010 (7-8/5) “Forecast combination based on multiple encompassing tests in a macroeconomic DSGE system”, (U. Gunter), QED Meeting, Alicante Spain.

2009 (29-31/10) “Combining forecasts based on multiple encompassing tests in a macroeconomic core system” (R. Kunst), 5th Nordic Econometric Meeting, Lund, Sweden.

2009(17/9) “Do “Clean Hands” Ensure Healthy Growth? Theory and Practice in the Battle Against Corruption” (R. Coppier), Annual Conference, European Law & Economics Association, University of Rome LUISS, Rome, Italy.

2009 (8/8) “Density Functions of Multivariate ADF Tests with Cross Sectional Dependence ” (R. Cerqueti), Joint Statistical Meetings, Washington, USA.

2009 (21/4) “ Financial Restraints, Globalization and Private Investment: Evidence from a Nonstationary Panel” (J. Gregory), Royal Economic Society Conference, University of Surrey, 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 (22-25/8) “Panel CADF test for unit roots”, Conference in honour of David Hendry, Oxford University, Oxford, UK.

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 (3/9) “Speculative bubbles in International stock market. A Panel Cointegration analysis”, International conference for the management of risk factors in economically relevant human activities”, University of Tuscia, Viterbo, 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”, Neuchâtel, 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.

## **Invited seminars**

2019 (11/12) “Uncertainty and spillover effects across the Euro Area, University of 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, Reading University, 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, 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 Forecasting, International Journal of Production Research, International Review of Financial Analysis, International Review of Economics and Finance, International Journal of Finance and Economics, Italian Journal of Regional Science, 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**

Econometrics of Panel data

Time series econometrics

Empirical finance

Time Series Forecasting

## **Computer Skills**

Software: Word, Excel, Power Point, Latex.

Econometric and Statistical Package: Eviews, Gauss, Matlab, Rats, Stata.

## **Languages**

Italian: Native.

English: Fluent.

Spanish: Fluent.

May 2020