

Curriculum Vitae of Gianluca Cubadda



Personal

Citizenship: Italian.

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Education

PhD in Statistics, 1994, Sapienza University of Rome.

MSc in Economics and Econometrics, 1992, University of Southampton.

Laurea *magna cum laude* in Statistics and Economics, 1990, Sapienza University of Rome.

Current and previous positions

November 2004-present: Full Professor of Economic Statistics, Tor Vergata University of Rome.

September 2023-present: Coordinator of the Master "[Data Science for Public Decision Making](#)", affiliated with the Bank of Italy.

May 2025-present: Chairperson of the sub-panel of experts in Statistics for the 2020-2024 Evaluation of Italian Research.

August 2017-July 2022: Coordinator of the Master Big Data in Business.

January 2019-December 2021: Dean of the School of Economics, Tor Vergata University of Rome.

October 2018-September 2021: Chairperson of the Italian University National Recruitment Committee on Economic Statistics.

May 2012-October 2015: Chairperson of the Department of Economics and Finance, Tor Vergata University of Rome.

August 2011-December 2014: Chairperson of the Independent Assessment Body of the Italian National Statistical Office.

November 2010-April 2012: Chairperson of the Department of Financial Economics and Quantitative Methods, Tor Vergata University of Rome.

September 2010-July 2011: Member of the Independent Assessment Body of the Italian National Statistical Office.

November 2003-October 2004: Chairperson of the Department of Economics, Management & Social Sciences, University of Molise.

November 2001-October 2004: Professor of Economic Statistics, University of Molise.

November 1998-October 2001: Associate Professor of Economic Statistics, University of Molise.

December 1995-October 1998: Lecturer of Economic Statistics, Sapienza University of Rome.

December 1994-November 1995: Researcher of Economics-Econometrics, Italian National Statistical Office (ISTAT), Rome.

Visiting positions

1999, 2001, 2002, September 2015-February 2016, 2019, 2022, 2023: Visiting Professor at the Department of Quantitative Economics, Maastricht University.

2005-2008, 2009-2012: Extramural fellow of METEOR (Maastricht research school of Economics of Technology and Organizations).

2005, 2007, 2010: Visiting Professor at the Department of Economics, Maastricht University.

Scientific societies affiliations and committees

Member of the following scientific societies:

1999–present: Italian Statistical Society.

2010–present: Italian Econometric Association.

2010–present: ERCIM working group CMStatistics.

2012–present: International Institute of Forecasters (IIF).

2021–present: International Association of Applied Econometrics (IAAE).

1997-2014: Econometric Society.

Member of the steering committee of the following scientific societies:

2006-2010: Italian Statistical Society.

2008-2012: Italian Statistical Society Workgroup for Time Series Analysis.

2008-2013: Centro Interuniversitario di Econometria (CIDE).

Scientific interests

Common features, high-dimensional time series, business cycle analysis, seasonality, cointegration, forecasting, structural breaks, volatility, non-causal autoregressive models.

Selected publications

Cubadda G. (1994), [Testing for Cointegration at any Frequency Using Spectral Methods](#), *Journal of the Italian Statistical Society*, 3, 37–50.

Cubadda G. (1995), [A Note on Testing for Seasonal Cointegration using Principal Components in the Frequency Domain](#), *Journal of Time Series Analysis*, 16, 499–508.

Cubadda G., Fachin S., and F. Nucci (1999), Disaggregated Import Demand Functions for the Italian Economy, in Kriesler P., and C. Sardoni (eds.), [Keynes, Post-Keynesianism and Political Economy. Essays in honour of G. Harcourt, volume three](#), Routledge Frontiers of Political Economy, 22, 510–526.

Cubadda G. (1999), [Common Cycles in Seasonal Non-Stationary Time Series](#), *Journal of Applied Econometrics*, 14, 273–291.

Cubadda G. (1999), [Common Serial Correlation and Common Business Cycles: A](#)

[Cautious Note](#), *Empirical Economics*, 24, 529–535.

- Cubadda G. (2001), [Common Features in Time Series with both Deterministic and Stochastic Seasonality](#), *Econometric Reviews*, 20, 201–216.
- Cubadda G. (2001), [Complex Reduced Rank Models for Seasonally Cointegrated Time Series](#), *Oxford Bulletin of Economics and Statistics*, 63, 497–511.
- Cubadda G., and A. Hecq (2001), [On Non-Contemporaneous Short-Run Comovements](#), *Economics Letters*, 73, 389–397.
- Cubadda G., and P. Daddi (2001), [Dynamics and Comovements of Regional Exports in Italy](#), in Borra S., Rocci R., Vichi M., and M. Schader (eds.), *Advances in Classification and Data Analysis*, Springer-Verlag, 275–282.
- Bruno G., Cubadda G., Lupi C., and E. Giovannini (2002), The Flash Estimate of the Italian Real Gross Domestic Product, in Barcellan R., and G.L. Mazzi (eds.), [Workshop on Quarterly National Accounts](#), Eurostat Working Papers and Studies, Cat. No. KS-AN-03-014, 225–235.
- Cubadda G., Savio G., and R. Zelli (2002), [Seasonality, Productivity Shocks, and Sectoral Comovements in a Real Business Cycle Model for Italy](#), *Macroeconomic Dynamics*, 6, 1–20.
- Centoni M., and G. Cubadda (2003), [Measuring the Business Cycle Effects of Permanent and Transitory Shocks in Cointegrated Time Series](#), *Economics Letters*, 80, 45–51.
- Cubadda G., and P. Omtzigt (2005), [Small-Sample Improvements in the Statistical Analysis of Seasonally Cointegrated Systems](#), *Computational Statistics & Data Analysis*, 49, 333–348.
- Centoni M., Cubadda G., and A. Hecq (2006), Measuring the Sources of Cyclical Fluctuations in the G7 Economies, in Mazzi G.L., and G. Savio (Eds.), [Growth and Cycle in the Euro-zone](#), 152–159, Palgrave Macmillan.
- Candelon B, and G. Cubadda (2006), [Testing for Parameter Stability in Dynamic Models Across Frequencies](#), *Oxford Bulletin of Economics and Statistics*, 68, 741–760.
- Centoni M., Cubadda G., and A. Hecq (2007), [Common Shocks, Common Dynamics, and the International Business Cycle](#), *Economic Modelling*, 24, 149–166.
- Cubadda G. (2007), [A Reduced Rank Regression Approach to Coincident and Leading Indexes Building](#), *Oxford Bulletin of Economics and Statistics*, 69, 271–292.
- Cubadda G. (2007), [A Unifying Framework for Analysing Common Cyclical Features in Cointegrated Time Series](#), *Computational Statistics & Data Analysis*, 52, 896–906.
- Cubadda G., Hecq A., and F. C. Palm (2008), [Macro-Panels and Reality](#), *Economics Letters*, 99, 537–540.

- Atella V., Centoni M., and G. Cubadda (2008), [Technology Shocks, Structural Breaks and the Effects on the Business Cycle](#), *Economics Letters*, 100, 392–395.
- Cubadda G., Hecq A., and F. C. Palm (2009), [Studying Co-movements in Large Multivariate Models Prior to Multivariate Modelling](#), *Journal of Econometrics*, 148, 25–35.
- Cubadda G., and A. Hecq (2011), [Testing for Common Autocorrelation in Data Rich Environments](#), *Journal of Forecasting*, 30, 325–335.
- Cubadda G., and U. Triacca (2011), [An Alternative Solution to the Autoregressivity Paradox in Time Series Analysis](#), *Economic Modelling*, 28, 1451–1454.
- Centoni M., and G. Cubadda (2011), [Modelling Comovements of Economic Time Series: A Selective Survey](#), *Statistica*, 71, 267–294.
- Cubadda G., and B. Guardabascio (2012), [On the Use of Partial Least Squares Regression for Forecasting Large Sets of Cointegrated Time Series](#), in Di Ciaccio *et al.* (Eds.), *Advanced Statistical Methods for the Analysis of Large Data-Sets*, Studies in Theoretical and Applied Statistics, Springer-Verlag, 171–180.
- Cubadda G., and B. Guardabascio (2012), [A medium-*N* Approach to Macroeconomic Forecasting](#), *Economic Modelling*, 29, 1099–1105.
- Cubadda G., Guardabascio B. and A. Hecq (2013), [A General to Specific Approach for Selecting the Best Business Cycle Indicators](#), *Economic Modelling*, 33, 367–374.
- Cubadda G., Guardabascio B., and A. Hecq (2013), [Building a Synchronous Common-Cycle Index for the European Union](#), in Cheung Y.W., and F. Westermann (Eds.), *Global Interdependence, Decoupling, and Recoupling*, The MIT Press, 37–52.
- Bernardini E. and G. Cubadda (2015), [Macroeconomic Forecasting and Structural Analysis through Regularized Reduced-rank Regression](#), *International Journal of Forecasting*, 31, 682–691.
- Centoni M., and G. Cubadda (2015), [Common Feature Analysis of Economic Time Series: An Overview and Recent Developments](#), *Communications for Statistical Applications and Methods*, 22, 1–20
- Cubadda G., Guardabascio B. and A. Hecq (2017), [A Vector Heterogeneous Autoregressive Index Model for Realized Volatility Measures](#), *International Journal of Forecasting*, 33, 337–344.
- Cubadda G., and B. Guardabascio (2019), [Representation, Estimation and Forecasting of the Multivariate Index-Augmented Autoregressive Model](#), *International Journal of Forecasting*, 35, 67–79.
- Cubadda G., Hecq A., and S. Telg (2019), [Detecting Co-Movements in Noncausal Time Series](#), *Oxford Bulletin of Economics and Statistics*, 81, 697–715.
- Cubadda G., Hecq A., and A. Riccardo (2019), [Forecasting Realized Volatility Measures with Multivariate and Univariate Models: The Case of The US Banking](#)

[Sector](#), in Chevallier J., Goutte S., Guerreiro D., Saglio S., and B. Sanhaji (Eds.), *Financial Mathematics, Volatility and Covariance Modelling. Vol. 2, Part 3: Financial Volatility and Covariance Modelling*, Routledge, UK, 286–307.

del Barrio Castro T., Cubadda G., and D. R. Osborn (2022), [On Cointegration for Processes Integrated at Different Frequencies](#), *Journal of Time Series Analysis*, 43, 412–435.

Cubadda, G., and A. Hecq (2022), [Reduced Rank Regression Models in Economics and Finance](#), in *Oxford Research Encyclopedia of Economics and Finance*, Oxford University Press, doi: 10.1093/acrefore/9780190625979.013.677.

Cubadda, G., and A. Hecq (2022), [Dimension Reduction for High Dimensional Vector Autoregressive Models](#), *Oxford Bulletin of Economics and Statistics*, 84, 1123–1152.

Cubadda G., Hecq A., and E. Voisin (2023), [Detecting Common Bubbles in Multivariate Mixed Causal-Noncausal Models](#), *Econometrics*, 11, 1–16.

Cubadda G., and M. Mazzali (2024), [The Vector Error Correction Index Model: Representation, Estimation and Identification](#), *Econometrics Journal*, 27, 126–150.

Cubadda G., Grassi S., and B. Guardabascio (2024), [The Time-Varying Multivariate Autoregressive Index Model](#), *International Journal of Forecasting*, forthcoming.

Cubadda G., Giancaterini F., Hecq A., and J. Jasiak (2024), [Optimization of the Generalized Covariance Estimator in Noncausal Processes](#), *Statistics and Computing*, forthcoming.

Working papers

<http://econpapers.repec.org/ras/pcu1.htm>

<http://ssrn.com/author=180354>

Editorial and referee services

Associate editor: *Forecasting* (2020-), *Statistical Methods and Applications* (2005-07).

Referee for: *Communications in Statistics - Theory and Methods*, *Computational Statistics & Data Analysis*, *Econometric Theory*, *Econometrics and Statistics*, *Economic Modelling*, *Empirical Economics*, *International Journal of Forecasting*, *Journal of Applied Econometrics*, *Journal of Business Cycle Analysis and Measurement*, *Journal of Business and Economic Statistics*, *Journal of Econometrics*, *Journal of Forecasting*, *Journal of Multivariate Analysis*, *Journal of Nonparametric Statistics*, *Journal of Statistical Computation and Simulation*, *Journal*

of the Italian Statistical Society, Journal of the Korean Statistical Society, Journal of Time Series Analysis, Labour, Metron, Oxford Bulletin of Economics and Statistics, Quantitative Finance, Quarterly Review, Statistical Methods and Applications, and Studies in Nonlinear Dynamics & Econometrics.

Research Grants

Vice Principal Investigator of the national research project: Prin 2022 Methodological and computational issues in large-scale time series models for economics and finance.

Coordinator of research units within the following national research projects:

CNR 2000 Statistical modeling and forecasting of time series.

Cofin 2000 Stochastic models and simulation methods for dependent data.

Cofin 2003 Statistical methods and models for non-stationary and non-linear time series forecasting, theory and applications.

Prin 2020 Towards an Anticipatory Governance System (TAGS)

Participant in the following national research projects:

Cofin 1998 Statistical models for time series analysis.

Prin 2010 Forecasting economic and financial time series: Understanding the complexity and modelling structural change.

*Participant in: The 2002-04 European Science Foundation Network *Econometric Methods for the Modelling of Nonstationary Data, Policy Analysis, and Forecasting.**

Invited lectures

XLI Italian Statistical Society Scientific Meeting, 5-7 June 2002, Milan, Italy.

4th Eurostat and DG ECFIN Colloquium on *Modern Tools for Business Cycle Analysis*, 20-22 October 2003, Luxembourg.

Joint Statistical Meetings, 29 July-2 August 2007, Salt Lake City, Utah, USA.

Methods in International Finance Network 1st Workshop, 24-25 September 2007, Maastricht, The Netherlands.

5th Eurostat-EUI Colloquium on *Modern Tools for Business Cycle Analysis*, 29 September-1 October 2008, Luxembourg.

1st IMS Asia Pacific Rim Meetings, 28 June-1 July 2009, Seoul, Korea.

31st Annual International Symposium on Forecasting, 26-29 June 2011, Prague, Czech Republic.

CESifo Workshop on *Global Interdependence, Decoupling, and Recoupling*, 22-23 July 2011, Island of San Servolo (Venice), Italy.

CIRET/KOF/HSE Workshop on *National Business Cycles in the Global World*, 15-17 September 2011, Moscow, Russia.

32nd Annual International Symposium on Forecasting, 24-27 June 2012, Boston, USA.

6th International Conference on Computational and Financial Econometrics, 1-3 December 2012, Oviedo, Spain.

International Statistical Conference SIS 2013 *Advances in Latent Variables - Methods, Models, and Applications*, 19-21 June 2013, Brescia, Italy.

7th International Conference on Computational and Financial Econometrics, 14-16 December 2013, London, UK.

8th International Conference on Computational and Financial Econometrics, 6-8 December 2014, Pisa, Italy.

9th International Conference on Computational and Financial Econometrics, 12-14 December 2015, London, UK.

36th Annual International Symposium on Forecasting, 19-22 June 2016, Santander, Spain.

10th International Conference on Computational and Financial Econometrics, 9-11 December 2016, Seville, Spain.

1st International Conference on Econometrics and Statistics, 15-17 June 2017, Hong Kong, China.

49th Scientific Meeting of the Italian Statistical Society, 20-22 June 2018, Palermo, Italy.

15th International Conference on Computational and Financial Econometrics, 18-20 December 2021, London, UK.

2nd Workshop on Time Series Methods for Official Statistics, 22-23 September 2022, OECD, Paris, France.

16th International Conference on Computational and Financial Econometrics, 17-19 December 2022, London, UK.

Workshop on Advanced Time Series Methods, 19-20 June 2023, Perugia, Italy.

Conference scientific committees

Common features in Maastricht, 15-16 December 2003, Maastricht, The Netherlands.

XLII Italian Statistical Society Scientific Meeting, 9-11 June 2004, Bari, Italy.

Frontiers in Time Series Analysis, 29-31 May 2005, Olbia, Italy.

Eurostat Conference on *Seasonality, Seasonal Adjustment, and Their Implications for Short-Term Analysis and Forecasting*, 10-12 May 2006, Luxembourg.

4th Italian Congress of Econometrics and Empirical Economics, January 18-21, 2011, Pisa, Italy.

23rd (EC)2 Conference on *Hypothesis Testing*, 14-15 December 2012, Maastricht, The Netherlands.

9th International Conference on Computational and Financial Econometrics, 12-14 December 2015, London, UK.

9th Italian Congress of Econometrics and Empirical Economics, 21-23 January 2021, Cagliari, Italy.

Workshop on "Dimensionality Reduction and Inference in High-Dimensional Time Series", 5-6 July 2021, Maastricht, The Netherlands.

7th International Conference on Time Series and Forecasting, 19-21 July 2021, Gran Canaria, Spain.

Workshop on "Dimensionality Reduction and Inference in High-Dimensional Time Series", 13-14 June 2022, Maastricht, The Netherlands.

8th International Conference on Time Series and Forecasting, 27-30 June 2022, Gran Canaria, Spain.

16th International Conference on Computational and Financial Econometrics, 17-19 December 2022, London, UK.

The 10th Italian Congress of Econometrics and Empirical Economics, 26-28 May 2023, Cagliari, Italy.

9th International Conference on Time Series and Forecasting, 12-14 July 2023, Gran Canaria, Spain.

17th International Conference on Computational and Financial Econometrics, 16-18 December 2023, Berlin, Germany.

Teaching

[Time Series and Econometrics](#)

[Advanced Topics in Time Series](#)

[Supervised Learning](#)