

# Rocco Roberto Mosconi

## *CURRICULUM VITAE*

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Personal Data	
Name and surname	Rocco Mosconi
Nationality	Italian
Born	Pavia, May 03, 1961
Education	Laurea, Economics, University of Pavia, 1985 (cum
Affiliation	Dip. Ingegneria Gestionale, Politecnico di Milano
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### **EDUCATION:**

Laurea, Economics, University of Pavia, 1985 (110/110 cum laude)  
High School, Classical, Liceo "U.Foscolo", Pavia, 1980 (54/60)

### **CURRENT POSITION:**

Full Professor of Econometrics, Department of Management, Economics and Industrial Engineering, Polytechnic of Milano (since March 2006)

### **FORMER POSITIONS:**

Associate Professor of Econometrics, Department of Business Engineering, Polytechnic of Milano (March 1998 to March 2006)

Assistant Professor of Econometrics, Department of Economics and Production, Polytechnic of Milano (May 1993 to March 1998)

Research Associate, Department of Economics and Production, Polytechnic of Milano (May 1990 to May 1993)

Junior Research Fellow, Department of Economics, Polytechnic of Milano (March 1986 to April 1990)

### **TEACHING:**

My teaching activity is mainly focused on econometrics (from introductory to advanced level). However, I also taught courses focused on various quantitative techniques: Business Statistics, Linear Programming, Game Theory, Decision Theory, Financial Mathematics, Multivariate Statistics, Simulation Techniques. Excluding short courses lasting less than 20 hours, the main courses I have been in are the following:

Years	Institution	Course	Level	Hours
2018-now	MIP-Polimi	Time series analysis and forecasting	Master	25
2016-now	MIP-Polimi	Metodi quantitative per il risk management (Ita)	Master	60
2015-now	Politecnico di Milano	Financial Econometrics	Ms	55
2015-now	Politecnico di Milano	Introductory Econometrics	Ms	55
1993-2015	Politecnico di Milano	Econometria Applicata (Ita)	Ms	110
2012-now	Politecnico di Milano	Topics in advanced Econometrics (Panel data, Structural Equations Models)	PhD	40

2010-now	MIP-Polimi	Business Statistics	MBA	40
2010-now	MIP-Polimi	Statistica per il Management (Ita)	MBA-PT	24
2000-2011	Politecnico di Milano	Introduction to Econometrics	PhD	20
2000-2011	Politecnico di Milano	Applied Multivariate Statistics	PhD	20
2008-2012	Università Bocconi	Advanced Econometrics I (ML Cointegration analysis, Bayesian VAR, State-space, Kalman Filter)	PhD	24
2006-2010	Università Bocconi	Econometrics II (Multiple equations GMM, Panel data models)	PhD	24
2003-2009	MIP-Polimi	Decision Support Systems and Quantitative Methods (Linear Programming, Business Statistics)	MBA	40
2005-2009	MIP-Polimi	Metodi Quantitativi per il Management (Ita)(Programmazione Lineare, Teoria delle decisioni, Teoria dei Giochi)	MBA	24
1995-2005	ENI Corporate University	Quantitative Methods for Business (Linear Programming, Financial mathematics, Forecasting, simulation techniques)	Master	50
2002	Università di Pavia	Microeconometria (Ita)	Master	20
1997-2000	Università Cattolica	Economia Applicata (Ita) (introduzione all'econometria)	Ms	40
1994 and 1998	University of Copenhagen	Advanced Cointegration	Ms	30
1991-1997	Politecnico di Milano	Economia e Organizzazione Aziendale (Ita) (Microeconomia, Macroeconomia, Contabilità)	Bs	50
1992	St. Xavier University	Business Statistics	MBA	50
1989-1991	Politecnico di Milano	Istituzioni di Economia (Ita) (esercitatore di Microeconomia e Macroeconomia)	Bs	25

### MENTORING:

Rocco Mosconi has supervised several students for their Ms or PhD thesis. Some of them hold important positions, where their econometric/quantitative skills are crucial:

- Raffaello Seri, Full Professor of Econometria, Università dell'Insubria (Ms, 1996, PhD 1999)
- Fabio Sartori, Statistical Officer, European Commission Luxembourg, (Ms 1996)
- Federico Martellosio, Senior Lecturer in Econometrics, University of Surrey (Ms, 1999)
- Filippo Olivetti, Managing Director, RBS Securities Japan (Ms 2000)
- Lorenzo Trapani, Professor of Econometrics, University of Nottingham (Ms, 2001)
- Andrea Colombo, Senior Manager, KPMG Advisory (Ms 2001)
- Francesca Monti, Economist (Monetary Analysis), Bank of England (Ms 2003)
- Daniel Zantedeschi, Assistant professor, Ohio State University (Ms 2003, PhD 2008)
- Eleonora d'Elia, Senior Manager, KPMG Advisory (Ms 2005)
- Viviana Vieli, Portfolio Analytics Specialist at FactSet Research Systems (Ms 2005)

### RESERCH INTERESTS:

Theoretical Econometrics: Time Series Analysis, Non-stationary Time Series Modelling, VAR models, Survival Data Analysis, Discrete choice models

Applied Econometrics: Econometric Modelling of Financial Data, Models for the Diffusion of Technological Innovation, Estimation of Export Demand Functions, Estimation of Cost Functions, Econometric analysis of energy and telecommunications

#### PUBLICATIONS:

1. Mariotti S., Mosconi R., Piscitello L., "Location and survival of MNEs' subsidiaries: Agglomeration and heterogeneity of firms", **Strategic Management Journal**, 40, 2242-2270 (doi: 10.1002/smj.3081)
2. Mosconi R., Paruolo P., 2017, "Identification conditions in simultaneous systems of cointegrating equations with integrated variables of higher order", **Journal of Econometrics** 198, p 271-276 (doi: [10.1016/j.jeconom.2017.01.007](https://doi.org/10.1016/j.jeconom.2017.01.007))
3. Doornik J., Mosconi R., Paruolo P., 2017, "Formula I(1) and I(2): Race Tracks for Likelihood Maximization Algorithms of I(1) and I(2) Cointegrated VAR Models", **Econometrics**, 5, 49, p 1-30 (doi:[10.3390/econometrics5040049](https://doi.org/10.3390/econometrics5040049))
4. Bertoldi P., Mosconi R., 2015, The impact of energy efficiency policies on energy consumption in the EU Member States: a new approach based on Energy Policy indicators, JRC research paper ([https://re.public.polimi.it/retrieve/handle/11311/1038570/243944/jrc\\_report\\_jrc98236-pdf.pdf](https://re.public.polimi.it/retrieve/handle/11311/1038570/243944/jrc_report_jrc98236-pdf.pdf))
5. Mosconi R. (2009). Stock Prices and Traded Quantities: Evidence from Ultra High Frequency Data. In: Società Italiana di Statistica. Statistical Methods for the analysis of large data-sets. p. 113-116, CLUEP
6. Mosconi R., Seri R., 2006, "Non Causality in Bivariate Binary Time Series", **Journal of Econometrics** 132, p 379-407
7. Johansen S., Mosconi R., Nielsen B., 2000, "Cointegration analysis in the presence of structural breaks in the deterministic trend", **Econometrics Journal**, vol. 3, 216-249
8. Mosconi R., Rahbek A., 1999, "Cointegration Rank Inference with Stationary Regressors in VAR Models", **Econometrics Journal**, vol. 2, 76-91
9. Mosconi R., 1998, "MALCOLM version 2.0: the Theory and Practice of Cointegration Analysis in RATS", **Cafoscarina**, 1998.
10. Colombo M.G., Mosconi R., "A Survival Model for the Study of the Diffusion of Multiple Technologies", **Giornale degli Economisti e Annali di Economia**, Luglio-Settembre 1995
11. Colombo M.G., Mosconi R., 1995, "Complementarity and Cumulative Learning Effects in the Early Diffusion of Multiple Technologies", **The Journal of Industrial Economics**, March 1995
12. Mosconi R., "Cointegrazione e modelli econometrici: teoria e applicazioni", atti del convegno "Ricerche quantitative per la politica economica 1993", **Contributi all'analisi economica**, numero speciale 1994
13. Giannini C., Mosconi R., 1992, "Non Causality in Cointegrated Systems: Representation, Estimation and Testing", **Oxford Bulletin of Economics and Statistics**, August 1992
14. Mosconi R., "La costruzione di indici settoriali di competitività all'esportazione: problemi tecnici e una applicazione all'industria meccanica", in F.Onida-R.Helg (a cura di), *Integrazione internazionale e specializzazione produttiva dell'industria italiana*, vol.II, 1992, **F.Angeli**
15. Brioschi F., Ghezzi L., Mosconi R., "The link between stock prices and fundamental values: some evidence from the Italian stock exchange", **Giornale degli Economisti e Annali di Economia**, Settembre-Ottobre 1990
16. Mosconi R., Prosperetti L., "Modelli econometrici della funzione di esportazione: il caso del settore meccanico italiano", in F.Onida (a cura di), *Integrazione internazionale e specializzazione produttiva dell'industria italiana*, **F.Angeli**, 1989
17. Giannini C., Mosconi R., "Predictions from unrestricted and restricted VAR models", **Giornale degli economisti e annali di economia**, Maggio-Giugno 1987
18. Giannini C., Mosconi R., "Analisi "VAR" di un sistema di prezzi", **Rivista internazionale di Scienze sociali**, XCV, Aprile-Giugno 1987

#### WORKING PAPERS

1. Mosconi R. and P. Paruolo, 2014, Initialization of Maximum Likelihood algorithms for cointegrated I(1) and I(2) VAR models. PRIN Workshop Forecasting economic and financial time series, Roma, June 2014
2. Mosconi R. and P. Paruolo P., 2014, Rank and order conditions for identification in simultaneous system of cointegrating equations with integrated variables of order two, MPRA Paper No. 53589, <http://mpra.ub.uni-muenchen.de/53589/>
3. Mosconi R. and P. Paruolo, 2011, Identification of Cointegrating Relations in I(2) Vector Autoregressive Models, Università dell'Insubria, mimeo, presented at the Econometric Society European Meeting 2011, Oslo
4. Carlini F., Manzoni M. and R. Mosconi, 2011, The Impact of Supply and Demand Imbalance on Stock Prices: an Analysis Based on Fractional Cointegration Using Borsa Italiana ultra High Frequency Data, Fourth Italian Congress of Econometrics and Empirical Economics (ICEEE 2011), Pisa
5. Gobbi A., Massarani M. and Mosconi R., 2008, Unbiased estimation of the out-of-sample mean-variance frontier, presented at the First International Conference in memory of Carlo Giannini - '*Recent Developments in Econometric Methodology*', Bergamo, January 25/26 2008.
6. Mosconi R., 2007, Asset Allocation under GARCH Dynamics (presented at the 2nd Italian Congress of Econometrics and Empirical Economics, Rimini - January 2007
7. Mosconi R., Olivetti F., 2005, "Bivariate Generalizations of the ACD Models", presented at the Journal of Applied Econometrics Annual Conference, Venezia, June 2005
8. Monti F., Mosconi R., 2005, "Optimal Control in Cointegrated Linear Systems", presented at the First Italian Congress of Econometrics and Empirical Economics, Venezia, January 2005

## SOFTWARE

Rocco Mosconi is the author of the econometric package MALCOLM, specialized in econometric analysis of non stationary time series. MALCOLM has been adopted by several central banks, universities and research centers.

## REFEREEING ACTIVITY

Guest editor (with P. Paruolo) of *Econometrics* special issue on ""Celebrated Econometricians: Katarina Juselius and Søren Johansen"" (2019).

Rocco Mosconi regularly acts as a referee for: *Journal of Econometrics*, *Journal of the Italian Statistical Society*, *European Economic Review*, *Journal of Industrial Economics*, *Oxford Bulletin of Economics and Statistics*, *Empirical Economics*, *The European Journal of Finance*, *Econometrics Journal*, *Econometrics*

## NETWORK

Rocco Mosconi has been Visiting Professor at the Department of Mathematical Statistics of the University of Copenhagen in 1994 (8 months) and 1998 (6 months). He regularly cooperates with the Department of Economics of the same university.

Member of the Econometric Time Series European Research Network (ETSERN, <http://www.econ.ku.dk/rahbek/etsern/Default.htm>).

Member of the Scientific Committee of the Centro Interuniversitario di Econometria (CIde, [http://virgo.unive.it/cide/?page\\_id=1691](http://virgo.unive.it/cide/?page_id=1691)).

Member of the board of Associazione Carlo Giannini (<http://economia.unipv.it/acq/>).

## EXTRA ACADEMIC ACTIVITIES

- 2014-now: **EU Joint Research Center, Ispra**: coordinator of a research project using econometric panel data analysis to evaluate the effectiveness of energy policy of EU member states in reducing energy consumption.
- 2012: **United Nations University, ECODOM e IPSOS** coordinator of a research project on EWaste disposal

- 2011-now: Supervision of the statistical/econometric methodology in several research projects carried on within **Osservatori.net**, School of Management - Politecnico di Milano
- 2001-2005: consultant for the monetary policy strategy division of the **European Central Bank**, on the role of cointegrated structural Vector AutoRegressive models and optimal control in monetary policy
- 1999-2000: Research for the **Italian Authority for Energy** on econometric estimation of cost functions for electricity and gas
- 1993-1994: Research for **Telecom Italia** on econometric analysis of the demand for telecommunication services
- 2001-2003: consultant for the monetary policy strategy division of the **European Central Bank**, on the role of cointegrated structural Vector AutoRegressive models and optimal control in monetary policy
- 2000-2002: Statistical analysis on individual data on salaries **OD&M Consulting e RCS - Corriere della Sera**
- 2002: Econometric analysis of optimal portfolio allocation **Reali e Associati SIM**
- 2002: Consulting on cointegrated Vector AutoRegressive models in asset management for **Nextra (Intesa BCI)**
- 1999-2000: Research for the **Italian Authority for Energy** on econometric estimation of cost functions for electricity and gas
- 2000: Econometric analysis of frauds in car insurance for **Price-Waterhouse-Coopers**
- 1993-1994: Research for **Telecom Italia** on econometric analysis of the demand for telecommunication services