

C.V. of Costanza Torricelli

Full Professor in Quantitative Methods for Economics and Finance
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Present and past positions

from 2001, Full Professor in Financial Mathematics, University of Modena and Reggio Emilia
1993-2001, Associate Professor in Financial Mathematics, Univ. of Modena and Reggio Emilia
1992-93, Associate Professor in Financial Mathematics, University of Bergamo
1991-92: Post-doc, University of Genova
1990-91: "Jean Monnet Fellow", Department of Economics, European University Institute, Firenze
1989-90: Adjunct Professor of Mathematical Economics, University of Udine

Visiting

2002 (Spring Term), Department of Economics, University of Warwick
1995 (Sommer Semester), Institut für Entscheidungstheorie und Unternehmensforschung,
Universität Karlsruhe, Germany
1996 (Sommer Semester), Institut für Entscheidungstheorie und Unternehmensforschung,
Universität Karlsruhe, Germany
1997 (Sommer Semester), Institut für Entscheidungstheorie und Unternehmensforschung,
Universität Karlsruhe, Germany
1989 (Autumn term), Faculty of Economics and Politics, University of Cambridge (UK)

Studies

Ph.D. in Economics, University of Bologna
M.Phil. in Economics, University of Warwick
Degree in Economics (with highest honours), University of Modena

Professional associations

Association for Banking and Finance (ABF, Univ. Lugano), International Finance and Banking Society (IFABS), Italian Association of Mathematics Applied to Economics and Social Sciences (AMASES: Member (elected) of the Scientific Board 2005-2010, 2008-2010 Vice-President), Italian Mathematics Associations (UMI), Italian Society for Mathematics and Applications (SIMAI), Euro Working Group on Financial Modelling (EWGFM), Italian Financial Risk Management Association (AIFIRM), Cefin (Centro Studi di Banca e Finanza, Università di Modena e Reggio Emilia), IFABS (International Finance and Banking Society)

Other academic activities

Scientific Committee: Ifabs conference (2012, 2013), EFMA conference (2013, 2014), MAF (2014), Amases annual conference (2005-10)
Member of the examining board of various public examinations for academic lecturer, associate and full professor
Member of various University and Faculty boards
Member of the Univ. Research Evaluation Board in the Area Economics and Statistics (VTR) for the years 2001-2003

Teaching

2001-today: Financial Mathematics, Theory of Finance, Derivatives, Risk management, Computational Methods in Finance, University of Modena e Reggio Emilia

2004- 2012: Risk management, Ph. D. in Computational Methods for Financial and Economic Forecasting and Decisions of the University of Bergamo

1996 e 1997: Microeconomic Theory of futures markets, Universität Karlsruhe, D

1992-1995: Financial Mathematics , University of Bergamo

1991-92: Microeconomic Theory of futures markets, University of Brescia

1989-90: Mathematical Economics, University of Udine

1989-90: Master in Finance and Economics, Faculty of Economics and Politics, Cambridge University (U.K).

Funded research projects

PRIN-COFIN 2007 (research years 2008-2010): National supervisor research project "The impact of population ageing on financial markets, intermediaries and financial stability"

Banco Popolare Verona e Novara, 2006: "Stress testing"

PRIN-COFIN 2005 (research years 2006-2007): National supervisor research project "Bank capital in risk management and in investment strategies"

PRIN-COFIN 2001 (research years 2002-2004): head Univ. Modena Research Unit "Financial risk management: economic, statistic and computational issue", National supervisor Prof. Giorgio Szego(Univ. La Sapienza, Roma)

PRIN-COFIN 1999 (research years 2000-2001): head Univ. Modena Research Unit "Measures and methodologies for controlling financial asset risks: from market to credit risk", National supervisor Prof. Giorgio Szego(Univ. La Sapienza, Roma)

CNR - 1998, head Univ. Modena Research Unit 98.01406.CT10 "Alternative models for pricing and trading derivatives", National supervisor Prof. Maria Ida Bertocchi (Univ. Bergamo)

CNR -1996-1997, head Univ. Modena Research Unit 96.01630.CT10 and 97.01050.CT10 "The term structure of interest rates: financial and macroeconomic issues"

Advanced Research Project, University of Modena 1997: head of research "The term structure of interest rates: theoretical and empirical issues"

CRUI-DAAD, Vigoni Programme (Exchange programme Italy-Germany), head of the Italian unit, " Stochastic models of the term structure of interest rates: an empirical comparison between Italy and Germany", 1996 renewed for 1997

MURST 40% - 1996: head Univ. Modena Research Unit "Monetary policy and the term structure of interest rates", National supervisor : Prof. Silvana Stefani (University of Brescia)

MURST 40% - 1995, head Univ. Modena Research Unit "The Italian term structure of interest rates", National supervisor Prof. Giorgio Szego (Univ. La Sapienza, Roma)

MURST 40% - 1988, Partecipant, Univ. Brescia Research Unit, "Developments of the General Equilibrium Theory"; National supervisor Prof. Aldo Montesano (Univ. Bocconi).

CNR - Partecipant (1988-1991) Permanent Seminar on General Equilibrium Theories, Univ. Bologna (National supervisor : Prof. S.Zamagni)

Refereeing

Research projects: PRIN, FIRB (Italian University Ministry)

Grants: DAAD - Deutscher Akademischer Austauschdienst (Servizio Tedesco per lo Scambio Accademico)

IFABS 2012 Awards Committee : Best PhD Student Paper Award and Best Young Researcher Paper Award

Journals: Advances in Data Analysis and Classification, Applied Financial Economics, European Journal of Finance, European Journal of Operational Research, European Journal of Political Economy, Frontiers in Finance and Economics, IEEE Transactions on Fuzzy Systems, International Economic Review, International Journal of Theoretical and Applied Finance, International Review of Financial Analysis, Decisions in Economics and Finance, Giornale degli Economisti, Journal of Banking and Finance, Journal of Business and Economic Statistics, Journal of Economic Dynamics and Control, Journal of Financial Economic Policy, Journal of Futures Markets, Journal of International Money and Finance, Journal of Multinational Financial Management, Proceedings MAF2010, The Review of Economic Analysis, Review of Derivatives Research, Revue Finance

Publications

G. Bertocchi, M. Brunetti, C. Torricelli, 2014, Who holds the purse strings within the household? The determinants of intra-family decision making, *Journal of Economic Behavior and Organization*, 101, 65–86. [\[download wp\]](#)

Pederzoli C., C. Torricelli, 2013, Efficiency and unbiasedness of corn futures markets: New evidence across the financial crisis, *Applied Financial Economics*, Vol. 23, No. 24, [1853–1863](#).

Pederzoli C., Thoma G., C. Torricelli, 2013, Modelling credit risk for innovative firms: the role of innovation measures, *Journal of Financial Services Research*, August, Volume 44, Issue 1, [111-129](#).

Bertocchi G., Brunetti, M., Torricelli C., 2011, "Marriage and other risky assets: a Portfolio Approach", *Journal of Banking and Finance*, Volume 35, Issue 11, November, [2902-2915](#).

M. Brunetti, C. Torricelli, Population age structure and household portfolio choices in Italy, *European Journal of Finance*, Volume 16, Number 6, September 2010, [481-502](#).

- C. Pederzoli, C. Torricelli, A Parsimonious Default Prediction Model for Italian SMEs, *Banks and Bank Systems*, [VI. 4, 2010](#), 5-9.
- C. Pederzoli, C.Torricelli, S.Castellani, The interaction of financial fragility and the business cycle in determining banks' loan losses: an investigation of the Italian case, *Economic Notes*, 39:3, 2010, 129-146.
- M.Brunetti , C.Torricelli, Demographics and asset returns: does the dynamics of population ageing matter?, *Annals of Finance*, Volume 6, March 2010, [193-219](#).
- M. Brunetti, C. Torricelli, "The impact of population ageing on household portfolios, Life-cycle allocations and asset returns", in *Optimizing the Ageing, Retirement and Pensions Dilemma*, M. Bertocchi, S.L. Schwartz and W. Ziemba (eds.), Wiley, ISBN: 9780470377345, February 2010.
- C. Pederzoli, Torricelli C., Tsomocos D., Rating systems, procyclicality and Basel II: an evaluation in a general equilibrium framework, *Annals of Finance*, Volume 6, January 2010, [33-49](#).
- M.Brunetti, C.Torricelli, Economic Activity and Recession Probabilities: information content and predictive power of the term spread in Italy, *Applied Economics*, 41:18, 2009, [2309 - 2322](#).
- V. Moriggia, S. Muzzioli, C. Torricelli, "On the no arbitrage condition in option implied trees" *European Journal of Operational Research*, [VI. 193, 1, 212-221](#), 2009.
- G. Bertocchi, M.Brunetti, C.Torricelli, Portfolio choices, Gender and Marital Status, *Rivista di Politica Economica*, 2008, Issue IX-X, [119-153](#).
- S.Castellani, C. Pederzoli, C.Torricelli, Indebtedness, macroeconomic conditions and banks' loan losses: evidence from Italy, in Moriggia V. & Torricelli C. (Eds.), *Bank Capital in risk management and investment strategies*, Esculapio, Bologna, October 2008.
- C. Pederzoli, C. Torricelli, Banks' optimal rating systems and procyclicality, *Communications to SIMAI Congress*, VI.2, 2007, ISSN 1827-9015, DOI: 10.1685/CSC06147.
- Brunetti, M., Torricelli C., The Population Ageing in Italy: Facts and Impact on Household Portfolios, in "*Money, Finance and Demography: The Consequences of Ageing*," SUERF Colloquium Volumes, SUERF - The European Money and Finance Forum, Morten Balling & Ernest Gnan & Frank Lierman (eds.), 2007.
- V.Moriggia, S.Muzzioli, C.Torricelli, Call and put implied volatilities and the derivation of option implied trees, *Frontiers in Finance and Economics*, VI. 4, N.1, June 2007.
- M.Brunetti, C.Torricelli, The internal and cross market efficiency in index option markets: an investigation of the Italian market, *Applied Financial Economics*, 17, 2007, 25-33.
- Marotta, G., Pederzoli, C., Torricelli,C., 2006, Forward-looking estimation of default probabilities with Italian data, *Euro-Mediterranean Economics and Finance Review*, 1, 1, 6-19.
- C.Pederzoli, C. Torricelli, Capital requirements and Business Cycle Regimes: Forward-looking modelling of Default Probabilities , *Journal of Banking and Finance*, 2, 2005, 3121-3140.
- M.Brunetti, C.Torricelli, Put-Call Parity and cross-market efficiency in the Index Options Markets: evidence from the Italian market, *International Review of Financial Analysis*, VI.14, 2005, 508-532.

S.Muzzioli, C.Torricelli, The pricing of options on an interval binomial tree: an application to the DAX index option market, *European Journal of Operational Research*, 163, 2005, 192-200.

S.Muzzioli - C.Torricelli, A multiperiod binomial model for pricing options in a vague world, *Journal of Economic Dynamics and Control*, 28, 2004, 861-887.

D.Mercurio, C.Torricelli, Estimation and arbitrage opportunities for exchange rate baskets, *Applied Economics*, 35, October 2003, 1689-1698.

S.Muzzioli, C.Torricelli, Implied trees in illiquid markets: a Choquet pricing approach, *International Journal of Intelligent Systems*, 17, 6, 2002.

G. Boero, C. Torricelli, "The information in the term structure of interest rates: further results for Germany", *European Journal of Finance*, vl.8, Issue 1, 20-44, 2002.

L.Malaguti, C.Torricelli, The Rational Expectation Dynamics of a Model for the Term Structure and Moneatry Policy, *Decisions in Economics and Finance*, Vl.24, N.2, November 2001, 137-152.

S.Muzzioli, C. Torricelli, "A model for pricing an option with a fuzzy payoff", *Fuzzy Economic Review*, 6 (1), May 2001.

L. Malaguti, C. Torricelli, 1997, "Monetary policy and the term structure of interest rates: a generalisation of McCallum (1994) two-period model", ed. C.Hipp, *Geld, Finanz, Banken und Versicherung*, VVW Karlsruhe.

G. Boero, C. Torricelli, "A comparative evaluation of alternative models of the term structure of interest rates", *European Journal of Operational Research*, vl. 93, n.1, 205-223, August 1996.

C.Torricelli: "Futures Market and Spot Price Volatility: a Model for a Storable Commodity", 1994, *European Journal of Political Economy*, vol.10, 339-355.

A. Bassetti, C. Torricelli: "Optimal Portfolio Selection as a Solution to an Axiomatic Bargaining Game", 1992, ed. G. Feichtinger, *Dynamic Economic Models and Optimal Control*, Amsterdam, Elsevier Publisher.

A.Bassetti, C.Torricelli: "Optimal Portfolio Selection as a Bargaining Game", 1991, eds. R.P.Hamalainen e H.Ehtamo, *Springer Verlag Lectures Notes in Control and Information Sciences*, vol.II, *Dynamic Games in Economic Analysis*, Heidelberg, Springer Verlag.

C.Torricelli: "A Survey in the Theory of Futures Markets", *Ricerche Economiche*, 4(1989).

Publications in Italian

Costanza Torricelli (Editor): S. Benninga, Modelli finanziari - La finanza con Excel 2° ed. italiana, con CD-Rom, settembre 2010, ISBN – 978883866637-7.

Bonollo M., Morandi D., Pederzoli C., Torricelli C., 2007, "Model risk e tecniche di controllo dei market parameter. L'esperienza di Banco Popolare", CEFIN Working Papers, N. 5.

C. Torricelli: various items for *Enciclopedia di Repubblica*, UTET, 2003.

C. Torricelli: *l'Enciclopedia dell'Economia dell'Impresa*, volume *Economia Politica*, UTET, maggio 1994: Capital Asset Pricing Model(CAPM), Credito, Futures Markets, Intermediazione Finanziaria, Mercati a termine, Mercati Finanziari, Teorie delle Opzioni.

C.Torricelli: "*I MERCATI FUTURES - Teorie, modelli e applicazioni*", Bologna, 1992, CLUEB.

G. Ricci - C.Torricelli : "*Strumenti matematici per le decisioni finanziarie*", Collana di Argomenti di Matematica Applicata, 1992, Bologna, PATRON.

Editorials

[La bolla dei mutui subprime e il fallimento Lehman Brothers: quali lezioni per i portafogli delle famiglie](#), IFANEWS.it, 11/10/2012

[Poca liquidità nei portafogli degli italiani](#) (con Marianna Brunetti e Elena Giarda), La Voce, 31/08/2012

[Are married women less risk averse? If so, why?](#) (with Graziella Bertocchi and Marianna Brunetti), VOX, 13/03/2010.

Recent Working Papers

Brunetti M., Giarda E., Torricelli C., 2012, Is financial fragility a matter of illiquidity? An appraisal for Italian households, Working Paper Cefin N.32, June, www.cefin.unimore.it, Ceis Research Paper No. 242.

Brunetti M., Bertocchi G., C. Torricelli, 2012, "Is it Money or Brains? The Determinants of Intra-Family Decision Power, June, [IZA-DP N. 6648](#), [CEPR DPS N. 9017](#).

Pederzoli C., Thoma G., C. Torricelli, 2011, Modelling credit risk for innovative firms: the role of innovation measures, Working Paper Cefin N.25, March, www.cefin.unimore.it
accepted by *Journal of Financial Services Research*

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published *Annals of Finance*

Bertocchi G., Brunetti, M., Torricelli C., 2008, "Marriage and other risky assets: a Portfolio Approach", CEPR Discussion Paper No. 7162 <http://www.cepr.org/pubs/new-dps/showdp.asp?dpno=7162> and IZA Discussion Paper No. 3975, January 2009
<http://ftp.iza.org/dp3975.pdf>
published *Journal of Banking and Finance*

Torricelli C., 2009, Models for household portfolios and life-cycle allocations in the presence of labour income and longevity risk, Working Paper Cefin N. 17 , March, www.cefin.unimore.it

Pederzoli C., C. Torricelli, 2010, A parsimonious default prediction model for Italian SMEs, Working Paper Cefin N.22, June, www.cefin.unimore.it
published *Banks and Bank Systems*

Pederzoli C., Thoma G., C. Torricelli, 2011, Modelling credit risk for innovative firms: the role of innovation measures, Working Paper Cefin N.25, March, www.cefin.unimore.it
published *Journal of Financial Services Research*

Brunetti M., Bertocchi G., C. Torricelli, 2012, "Is it Money or Brains? The Determinants of Intra-Family Decision Power, June, [IZA-DP N. 6648](#), [CEPR DPS N. 9017](#).

Brunetti M., Giarda E., Torricelli C., 2012, Is financial fragility a matter of illiquidity? An appraisal for Italian households, Working Paper Cefin N.32, June, www.cefin.unimore.it

Gianfelice G., Marotta G., Torricelli, 2013, A liquidity risk index as a regulatory tool for systemically important banks? An empirical assessment across two financial crises, Working Paper Cefin N.38, July, www.cefin.unimore.it ISSN 2282-8168
Under revision for *Applied Financial Economics*

Pederzoli C., C. Torricelli, 2013, Efficiency and unbiasedness of corn futures markets: New evidence across the financial crisis, Working Paper Cefin N.40, September, www.cefin.unimore.it ISSN 2282-8168
Accepted *Applied Financial Economics*

H.Prast, Rossi M.C., Torricelli C., C. Druta, 2013, Do women prefer pink? The effect of a gender stereotypical stock portfolio on investing decisions, Collegio Carlo Alberto, Working Paper N. 338, December, ISSN 2279-9362 <http://www.carloalberto.org/assets/working-papers/no.338.pdf>

Brunetti M., C. Torricelli, 2014, "Second homes: households' life dream or (wrong) investment?", in progress.

Baldini M., C. Torricelli, M.C. Urzì Brancati, 2014, Family ties: occupational responses to cope with a household income shock, CAPP WP N. 113, Cefin WP N. 45, April.
<http://ideas.repec.org/s/mod/cappmo.html>, http://www.cefin.unimore.it/?q=webfm_send/213

Modena, April 2014