Marco Bee

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Personal details

Born February 1, 1969.

Italian citizen.

Married, one daughter.

Education

B.A. in Economics, 1993, University of Trento - Italy. Thesis: *La Relazione fra Tassi di Cambio Spot e Forward: un Approccio di Cointegrazione*. Advisors: R.G. Avesani and G. Passamani. Summa cum laude.

Ph.D. in Theoretical Statistics, 1998, University of Trento - Italy. Thesis: *Misture Normali Multivariate: Inferenza con Dati di Dimensioni Diverse*. Advisors: B. Flury and M.N. Goria.

Visiting Research Associate, Department of Mathematics, Indiana University (August 1996 - June 1997).

Previous Employment

September 1998 - March 1999: Expert in data processing at Informatica Trentina SpA, Trento.

April 1999 - January 2005: financial researcher at the Banca Intesa Risk Management & Research department. Promoted to the senior staff in July 2001. Head of the credit risk quantitative methods group since February 2003. Responsible for the development and implementation of

(i) Statistical models of risk scenarios;
(ii) Methodologies for fitting heavy-tailed distributions to be used in Value at Risk computation;
(iii) Methodologies for the estimation of volatilities and beta for shares and indices;
(iv) Structural and reduced form models for the pricing of credit derivatives;
(v) Monte Carlo models for operational risk loss models;
(vi) Quantitative models for credit grade estimation;
(vii) Portfolio credit risk models.

January 2005 - September 2012: Assistant professor in Economic Statistics (scientific sector SECS-S/03, competition sector 13/D2), Faculty of Economics, University of Trento.

October 2012 - : Associate professor in Economic Statistics (scientific sector SECS-S/03, competition sector 13/D2), Department of Economics and Management, University of Trento.

National Scientific Qualification to full professor in:

Economic Statistics (scientific sector SECS-S/03, competition sector 13/D2), March 30, 2017;

Econometrics (scientific sector SECS-P/05, competition sector 13/A5) March 20, 2018.

Grants and Awards

Winner of the Fund for Basic Research (Fondo per le Attività Base di Ricerca) 2017 issued by the Italian Ministry of Education, University and Research.

Other scientific and professional activities

Consultant for the "Procura della Repubblica presso il Tribunale di Trento" for technical assessments concerning public auctions (2005).

Member of the University of Trento group, winner of the research project "Evaluation models and tools for assessment of innovation and sustainable development at the EU level", College of Europe (Bruges), funded by the European Commission (December 2005 - September 2006; senior expert prof. G. Espa).

Consultant for ANIA, Telespazio SpA and Agriconsulting SpA for the construction of "SIGRA - Sistema Integrato per la Gestione del Rischio assicurativo da Alluvione". Responsible for the development and implementation of models for forecasting and simulating flood events (September 2005 - September 2006).

Winner, as a Junior Expert, of the research project "Analysis of e-Inclusion impact resulting from advanced R&D based on economic modelling in relation to innovation capacity, capital formation, productivity, and empowerment", College of Europe, Bruges, funded by the European Commission (August 2009 - September 2010).

Consultant for "CIR Food scarl" in the verification ordered by the Tribunale Regionale di Giustizia Amministrativa, concerning the announcement for the catering service for Provincia Autonoma di Trento, University of Trento, municipalities and other local authorities (March 2014).

Programming languages

High level languages: Matlab, Gauss, R, TEX.

Data provider and financial analysis tools: Bloomberg, Reuters.

Teaching experience

Teaching assistant for the course Statistica, Faculty of Sociology, University of Trento, 1997-1998.

Teaching assistant for the course Statistica Aziendale, Laurea in Economia e Gestione Aziendale, University of Trento, 2004-2005.

Teaching assistant for the course Statistica, Faculty of Economics, University of Trento, academic years 2005-2006 to 2007-2008.

Ingegneria Finanziaria, Laurea specialistica in Banca, Impresa e Mercati Finanziari, University of Trento, academic years 2004-2005 to 2010-2011.

Laboratorio 3: Simulazione Finanziaria, Laurea specialistica in Banca, Impresa e Mercati Finanziari, University of Trento, academic years 2005-2006 to 2010-2011.

Risk Management S, Laurea specialistica in Scienze Statistiche ed Economiche, University of Milano - Bicocca, 2006-2007 and 2007-2008.

Quantitative Methods I, Master in International Management, University of Trento, academic years 2008-2009 to 2015-2016.

Quantitative Models for Business Decision Making, Master in Innovation Management, University of Trento, academic years 2010-2011 to 2013-2014.

Data Analysis and Forecasting, Master in Innovation Management, University of Trento, academic years 2014-2015 and 2015-2016.

Statistics (intensive course), Master in Economics, University of Trento, academic years 2012-2013 to 2016-2017.

Analisi dei Dati e Statistica, bachelor in Amministrazione Aziendale e Diritto, University of Trento, academic years 2016-2017 and 2017-2018.

Financial Markets, PhD in Economics and Management, Interdepartmental Centre for Training to Research in Economics and Management, University of Trento, 2005.

Methods and Concepts in International Studies II, PhD in International Studies, School of International Studies, University of Trento, April-May 2013.

Statistics and Regression, Doctoral Programme in Economics and Management, Doctoral School of Social Sciences, University of Trento, academic year 2017-2018.

Laboratorio: Simulazioni Finanziarie, Laurea magistrale in Finanza, University of Trento, academic years 2011-2012 to 2018-2019.

Data Analysis and Forecasting, Master in Innovation Management and Master in International Management, University of Trento, academic years 2016-2017 to 2018-2019.

Introduction to Market Analysis, Master in Innovation Management and Master in International Management, University of Trento, academic year 2018-2019.

Other courses

"Modelli di portafoglio per la gestione attiva del rischio di credito ed il Credit VaR", ABI Formazione - Area Credit, percorso Misurazione, Milano, June 16-17, 2005; May 10-11, 2006; June 27-28, 2007; June 25-26, 2009; May 17-18, 2010; June 15-16, 2011; July 2-3, 2012; September 16-17, 2013.

"Linear and non-linear time series analysis", summer school "Reaction - R: Economics in Action", Trento, September 5-8, 2017.

Languages

English: excellent (spoken and written).

German: scholastic.

Progetti di Ricerca di Interesse Nazionale (PRIN)

Member of the research program "The role of financial fragility and of default risk in the contagion processes of the systemic crises", 2007.

Publications

Articles in ISI Thomson Journal Citation Reports journals

1. Bee M. and Flury B. (2002), "A Problem of Dimensionality in Normal Mixture Analysis", *Scandinavian Journal of Statistics*, 29, 485-500.
2. Bee M. (2004), "Testing for Redundancy in Normal Mixture Analysis", *Communications in Statistics - Simulation & Computation*, 33, 915-936.
3. Bee M. (2005), "Estimating Rating Transition Probabilities with Missing Data", *Statistical Methods & Applications*, 14, 127-141.
4. Bee M., Cozzani M., Manfredi M., Mutinelli S. and Siciliani G. (2008), "Dental Arch Changes Following Rapid Maxillary Expansion", *European Journal of Orthodontics*, 30, 469-476.
5. Bee M., Benedetti R. and Espa G. (2008), "Spatial Models for Flood Risk Assessment", *Environmetrics*, 19, 725-741.
6. Bee M. (2009), "Importance Sampling for Sums of Lognormal Distributions with Applications to Operational Risk", *Communications in Statistics - Simulation & Computation*, 38, 939-960.
7. Benedetti, R., Bee M. and Espa G. (2010), "A Framework for Cut-off Sampling in Business Survey Design", *Journal of Official Statistics*, 26, 651-671.
8. Arbia G., Bee M. and Espa G. (2011), "Aggregation of Regional Economic Time Series with Different Correlation Structures", *Geographical Analysis*, 43, 78-103.
9. Bee, M. (2011), "Adaptive Importance Sampling for Simulating Copula-based Distributions", *Insurance: Mathematics & Economics*, 48, 237-245.
10. Verdecchia F., Bee M., Lombardo L., Sgarbanti C. and Gracco A. (2011), "Influence of Anterior Teeth Alignment on Peer Perception in a Population of 8 to 10-year-olds", *European Journal of Orthodontics*, 33, 155-160.
11. Taufer E., Leonenko, N. and Bee, M. (2011), "Characteristic Function Estimation of Ornstein-Uhlenbeck-based Stochastic Volatility Models", *Computational Statistics and Data Analysis*, 55, 2525-2539.
12. Bee, M., Riccaboni, M. and Schiavo, S. (2011), "Pareto versus Lognormal: a Maximum Entropy Test", *Physical Review E*, 84, 026104.
13. Bee M. (2012), "Dynamic VaR Models and the Peaks over Threshold Method for Market Risk Measurement: an Empirical Investigation during a Financial Crisis", *Journal of Risk Model Validation*, 6, 3-45.
14. Bee, M., Benedetti, R. and Espa G. (2013), "On Maximum Likelihood Estimation of a Pareto Mixture", *Computational Statistics*, 28, 161-178.
15. Bee, M. (2013), "A Maximum Entropy Approach to Loss Distribution Analysis", *Entropy*, 15, 1100-1117.
16. Bee M., Riccaboni, M. and Schiavo, S. (2013), "The size distribution of US cities: not Pareto, even in the tail", *Economics Letters*, 120, 232-237.
17. Arbia, G., Bee M. and Espa, G. (2013), "Testing Isotropy in Spatial Econometric Models", *Spatial Economic Analysis*, 8, 228-240.
18. Bee, M., Espa, G. and Giuliani, D. (2015), "Approximate Maximum Likelihood Estimation of the Autologistic Model", *Computational Statistics and Data Analysis*, 84, 14-26.

19. Bee M. (2015), “Statistical analysis of the Lognormal-Pareto distribution using Probability Weighted Moments and Maximum Likelihood”, *Communications in Statistics - Simulation and Computation*, 44, 2040-2060.

20. Bee M., Dupuis, D.J. and Trapin, L. (2016), “Realizing the Extremes: Estimation of Tail-risk Measures from a High-frequency Perspective”, *Journal of Empirical Finance*, 36, 86-99.

21. Bee M., Dupuis, D.J. and Trapin, L. (2016), “U.S. Stock Returns: Are there Seasons of Excesses?”, *Quantitative Finance*, 16, 1453-1464.

22. Bee M. and Trapin, L. (2016), “A Simple Approach to the Estimation of Tukey’s gh Distribution”, *Journal of Statistical Computation and Simulation*, 86, 3287-3302.

23. Bee, M., Benedetti, R. and Espa, G. (2017), “Approximate Maximum Likelihood Estimation of the Bingham Distribution”, *Computational Statistics and Data Analysis*, 108, 84-96.

24. Bee M. (2017), “Density Approximations and VaR Computation for Compound Poisson-Lognormal Distributions”, *Communications in Statistics - Simulation and Computation*, 46, 1825-1841.

25. Bee M., Riccaboni, M. and Schiavo, S. (2017), “Where Gibrat meets Zipf: Scale and Scope of French Firms”, *Physica A*, 481, 265-275.

26. Bee, M., Espa, G., Giuliani, D. and Santi, F. (2017), “A Cross-Entropy Approach to the Estimation of Generalised Linear Multilevel Models”, *Journal of Computational and Graphical Statistics*, 26, 695-708.

27. Bee, M., Riccaboni, M. and Trapin, L. (2017), “An Extreme Value Analysis of the Last Century Crises across Industries in the U.S. Economy”, *Journal of Economic Dynamics and Control*, 81, 65-78.

28. Arbia, G., Bee, M., Espa, G. and Santi, F. (2017), “A Frequency Domain Test for Isotropy in Spatial Data Models”, *Spatial Statistics*, 21, 262-278.

29. Arbia, G., Bee, M., Espa, G. and Santi, F. (2018), “Fitting Spatial Regressions to Large Datasets using Unilateral Approximations”, *Communications in Statistics - Theory and Methods*, 47, 222-238.

30. Bee, M. and Schiavo, S. (2018), “Powerless: Gains from Trade when Firm Productivity is not Pareto Distributed”, *Review of World Economics*, 154, 15-45.

31. Lattante, S., Pomponi, M.G., Conte, A., Marangi, G., Bisogni G., Patanella, A.K., Meleo, E., Lunetta, C., Riva, N., Mosca, L., Carrera, P., Bee, M., Zollino, M. e Sabatelli, M. (2018), “ATXN1 intermediate-length polyQ expansions are associated with Amyotrophic Lateral Sclerosis”, *Neurobiology of Aging*, 64, 157.e1-157.e5.

32. Bee, M., Dickson, M.M. and Santi, F. (2018), “Likelihood-based Risk Estimation for Variance-Gamma Models”, *Statistical Methods & Applications*, 27, 69-89.

33. Dickson, M.M., Giuliani, D., Espa, G., Bee, M., Taufer, E. and Santi, F. (2018), “Design-based Estimation in Environmental Surveys with Positional Errors”, *Environmental and Ecological Statistics*, 25, 155-169.

34. Bee M., Dupuis, D.J. and Trapin, L. (2018), “Realized Extreme Quantile: A Joint Model for Conditional Quantiles and Measures of Volatility with EVT Refinements”, *Journal of Applied Econometrics*, 33, 398-415.

35. Bee M. and Trapin, L. (2018), “Estimating and Forecasting Conditional Risk Measures with Extreme Value Theory: A Review”, *Risks*, 6, 45.

36. Bee M. and Trapin, L. (2018), “A characteristic function-based approach to Approximate Maximum Likelihood Estimation”, *Communications in Statistics - Theory and Methods*, 47, 3138-3160.

37. Bee M., Dupuis, D.J. and Trapin, L. (2019), “Realized Peaks over Threshold: a Time-Varying Extreme Value Approach with High-Frequency based Measures”, *Journal of Financial Econometrics*, forthcoming.

Articles in refereed books

1. Bee M., Espa G. and Tamborini R. (2004), “Firms’ Bankruptcy and Turnover in a Macroeconomy”, in The Complex Dynamics of Economic Interaction - Essays in Economics and Econophysics, (eds M. Gallegati, A.P. Kirman and M. Marsili), Lecture Notes in Economics and Mathematical Systems, vol. 531, 79-106, Springer.

2. Bee M. (2006), “Estimating the Parameters in the Loss Distribution Approach: How can we Deal with Truncated Data?”, in *The Advanced Measurement Approach to Operational Risk* (ed. E. Davis), Risk Books, 123-144.

3. Bee M., Espa G. and Gabriele R. (2007), “ICT as a General Purpose Technology (GPT): modelling its impact on performance using IFS”, in *Modelling ICT as a General Purpose Technology: Evaluation Models and Tools for Assessment of Innovation and Sustainable Development at the EU Level* (eds P. Guerrieri and P.C. Padoan), Collegium, 35, chap. 5, 115-146, College of Europe, Bruges. www.coleurop.be\template.asp?pagename=pub_collegium.

4. Bee M., Espa G., Gabriele R., Guerrieri P., Maggi B. and Padoan P.C. (2007), “General Purpose Technology in a structural model”, in *Modelling ICT as a General Purpose Technology: Evaluation Models and Tools for Assessment of Innovation and Sustainable Development at the EU Level* (eds P. Guerrieri and P.C. Padoan), Collegium, 35, chap. 7, 172-190, College of Europe, Bruges. www.coleurop.be\template.asp?pagename=pub_collegium.

5. Bee M. and Espa G. (2009), “Importance Sampling techniques for large quantile estimation in the Advanced Measurement Approach”, in *Operational Risk Towards Basel III: Best Practices and Issues in Modeling, Management and Regulation* (ed. G.N. Gregoriou), chap. 8, 155-176, Wiley.

6. Bee M., Benedetti, R., Espa G. and Piersimoni, F. (2010), “On the Use of Auxiliary Variables in Agricultural Surveys Design”, in *Agricultural Survey Methods* (eds R. Benedetti, M. Bee, G. Espa and F. Piersimoni), chap. 7, 107-132, Wiley.

7. Bee M., Espa G. and Gabriele R. (2011), “The e-Inclusion in Europe: a scenario analysis”, in *The Economic Impact Of Digital Technologies: Measuring Inclusion and Diffusion in Europe* (eds P. Guerrieri and S. Bentivegna), chap. 7, 162-187, Edward Elgar.

8. Bee, M. (2013), “A Maximum Entropy Approach to the Measurement of Event Risk”, in *Rethinking Valuation and Pricing Models: Lessons Learned from the Crisis and Future Challenges* (eds. C. Wehn, C. Hoppe and G.N. Gregoriou), Academic Press, Elsevier Inc., 375-385.

9. Bee M., Riccaboni M. and Schiavo S. (2019), “Distribution of cities size: Zipf, Gibrat, Pareto Law”, in *The Mathematics of Urban Morphology* (ed. L. D’Acci), Birkhäuser Basel, Springer Nature.

Articles in other refereed journals

1. Bee M. and Espa G. (1999) ”Metodi Statistici per l’Interpolazione Areale: l’Algoritmo EM per Dati Continui”, *Statistica Applicata*, 11 (3), 1-28.

2. Bee M. (2004), “Modelling Credit Default Swap Spreads by means of Normal Mixtures and Copulas”, *Applied Mathematical Finance*, 11 (2), 125-146.

3. Bee M. and Espa G. (2008), ”A Monte Carlo EM Algorithm for the Estimation of a Logistic Auto-logistic Model with Missing Data”, *Letters in Spatial and Resource Sciences*, 1, 45-54.

4. Bee M. and Gatti G. (2016) “A Pairs Trading Strategy Based on Switching Regime Volatility for Commodity Futures”, *Energy Risk*, December 2016, 29-35.

Other publications

Articles

1. Bee M. (1997), "Un Problema Dimensionale in Analisi di Mistura Finita", *Quaderni di Statistica e Matematica Applicata alle Scienze Economico-sociali*, 20, 137-150.

2. Bee M. (2006), "Estimating and Simulating Loss Distributions with Incomplete Data", *OpRisk & Compliance*, 7, 36-41.

3. Bee M., Benedetti R., Espa G. and Piersimoni, F. (2013), Is it acceptable not to cover the smallest businesses in a business survey? How should such a cutoff be chosen?, *The Survey Statistician*, 67, 14-18.

4. Bee, M., Dickson, M.M., Giuliani, D., Piacentino, D., Santi, F., Taufer, E. (2016), "La sopravvivenza immediata delle start-up italiane del settore manifatturiero sanitario: un'analisi multilevel", *Rivista di Economia e Statistica del Territorio*, 3, 11-22.

Books

1. Bee M., Espa G. and Micciolo R. (2002), *Esercizi di Statistica Nuovo Ordinamento*, Flashbook Drake.

2. Bee M. and Erzegovesi L. (2008), *I Modelli di Portafoglio per la Gestione del Rischio di Credito. Guida alla Misurazione e al Controllo dopo Basilea 2*, Bancaria.

3. Bee M., Espa G., Gabriele R., Maggi B. and Piras G. (2008), *Econometric Modeling Perspectives*, Novapublishers.

4. Benedetti, R., Bee, M., Espa, G. and Piersimoni, F. (eds) (2010), *Agricultural Survey Methods*, Wiley.

5. Bee, M. and Santi, F. (2013), *Finanza Quantitativa con R*, Apogeo.

Book chapters

1. Bee M. and Senati M. (2004), "La gestione del Rischio di Credito in Banca Intesa", in De Laurentis G., Saita, F. and Sironi, A. (eds), *Rating Interni e Controllo del Rischio di Credito*, Bancaria.

2. Bee M., Espa G., Gabriele R., Maggi B., Piras G. (2008), "Structural Models and Empirical Analysis of Technology Accumulation and Diffusion: a Continuous-time Econometric Approach". In Toggins, W.N. (ed.), *New Econometric Modeling Research*, Nova Science.

Proceedings, working papers, talks and other publications

1. Avesani R.G., Bee M. and Passamani G., "The Relation between Spot and Forward Exchange Rates: a Varying Trend Cointegration Analysis". In: Bulletin of the International Statistical Institute, vol. 55 - book 1. Proceedings of the 49th Session of the International Statistical Institute, Firenze, August 25 - September 2, 1993.

2. Bee M., Besana A. and Espa G., "L'Algoritmo EM per la Conversione di Dati Areali Continui", II National Conference of the "Federazione delle Associazioni Scientifiche per le Informazioni Territoriali e Ambientali", Bolzano, November 24-27, 1998.

3. Avesani R.G., Bee M., Ceci V. and Vecchiato W. (2000), "Exploring a Methodology for Estimating the Price of Volatility", V International Conference on Metodi Quantitativi per le Scienze Applicate, Siena, May 31 - June 3, 2000.

4. Bee M. (2001), "Mixture Models for VaR and Stress Testing", Tech report nr. 12, Alea, Centro di Ricerca sui Rischi Finanziari, University of Trento.

5. Bee M. (2002), “Un Modello per l’Incorporazione del Rischio Specifico nel VaR”, Tech report nr. 13, Alea, Centro di Ricerca sui Rischi Finanziari, University of Trento.
6. Bee M. and Espa G. (2002), “Misture Normali e Valore a Rischio”, quaderno DISA 68, Department of Computer and Management Sciences, University of Trento.
7. Bee M., Espa G. and Tamborini R., “Firms’ Bankruptcy and Turnover in a Macroeconomy”, Workshop on Economics and Hetereogeneous Interacting Agents, Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, May 30 - June 1, 2002.
8. Bee M., Espa G. and Tamborini R., “Firms’ Bankruptcy and Turnover in a Macroeconomy”, Istituto di Teoria Economica e Metodi Quantitativi, Università Cattolica, Milano, June 23, 2003.
9. Bee M. and Senati M., “Gestione del Rischio di Credito in Banca Intesa”, convegno su Rating Interni e Controllo del Rischio di Credito: Esperienze, Problemi e Soluzioni, Milano, Università Bocconi, March 31, 2004.
10. Bee M. and Gazzini A. (2004), “Testing the Profitability of Simple Technical Trading Rules: a Bootstrap Analysis of the Italian Stock Market”, Tech report nr. 18, Alea, Centro di Ricerca sui Rischi Finanziari, University of Trento.
11. Bee M. and Espa G., “Metodi Statistici per la Determinazione del Rating Interno”, Department of Computer and Management Sciences, University of Trento, April 18, 2005.
12. Bee M., “Modelling and Estimating Operational Losses”, Department of Economics, University of Trento, May 4, 2005.
13. Bee M. (2005), “On Maximum Likelihood Estimation of Operational Losses”, Discussion paper 2005.3, Department of Economics, University of Trento, www-econo.economia.unitn. it\new\pubblicazioni\papers\3_05_bee.pdf.
14. Bee M. (2005), “Copula-based Multivariate Models with Applications to Risk Management and Insurance”, Social Science Research Network: http://ssrn.com/author=453173.
15. Arbia G., Bee M. and Espa G. (2006), “Aggregation of Regional Economic Time Series with Different Correlation Structures”, International Workshop on Spatial Econometrics and Statistics, Università LUISS, Roma, May 25-27, 2006.
16. Bee M., Benedetti R., Espa G. and Terpessi C. (2006), “Spatial Models for Flood Risk Assessment”, International Workshop on Spatial Data Methods for Environmental and Ecological Processes, Foggia, September 14-15, 2006.
17. Bee M., Benedetti R. and Espa G. (2006), “Metodi ed Algoritmi per la Determinazione delle Soglie Multivariate di Censimento, Campionamento ed Esclusione di Aziende Agricole”, Le Statistiche Agricole verso il Censimento del 2010: Valutazioni e Prospettive, Cassino, October 26-27, 2006.
18. Bee M. (2006), discussion of the paper “The Role of Heterogeneity in the Topology and Dynamics of Interbank Markets” by G. De Masi, workshop su Financial fragility and technological progress with heterogeneous agents and social interactions: models, simulations and empirical evidence, Trento, December 14-15, 2006.
19. Bee M., Benedetti R., Espa G., Ghizzoni T., Roth G., Rudari R., Taramasso A.C., Terpessi C. (2007), “On multi-variate flood scenario simulations”, XXIV General Assembly of the International Union of Geodesy and Geophysics, Perugia, July 2-13, 2007.
20. Bee M., Benedetti R., Espa G., Ghizzoni T., Roth G., Rudari R., Taramasso A.C., Terpessi C. (2007) “Conditional probability approach to spatially distributed flood scenarios simulation”, 9th Plinius Conference on Mediterranean Storms, International Congress Centre Villa Monastero, Varenna, September 10-13, 2007.

21. Arbia G., Bee M. and Espa G. (2007), "Effects of aggregation on spatially correlated time series", StatGIS conference 2007, Klagenfurt (Austria), September 24-26, 2007.

22. Bee M. (2007), "The Asymptotic Loss Distribution in a Fat-tailed Factor Model of Portfolio Credit Risk", Discussion paper 2007.1, Department of Economics, University of Trento, www-econo.economia.unitn.it\new\pubblicazioni\papers\1_07_bee.pdf.

23. Bee M., Benedetti R. and Espa G. (2007), "A Framework for Cut-off Sampling in Business Survey Design", Discussion paper 2007.9, Department of Economics, University of Trento, www-econo.economia.unitn.it\new\pubblicazioni\ papers\9_07_bee.pdf.

24. Bee M., Benedetti R. and Espa G. (2007), "Spatial Models for Flood Risk Assessment", Discussion paper 2007.10, Department of Economics, University of Trento, www-econo.economia.unitn.it\new\pubblicazioni\papers\10_07_bee. pdf.

25. Arbia G., Bee M. and Espa G. (2007), "Aggregation of Regional Economic Time Series with Different Spatial Correlation Structures", Discussion paper 2007.20, Department of Economics, University of Trento, www-econo.economia. unitn.it\new\pubblicazioni \papers\20_07_arbia.pdf.

26. Bee, M. (2007), "Importance Sampling for Sums of Lognormal Distributions, with Applications to Operational Risk", Discussion paper 2007.28, Department of Economics, University of Trento, www-econo.economia.unitn.it\new\ pubblicazioni\papers\28_07_bee.pdf.

27. Bee M. and Espa G. (2008), "A Monte Carlo EM Algorithm for the Estimation of a Logistic Auto-logistic Model with Missing Data", Discussion paper 2008.1, Department of Economics, University of Trento, www-econo.economia. unitn.it\new\pubblicazioni\papers\1_08_Bee_Espa.pdf.

28. Bee M. (2008), "Importance sampling techniques for computation of extreme risk measures", Research Day, Faculty of Economics, University of Trento, May 8, 2008.

29. Arbia G., Bee M. and Espa G. (2008), "Estimating the Logistic Auto-logistic Model with Missing Data: Some Simulation Results", First Workshop of the ERCIM Working Group on Computing & Statistics, Neuchatel, Svizzera, June 19-21, 2008.

30. Bee M. and Taufer E. (2008), "Characteristic Function Estimation of Stochastic Volatility Models", First Workshop of the ERCIM Working Group on Computing & Statistics, Neuchatel, Svizzera, June 19-21, 2008.

31. Bee M. and Espa G. (2008), "Aspetti di Statistica Finanziaria nel Nuovo Accordo di Basilea", SISmagazine, September 2008, http://magazine.sis-statistica.it.

32. Bee M., Benedetti R. and Espa G. (2009), "Estimating mixtures of Pareto distributions, with applications to operational risk", International Federation of Classification Societies 2009 Conference, Dresda, March 13-18, 2009.

33. Bee M., Benedetti R. and Espa G. (2009), "A note on maximum likelihood estimation of a Pareto mixture", Discussion paper 2009.3, Department of Economics, University of Trento.

34. Bee, M. and Espa, G. (2009), "Estimating auto-models with missing data", articolo invitato alla conferenza della Società Italiana di Statistica *Statistical methods for the Analysis of Large Data-Sets*, Pescara, September 23-25, 2009.

35. Taufer E., Leonenko, N. and Bee, M. (2009), "Characteristic function estimation of Ornstein-Uhlenbeck-based stochastic volatility models", DISA working paper 2009/7.

36. Lomazzi M., Roth G., Rudari R., Taramasso A.C., Ghizzoni T., Benedetti R., Espa G., Terpessi C. (2009), "Frequency assessment of spatially distributed generations of flood scenarios: an application on Italian territory", American Geophysical Union, Fall Meeting 2009, abstract #NH54B-06.

37. Bee M. (2010), “Simulating copula-based distributions and estimating tail probabilities by means of adaptive importance sampling”, Discussion paper 2010.3, Department of Economics, University of Trento.

38. Bee, M. and Benedetti, R. (2010), “Simulation of the Multivariate Generalized Hyperbolic Distribution using Adaptive Importance Sampling”, 45th Scientific Meeting of the Italian Statistical Society, Padova, June 16-18, 2010.

39. Bee M. and Miorelli, F. (2010), “Dynamic VaR models and the Peaks over Threshold method for market risk measurement: an empirical investigation during a financial crisis”, Discussion paper 2010.9, Department of Economics, University of Trento.

40. Bee, M. (2010), “Pricing of basket credit derivatives by means of Adaptive Importance Sampling”, 5th Meeting on Dynamics of Social and Economic Systems, Benevento, September 20-25, 2010.

41. Bee, M., Riccaboni, M. and Schiavo, S. (2011), “Pareto versus lognormal: a maximum entropy test”, Discussion Paper 2011.2, Department of Economics, University of Trento.

42. Bee, M. (2011), “A maximum entropy approach to the measurement of market risk”, Italian Statistical Society 2011 Statistical Conference, Bologna, June 8-10, 2011, in: Quaderni di Dipartimento di Scienze Statistiche, Serie Ricerche 2011, n.2 Alma Mater Studiorum Università di Bologna, p. 6.

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65. Bee, M., Dupuis, D.J. and Trapin, L. (2016), “Realized Peaks over Threshold”, 44th Annual Meeting of the Statistical Society of Canada, May 29 - June 1, Brock University, St. Catharines.
66. Bee, M., Dickson M. M., Giuliani D., Santi F. (2016), “La probabilità di sopravvivenza delle imprese a un anno dalla nascita: un’analisi congiunta delle determinanti individuali di impresa e di contesto territoriale”, 37-th Annual Scientific Conference of the Italian Association of Regional Studies, Ancona, September 20-22, 2016.
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Fellowships

SIS (Italian Statistical Society), European Econometric Society.

Service to the profession

Member of the examination board of the PhD in Economic Statistics, "La Sapienza" University of Rome - 27th cycle (December 2014).

Referee for: Scandinavian Journal of Statistics; Quantitative Finance; European Journal of Operational Research; IBM Journal of Research and Development; European Journal of Finance; Regional Science and Urban Economics; Journal of Credit Risk; Insurance: Mathematics & Economics; Communications in Statistics - Simulation and Computation; Journal of Banking and Finance; Computational Statistics; Entropy; The American Statistician; Journal of Control and Decision; Review of Derivatives Research, Statistical Methods and Applications; International Journal of Financial Studies, International Statistical Review; Risks; Environmetrics; Physica A.

Reviewer for Mathematical Reviews since 2012.

Scientific evaluator of a project ("Extreme Monte Carlo" - responsible prof. A. Mira) presented to the Swiss National Science Foundation (2011).

Member of the board of the PhD program in "Economics and Management", University of Trento (since April 8, 2015).

External referee for Daniele Di Gennaro's PhD thesis ("Policy Evaluation and Spillover Effects"), PhD in Models for Economics and Finance, "La Sapienza" University of Rome - 29th cycle (October 2016).

External referee for Richard Ayisi's PhD thesis ("Essays on Informal Credit Intermediation and Monetary Policy Effectiveness"), PhD in Economics LASER, University of Milano, Brescia and Pavia - 30th cycle (September 2017).

Student advising

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