# Anna Maria Fiori

Department of Statistics and Quantitative Methods University of Milano-Bicocca Via Bicocca degli Arcimboldi, 8 I - 20126 Milano

Office: +39 0264483112 Email: anna.fiori@unimib.it

# **Academic appointments**

Senior Researcher in Statistics, Department of Statistics and Quantitative Methods, University of Milano-Bicocca, Milan (I).	2008 – present
Assistant Professor of Quantitative Methods, Department of Economics and Quantitative Methods, IESEG School of Management, Paris - La Défense (F).	2015 – 16
Fellow of the Italian Statistical Society.	2006 – present

Last updated: December 2, 2022

## **Education**

Ph.D. in Statistics, University of Milano-Bicocca (I).	2005
M.Sc. in Economics, HEC Lausanne (CH).	2000
FAME Certificate in Financial Asset Management and Engineering, International Centre FAME, Geneva (CH).	2000
B.Sc. in Statistics & Economics, with honors, Catholic University of Milano (I).	1999

# Research grants and awards

Research grant (joint with L. Eeckhoudt and E. Rosazza Gianin), Dauphine Risk Foundation. Project: "Loss aversion, prudence and the demand for insurance".	2014
Research prize (joint with L. Eeckhoudt and E. Rosazza Gianin), Dauphine-Amundi Chair in Asset Management. Project: "Downside loss-averse behaviours and risk measurement: VaR, CVaR and lower partial risk measures".	2013 - 14
Erasmus grant for teaching staff mobility (destination: Université Paris-Dauphine).	June 2010
Prize for outstanding performance, FAME Certificate, Geneva (CH).	2000
Prix d'école (best average grade in master exams), M.Sc. in Economics, HEC Lausanne (CH).	2000
Prize Agostino Gemelli (best graduate in Statistics), Catholic University of Milano (I).	1999

## Visiting positions

Visiting position (1 month), Institut de Statistique, Biostatistique et Sciences Actuarielles (ISBA), Université Catholique de Louvain, Louvain-la-Neuve (BE). Invited by Prof. Michel Denuit.

February 2014

Erasmus visiting professor, Laboratoire d'Analyse et Modélisation de Systèmes pour l'Aide à la DEcision (LAMSADE), Université Paris-Dauphine, Paris (F). Invited by Prof. Camille Rosenthal-Sabroux.

June 2010

## Referee

International Statistical Review, Journal of Nonparametric Statistics, Science Advances, Computational Statistics and Data Analysis, Communications in Statistics – Theory and Methods, Communications in Statistics –Simulation and Computation, Applied Economics, Mathematics, Sustainability, International Journal of Contemporary Hospitality Management, International Journal of Hospitality Management, Studia Geophysica et Geodaetica, Risks, Journal of Risk and Financial Management, Statistica & Applicazioni, Energies, Symmetry...

## **Teaching**

## University of Milano-Bicocca (I), School of Economics and Statistics:

- Statistics (bachelor): 2007-present.
- Probability and statistical inference (bachelor): 2011-2013.
- Actuarial risk theory (master): 2009-present.
- Probability, distribution theory and regression analysis (bachelor): 2006-11.
- Statistical quality control (master): 2009-11.
- Probability and Statistics (Master in Energy Risk Management): 2005-06.
- Value at Risk: an Introduction (Master in Finance and Risk Management): 2001-03.
- Advisor/co-advisor of approx. 50 master theses, supervisor of approx. 20 bachelor projects.

### **IESEG School of Management, Paris La Défense (F):**

- Research methodology (master, in English): 2015-16.
- Intermediate econometrics (bachelor, in English): 2015-16.
- Microeconomics (bachelor and master, in English): 2015-16.

#### University of Milano (I), Department of Mathematics:

• Multivariate Statistical Analysis – Computer Lab with SAS (master): 2019.

#### Université Paris-Dauphine (FR):

• Erasmus visiting professor at LAMSADE. Lecture (in French): Limites d'utilisation des outils statistiques dans les applications bancaires informatiques, June 2010.

#### Refereed journal articles

Fiori, A.M., Rosazza Gianin E. (2022). Generalized PELVE and applications to risk measures. European Actuarial Journal, https://doi.org/10.1007/s13385-022-00320-6.

Fiori, A.M., Foroni, I. (2020). Prediction accuracy for reservation-based forecasting methods applied in Revenue Management. International Journal of Hospitality Management (published online: 11-07-2019), 84, 102332; https://doi.org/10.1016/j.ijhm.2019.102332.

Fiori, A.M. (2020). On firm size distribution: statistical models, mechanisms, and empirical evidence. Statistical Methods & Applications, 29, 447–482 (published online: 22-07-2019), https://doi.org/10.1007/s10260-019-00485-7.

Fiori, A.M., Porro, F. (2020). A method to decompose the systemic risk in geographic areas. Soft Computing, 8599–8606 (published online: 02-11-2019), https://doi.org/10.1007/s00500-019-04463-9.

Fiori, A.M., Foroni, I. (2019). Reservation forecasting models for hospitality SMEs with a view to enhance their economic sustainability, Sustainability, 11(5), 1274, https://doi.org/10.3390/su11051274.

Eeckhoudt, L., Fiori, A.M., Rosazza Gianin, E. (2018). Risk aversion, loss aversion, and the demand for insurance. Risks, 6(2), 60; https://doi.org/10.3390/risks6020060.

Eeckhoudt, L., Fiori, A.M., Rosazza Gianin, E. (2016). Loss-averse preferences and portfolio choices: An extension. European Journal of Operational Research, 249(1), 224-230.

Fiori, A.M., Beltrami, D. (2014). Right and left kurtosis measures: large sample estimation and an application to financial returns. Stat, 3(1), 95-108.

Fiori, A.M., Zenga, M. (2009). Karl Pearson and the origin of kurtosis, International Statistical Review, 77, 40-50.

Fiori, A.M. (2008). Measuring kurtosis by right and left inequality orders, Communications in Statistics – Theory and Methods, 37 (17), 2665-2680.

Fiori, A.M. (2007). Kurtosis measures: tradition, contradictions, alternatives, Statistica & Applicazioni, V (2), 185-203.

Fiori, A.M., Zenga, M. (2005). The meaning of kurtosis, the influence function and an early intuition by L. Faleschini, Statistica, LXV (2), 135-144.

#### Refereed book chapters and conference proceedings

Avellone, A., Fiori, A., Foroni, I. (2021). Portfolio Optimization with Nonlinear Loss Aversion and Transaction Costs. In M. Corazza, M. Gilli, C. Perna, C. Pizzi, M. Sibillo (a cura di), Mathematical and Statistical Methods for Actuarial Sciences and Finance (pp. 51-56), Springer, Cham

Fiori, A., Foroni, I. (2020). Spatial Localization of Visitors Mobile Phones in a Sardinian Destinations' Network. In P. Mariani, M. Zenga (a cura di), Data Science and Social Research II: DSSR 2019. Studies in Classification, Data Analysis, and Knowledge Organization (pp. 145-155). Springer, Cham.

Fiori, A.M., Motta, A. (2019). Stochastic models for the size distribution of Italian firms: a proposal. In: Greselin, F., Deldossi, L., Bagnato, L., Vichi, M. (Eds.), Statistical Learning of Complex Data: CLADAG

2017. Studies in Classification, Data Analysis, and Knowledge Organization (pp. 111-120). Springer, Cham.

Fiori, A.M., Rosazza Gianin, E., Spasova, A. (2012). Risk measures and Pareto tails, In: Perna, C., Sibillo M. (Eds.), Mathematical and Statistical Methods for Actuarial Sciences and Finance (pp. 183-192), Springer, Milano.

#### Miscellaneous contributions (peer-reviewed)

Fiori, A.M, Foroni, I. (2019) Spatial localization of mobile phone users and tourism flows in Sardinian destinations network. In: Data Science & Social Research 2019, Book of Abstracts, 64, PKE. ISBN: 9788894312096.

Fiori, A.M., Motta, A. (2017). The size distribution of Italian firms: An empirical analysis. In: F. Greselin, F. Mola, M. Zenga (Eds.): CLADAG 2017 Book of Short Papers.

Fiori, A.M., Foroni, I., Zenga, M. (2013). Forecasting techniques for short-term demand of hotel bookings. In: Nicolussi, F., Mecatti, F. (Eds), Book of Abstracts. Italian Conference on Survey Methodology ITACOSM 2013, Libreria Universitaria Ed., 139-140.

Fiori, A. M., Beltrami, D. (2012). Asymptotic estimation of right and left kurtosis measures, with applications to finance, Proceedings of the 49th Meeting of the Italian Statistical Association (on CD-ROM).

Fiori, A.M. (2011). Extreme losses and reinsurance (in Italian). SIS Magazine, Italian Statistical Society, article n. 208.

Fiori, A.M. (2010). Two kurtosis measures in a simulation study, In: Lechevallier, Y., Saporta, G. (Eds.), Proceedings in Computational Statistics, Physica-Verlag, SpringerLink, 1007-1014.

Fiori, A. M., Zenga, M. (2006). The standard fourth moment coefficient of kurtosis and its influence function: an early intuition by L. Faleschini, Proceedings of the Italian Statistical Society, 593-596

#### **Working papers**

Eeckhoudt, L., Fiori, A.M., Rosazza Gianin E. (2014). Downside loss-averse behaviours and risk measurement (VaR, CVaR and lower partial risk measures). *Research paper awarded the Dauphine-Amundi research prize in Asset Management*, 2013-14 edition.

#### Conferences

### Organizer and chair

"Recent advances in systemic risk assessment", 9th International Conference on Risk Analysis (ICRA9), University of Perugia (I), May 25-27, 2022.

### **Invited speaker**

"Introductory activities in descriptive statistics" (in Italian), Active Teaching at Universities: Experiences with Wooclap, University of Padova (I), November 4, 2022.

"Nonlinear loss aversion and portfolio optimization", 12th International Conference of the ERCIM Working Group on Computational and Methodological Statistics (CMSTATISTICS 2019), University of London (UK), December 14-16, 2019.

"Downside loss-averse behaviours and risk measurement", Annual Workshop of the Dauphine-Amundi Chair in Asset Management, Amundi, Paris (FR), June 10, 2014.

## **Regular contributions**

"Generalized PELVE and applications to risk measures" (regular talk), XXII Workshop on Quantitative Finance (QFW 2022), University of Roma Tor Vergata, March 31-April 1, 2022.

"Generalized PELVE and applications to risk measures" (online talk), 10th International Conference on Mathematical and Statistical Methods for Actuarial Sciences and Finance (MAF 2022), University of Salerno, April 20-22, 2022.

"Generalized PELVE and applications to risk measures" (online talk), 24th International Congress on Insurance: Mathematics and Economics (IME 2021 – virtual conference), July 5-9, 2021.

"On firm size distributions: a comparison of different size measures" (regular talk), International Conference on Distributions and Inequality Measures in Economics, University of Milano-Bicocca, February 20-21, 2020.

"Portfolio optimization with nonlinear loss aversion" (regular talk), 26th Forecasting Financial Markets Conference (FFM2019), Ca' Foscari University of Venice (I), June 2019.

"Portfolio optimization with nonlinear loss aversion" (poster), 20th Workshop on Quantitative Finance (QFW2019), ETH Zürich (CH), January 23-25, 2019.

"The size distribution of Italian firms: An empirical analysis" (regular talk), 11th Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society (CLADAG 2017), University of Milano-Bicocca (I), September 13-15, 2017.

"Insurance Demand under Downside Loss Aversion" (regular talk), 43rd Seminar of the European Group of Risk and Insurance Economists (EGRIE), Limassol (Cyprus), September 19-21, 2016.

"Forecasting techniques for short-term demand of hotel bookings" (poster), 3rd Italian Conference on Survey Methodology (ITACOSM 2013), University of Milano-Bicocca (I), June 26-28, 2013.

"Estimating inequality-based measures of kurtosis, with actuarial and financial applications in view" (poster), Conference on Quantitative Methods in Statistics, Biostatics and Actuarial Sciences, Université Catholique de Louvain (BE), May 30-June 1, 2012.

"Investigating the interplay between excess kurtosis and tail events in financial contexts" (regular talk), International Conference MAF 2012 – Mathematical and Statistical Methods for Actuarial Sciences and Finance, Venice (I), April 10-12, 2012.

"Investigating the interplay of excess kurtosis and tail events in financial series" (regular talk), 7th Conference on Extreme Value Analysis, Probabilistic and Statistical Models and their Applications (EVA 2011), Lyon (FR), June 27-July 1, 2011.

"Two Kurtosis Measures in a Simulation Study" (regular talk), 19th International Conference on Computational Statistics (COMPSTAT 2010), Paris (FR), August 22-27, 2010.

"Risk measures and Pareto tails" (regular talk), International Conference MAF 2010 – Mathematical and Statistical Methods for Actuarial Sciences and Finance, Ravello (I), April 2010 (regular talk).

"Kurtosis measures" (regular talk), 2nd International Workshop on Computational and Financial Econometrics (CFE 2008), Université de Neuchâtel (CH), June 2008.

"Simple tests for right, left and overall excess kurtosis in financial variables", International Conference MAF 2008 – Mathematical and Statistical Methods for Actuarial Sciences and Finance, Venezia (I), March 23-26, 2008.

"Kurtosis: new theoretical results and inference issues" (regular talk), 9th Meeting of New Researchers in Statistics and Probability, University of Washington, Seattle, WA (USA), August 1-5, 2006.

"The standard fourth moment coefficient of kurtosis and its influence function: an early intuition by L. Faleschini" (regular talk), 43rd Scientific Meeting of the Italian Statistical Society, Torino (I), June 2006.