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## CURRICULUM VITAE (Sergio Ortobelli Lozza)

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Sergio Ortobelli Lozza is a full professor in Mathematical Finance at the University of Bergamo. He holds a Ph.D. in Computational Methods for Financial and Economic Forecasting and Decisions from the University of Bergamo. He is associate editor of Frontiers in Applied Mathematics and Statistics and he is in the Editorial Board of Mathematical Problems in Engineering. His research, published in various academic journals in mathematics and finance, focuses on the application of probability theory and operational research to portfolio theory, risk management, and option theory. He taught numerous courses at the Universities of Bergamo, Calabria and Milan, including basic and advanced calculus, measure theory, stochastic processes, portfolio theory, and advanced mathematical finance. From 1999 till 2020 he wrote more than 170 refereed scientific works (71 papers in international journals, 12 chapters in books, 44 proceedings, 2 books and more than 45 working papers in different countries) together with several well known Italian and international professors. Some of these papers have been well recognized by the scientific community.

### Previous Studies:

1986 – Diploma of Business at Technical Business School “Vittorio Emanuele II” in Bergamo  
1994 – Degree in Mathematics at University of Milan  
1999 – Ph.D. in “Computational methods for financial and economic forecasting and decisions” at University of Bergamo

### Academic Appointments:

**1999-2002** Researcher at Department OAAP, University of Calabria, Italy  
**2002-2006** Researcher at Department MSIA, University of Bergamo, Italy  
**2006-2017** Associate Professor at Department SAEMQ (ex MSIA), University of Bergamo, Italy  
**2017-2020** Professor at Department SAEMQ, University of Bergamo, Italy  
**2020-Now** Professor at Department of Economics, University of Bergamo, Italy

Here in the following we briefly summarize the main activities of the last years:

- a) Study and research: international experiences
- b) Research projects
- c) Editorial work and organizational activity
- d) Principal research interests and publications
- e) National and international conferences: organization and participation
- f) Teaching courses and invited talks

## Study and research: international experiences

**1997-1998** Visiting PhD student at Washington University in St. Louis.

Two weeks every summer from **2001** till **2004** as visiting researcher at Karlsruhe University to collaborate with Prof. Rachev Svetlozar.

**2013-2020** In the Research team at VSB-Technical University of Ostrava, Czech Republic, of the research project financed by the European Union (European Social Fund in the Czech Republic/Ministry of Education) titled “Modeling of economic and financial processes”. This experience has been successful for different reasons (here summarized):

- a) the help of two new post doc positions for Italian PhD students (Filomena Petronio and Tommaso Lando) who have collaborated to common projects;
- b) the activation of a collaboration (even through some PhD student cotutelles) between the PhD program “Analytics for Economics and Business” of University of Bergamo (directed from Prof Bertocchi Marida) and the PhD of Finance of VSB Technical University of Ostrava;
- c) the proposal for further joint research projects.

## Research Projects

### Participation to National research projects

- 1) MIUR PRIN 2002: Ottimizzazione stocastica di portafoglio con differenti ipotesi distribuzionali dei rendimenti e analisi di robustezza rispetto alla struttura del modello stocastico.
- 2) MIUR PRIN 2007: Innovazione finanziaria e cambiamenti demografici: nuovi prodotti e strumenti di valutazione a fronte dell'elemento stocastico "invecchiamento".
- 3) MIUR PRIN 2010-2011: Multivariate statistical models for the risk valuation
- 4) MIUR PRIN 2013-2015: MISURA. (Principal Unit: University of Pavia)

### Principal investigator of research projects

- 5) Coordinator of GACR 2015-2017 (Czech Republic) **Titled:** Risk Probability Functionals and Ordering Theory Applied to International Markets and Portfolio Selection Problems.
- 6) Coordinator of GACR 2017-2019 (Czech Republic) **Titled:** Financial applications of stochastic ordering rules.

## Editorial work and Organizational activity

### Editorial Work

**2014 –now** Associate editor of Frontiers in Applied Mathematics and Statistics.

**2018 – now** Editorial Board of Mathematical Problems in Engineering

### Referee of:

“Journal of Banking and Finance”; “Annals of Operations Research”; “Journal of Portfolio Management”; “The Review of Financial Studies”; “Quantitative finance”; “Journal of Risk”; “Journal of Economic Dynamics and Control”; “Journal of Empirical Finance”, “Intelligent Systems in Accounting Finance and Management”, “Rivista di Economia Politica”, “Advances in Operations Research”, “Optimization Letters”, “Journal of Econometrics”, “Mathematical Finance”, “Computational Economics”, “European Journal of Operational Research”, “Entropy”; “International Journal of Theoretical and Applied Finance”; “Journal of Pension Economics and Finance”, “Journal of Statistical Computation and Simulation”, “Czech Journal of Economics and

Finance”, “European Journal of Finance”, “IMA Journal of Management Mathematics”, “OR Spectrum”, “Mathematical Problems in Engineering”, “Mathematical Methods of Operations Research”, “Chapters of North Holland Handbooks of Finance Series”.

Referee of a book for the research Section in Statistics and Probability for Springer Verlag.

Moreover, I recall the following organizational activities for the department SAEMQ and Department of Economics of the University of Bergamo.

**2011-2015:** Component of the didactical committee of the department SAEMQ

**2015-2020** President of the research committee of the department SAEMQ

**2020-Now** Component of the research committee of the Department of Economics

**October 2016-now:** Component of the Council of Doctoral School of Higher Education of the University of Bergamo

#### Principal Research Interests and Publications

My scientific interests are reflected in the below publications. In particular, relevant research areas are related to:

- Portfolio Selection Theory
- Choices under uncertainty conditions
- Risk Theory and Market Trend Analysis
- Actuarial Mathematics
- Financial and Economic Applications of: Probability, Mathematical Statistics, Stochastic Processes in discrete and continuous time, SDE.

#### Main Publications

- 1) Kouaissah N. Ortobelli Lozza S. 2020 Multivariate stochastic dominance: A parametric approach, *Economics Bulletin* 40(2), 1380-1387
- 2) M.Malavasi, S.Ortobelli Lozza, S.Trueck 2020 Second order of stochastic dominance efficiency vs mean variance efficiency *European Journal of Operational Research*, <https://doi.org/10.1016/j.ejor.2020.08.051>
- 3) Bonomelli, M., Giacometti, R. & Ortobelli Lozza, S. Joint tails impact in stochastic volatility portfolio selection models. *Ann Oper Res* (2020). <https://doi.org/10.1007/s10479-020-03531-w>
- 4) Kouaissah N., Ortobelli S., 2020 Multivariate stochastic dominance applied to sector-based portfolio selection, accepted *IMA Journal of Management Mathematics* DOI: 10.1093/imaman/dpaa004
- 5) Kouaissah N., Orlandini D. Ortobelli S., Tichy T. (2020) Theoretical and practical motivations for the use of the moving average rule in the stock market, *IMA Journal of Management Mathematics* 31(1), Pages 117–138, DOI: [10.1093/imaman/dpz006](https://doi.org/10.1093/imaman/dpz006)
- 6) Ortobelli Lozza, S., Angelelli, E. & Ndoci, A. (2019) Timing portfolio strategies with exponential Lévy processes, *Computational Management Science*, Volume 16, Issue 1–2, pp 97–127 <https://doi.org/10.1007/s10287-018-0332-y>.

- 7) Ortobelli S., Kouaissa N., Tichy T. (2019) " On the use of conditional expectation in portfolio selection problems", Annals of operations research, Volume 274, Issue 1–2, pp 501–530 |<https://doi.org/10.1007/s10479-018-2890-3>.
- 8) Sergio Ortobelli Lozza, Wing-Keung Wong, Frank J. Fabozzi & Martin Egozcue (2018) Diversification versus optimality: is there really a diversification puzzle?, Applied Economics, 50:43, 4671-4693, DOI: [10.1080/00036846.2018.1459037](https://doi.org/10.1080/00036846.2018.1459037)
- 9) Ortobelli S., Vitali S., Cassader M., Tichy T. (2018) "Portfolio selection strategy for the fixed income markets with immunization on average" Annals of operations research, doi: [10.1007/s10479-016-2182-8](https://doi.org/10.1007/s10479-016-2182-8) Volume 260, Issue 1–2, pp 395–415
- 10) Sergio Ortobelli Lozza , Filomena Petronio , Sebastiano Vitali (2018) Price and market risk reduction for bond portfolio selection in BRICS markets, Investment Management and Financial Innovations 15(1) pp. 120-131
- 11) Ortobelli S., Kouaissa N., Tichy T. (2017) "On the impact of conditional expectation estimators in portfolio theory" Computational Management Science, DOI [10.1007/s10287-017-0282-9](https://doi.org/10.1007/s10287-017-0282-9), 14(4) 535-557.
- 12) Cirelli S., Vitali, S., Ortobelli S., Moriggia V. (2017) "A conservative discontinuous target volatility strategy" Investment Management and Financial Innovations 14(2) 176-190
- 13) Ortobelli S., Petronio, F., Lando, T. (2017) A portfolio return definition coherent with the investors' preferences, IMA Journal of Management Mathematics, Volume 28, Issue 3, 1 July 2017, Pages 451–466,
- 14) Sasan Barak , Azadeh Arjmand , Sergio Ortobelli (2017) Fusion of Multiple Diverse Predictors in Stock Market, Information Fusion,36, 90-102
- 15) Ortobelli S., Lando T., Petronio F., Tichy T. (2016) "Asymptotic Multivariate Dominance: A Financial Application" Methodology and Computing in Applied Probability. doi:[10.1007/s11009-016-9502-y](https://doi.org/10.1007/s11009-016-9502-y), vol. 18, 1097-1115
- 16) Malavasi M., Previtali R., Ortobelli S., Tichy T. (2016)"Backtesting AVaR and VaR with Simulated Copula", Ekonomicka revue – Central European Review of Economic Issues 19(1): 15-24. doi: [10.7327/cerei.2016.03.02](https://doi.org/10.7327/cerei.2016.03.02)
- 17) Ortobelli S., Lando T., Petronio F., Tichy T. (2016) "Asymptotic stochastic dominance rules for sums of i.i.d. random variables" in Journal of computational and applied mathematics 300, Pages 432–448.
- 18) Giacometti R., Ortobelli S., Tichy T. (2015) "Portfolio selection with uncertainty measures consistent with additive shifts", in Prague Economic Papers 24, 3-16.
- 19) Ortobelli S., Lando T., (2015) "Independence Tests based on the Conditional Expectation" WSEAS Transactions on Mathematics, ISSN 1109-2769, Volume 14, pp. 335-344
- 20) Kouaissa N., Ortobelli S., (2015) " Alternative methods to evaluate the arbitrage opportunities" WSEAS Transactions on business and Economics, ISSN 2224-2899, Volume 12, pp. 416-425.
- 21) Sergio Ortobelli, Tomáš Tichý (2015) On the impact of semidefinite positive correlation measures in portfolio theory, Annals of operations research, 235(1), 625-652.
- 22) Lando T., Ortobelli S. (2015) "On the Approximation of a Conditional Expectation" WSEAS Transactions on Mathematics, ISSN 1109-2769, Volume 14, pp. 237-247

- 23) Brambilla C., Gurny M., Ortobelli S. (2015) "Structural credit risk models with Lévy processes: The VG and NIG cases", *Far East Journal of Mathematical Sciences* 97(1), 101-119.
- 24) Petronio, Ortobelli, Tamborini, Lando (2014) "Portfolio selection in the BRICs stocks markets using Markov processes " *International Journal of Mathematical Models and Methods in Applied Sciences* 8, 311-318 (ISSN:1998-0140)
- 25) Ortobelli S, Petronio F. , Tichy T. (2014)" Dominance among financial markets" *WSEAS Transactions on Business and Economics* 11, 2014, pp. 707-717
- 26) Biglova, Ortobelli, Fabozzi (2014) "Portfolio selection in the presence of systemic risk" *The Journal of Asset Management*, 15: 285-299.
- 27) M. Cassader, S. Ortobelli, L., V. Caviezel, S. Caglio (2014) On the use of contingent claims in portfolio selection problems , *International Journal of Economics and Statistics* 2, 220-229
- 28) F. Petronio, T. Lando, A. Biglova, S. Ortobelli (2014) Optimal portfolio performance with Exchange Traded Funds. *Ekonomicka Revue Central European Review of Economic Issues* 17(5), 5-12.
- 29) Enrico Angelelli, Sergio Ortobelli Lozza, and Gaetano Iaquinta.(2013) Volume-Return portfolio selection and large scale dimensional problems with bivariate Markov chains, *International Journal of Mathematical Models and Methods in Applied Sciences* 7(12), 984-992
- 30) Ortobelli S., Shalit H., Fabozzi F.(2013) "Portfolio selection problems consistent with given preference orderings" in *International Journal of Theoretical and Applied Finance* 16(5) (38 pages) DOI: 10.1142/S0219024913500295
- 31) Gurny M., Ortobelli Lozza S., Giacometti R. (2013) Structural credit risk models with subordinated processes, *Journal of Applied Mathematics*. Volume 2013 Article ID 138272, 12 pages <http://dx.doi.org/10.1155/2013/138272>
- 32) E. Angelelli, S. Ortobelli Lozza, and G. Iaquinta 2013 "An asymptotic Markovian approach to the portfolio selection problem" in *International Journal of Mathematical Models and Methods in Applied Sciences* 7(11), 936-944
- 33) V. Caviezel, S. Gambirasi and S. Ortobelli Lozza (2012) Risk profile using PCM and RSM, in *Electronic Journal of Applied Statistical Analysis*, Vol. 5, Issue 3, 327 – 332
- 34) S. Ortobelli Lozza, E. Angelelli, A. Bianchi, (2011) Financial Applications of bivariate Markov processes, *Mathematical Problems in Engineering* Volume 2011 Article ID 347604, 15 pages,doi:10.1155/2011/347604
- 35) Valeria Caviezel, Lucio Bertoli Barsotti and Sergio Ortobelli Lozza, (2011) Measuring risk profile with a multidimensional Rasch analysis *Journal of Applied Quantitative Methods*, vol.6(4), p. 14 - 29.
- 36) Valeria Caviezel and Sergio Ortobelli Lozza, (2011) On the investors' tendency to risk/earn on the stock market *International Journal on GSTF Business Review*, 1(2), p. 35 - 40.
- 37) Ortobelli S., Tichy T. (2011) The impact of association measures within the portfolio dimensionality reduction problem, *Ekonomicka Revue Central European Review of Economic Issues*, 14, 257-264.
- 38) R. Giacometti, S. Ortobelli, M. Bertocchi (2011)"A Stochastic Model for Mortality Rate on Italian Data" *Journal of Optimization Theory and Applications*149(1), 216-230
- 39) S. Ortobelli Lozza, E. Angelelli, D. Toninelli, (2011) Set-Portfolio Selection with the Use of Market Stochastic Bounds. *Emerging Markets Finance and Trade* 47(5), 5-24

- 40) G. Iaquinta, S. Ortobelli Lozza, E. Angelelli (2011) GARCH type portfolio selection models with the Markovian approach, International Journal of Mathematical Models and Methods in Applied Sciences, Volume 5(2), pp.308-315
- 41) S. Ortobelli Staino A. (2011) "Exotic options with Lévy Processes: the Markovian Approach" in Investment Management and Financial Innovations 8(1), 140-156
- 42) V. Russo, R. Giacometti, S. Ortobelli, S. Rachev, F. Fabozzi (2011) Calibrating affine stochastic mortality models using term assurance premiums. Insurance: Mathematics and Economics 49(1), Pages 53-60
- 43) S. Ortobelli V. Caviezel, S. Rachev (2010) "Semi-parametric estimators for heavy tailed distributions" Journal of Concrete and Applicable Mathematics 8, 150-164.
- 44) S. Ortobelli S. Rachev, F. Fabozzi (2010) "Risk Management and Dynamic Portfolio Selection with Stable Paretian Distributions" Journal of Empirical Finance 17(2), 195-211.
- 45) Biglova A., Ortobelli S., Rachev S.T. Stoyanov S. A note on the impact of non linear reward and risk measures, Journal of Applied Functional Analysis, 5/2, 194-202, 2010
- 46) Ortobelli S., Biglova A., Rachev S.T. Stoyanov S. Portfolio Selection Based on a Simulated Copula, Journal of Applied Functional Analysis, 5/2, 177-193, 2010
- 47) S. Ortobelli, R. Giacometti, M. Bertocchi (2009) "Impact of different distributional assumptions in forecasting Italian mortality rates" in Investment Management and Financial Innovations 6(3), 186-193.
- 48) Ortobelli S., Rachev S., Shalit H., Fabozzi F.(2009) "Orderings and Probability Functionals Consistent with Preferences" Applied Mathematical Finance 16(1), 81-102
- 49) Ortobelli S., A. Biglova, S. Stoyan, S. Rachev, (2009) "Analysis of the factors influencing momentum profits", Journal of Applied Functional Analysis 4(1), 81-106.
- 50) Ortobelli S. Iaquinta G., Lamantia F., Massabò I. (2009) "Moment based approaches to value the risk of contingent claim portfolios", Annals of Operations Research 165(1), 97-121.
- 51) T. Tichy, S. Ortobelli (2009) "Concordance Measures and Portfolio Selection Problem" ECON - Journal of Economics, Management and Business, ISSN 1803 - 3865 41-48.
- 52) Ortobelli S. Stoyanov S., Rachev S., Fabozzi F. (2008) "Relative deviation metrics and the problem of strategy replication" Journal of Banking and Finance 32(2), 199-206
- 53) Ortobelli S. Rachev S., Stoyanov S., Fabozzi F. and Biglova A. (2008) "Desirable Properties of an Ideal Risk Measure in Portfolio Theory" International Journal of Theoretical and Applied Finance 11(1), 19-54.
- 54) Ortobelli S. Rachev S., Shalit H., Fabozzi F. (2008) "Orderings and Risk Probability Functionals in Portfolio Theory" in Probability and Mathematical Statistics 28(2), 203-234.
- 55) Ortobelli S. Iaquinta G. (2008) "Markov Chain Applications to Non Parametric Option Pricing Theory" in International Journal of Computer Science & Network Security 8(6), 199-208
- 56) Ortobelli S. Pellerey F. (2008) "Market stochastic bounds with elliptical distributions", Journal of Concrete and Applicable Mathematics 6(3), 293-314.
- 57) Ortobelli, S. De Giovanni D., and Rachev, S.T.(2008): "Delta hedging strategies comparison" in European Journal of Operational Research. 185(3) 1615-1631

- 58) Ortobelli S. Pellerey F. (2007) "Applications to portfolio theory of market stochastic bounds", *Investment Management and Financial Innovations* 4(4), 26-37.
- 59) Ortobelli S. Staino A., and Massabò I. (2007) "A comparison among Portfolio Selection Models with Subordinated Lévy Processes" in *International Journal of Computer Science & Network Security* 7(7), 224-233
- 60) Ortobelli S. Leccadito A., Russo E.(2007): "Portfolio Selection, VaR and CVaR models with Markov Chains". in *International Journal of Computer Science & Network Security* 7(6), 115-123.
- 61) Ortobelli S. Lamantia F., and S. T. Rachev (2006) "An Empirical Comparison among VaR Models and Time Rules with Elliptical and Stable Distributed Returns" in *Investment Management and Financial Innovations* 3(3), 8-29
- 62) Ortobelli S. Iaquinta G. (2006) "Distributional Approximation of Asset Returns with Nonparametric Markovian Trees" in *International Journal of Computer Science & Network Security* 6(11), 69-74
- 63) Ortobelli S. Lamantia F., and S. T. Rachev (2006) "VaR, CVaR and Time Rules with Elliptical and Asymmetric Stable Distributed Returns" *Investment Management and Financial Innovations* 3(4), 19-39
- 64) S. Ortobelli S. , Stoyanov, G. Samorodnitsky, S. T. Rachev (2006) "Computing the portfolio Conditional Value-at-Risk in the alpha-stable case" in *Probability and Mathematical Statistics* 26, 1-22.
- 65) Ortobelli S., Biglova A., Huber I., Stoyanov S., Racheva B. (2005) "Portfolio selection with heavy tailed distributions" *Journal of Concrete and Applicable Mathematics* 3, 353-376.
- 66) Ortobelli S. , Bertocchi M., Giacometti R., Rachev S. (2005) "The impact of different distributional hypothesis on returns in asset allocation" *Finance Letters* 3, 17-27.
- 67) Ortobelli S. , Rachev S., Stoyanov S., Fabozzi F. and Biglova A.(2005) "The proper use of the risk measures in the Portfolio Theory" *International Journal of Theoretical and Applied Finance* 8(8), 1107-1133.
- 68) Ortobelli S. , Biglova A., Rachev S., Stoyanov S. (2004) "Different Approaches to Risk Estimation in Portfolio Theory" *Journal of Portfolio Management*, 31, 103-112.
- 69) Ortobelli S. Huber I., Schwartz E. (2002): "Portfolio selection with stable distributed returns" Springer-Verlag: *Mathematical Methods of Operations Research* 55, 265-300.
- 70) Ortobelli S. Rachev, S.T.(2001): "Safety first analysis and stable paretian approach" Elsevier Science Ltd. *Mathematical and Computer Modelling*, 34, 1037-1072.
- 71) Ortobelli S. (2001): "The classification of parametric choices under uncertainty: analysis of the portfolio choice problem" Kluwer Academic Publishers, *Theory and Decision*, 51, 297-327.

### **Publications on Italian national review**

Ortobelli S. ,Consiglio A., Massabò I. (2002): "Value at Risk: Oltre la normale" (Casa Ed. Bancaria) Newfin: in "La tutela dell'investitore nei servizi di asset management", 175-200.

## Main Publications on books

1. Ortobelli S. (2013) "Inflation-Linked Bonds" Chapter 7.2 in "Euro Bonds: Markets, Infrastructure and Trends" World Scientific Book, 185-195(NO WoS)
2. Ortobelli S. (2013) "Bond Exchange Traded Funds" Chapter 7.3 in "Euro Bonds: Markets, Infrastructure and Trends" World Scientific Book, 195-222. (NO WoS)
3. Ortobelli S. (with Angelelli, E.) (2009) "American and European Portfolio Selection Strategies: the Markovian Approach" Chapter 5 in "Financial Hedging" edited By Patrick N. Catlere, 119-152. (NO WoS)
4. Ortobelli S. (with Biglova A., S. Rachev, F. Fabozzi )(2009) "Modeling, Estimation, and Optimization of Equity Portfolios with Heavy-tailed Distributions" Chapter 5 in "Optimizing Optimization: The Next Generation Of Optimization Applications and Theory" edited By Stephen Satchell, pp.117-141. (NO WoS)
5. Ortobelli S. ,(with Angelelli, E. )(2009) " Maximum Expected Utility of Markovian Predicted Wealth " a Lecture Notes in Computer Science 5545,G. Allen et al. (Eds.): ICCS 2009, Part II, LNCS pp. 588–597, 2009.© Springer-Verlag Berlin Heidelberg 2009
6. Ortobelli S. (with Bertini C., Staino A.) (2007) "Discrete Time Portfolio Selection with Lévy Processes" , Springer-Verlag Lecture Notes in Computer Science 4881, 1032-1041
7. Ortobelli S. (with Leccadito A., Russo E., Iaquinta G.) (2006) "Financial Risk Modeling with Markov Chains" , Springer-Verlag Lecture Notes in Computer Science 4284, 1275-1282.
8. Ortobelli, S. (with Giacometti, R.) (2004): "Risk measures for asset allocation models", published in Chapter 6 "Risk Measures in the 21st century" Wiley and Sons 69-86 (NO WoS)
9. Ortobelli S. (with Rachev S., Huber I., Biglova A.) (2004) "Optimal portfolio selection and Risk management: A comparison between the stable paretian Approach and the Gaussian one" pubblicato in Chapter 6, Handbook of Computational and Numerical Methods in Finance, 197-252, Birkhauser, Boston (NO WoS)
10. Ortobelli S. (with Rachev, S.T., Schwartz, E )(2004): "The problem of optimal asset allocation with stable distributed returns", in (A.C. Krinik, R.J. Swift eds.) "Stochastic Processes and Functional Analysis a volume of recent advances in Honor of Prof. M.M. Rao" Volume 238 Marcel Dekker Inc., 295-347, New York. (NO WoS)
11. Ortobelli S.,(with Lamantia F., Rachev S.) (2004) "Time-Scale transformations: effects on VaR models" Springer-Verlag Lecture Notes in Computer Science 3039, 779-786.
12. Ortobelli S.( with Huber I., Rachev S., Schwartz E. ) (2003): "Portfolio choice theory with non-Gaussian distributed returns", Cap. 14 di Handbook of Heavy Tailed Distributions in Finance, North Holland Handbooks of Finance Series Editor W. T. Ziemba, 547-594(NO WoS)

## Books

- 1) Bertocchi M., Consigli G., D'Ecclesia R., Giacometti R., Moriggia V., Ortobelli L.S. (2013) "Euro Bonds: Markets, Infrastructure and Trends" World Scientific Book.
- 2) N. Kouaissaah, S. Ortobelli Lozza (2018) Portfolio Theory and Conditional Expectations: Selected Models and Applications, Series on Advanced Economic Issues, Faculty of Economics, VSB-TU Ostrava

## Curatele

- 1) Wing-Keung Wong, Xu Guo and S. Ortobelli Lozza, (2020) Mathematical Finance with Applications *Special Issue Journal of Risk and Financial Management*

## **Publications on Proceeding**

1. Ortobelli S., Consiglio A., Massabò I. (2003): "Non Gaussian distribution for VaR calculation: An assessment for the Italian Market" in (ed by R. Neck) "Modeling and Control of Economic System 2001" (Elsevier Science Ltd. ISBN: 0-08-043858X), p.213-218. (NO WoS)
2. Ortobelli, S., Huber I., Höchstötter M., Rachev S.T. (2003): "A Comparison among Gaussian and non-Gaussian portfolio choice models" in (ed by R. Neck) "Modeling and Control of Economic System 2001" (Elsevier Science Ltd. ISBN: 0-08-043858X) p. 225-230. .( NO WoS)
3. Ortobelli, S. (2003) "A comparison between Stable Paretian models and Gaussian approaches" Atti della Giornata di studio "Metodi Numerici della Finanza", ISBN: 88-88037-06-3 p. 221-240. .( NO WoS)
4. S. Ortobelli (2003) "Safety First portfolio selection and market trend analysis", in (Eds E. Gyurkovics & R. Bars) "Control Applications of Optimization 2003" Elsevier Science Ltd. ISBN: 0-08-044074-6.
5. S. Ortobelli, A. Biglova, S. Stoyanov, S. Rachev, F. Fabozzi (2005) "A comparison among performance measures in portfolio theory", in (ed by P. Horacek and M. Simandl and P. Zitek), Proceeding 16th IFAC World Congress, June Prague.( NO WoS)
6. Iaquinta G., Ortobelli S., Angelelli E. (2010) "The Markovian portfolio selection model with GARCH volatility dynamics" in (M. Pirtea, M. Mazilu, J. Strouhal eds.) Selected Topics in Economy & Management Transformation Vol. I, ISSN:1792-5983, ISBN: 978-960-474-240-0 pp.382-387..( NO WoS)
7. Angelelli G., Bianchi A., Ortobelli S. (2010) " Some possible applications of bivariate Markov processes " in proceeding 47 EWGFM Tichy T., Kopa M. (eds), ISBN 978-80-248-2351-5 pp.25-34.
8. Ortobelli S. Tichy T. (2010) " Semidefinite positive association measures and portfolio theory " in proceeding 47 EWGFM Tichy T., Kopa M. (eds), ISBN 978-80-248-2351-5, pp.119-130.( NO WoS)
9. Caviezel V., Ortobelli Lozza S., Bertoli Barsotti L., (2012) "Risk profile versus portfolio selection: a case study" Meeting of the Italian Statistical Society, ISBN 978-88-6129-882-8. .( NO WoS)
10. Angelelli E., Ortobelli L.S., Iaquinta G. (2013) "Portfolio choice: a non parametric Markovian framework" ISBN: 978-960-474-305-6 in "Mathematical Applications in Science & Mechanics" (eds. Trisovic N., Rasteiro D., Tenorio A., Simian D., Minea A., Roushdy M., Salem A.) pag.237-242. .( NO WoS)
11. Cassader M., Ortobelli S., Caviezel V. (2013) "Portfolio selection with options" ISBN: 978-960-474-319-3 in "Recent Advanced in Intelligent Control, Modeling & Computational Science" (eds. Sendra S., Leba M., Ionica A., Kalovrektis K., Corbi O.) pag.89-94. . ( NO WoS )
12. Caglio S., Ortobelli S.(2013) "Portfolio selection without default risk in the fixed income market" ISBN: 978-960-474-319-3 in "Recent Advanced in Intelligent Control, Modeling & Computational Science" (eds. Sendra S., Leba M., Ionica A., Kalovrektis K., Corbi O.) pag.101-106. .( NO WoS)
13. Angelelli E., Ortobelli S.,Iaquinta G. (2013) "Dimensional portfolio reduction problems with asymptotic Markov processes" ISBN: 978-960-474-319-3 in "Recent Advanced in Intelligent Control, Modeling & Computational Science" (eds. Sendra S., Leba M., Ionica A., Kalovrektis K., Corbi O.) pag.95-100.( NO WoS)
14. Petronio, F., Ortobelli, S. and Tichy T. (2013). Multivariate stochastic orderings consistent with preferences and their possible applications, in Proceeding of MME2013, . ISBN: 978-80-87035-76-4., pp. 724-729.

15. Angelelli E., Ortobelli S., Tichý T., Toninelli D. (2013), “International portfolio selection with Markov processes and liquidity constraints”, in Proceedings of the 31<sup>st</sup> International Conference on Mathematical Methods in Economics. 11-13 September 2013, Jihlava, Czech Republic. . ISBN: 978-80-87035-76-4., pp. 7-12.
16. Martin Gurny Sergio Ortobelli Lozza, Rosella Giacometti (2013) “A comparison of estimated default probabilities: Merton model vs. stable Paretian model” in “Proceeding of Management of Firms and Financial Institutions” (ed Miroslav Čulík).ISBN: 978-80-248-3172-5, pp. 217-226.
17. Petronio F., Ortobelli S., Tichy T. (2013) A Financial Application of Multivariate Stochastic Orderings Consistent with Preferences, in Polouček, s. and Stavárek, D. (Eds.), 2013. *Financial Regulation and Supervision in the After-Crisis Period. Proceedings of 14th International Conference on Finance and Banking*. Karviná: Silesian University, School of Business Administration, ISBN 978-80-7248-892-620. Pp 320-328
18. Ortobelli S., Vitali S., Cassader M. (2013) Reward and risk in the fixed income markets, in Polouček, s. and Stavárek, D. (Eds.), 2013. *Financial Regulation and Supervision in the After-Crisis Period. Proceedings of 14th International Conference on Finance and Banking*. Karviná: Silesian University, School of Business Administration, ISBN 978-80-7248-892-620 pp 329-340
19. Ortobelli, S., Petronio, F., and Tichy, T., (2014) Multivariate stochastic orderings among different financial markets, in (J. Balicki ed.) Advanced in Applied and pure mathematics, Proceeding of MCSS 14, pp.283-290. Wseas Press, ISSN:2227-4588, ISBN: 978-960-474-380-3(NO WoS)
20. S. Ortobelli, F. Petronio, and T. Lando, (2014) “Portfolio problems based on returns consistent with the investor's preferences”, in (J. Balicki ed.) Advanced in Applied and pure mathematics, Proceeding of MCSS 14, pp. 340-347, Wseas Press, ISSN:2227-4588, ISBN: 978-960-474-380-3. (NO WoS)
21. S. Ortobelli, F. Petronio, T. Lando, (2014) Impact of portfolio strategies based on different return definitions Conference Proceeding in Managing and Modelling of Financial Risks (part II), ISBN: 978-80-248-3631-7, pp 582-589.
- 22 Petronio F., Ortobelli Lozza S. (2014) Ex-post portfolio comparison in the BRICs stocks markets, Conference Proceeding in Managing and Modelling of Financial Risks (part III), ISBN: 978-80-248-3631-7, pp 631-638,
23. S. Ortobelli, T. Tichy, F. Petronio: (2014) On the use of dispersion measures consistent with additive shifts in Proceeding MME 2014, ISBN 978-80-244-4209-9, pp 727-731
24. Ortobelli, S., Lando, T. (2015) On the use of conditional expectation estimators, New developments in pure and applied mathematics, ISSN: 222-4588. pp. 244-246(NO WoS)
25. Ortobelli, S., Tichy, T., Lando, T., Petronio, F. (2015) On the financial application of multivariate stochastic orderings, New developments in pure and applied mathematics, ISSN: 222-4588. pp 142-145 (NO WoS)
26. Ortobelli, S., Lando, T. (2015) Independence tests for financial variables. Proceedings of the conference “Mathematics and computers in sciences and industry”, ISBN: 978-1-61804-330-6, pp. 67-70. (NO WoS)
27. Petronio, F., Ortobelli, S., Tichy T., Lando, T., (2015) Parametric asymptotic portfolio decisions. In Mathematical Methods in Economics, ISBN: 978-80-261-0539-8, pp. 590-595
28. Petronio F., Ortobelli S. (2015) An Analysis of Fixed Income BRICS Markets (ed. Miroslav Čulík), Financial management of firms and financial institutions Conference, 8-9 September 2015 Ostrava (Czech Republic), ISSN: 2336-162X Ostrava, 09/2015. 911-920
29. Petronio F., Ortobelli S. (2015) Choices based on asymptotic approximation (ed. Miroslav Čulík), Financial management of firms and financial institutions Conference, 8-9 September 2015 Ostrava (Czech Republic), ISSN: 2336-162X Ostrava, 09/2015. 905-910

30. Cassader M., Ortobelli S., Tichy T. (2015) LP active benchmarking strategies based on performance measures and stochastic dominance constraints (ed. Miroslav Čulík), Financial management of firms and financial institutions Conference, 8-9 September 2015 Ostrava (Czech Republic), ISSN: 2336-162X Ostrava, 09/2015. 145-154
31. Ortobelli, S. Kouaissah, N., (2015) "Alternative methods to estimate the State Price Density". In 2015 Second International Conference on Mathematics and Computers in Sciences and in Industry, 244 – 246.
32. Kouaissah, N., Ortobelli, S., (2015) "On the estimation of the state price density". In Proceedings of the 33rd International Conference on Mathematical Methods in Economics. 09-11 September 2015, Plzen: UWB, Czech Republic. ISBN: 978-80-261-0539-8, pp. 389-394.
33. Kouaissah, N., Ortobelli, S., (2015) "On the valuation of the arbitrage opportunities". To appear on Management of Firms and Financial institutions, (ed. Miroslav Čulík), ISSN: 2336-162X Ostrava, 09/2015, 582-589
34. Kouaissah, N., Orlandini D., Ortobelli, S., Tichy T.(2015) "Some implications of the moving average rule usage for portfolio trading," *2015 12th International Conference on Service Systems and Service Management (ICSSSM)*, pp. 1-5.doi: 10.1109/ICSSSM.2015.7170325
35. Ortobelli S., Lando T, Nardelli C. (2016) Parametric rules for stochastic comparisons. Proceedings of the 33rd International Conference on Mathematical Methods in Economics, pp. 630-634. ISBN 978-80-7494-296-9.
36. Kouaissah, N., Ortobelli, S., Tichý, T (2016). Reward and Risk in the Italian Fixed Income Market. in *Managing and Modelling of Financial Risks*, (Ed. Miroslav Čulík), ISSN: 2464-6989 (Conference September 2016 Ostrava). pp 430-438
37. Malavasi M., Previtali R., Ortobelli S., Nardelli C. (2016) Managing Risk with Simulated Copula, in *Managing and Modelling of Financial Risks*, (Ed. Miroslav Čulík), ISSN: 2464-6989 (Conference September 2016 Ostrava). pp 538-545
38. Malavasi M., Ortobelli S. (2017) Semiparametric Tests for Behavioral Finance Efficiency, in *Managing and Modelling of Financial Risks*, (Ed. Miroslav Čulík), (Conference September 2017 Ostrava) ISSN: 2336-162X, 507-513.
39. Malavasi M., Ortobelli S. (2017) On the Efficiency of Portfolio Choices in *Proceeding on 16th INTERNATIONAL CONFERENCE ON FINANCE AND BANKING (October 2017 Ostrava)*.
- 40 Kouaissah, N., Ortobelli, S., Cavenago, M. (2017). Optimal choices among ethic assets of the Italian market 35th International Conference Mathematical Methods in Economics September 13th - 15th, 2017, Hradec Králové, Czech Republic, ISBN 978-80-7435-678-0.pp. 354-359
41. Kouaissah, N., Ortobelli, S. (2017). Multivariate Dominance among financial sectors. To appear in Management of Firms and Financial institutions, (Ed. Miroslav Čulík), ISSN: 2336-162X Ostrava, 423-431.
42. Ortobelli Sergio, Kouaissah Noureddine (2018) Implications of conditional expectation in portfolio theory in *Managing and Modelling of Financial Risks* (Ed. Miroslav Čulík), ISSN: 2336-162X Ostrava, 372-379
43. Kamonchai Rujirarangsan and Sergio Ortobelli Lozza (2019) Impact of Google Trends on stock prices, in *Financial management of Firms and Financial Institutions* (Ed. Miroslav Čulík).
44. Kamonchai Rujirarangsan and Sergio Ortobelli Lozza (2020) Impact of Volume on portfolio optimization, to appear in *Managing and modeling financial risk* (Ed. Miroslav Čulík).

## Technical Reports

1. Cassader M., Ortobelli L.S., (2013) Portfolio selection with options. Technical Report, Department SAEMQ, University of Bergamo.
2. Ortobelli L.S., Angelelli E, Toninelli D. (2010) Set-Portfolio selection with the use of stochastic bounds. Technical Report n. 5, Department MSIA, University of Bergamo.
3. Ortobelli S. Tichy T. (2010) " On the impact of association measures in the portfolio theory" Technical Report 7, University of Bergamo
4. Iaquinta G., Ortobelli Lozza, S. and Angelelli, E. (2010), Portfolio Selection with GARCH volatility dynamics, Technical Report 10, University of Bergamo
5. Angelelli, E. and Ortobelli Lozza, S. (2010), On the application of Markov processes to the large scale portfolio selection problem, Technical Report n. 347, Department of Quantitative Methods, University of Brescia.
6. S. Ortobelli V. Caviezel, S. Rachev (2009) "Semi-parametric estimators for heavy tailed distributions" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe
7. Ortobelli S. Biglova A., S. Rachev, F. Fabozzi (2009) "Modeling, Estimation, and Optimization of Equity Portfolios with Heavy-tailed Distributions" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe.
8. Ortobelli S. Rachev S., Shalit H., Fabozzi F.(2008) "Practical Portfolio Selection Problems Consistent With A Given Preference Ordering" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe
9. S: Ortobelli, N. Topaloglou (2008) "Testing for preference orderings efficiency" Technical Report, University of Bergamo
10. Ortobelli, S. A. Biglova, S. Rachev, S. Stoyan, (2008) "Analysis of the Factors Influencing Momentum Profits" Technical Report, Probability and Applied Statistics, University of California Santa Barbara
11. Ortobelli, S. A. Biglova, S. Rachev, S. Stoyan, (2008) "Portfolio selection based on a simulated copula" Technical Report, Probability and Applied Statistics, University of California Santa Barbara
12. S. Ortobelli E. Angelelli (2008)"American and European Portfolio Selection Strategies: the Markovian Approach" Technical Report 309, University of Brescia
13. S. Ortobelli Staino A. (2007) "Exotic options with Lévy Processes: the Markovian Approach" Technical Report, Department MSIA University of Bergamo
14. Ortobelli S. Rachev S., Shalit H., Fabozzi F. (2007) "Orderings and Probability Functionals Consistent with Preferences" Technical Report, Probability and Applied Statistics, University of California Santa Barbara.
15. S. Ortobelli F. Pellerey (2007) " Market stochastic bounds and applications to portfolio theory " Technical Report n. 22-2007, Dipartimento di Matematica, Politecnico di Torino, Torino, Italy
16. Ortobelli L. S. Bertini C., Staino A. (2007) "Discrete Time Portfolio Selection with Lévy Processes" Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo,
17. S. Ortobelli Iaquinta G. (2006) " Option pricing with non-parametric markovian trees", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo.
18. Ortobelli S. Rachev S., Shalit H., Fabozzi F. (2006) "The Theory of Orderings and Risk Probability Functionals" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe

19. Ortobelli S., Rachev S., Shalit H., Fabozzi F. (2006) "Risk Probability Functionals and Probability Metrics Applied to Portfolio Theory" Technical Report, Probability and Applied Statistics, University of California Santa Barbara.
20. Ortobelli S., Rachev S., Fabozzi F. (2006) "Risk management and dynamic portfolio selection with stable Paretian distributions" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe
21. Ortobelli S., Stoyanov S., Rachev S., Fabozzi F. (2006) "Relative deviation metrics and the problem of strategy replication" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe,
22. Ortobelli S., Lamantia F., Rachev S. (2006): "An Empirical Comparison among VaR Models and Time Rules with Elliptical and Stable Distributed Returns" Technical Report, University of Karlsruhe.
23. Ortobelli S., Lamantia F., Rachev S. (2006): "VaR, CVaR and Time Rules with Elliptical and Asymmetric Stable Distributed Returns" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe.
24. Ortobelli S., Rachev S., Stoyanov S., Fabozzi F. and Biglova A. (2005) "Desirable Properties of an Ideal Risk Measure in Portfolio Theory" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe
25. Ortobelli S., Leccadito A., Russo E. (2005): "Portfolio Selection, VaR and CVaR models with Markov Chains". Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo.
26. Ortobelli S., Rachev S., Stoyanov S., Fabozzi F. and Biglova A. (2005) "The proper use of the risk measures in the Portfolio Theory" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe
27. Ortobelli S., Consiglio A., Massabò I. (2005): A Comparison among different VaR Models for portfolios with heavy tailed distributions, Technical Report, University of Bergamo
28. Ortobelli S., De Giovanni D., Rachev, S.T. (2004): "Delta hedging strategies comparison" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe.
29. S. Ortobelli S., Stoyanov, G. Samorodnitsky, S. T. Rachev (2004) "Computing the portfolio Conditional Value-at-Risk in the alpha-stable case" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe.
30. Ortobelli S., Bertocchi M., Giacometti R., Rachev S. (2004) "The impact of different distributional hypotheses on returns in asset allocation" Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, Università di Bergamo
31. Ortobelli S., Lamantia F., Rachev S. (2004): "Value at Risk with stable distributed returns" Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe.
32. S. Ortobelli, Iaquinta G., Lamantia F., Massabò I. (2003) "A semi-parametric approach to value the risk of asset derivative portfolios", Technical Report 15, Università di Bergamo.
33. S. Ortobelli (2003) "Market trend analysis and stochastic bounds", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 14, Università di Bergamo
34. S. Ortobelli, Biglova, Huber, Racheva, Stoyanov (2003): "Portfolio choices with heavy tailed distributions" Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 22, Università di Bergamo
35. Ortobelli L., S. Giacometti, R. (2001): "A comparison between dispersion measures for the asset allocation problem", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 7, Università degli Studi di Bergamo

36. Ortobelli L., S. Rachev S.T. (2000): "Motivations to safety first analysis", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 17, Università degli Studi di Bergamo.
37. Ortobelli L., S. (2000): "A first classification of the parametric distribution function consistent with the expected utility maximization", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 18, Università degli Studi di Bergamo.
38. Ortobelli L., S. Rachev, S.T. and Schwartz, E. (2000): "The problem of optimal asset allocation with stable distributed returns", Technical Report, 20, Department of Finance, Anderson School of Management, UCLA
39. Ortobelli L., S. (1999): "Multi-parameter efficiency analysis in portfolio choice theory II: k Parameter analysis", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 25, Università degli Studi di Bergamo
40. Ortobelli L., S. Rachev, S.T. (1999): "Safety-first analysis and stable paretian approach to portfolio choice theory", Technical Report, Institute of Statistics and Mathematical Economic Theory, University of Karlsruhe.
41. Ortobelli L., S. (1999): "Safety-first approach to portfolio selection I: stochastic bounds and one parameter safety first analysis", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 22, Università degli Studi di Bergamo
42. Ortobelli L., S. (1999): "Multi-parameter efficiency analysis in portfolio choice theory I: Moments analysis", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 24, Università degli Studi di Bergamo
43. Ortobelli L., S. (1999): "Safety-first approach to portfolio selection II: Distributional motivation to multi-parameter safety first analysis and portfolio choice with unknown distributions", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 23, Università degli Studi di Bergamo.
44. Ortobelli L., S. (1997): "Un modello per la scelta del portafoglio che minimizza il rischio di perdita del valore atteso e alcune considerazioni sui portafogli di massimo margine", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo 5, Università degli Studi di Bergamo
45. Ortobelli L., S. (1997): "A way to solve the investor problem", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 23, Università degli Studi di Bergamo.
46. Ortobelli L., S. (1997): "Analisi della curva dei momenti", Quaderni del Dipartimento MSIA dell'Università degli Studi di Bergamo, 4, Università degli Studi di Bergamo.

#### National and International Conferences: Organization and Participation

In the last years I have been part of the organization committees of the Conference in "Managing and Modelling of Financial Risks" at VSB Technical University of Ostrava (2013-2019); EUMoptFin3 Workshop (Bergamo 2004); and ICSP XIII (Bergamo 2013) CMS 2017 (Bergamo 2017) I often organize sessions in international conferences where I'm invited. In this section, a list of attended conferences follows in chronological order.

1. Ortobelli, S. (1998): "Moments curve and asymmetry", Convegno AMASES, Genova.
2. Ortobelli, S. (1998): "Portfolio choice: a new approach (The efficiency analysis)", Convegno AMASES, Genova.
3. Ortobelli, S. (1999): "Multi-parameter analysis in the portfolio choice theory", Convegno AMASES, Arcavacata di Rende, Cosenza.
4. Ortobelli, S. (with Giacometti, R.) (2000): "A comparison among three dispersion measures for the asset allocation problem", Convegno AMASES, Padenghe sul Garda, Brescia.

5. Ortobelli, S. (2001): "Motivations to a portfolio choice theory with non-Gaussian distributions", Workshop di Finanza Matematica, Pisa.
6. Ortobelli, S. (2001): "A first classification of the parametric distribution functions consistent with the expected utility maximization: the portfolio choice case" F.U.R. X, Tenth International Conference on the Foundations and Applications of Utility, Risk and Decision Theory, Torino.
7. Ortobelli, S. (with Huber, I., Höchstötter, M., Rachev, S.T.) (2001): " A Comparison among Gaussian and non-Gaussian portfolio choice models" IFAC Symposium on Modeling and Control of Economic Systems, SME 2001, Klagenfurt, Austria.
8. Ortobelli, S. (with Consiglio, A., Massabò, I.) (2001): " Non Gaussian distribution for VaR calculation: An assessment for the Italian Market" IFAC Symposium on Modeling and Control of Economic Systems, SME 2001, Klagenfurt, Austria.
9. Ortobelli, S. (with Giacometti, R.) (2002): "Risk Measures for asset allocation models" IFORS 2002, on OR in a globalised, networked world economy, Edinburgh, Regno Unito.
10. Ortobelli, S. (with Lamantia, F. e Rachev S.) (2002) "Value at Risk with stable distributed returns" Convegno AMASES, Verona.
11. Ortobelli L., S.(with Iaquinta G., Lamantia F., Massabò I.) (2003)"A semiparametric approach to value the risk of asset derivative portfolios" EUMoptFin Workshop, Semmering, Austria.
12. Ortobelli, S. (2003) "A comparison between Stable Paretian Models and Gaussian approaches" Giornata di studio in Metodi Numerici della Finanza, Venezia 2003.
13. Ortobelli L., S. (2003) "Safety First portfolio selection and market trend analysis" Workshop CAO 2003, Visegràd, Hungary.
14. Ortobelli L., S. .(with Iaquinta G., Lamantia F., Massabò I.) (2003)"A semiparametric approach to value the risk of contingent claims" Euro/Informs Joint International Meeting, Istanbul 2003 (Turchia)
15. Ortobelli L., S. .(with Vecellio P.) (2003) "Un confronto tra modelli di selezione del portafoglio dipendenti da tre parametri" Convegno AMASES, Cagliari (2003).
16. Bertocchi M., R. Giacometti, S. Ortobelli (2003) "Un confronto tra diverse ipotesi distribuzionali nella selezione del portafoglio" Convegno Amases 2003 (Cagliari).
17. Ortobelli L., S. De Giovanni D., e Rachev S (2004) "A comparison among delta hedging strategies" 34th Euro Working Group on Financial Modelling, Parigi.
18. Ortobelli L., S. Lamantia F. e Rachev S. (2004) "Time-scale transformations: effects on VaR models" Convegno ICCS 2004, Cracovia (Polonia).
19. Ortobelli L., S. .(with De Giovanni D., Rachev S.) (2004) "Delta hedging strategies comparison" Convegno AMASES, Modena (2004).
20. Ortobelli L., S. .(with Russo E.) (2004) "On the markovian behavior of asset returns" Convegno AMASES, Modena (2004).
21. Ortobelli L., S. .(with Russo E.) (2005) "On the markovian behavior of asset returns" EWGFM Brescia (2005).
22. S. Ortobelli (with S. T. Rachev, S. Stoyanov, F. Fabozzi and A. Biglova) (2005) "Desirable Properties of an Ideal Risk Measure in Portfolio Theory" International Summer School in Risk Measurement and Management, Roma Giugno 2005
23. Ortobelli L., S. (with Leccadito A., Iaquinta G.) (2005) "Markovian trees and markovian choices" 8<sup>th</sup> Italian Spanish Meeting on Financial Mathematics, Verbania Giugno 2005.
24. S. Ortobelli (with A. Biglova, S. Stoyanov, S. Rachev, F. Fabozzi) (2005) A comparison among performance measures in portfolio theory, 16<sup>th</sup> IFAC World Congress, Luglio 2005 Praga
25. S. Ortobelli (with A. Leccadito, E. Russo) (2005) "Porfolio Selection and Value at Risk with Markov Chains" presentato a AMASES 2005, Palermo and EWGFM Brescia.

- 26.S. Ortobelli (with G. Iaquinta) "Option Pricing with Markovian Trees", presentato a AMASES 2005, Palermo.
- 27.S. Ortobelli , G. Iaquinta, I. Massabò (2005) Value at Risk of contingent claim portfolios: a further correction to Li model, presentato a AMASES 2005, Palermo.
- 28.S. Ortobelli , S. Rachev 2005 "Risk management and dynamic portfolio selection with Stable Paretian distributions" Deutsche Bundesbank Conference on "Heavy tails and stable Paretian distributions in finance and macroeconomics" Eltville, Germany.
29. S. Ortobelli, A. Leccadito, E. Russo 2006 "Portfolio Selection, VaR and CVaR models with Markov Chains " presentato ad Infiniti 2006, Conference on International Finance, Dublin
30. S. Ortobelli , G. Iaquinta 2006 " Option and Risk Pricing with Markovian Trees " presentato ad EURO XXI 2006 – Reykjavík (Island)
31. S. Ortobelli (2006) (with C. Bertini, P. Pisciella) "Extensions, applications and representations of multivariate stochastic orderings " presentato ad AMASES 2006, Trieste.
32. S. Ortobelli (2006) (with A. Leccadito, E. Russo, G. Iaquinta) " Financial Risk Modeling with Markov Chains " presentato ad IDEAL 2006, Burgos, Spain.
33. S. Ortobelli (2007) (with A. Staino, I. Massabò) "Portfolio selection with subordinated Lévy processes " a EURO XXII, Praga
34. S. Ortobelli (2007) (with C. Bertini, S. Stoyanov, S. Rachev, F. Fabozzi) "Representations and applications of multivariate stochastic orderings" International Workshop on Computational and Financial Econometrics –Geneva, April 2007
35. S. Ortobelli (2007) (with A. Staino, I. Massabò) "Portfolio selection with subordinated Lévy processes " XXXVIII AIRO 2007, 5-8 Settembre, Genova.
36. S. Ortobelli (2007) (with S. Stoyanov, S. Rachev, F. Fabozzi) "On the orderings derived by the use of utility probability functionals: theoretical aspects and applications to portfolio theory" a IV International Summer School on Risk Measurement and Control, Roma, June 11-16, 2007
37. S. Ortobelli (2007) (with C. Bertini, A. Staino) "Discrete Time Portfolio selection with Lévy processes " IDEAL 2007, Birmingham, UK.
38. S: Ortobelli, (with N. Topaloglou) "Testing for preference ordering efficiency" a International Summer School on Risk Measurement and Control 2008 (Roma)
39. S. Ortobelli (with E. Angelelli)"American and European Portfolio Selection Strategies: the Markovian Approach" in AMASES 2008 (Trento)
40. S. Ortobelli (with V. Caviezel, S. Rachev) "Semi-parametric estimators for heavy tailed distributions" in AMAT 2008 (Memphis)
41. S: Ortobelli, (with E. Angelelli) (2009)"A comparison among dynamic portfolio strategies" al X Workshop in Quantitative Finance, Milan (Italy)
42. S: Ortobelli, (with N. Topaloglou) (2009) "Testing for preference ordering efficiency" a 5<sup>th</sup> International Finance Conference Hammamet (Tunisia)
43. Ortobelli S. (with Angelelli, E. ) (2009) " Maximum Expected Utility of Markovian Predicted Wealth " in ICCS 2009, Baton Rouge (USA).
44. Ortobelli S. (with T. Tichy ) (2010) " On the impact of association measures in the portfolio theory" XI Workshop in Quantitative Finance, Palermo (Italy)
45. Ortobelli S. (with T. Tichy ) (2010) " Association measures in presence of heavy-tailed distributions: the impact in portfolio selection problems" Workshop in "Latest Developments in Heavy-Tailed Distributions", Brussels.
46. S. Ortobelli, E. Angelelli D. Toninelli, (2010) " Set-Portfolio Selection with the Use of Market Stochastic Bounds", EURO XXIV, Lisbon
47. Iaquinta G., Ortobelli S., Angelelli E. "The Markovian portfolio selection model with GARCH volatility dynamics" in EMT, Timisoara

48. Angelelli G., Bianchi A., Ortobelli S. 2010 " Some possible applications of bivariate Markov processes " 47 EWGFM Praga
49. Ortobelli S. Tichy T. (2010) " On the impact of association measures in the portfolio theory" 47 EWGFM Praga
50. S. Ortobelli, E. Angelelli D. Toninelli, (2010) " Set-Portfolio Selection with the Use of Market Stochastic Bounds", EBES Atene
51. Topaloglou N., Ortobelli S. (2010) " Testing for preference orderings efficiency" 47 EWGFM, Ottobre 2010, Praga
- 52 Valeria Caviezel, Lucio Bertoli Barsotti and Sergio Ortobelli Lozza, (2011) "Risk profile using Rasch Analysis" Convegno IES2011, Maggio 2011, Firenze.
53. Ortobelli S. Angelelli E. (2011) "Jumping Assets, Timing Effect and Systemic Risk in Portfolio Selection Problems" CEQURA, Settembre 2011, Monaco (di Baviera)
54. Ortobelli S. Angelelli E. (2012) "Jumping Assets, Timing Effect and Systemic Risk in Portfolio Selection Problems" EURO 2012, Vilnius.
55. Ortobelli S., Caviezel V., Tichy T. (2012) "On the impact of some distributional factors in large scale portfolio problems" ISMP – Berlin, August 2012.
56. Ortobelli S., Angelelli E., Iaquinta G. (2013) "Portfolio choice: a non parametric Markovian framework" AMATH13, Dubrovnik, June 2013.
57. Ortobelli S., Toninelli D., Angelelli E., Tichy T. (2013) "*International portfolio selection with Markov processes and liquidity constraints*" ICSP XIII – Bergamo, July, 2013
58. Ortobelli S., Caglio S. (2013) "Portfolio selection without default risk in the fixed income market", CSE '13 Valencia, August 2013.
59. Ortobelli S., Angelelli E., Iaquinta G. (2013) "Dimensional portfolio reduction problems with asymptotic Markov processes" CSE '13 Valencia, August 2013.
60. Ortobelli S., Cassader M., Caviezel V. (2013) "Portfolio selection with options" CSE '13 Valencia, August 2013.
61. Ortobelli S., Gurny M., Giacometti R. (2013) "A comparison of estimated default probabilities: Merton model vs. stable Paretian model" 9<sup>th</sup> International Scientific Conference Financial Management of Firms and Financial Institutions, Ostrava, September 2013
62. Toninelli D., Ortobelli S., Angelelli E., Tichy T. (2013) "*International portfolio selection with Markov processes and liquidity constraints*" MME2013, Jihlava September 2013
63. Petronio, F., Ortobelli, S. and Tichy T. (2013). Multivariate stochastic orderings consistent with preferences and their possible applications, *MME2013*. Jihlava September 2013
64. Ortobelli S., Petronio F., Tichy T., "A Financial Application of Multivariate Stochastic Orderings Consistent with Preferences " 14th International Conference on Finance and Banking Ostrava, October 2013
65. Ortobelli S., Vitali S., Cassader M. (2013) Reward and risk in the fixed income markets, 14th International Conference on Finance and Banking, Ostrava, October 2013
66. Ortobelli S., Petronio F., Tichy T., (2014) "Multivariate stochastic orderings among different financial market" 2nd International Conference on Mathematical computational and statistical sciences, Gdansk, May 2014

67. S. Ortobelli, F. Petronio, and T. Lando.,(2014) “Portfolio problems based on returns consistent with the investor's preferences” 2nd International Conference on Mathematical computational and statistical sciences, Gdansk, May 2014
68. S. Ortobelli, F. Petronio, and T. Lando, (2014) Impact of portfolio strategies based on different return definitions Conference in Managing and Modelling of Financial Risks, Ostrava, September 2014
69. Petronio F., Ortobelli Lozza S. (2014) Ex-post portfolio comparison in the BRICs stocks markets, Conference in Managing and Modelling of Financial Risks, Ostrava, September 2014.
70. S. Ortobelli, T. Tichy, F. Petronio: (2014) On the use of dispersion measures consistent with additive shifts in MME 2014, Olomouc, September 2014.
71. S. Ortobelli, Caviezel V. , Bertoli-Barsotti L. (2014) Portfolio selection based on risk profile analysis, EWGCFM 2014, Milan, December 2014.
72. Petronio F., Ortobelli S. (2015) An Analysis of Fixed Income BRICS Markets (ed. Miroslav Čulík), Financial management of firms and financial institutions Conference, 8-9 September 2015 Ostrava (Czech Republic).
73. Ortobelli, S. Kouaissah, N., (2015) “Alternative methods to estimate the State Price Density”. In MSCI 2015, Sliema – Malta, August 2015.
74. Kouaissah, N., Ortobelli, S., (2015) “On the valuation of the arbitrage opportunities”. Conference Management of Firms and Financial institutions Ostrava September 2015
75. Ortobelli S., Petronio F, Tomas T. (2016) Timing and hedging portfolio strategies with derivatives. EURO 2016 Posnan (Poland) July 2016
76. Malavasi M., Previtali R., Ortobelli S., Nardelli C. (2016) Managing Risk with Simulated Copula, Conference on Managing and Modelling of Financial Risks Ostrava (Czech Republic) September 2016
77. Ortobelli, S., (2017) “Dynamic orderings consistent with preferences”. Conference on Computational Management Science 2017, Bergamo, May 2017
78. Kouaissah, N., Ortobelli, S., (2017) “On the valuation of the arbitrage opportunities”. Computational Management Science 2017, Bergamo, May 2017
79. Malavasi M., Ortobelli S. (2017) Semiparametric Tests for Behavioral Finance Efficiency, Conference on *Managing and Modelling of Financial Risks (September 2017 Ostrava)*.
80. Malavasi M., Ortobelli S. (2017) On the Efficiency of Portfolio Choices 16th INTERNATIONAL CONFERENCE ON FINANCE AND BANKING (*October 2017 Ostrava*).
81. Kouaissah, N., Ortobelli, S., Cavenago, M. (2017). Optimal choices among ethic assets of the Italian market 35th International Conference Mathematical Methods in Economics September 13th - 15th, 2017, Hradec Králové, Czech Republic
82. Kouaissah, N., Ortobelli, S., (2017) “Multivariate Dominance among financial sectors.”. AMASES 2017, Cagliari, September 2017
83. Ortobelli S., Giacometti R, Bonomelli M. (2018) On the impact of the joint tails in portfolio selection stochastic volatility models Conference in *Stochastic Optimisation and Data Analytics for Computational Management*, February 2018, Bergamo
84. Ortobelli S., Malavasi M.. (2019) Testing for orderings efficiency, Conference in Computational Management Science, March 2019, Chemnitz
85. Ortobelli S., Malavasi M.. (2019) Testing for orderings efficiency, EURO 2019, June 2019, Dublin

86. Kamonchai Rujirarangsan and Sergio Ortobelli Lozza (2019) Impact of Google Trends on stock prices, in Financial management of Firms and Financial Institutions September 2019, Ostrava
87. Kamonchai Rujirarangsan and Sergio Ortobelli Lozza (2020) Impact of Volume on portfolio optimization, in Managing and modeling financial risk, September 2020, Ostrava

**Teaching courses and invited talks**

My teaching courses are the following (with the attached academic years):

Actuarial Mathematics: 1999-2000, 2000-2001, 2001-2002, 2008-2009, 2009-2010  
 Mathematical Finance: 1999-2000, 2000-2001, 2001-2002, 2005-2006, 2006-2007, 2007-2008, 2008-2009  
 Mathematics for Economists 2002-2003, 2003-2004, 2004-2005, 2005-2006, 2006-2007  
 Elements of Mathematics: 2002-2003, 2003-2004, 2004-2005, 2016-2017, 2017-2018  
 Complements of Mathematics: 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021  
 Asset derivatives and mathematical models applied to finance: 2001-2002, 2006-2007  
 Differential equations and Economic applications: 2003-2004, 2005-2006, 2006-2007,  
 Optimization: 2002-2003  
 Stochastic processes and Measure theory (for PhD courses): 2003-2004, 2004-2005, 2005-2006  
 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2011-2012, 2015-2016  
 Portfolio theory: 2007-2008, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-  
 2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021  
 Probability and Statistics for Business and Finance: 2007-2008, 2008-2009, 2009-2010, 2011-  
 2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016.

Moreover, I recall here in the following some invited talks reported in chronological order:

- 1) University of Calabria, talk titled “Where does the market go?” January 2003.
- 2) University of Calabria, talk titled “Portfolio Selection with Gini-type Risk Measures” November 2005
- 3) University of Calabria, talk titled “Option Pricing with Markovian Trees” November 2005
- 4) University of Milan “Bicocca”, talk titled: “Option Pricing with Markovian Processes” for the Master in “Energy Risk Management” February 2007
- 5) University of Venezia, talk titled “Orderings, risk and performance measures and their application to portfolio theory”, in the PhD class "Static and Dynamic Portfolio Management" PhD program of Venice, November 2007
- 6) University of Ostrava, talk Titled “Jumping Assets, Timing Effect and Systemic Risk in Portfolio Selection Problems” February 2013.
- 7) University of Milan (Bicocca), talk titled “Ottimizzazione delle misure di performance per attività azionarie e obbligazionarie” Discussion on the Performance Measures Università degli studi di Milano Bicocca, December 2013.
- 8) University of Calabria, talk titled “Portfolio selection based on risk profile analysis”, January 2015
- 9) University of Calabria, talk titled “Volatility Markovian Conditional Portfolio Models”, December 2017