

CURRICULUM VITAE ET STUDIORUM

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Personal Details

Place and date of birth: Rome, 4 october 1975

Nationality: Italian

Status: married

Current Position

Since 2011: Assistant Professor at Roma Tre University

Since 2017: National Academic Qualification (“Abilitazione Scientifica Nazionale”) as Associate Professor

Research interests

Portfolio selection problems; Asset management; Risk modelling and optimum risk decisions; Index Tracking and Enhanced Indexation Problems; Algorithms for large scale linear, quadratic integer and mixed integer programming problems; Heuristic optimization; Computational finance; Parallel Computing.

Education

January 2013: Certificate in Advanced Risk and Portfolio Management - “ARPM Certificate” (Attilio Meucci, New York, US).

September 2010: CASPUR Summer School of Advanced Computing, Villa Grazioli, Grottaferrata (Rome).

July 2010: International School of Scientific Computation and MATLAB, Palermo - Department of Physical and Astronomical Sciences.

November 2006 - March 2010: PhD in Mathematics for Economic and Financial Applications at the Faculty of Economics - University of Rome "La Sapienza". PhD thesis: "A New Portfolio Selection Approach: Algorithms, Analysis and Models", discussed on March 26th, 2010.

November 2009: Stochastic Programming School: Theory and Applications, Bergamo - Faculty of Economics.

November 2006: winner of PhD fellowship in Mathematics for Economic and Financial Applications at the Faculty of Economics of LUISS (Libera Università Internazionale degli Studi Sociali Guido Carli) in Rome.

2002: Degree in Physics (109/110) at Università degli Studi di Roma "La Sapienza", Facoltà di Scienze Matematiche, Fisiche e Naturali.

Thesis on: "Modello di diffusione con memoria in membrane biologiche (Diffusion model with memory across a biological membrane)".

Tutor: Prof. Michele Caputo, Prof. Cesare Cametti.

This work has been published on the *Journal of Membrane Science*: F. Cesarone, M. Caputo, C. Cametti, "Memory formalism in the passive diffusion across a biological membrane" (*Journal of Membrane Science* 250 (2005) 79-84).

1999: Stage as young manager.

Languages

Mother tongue: Italian.

English: reading - good; writing - good; verbal - good.

30 June - 25 July 2008: intensive English course at Language Centre, University of Bristol.

Computing Skills

Operating systems: Windows, Linux.

Packages: MATLAB, AMPL, Mathematica, Origin, S-Plus, LaTeX, Grid Analysis and Display System (GrADS), Microsoft Office.

Programming: Fortran, C.

Teaching

Since 2014: Computational Finance, University of Roma Tre.

March-June 2012-2013: Mathematical Models of Financial Markets, University of Roma Tre.

April-June 2010-2011; October-December 2011-2012-2013: Linear Programming using Excel at the Faculty of Economics, LUISS.

April-June 2011: Computing and Financial Management at the Faculty of Economics, La Sapienza.

October-December 2010-2011-2012: Mathematical methods for economic and business decisions, University of Roma Tre.

October-December 2009-2010-2011-2012: Financial Mathematics using Excel at the Faculty of Economics, LUISS.

September 2010: Calculus at the Faculty of Economics, University of Roma Tre.

April-June 2009; February-April 2010: Information Technology - Introduction to Financial Computing using MATLAB at the Faculty of Economics, University of Roma Tre.

April-June 2009: Portfolio Theory at the Faculty of Economics, LUISS.

July 2007; October-December 2007-2008-2009: Calculus at the Faculty of Economics, La Sapienza.

Awards

September 2005: winner of the *Young Scientist Travel Award awarded by the European Meteorological Society* for outstanding contribution to the 5th Annual Meeting of the EMS, Utrecht, The Netherlands.

Visiting positions

2009: Mathematical Sciences Department - Brunel University (London)

Working Experience

02.2013 - 07.2013: research contract at SYMMYS (Attilio Meucci) for creating and development of materials relating to the Advanced Risk and Portfolio Management (ARPM) Bootcamp (<http://symmys.com/node/188>).

06.2010 - 03.2011: research fellowship at the Faculty of Economics, University of Rome "La Sapienza". Topic: "Portfolio selection models".

06.2010 - 08.2010: research contract at the Department of Statistics, University of Rome "La Sapienza". Topic: "Development of efficient algorithms for solving portfolio selection problems with high computational burden".

11.2006 - 10.2009: PhD scholarships at the Faculty of Economics, University of Rome "La Sapienza".

03.2006 - 06.2006: work collaboration in the Information Technology group of FLIPPER-MUSIC at FOX (SKY).

01.2005 - 02.2006: research contract at the Institute of Biometeorology IBIMET - CNR in Rome. Topic: "Study and identification of lasting baric configurations".

09.2004 - 01.2005: research contract at the Institute of Biometeorology IBIMET - CNR in Rome. Topic: “Analysis and modelling of climatologic variability of the Mediterranean basin using station and reanalysis data”. Climagri project.

07.2003 - 07.2004: research contract at the Institute of Biometeorology IBIMET - CNR in Rome. Topic: “Analysis of climatologic variability of the Mediterranean basin”. Climagri project.

10.2002 - 06.2003: Physics teacher in Secondary School.

2002-2003: research activity at the Physics Department of the University of Rome “La Sapienza”.

Topic: “Diffusion with memory of drugs across a biologic membrane”. This work has been published on the *Journal of Membrane Science*.

Coordination of Projects

2017-2018: Coordinator of the project “XIX Workshop on Quantitative Finance” Winner of the competition “BANDO ACRI YOUNG INVESTIGATOR TRAINING PROGRAM 2017”.

2016: Coordinator of a Research Program on “Portfolio Selection and Efficient Frontiers”, funded by the Department of Business Studies, University of Roma Tre.

2015: Coordinator of a Research Program on “Risk Diversification Strategies for Portfolio Construction”, funded by the Department of Business Studies, University of Roma Tre.

2014: Coordinator of a Research Program on “Risk Parity Approach for Portfolio Selection Problems”, funded by the Department of Business Studies, University of Roma Tre.

2011-2013: Coordinator of a Research Program on “Mathematical models and computational procedures for quantitative finance problems”, funded by University of Roma Tre.

2012: Coordinator of a Research Program on “Portfolio selection models”, funded by the Department of Economics, University of Roma Tre.

Organization of Conferences

January 2018: organizing committee chair for the XIX Workshop on Quantitative Finance (QFW2018), Rome, Italy.

May 2009: Member of the organizing committee for the International Conference NET2009 evolution and complexity and COST-ESF workshop on Physics of Competition and Conflicts, Rome, Italy.

Editorial Activity

Referee for the following scientific journals: *Quantitative Finance*, *Journal of the Operational Research Society*, *European Journal of Operational Research*, *Computational Management Science*, *Computers & Operations Research*, *Decisions in Economics and Finance*, *Optimization Letters*.

Publications

- A. Giaccherio, J. Moretti, F. Cesarone, F. Tardella (2019), "An alternative approach for the operational risk assessment of a new product", *Journal of Operational Risk* Vol. 14(1), pag. 1-27, DOI: 10.21314/JOP.2019.221.
- F. Cesarone, L. Lampariello, S. Sagratella (2018), "A risk-gain dominance maximization approach to enhanced index tracking", *Finance Research Letters*.
- F. Cesarone, C. D. Mottura, J. M. Ricci, F. Tardella (2018), "On the stability of portfolio selection models", submitted.
- F. Cesarone, A. Scozzari, F. Tardella (2018), "A Multi-Greedy Approach to Optimal Diversified Portfolio Selection", Available at SSRN: <https://ssrn.com/abstract=3203540>, submitted to *Journal of Global Optimization*.
- F. Cesarone, J. Moretti, F. Tardella (2018), "Why small portfolios are preferable and how to choose them", *The Journal of Financial Perspectives*, Vol. 5(1), pag. 103-116, ISSN 2049-8640.
- F. Cesarone, S. Colucci (2018), "Minimum Risk vs. Capital and Risk Diversification strategies for portfolio construction", *Journal of the Operational Research Society*, Vol. 69(2), pag. 183-200, DOI: 10.1057/s41274-017-0216-5.
- A. Carleo, F. Cesarone, A. Gheno, J.M. Ricci (2017), "Approximating Exact Expected Utility via Portfolio Efficient Frontiers", *Decisions in Economics and Finance*, Vol. 40(1-2), pag. 115-143, DOI: 10.1007/s10203-017-0201-0.
- F. Cesarone and F. Tardella (2017), "Equal Risk Bounding is better than Risk Parity for portfolio selection", *Journal of Global Optimization*, Vol. 68(2), pag. 439-461, DOI: 10.1007/s10898-016-0477-6.
- R. Bruni, F. Cesarone, A. Scozzari, F. Tardella (2017), "On Exact and Approximate Stochastic Dominance Strategies for Portfolio Selection", *European Journal of Operational Research*, Vol. 259(1), pag. 322-329, DOI: 10.1016/j.ejor.2016.10.006.
- F. Cesarone, S. Colucci (2016), "A Quick Tool to Forecast VaR Using Implied and Realized Volatilities", *The Journal of Risk Model Validation*, Vol. 10(4), pag. 71-101, DOI: 10.21314/JRMV.2016.163.
- F. Cesarone, J. Moretti, F. Tardella (2016), "Optimally chosen small portfolios are better than large ones", *Economics Bulletin*, Vol. 36(4), pag. 1876-1891, ISSN 1545-2921.

- R. Bruni, F. Cesarone, A. Scozzari, F. Tardella, (2016), “Real-world datasets for portfolio selection and solutions of some stochastic dominance portfolio models”, *Data in Brief*, Vol. 8, pag. 858-862 doi:10.1016/j.dib.2016.06.031.
- R. Bruni, F. Cesarone, A. Scozzari, F. Tardella, (2015), “A Linear Risk-Return Model for Enhanced Indexation in Portfolio Optimization”, *OR Spectrum*, Vol. 37(3), pag. 735-759 DOI: 10.1007/s00291-014-0383-6.
- F. Cesarone, J. Moretti, F. Tardella, (2014), “Does Greater Diversification Really Improve Performance in Portfolio Selection?”, *Available at SSRN: <http://ssrn.com/abstract=2473630>*.
- F. Cesarone, A. Scozzari, F. Tardella, (2014), “Linear vs. quadratic portfolio selection models with hard real-world constraints”, *Computational Management Science*, Vol. 12(3), pag. 345-370.
- F. Cesarone and F. Tardella (2014), “Equal risk bounding is better than risk parity for portfolio selection”, *Advanced Risk & Portfolio Management Research Paper Series 4*, Available at SSRN: <http://ssrn.com/abstract=2412559>.
- R. Bruni, F. Cesarone, A. Scozzari, F. Tardella (2013), “No arbitrage and a linear portfolio selection model”, *Economics Bulletin* Vol. 33(2), pag. 1247-1258, ISSN 1545-2921.
- F. Cesarone, A. Gheno, F. Tardella, (2013), “Learning and Holding Periods for Portfolio Selection: a Sensitivity Analysis”, *Applied Mathematical Sciences* Vol. 7(100), pag. 4981-4999, <http://dx.doi.org/10.12988/ams.2013.37428>, ISSN 1312-885X.
- R. Bruni, F. Cesarone, A. Scozzari, F. Tardella (2012), “A new stochastic dominance approach to enhanced index tracking problems”, *Economics Bulletin* Vol. 32(4), pag. 3460-3470, ISSN 1545-2921.
- R. Bruni, F. Cesarone, A. Scozzari, F. Tardella (2012), “A New LP Model for Enhanced Indexation”, *Working papers of Department of Economics - University of Roma Tre - online*, ISSN 2279-6916.
- F. Cesarone, A. Scozzari, F. Tardella (2012), “A new method for Mean-Variance portfolio optimization with cardinality constraints”, *Annals of Operations Research*, Vol. 205(1), pag. 213-234, ISSN: 1572-9338, doi: 10.1007/s10479-012-1165-7.
- F. Cesarone, A. Scozzari, F. Tardella (2011), “Portfolio selection problems in practice: a comparison between linear and quadratic optimization models”,
In: <http://econpapers.repec.org/paper/arxpapers/1105.3594.htm>.
- F. Cesarone, A. Scozzari, F. Tardella, “Efficient Algorithms For Mean-Variance Portfolio Optimization With Hard Real-World Constraints”, *Giornale dell’Istituto Italiano degli Attuari* 72 (2009), 37-56.
- M. Baldi, G. Dalu, G. Maracchi, M. Pasqui, F. Cesarone, “Heat waves in the Mediterranean: a local feature or a larger-scale effect?”, *Int. J. Climatol.* 26 (2006) 1477-1487.
- F. Cesarone, M. Caputo, C. Cametti, “Memory formalism in the passive diffusion across a biological membrane”, *Journal of Membrane Science* 250 (2005) 79-84.

M. Baldi, F. Cesarone, G. A. Dalu, F. Cannata, "Mitigation and Recover of Semi-arid and Arid Provinces in China", *Acta Hort. (ISHS)* 705 (2005): 47-54.