

	<p style="text-align: center;">Sergio Focardi, Ph.D. <i>Accounting, Law, Finance and Economics Department</i> Professor - Speciality: Finance</p> <p style="text-align: center;">Phone : +33 (0)4 93 18 99 66 Fax : +33 (0)4 93 83 08 10 E-mail : sergio.focardi@edhec.edu</p>
--	---

EDUCATION

- 1970 Degree in Electronic Engineering from the University of Genoa with 110/110 and Bronze Medal.
- 1972 Post-graduate specialization in Telecommunications from the IENGF (National Electrotechnical Institute Galileo Ferraris) in Turin.
- 2009 PhD in Mathematical Finance at the University of Karlsruhe, Germany

PROFESSIONAL EXPERIENCE

- 1993 Founding The Intertek Group, a firm specialized in market research, training and consulting in quantitative portfolio management and mathematical finance.
- 1988 Managing Director, Italy, of the American supercomputer company Control Data Corp.

RECENT CONSULTING EXPERIENCE

- 2007-2008 UBS O'Connor, Chicago. Consulting on model development
- 2007-2008 Ontario Teachers' Pension Plan, Toronto. Consulting on model development
At the University of Genoa participated in the design and implementation of an Artificial Market

TEACHING EXPERIENCE

- 2009-Present **Professor of Finance**, EDHEC Business School (Accounting, Law, Finance and Economics Department)
- 2004-2009 Intertek Master Classes on various aspects of equity portfolio modeling. Selection of subjects taught: clustering of time series, dynamic factors analysis, extreme value theory, robust statistics.
- 2001-2004 Seminars and courses on financial modeling at the Center for Interdisciplinary Research on Economics and Financial Engineering (CINEF) at the Engineering faculty of the University of Genoa. Selection of subjects taught: Asset pricing theory, fat-tailed distributions, cointegration, time series clustering/forecasting, nonlinear methods in econophysics.
- 1970-1973 Post graduate assistant lecturer of calculus, Engineering Faculty, University of Genoa.

PUBLICATIONS

PAPERS PUBLISHED

- Sergio Focardi and Frank J. Fabozzi, "The Reasonable Effectiveness of Mathematics in Economics" Spring 2009 *The American Economist*.
- Frank J. Fabozzi, Sergio M. Focardi, and Caroline L. Jonas, "Considerations on the Challenges in Quantitative Equity Management", *Quantitative Finance*, Volume 8, Issue 7, 2008, Pages 649 – 665.
- Sergio Focardi and Frank J. Fabozzi, "Black Swans and White Eagles: On Mathematics and Finance," *Mathematical Methods in Operations Research*, published online 5 September 2008.
- Frank J. Fabozzi, Petter N. Kolm, Dessislava A. Pachamanova, and Sergio M. Focardi, "Robust Portfolio Optimization," *Journal of Portfolio Management* (Spring 2007), pp. 40-48.
- Frank J. Fabozzi, Sergio M. Focardi, and Caroline Jonas, "Trends in Quantitative Equity Management: Survey Results," *Quantitative Finance* Volume 7, No. 2 (April 2007), pp. 115-122. (The results reported in this article were the subject of a feature story in *CFA Institute Magazine* by Susan Trammell, "Perpetual Motions: A New Study Looks at Trends in Equity Portfolio Modeling" January-February 2007, pp. 39-44. The paper is reprinted as Chapter 1 in *Quantitative Fund Management* edited by M. Dempster, G. Pflug, and G. Mitra, published by Taylor & Francis Group in 2008).
- Wesley Phoa, Sergio Focardi, Frank J. Fabozzi, "How Do Conflicting Theories About Financial Markets Coexist?" *Journal of Post Keynesian Economics*, Vol.29, No. 4 (Summer 2007), pp. 699-701.
- Frank J. Fabozzi, Sergio M. Focardi, and Petter N. Kolm, "A Simple Framework for Time Diversification," *Journal of Investing* (Fall 2006), pp. 8-18.

- Frank J. Fabozzi, Sergio M. Focardi, and Petter N. Kolm, "Incorporating Trading Strategies in the Black-Litterman Framework," *Journal of Trading* (Spring 2006), pp. 28-37.
- Sergio Focardi and Frank J. Fabozzi, "Contagion Modeling in Market and Credit Risk: Does It Add Value?" *Risk Letters* Vol. 1, No. 2 (December 2005).
- Frank J. Fabozzi, Sergio M. Focardi, and K.C. Ma, "Implementable Quantitative Research", *The Journal of Alternative Investments* (Fall 2005), pp. 71-79. (Translated and reprinted as "Überführung von quantitativem Research in implementierbare Handelsstrategien - Möglichkeiten und Grenzen der Automatisierung", in: Michael Busack and Dieter G. Kaiser (eds.), *Handbuch Alternative Investments*, Band 1, Gabler Verlag, Wiesbaden.)
- Frank J. Fabozzi, Sergio M. Focardi and Caroline Jonas "Market Experience with Modeling for Defined-Benefit Pension Funds : Evidence from Four Countries," *Journal of Pension Economics*, Vol 4, No. 3 (November 2005), pp. 313-327. (Paper subject of an article in the December 20, 2004 issue of the *Financial Times*.)
- Sergio M. Focardi and Frank J. Fabozzi, "An Autoregressive Conditional Duration Model of Credit-Risk Contagion." *Journal of Risk Finance*, Vol 6, No. 3 (2005),pp. 208-225. (Winner of the 2006 Outstanding Paper by Emerald Literati Network.)
- Petter N. Kolm, Frank J. Fabozzi, and Sergio M. Focardi, "Financial Modeling of Transaction and Trading Costs: Overview and Practice," *Finance Letters* Vol. 3, Issue 1 (February 2005, Special Issue on Financial Modeling of the Equity Markets).
- Frank J. Fabozzi, Sergio M. Focardi, and Petter N. Kolm, "Introduction," *Finance Letters* Vol. 3, Issue 1 (February 2005, Special Issue on Financial Modeling of the Equity Markets).
- Sergio M. Focardi and Frank J. Fabozzi, "A Methodology for Index Tracking Based on Time-Series Clustering," *Quantitative Finance*, Vol 4, No. 4 (August 2004), pp. 417-425.
- Sergio M. Focardi, Petter N. Kolm, and Frank J. Fabozzi, "New Kids on the Block: Trends in Quantitative Finance and Their Impact on Investment Management," *Journal of Portfolio Management*, Special Anniversary Issue(Fall 2004), pp. 42-54.
- Sergio M. Focardi and Frank J. Fabozzi, "A Percolation Approach to Modeling Credit Loss Distribution Under Contagion," *Journal of Risk*, Vol. 7, No.1 (Fall 2004), pp. 75-94.
- Frank J. Fabozzi, Sergio M. Focardi, and Caroline L. Jonas, "Trends in Quantitative Asset Management in Europe," *Journal of Portfolio Management*, Special European Issue (Summer 2004), pp. 125-132.
- Sergio Focardi and Frank J. Fabozzi, "Clustering Economic and Financial Time Series: Exploring the Existence of Stable Correlation Conditions," *Finance Letters* , 2004, Vol. 2, No 3, pp. 1-9.
- Sergio M. Focardi and Frank J. Fabozzi, "Fat Tails, Scaling, and Stable Laws: A Critical Look at Modeling Extremal Events in Financial Phenomena,?" *Journal of Risk Finance*, Vol, 5, No.1 (Fall 2003), pp. 5-26.
- M. Raberto, S. Cincotti, S.M. Focardi, M. Marchesi. "Traders' Long-Run Wealth in an Artificial Financial Market." [*Computational Economics*, 22 No. 2-3 \(October-December 2003\), pp. 255-272.](#)

S. Cincotti, S.M. Focardi, M. Marchesi, M. Raberto. "Who wins? Study of long-run trader survival in an artificial stock market," [*Physica A: Statistical Mechanics and its Applications*, Volume 324, Issues 1-2, June 2003, pp. 227-233.](#) Proceedings of the International Econophysics Conference.

Sergio Focardi, Silvano Cincotti and Michele Marchesi, "Self-organization and Market Crashes," *Journal of Economic Behavior & Organization*, Vol. 49, No.2 (2002),pp. 241-267, 2002.

Raberto, Marco, Silvano Cincotti, Sergio Focardi, Michele Marchesi, "Agent-based Simulation of a Financial Market," [*Physica A: Statistical Mechanics and its Applications* Volume 299, Issues 1-2](#), 1 October 2001, Pages 319-327.

Sergio Focardi, "Business as Usual and Rare Events: The Odd Couple of Risk Management Coming Together," *Journal of Portfolio Management*, 25th Anniversary Issue (May 1999), pp. 47-54.

Sergio Focardi, "A Seam of Knowledge: The Importance of Data Analysis in Firm-wide Financial Optimisation," *Risk Magazine* Vol. 10, No. 8 (August 1997).

Sergio Focardi, "From Equilibrium to Non-linear Dynamics in Investment Management," *Journal of Portfolio Management* (Summer 1996), pp. 19-30.

PAPER UNDER REVIEW

Sergio Focardi and Frank J. Fabozzi, "Modeling Momentum and Reversals with Regime Shifting Models with Time-Varying Probabilities" (July 2008) (Submitted to the International Journal of Theoretical and Applied Finance).

PAPERS IN PROGRESS

"Adapting factors to market states through clustering: implications of clustering-based factor models for portfolio management" (working title).

"Factor models of prices" (working title)

"A methodology for assessing the diversity of factor models and predicting their forecasting ability" (working title).

TECHNICAL REPORT

Karsten M. Decker and Sergio Focardi. *Technology overview: A report on data mining. Technical Report*,(CSCS TR-95-02) Swiss Scientific Computing Center, 1995.

BOOKS

Svetlozar T. Rachev, Steffan Mittnik, Frank J. Fabozzi, Sergio Focardi, and T. Jasic, *Financial Econometrics: From Basics to Advanced Modeling Techniques* (Wiley 2007).

Frank J. Fabozzi, Peter.N. Kolm, D.A. Pachamanova, and Sergio M. Focardi, *Robust Portfolio Optimization and Management* (Wiley 2007).

Frank J. Fabozzi, Sergio Focardi, and Petter N. Kolm, *Financial Modeling of the Equity Market: From CAPM to Cointegration* (Wiley 2006). Selected by *Financial Engineering News* as one of the top new 10 technical books in finance in 2006.

Sergio Focardi and Frank J. Fabozzi, *The Mathematics of Financial Modeling and Asset Management* (Wiley 2004). Selected by RiskBook.com for “Best of 2004 Book Awards” and by *Financial Engineering News* as one of the top 3 books in finance in 2005. To be translated into Simplified Chinese by China Renmin University Press, China.

Sergio Focardi and Caroline Jonas, *Risk Management: Framework, Methods and Practice* (Wiley, 1998).

Sergio Focardi and Caroline Jonas, *Modeling the Market: New Theories and Techniques* (Wiley, 1997).

BOOKS IN PROGRESS

The Impact of the Financial Crisis on the Asset Management Industry (working title), (CFA Institute Research Foundation, 2009), coauthors Frank J. Fabozzi, Sergio M. Focardi, and Caroline Jonas

Quantitative Equity Investing (working title). Coauthors: Frank J. Fabozzi, Petter N. Kolm. To be published by Wiley in 2009.

Statistics for Finance (working title). Coauthors: Frank J. Fabozzi, Svetlozar Rachev, and Markus Hochstotter. To be published by Wiley in 2009.

Selected Topics in Financial Econometrics. Coauthors: Frank J. Fabozzi and Svetlozar Rachev.

MONOGRAPHS

Frank J. Fabozzi, Sergio M. Focardi, and Caroline Jonas, *Challenges in Quantitative Equity Management*, (CFA Institute Research Foundation, May 2008). Available from www.cfapubs.org/toc/rf/2008/2008/2. This monograph has been the subject of stories published in, among others, the *Wall Street Journal*, *Barrons*, *Financial Times*, *Financial News*, *Investment & Pensions Europe* and *The Hedge Fund Journal*.

Frank J. Fabozzi, Sergio Focardi, and Petter N. Kolm, *Trends in Quantitative Finance*, (CFA Institute Research Foundation, 2006). <http://www.theintertekgroup.com/articlesbooks.html - Book 4#Book 4>

<http://www.theintertekgroup.com/articlesbooks.html - Book 5#Book 5>

CHAPTERS IN BOOKS

Robert F. Engle, Sergio M. Focardi, Frank J. Fabozzi, “ARCH/GARCH Models In Applied Financial Econometrics,” in Frank Fabozzi (Ed.), *Handbook of Finance: Volume 3* (Wiley, 2008).

S. Cincotti, S.M. Focardi, L. Ponta, M. Raberto, G. Scalas. “The waiting-time distribution of trading activity in a double auction artificial financial market.” [*Economics and Heterogeneous Interacting Agents*, A. Namatame, T. Kaizouji, Y. Aruka \(Eds\)](#), Springer-Verlag, Berlin, 2005.

- M. Raberto, S. Cincotti, C. Dose, S.M. Focardi, M. Marchesi. "Price formation in an artificial market: limit order book versus matching of supply and demand." [*Nonlinear Dynamics and Heterogenous Interacting Agents*, T. Lux, S. Reitz, E. Samanidou \(Eds\)](#), Springer-Verlag, Berlin, 2005.
- M. Marchesi, S. Cincotti, S.M. Focardi, M. Raberto. "The Genoa artificial stock market: microstructure and simulations." [*Heterogenous Agents, Interactions and Economic Performance*, R. Cowan and N. Jonard \(Eds\)](#), pp. 277-289. Springer-Verlag, Berlin, 2003.
- Sergio Focardi, Michele Marchesi, Giancarlo Succi, "A Stochastic Model of Software Maintenance and Its Implications on Extreme Programming Processes," in G. Succi and M. Marchesi (Eds.), *Extreme Programming Examined* (Addison Wesley, New York, 2001).
- Sergio Focardi, Michele Marchesi, "Self-Organization in Global Stochastic Models of Production and Inventory Dynamics," in D. Delli Gatti, M. Gallegati and A.P. Kirman (Eds), *Essays on Heterogeneity in Economics* (Springer-Verlag, Berlin, 1999, updated 2000).
- Sergio Focardi, "The Changing Framework and Methods of Investment Management", in Frank Fabozzi, *Handbook of Portfolio Management*, (Wiley, 1998, pp. 31-56).

LANGUAGES

LANGUAGES

- Bi-lingual Italian; English; fluent French.

COMPUTER LANGUAGES

- Simulation languages, including Matlab

EDITORIAL BOARD

- *The Journal of Portfolio Management*

AREAS OF RESEARCH INTEREST

- Quantitative equity portfolio management
- Financial econometrics
- Clustering and self-adaptation in finance
- Dynamic factor analysis of prices and returns
- Artificial stock markets
- Complex interacting agents systems