CURRICULUM VITAE

Patrick Gagliardini

PERSONAL DATA

Born: March 9, 1974, Lugano Nationality: Swiss and Italian

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CURRENT POSITION

Full Professor at the University of Lugano (USI), Faculty of Economics

EDUCATION

1993-1998: Degree in Physics, Swiss Federal Institute of Technology, Zurich (with honor)

1999: Courses, with exams, at the Faculty of Economics, University of Lugano (with the highest score)

1999-2000: Swiss Program for Beginning Doctoral Students in Economics, Study Center Gerzensee, Bern (with the highest score)

2000-2003: PhD in Economics at the University of Lugano, thesis in Econometrics under the direction of Prof. P. Balestra (University of Lugano) and Prof. C. Gouriéroux (CREST and University of Toronto): "Constrained Non-parametric Dependence with Applications to Finance" (Summa cum laude)

2003-2004: Post Doc at CREST, Paris, Prof. C. Gouriéroux (one year)

LANGUAGES

Italian (native), French, German, English

EMPLOYMENT

1995-1998: Teaching Assistant in Mathematics at the Swiss Federal Institute of Technology, Zurich, Department of Biology and Department of Mathematics and Physics

1999-2002: Teaching Assistant in Econometrics at the University of Lugano, Faculty of Economics; Lecturer in Mathematics at the Faculty of Communication Sciences, University of Lugano

2002-2003: Lecturer in Mathematics at the University of Lugano, Faculty of Economics

2003-2004: Visiting Fellow at CREST, Paris, Laboratoire de Finance-Assurance

2004-2006: Assistant Professor (Nachwuchsdozent) at the University of St. Gallen, Department of Economics

2006-2010: Assistant Professor (Tenure Track) at the University of Lugano, Faculty of Economics

2010-2012: Associate Professor at the University of Lugano, Faculty of Economics

2012-: Full Professor at the University of Lugano, Faculty of Economics

GRANTS AND AWARDS

1993: Prize for the best High School diploma at the Scuola Cantonale di Commercio, Bellinzona. Prize of the Rotary Club for the best diploma

2003: Swiss National Science Foundation Fellowship for Perspective Researchers

2005: Best Researcher Award (Assistant Professor), Department of Economics, University of St. Gallen

2007: Pro*Doc Graduate School Training Program, Swiss National Science

Foundation, Research Module on "New Methods for Moment Based Econometric Models" (principal co-investigator with E. Ronchetti and F. Trojani)

2008-2012: Junior Chair Professorship of the Swiss Finance Institute

2012: Swiss National Science Foundation project "Mathematical Modeling of Credit and Equity Risk Beyond Homogeneity and Stationarity Assumptions" (principal co-investigator with I. Horenko and W. Sawyer)

PARTICIPATION AT RESEARCH PROJECTS

1999-2001: Researcher in the Swiss National Science Foundation project No. 1214-056679 (direction: Prof. G. Barone Adesi, University of Lugano)

2001-2002: Researcher in the Swiss National Science Foundation project No. 1213-065196.01 (direction: Prof. F. Trojani, University of Lugano)

2004: Researcher in NCCR FINRISK project No. 10 (direction: Prof. G. Barone Adesi, University of Lugano)

2005-: Researcher in NCCR FINRISK project "New Methods in Theoretical and Empirical Asset Pricing" (direction: Prof. F. Trojani, University of St. Gallen and University of Lugano)

TEACHING

Mathematics, Bachelor, Faculty of Economics, University of Lugano, 2003-2004

Specialized postgraduate courses in financial econometrics at ENSAE-CREST, Paris, 2003, and at the Università dell'Insubria, Varese, Italy, 2004

Asset Pricing, Master in Quantitative Finance and Economics (MiQEF), University of St. Gallen, 2004

Microeconometrics, MiQEF, University of St. Gallen, 2005

Advanced Time Series Econometrics, PhD in Economics and Finance (PEF)

and FINRISK, University of St. Gallen, 2005-2008

Financial Econometrics, PEF and FINRISK, University of St. Gallen, 2005-2008

Time Series Methods in Financial Econometrics, PEF and FINRISK, University of St. Gallen, 2009-

Introduzione all'Econometria, Bachelor, University of Lugano, 2005-

Financial Econometrics, Master in Finance, University of Lugano, 2006-

Econometrics, PhD, University of Lugano, 2006-

Time Series Analysis, PhD, University of Lugano, 2011-

Large Portfolios, Concentration and Granularity Theory, ENSAE, Paris, 2010

STUDENTS SUPERVISION

PhD thesis direction:

I. Finzi, USI, October 2005 - July 2008

(previously supervised by a colleague at USI in the period 2002-2005)

- D. Ronchetti, USI, October 2006-June 2011 (currently visiting Columbia Business School with a SNF Fellowship)
- E. Ossola, USI, October 2007- (expected thesis defense in April 2013)
- M. Rubin, USI, July 2010-

RESEARCH INTERESTS

Econometric methods: nonparametric methods, Generalized Method of Moments, inverse problems and ill-posedness, nonlinear time series models, factor panel models

Financial econometrics and modeling: credit risk, rating migration models, systematic risk and granularity theory, discrete-time asset pricing models, empirical option pricing

PUBLICATIONS

1998: "Generalization of the Luttinger Theorem for Fermionic Ladder Systems", *Phys. Rev. B*, 58, 9603-6 (with S. Haas and T. M. Rice)

2001: "Short Term Volatility Timing Reduces Downside Risk", *International Journal of Finance*, 13 (with G. Barone Adesi and F. Trojani)

2004: "Testing Asset Pricing Models with Coskewness", *Journal of Business and Economic Statistics*, 22, 474-485 (with G. Barone Adesi and G. Urga)

2005: "Migration Correlation: Definition and Efficient Estimation", Journal of Banking and Finance, 29, 865-894 (with C. Gouriéroux)

2005: "Robust GMM Tests for Structural Breaks", *Journal of Econometrics*, 129, 139-182 (with F. Trojani and G. Urga)

2005: "Stochastic Migration Model with Application to Corporate Risk", Journal of Financial Econometrics, 3(2), 188-226 (with C. Gouriéroux)

2007: "An Efficient Nonparametric Estimator for Models with Nonlinear Dependence", *Journal of Econometrics*, 137, 189-229 (with C. Gouriéroux)

2008: "Duration Time Series Models with Proportional Hazard", *Journal of Time Series Analysis*, 29, 74-124 (with C. Gouriéroux)

2009: "Ambiguity Aversion and the Term Structure of Interest Rates", Review of Financial Studies, 22, 4157-4188 (with P. Porchia and F. Trojani)

2011: "Efficient Derivative Pricing by the Extended Method of Moments", *Econometrica*, 79, 1181-1232 (with C. Gouriéroux and E. Renault)

2011: "Approximate Derivative Pricing for Large Classes of Homogeneous Assets with Systematic Risk", *Journal of Financial Econometrics*, 9, 237-280 (with C. Gouriéroux)

2012: "Microinformation, Nonlinear Filtering and Granularity", *Journal of Financial Econometrics*, 10, 1-53 (with C. Gouriéroux and A. Monfort)

2012: "Tikhonov Regularisation for Nonparametric Instrumental Variable

Estimators", Journal of Econometrics, 167, 61-75 (with O. Scaillet)

2012: "Nonparametric Instrumental Variable Estimation of Quantile Structural Effects", *Econometrica*, 80, 1533-1562 (with O. Scaillet)

2013: "Semi-parametric Estimation of American Option Prices", Journal of Econometrics, 173, 57-82 (with D. Ronchetti)

REVISE AND RESUBMIT

2008: "Efficiency in Large Dynamic Panel Models with Common Factors", under revision (3.rd round) for *Econometric Theory* (with C. Gouriéroux)

2011: "Correlated Risks vs Contagion in Stochastic Transition Models", under revision for *Journal of Economic Dynamics and Control* (with C. Gouriéroux)

WORKING PAPERS

2007: "A Specification Test for Nonparametric Instrumental Variable Regression" (with O. Scaillet)

2010: "Time-varying Risk Premium in Large Cross-sectional Equity Datasets" (with E. Ossola and O. Scaillet)

2011: "Survival of Hedge Funds: Frailty vs Contagion" (with S. Darolles and C. Gouriéroux)

MONOGRAPHS

2010: "Granularity Theory with Application to Finance and Insurance", forthcoming in Cambridge University Press (with C. Gouriéroux)

BOOK CHAPTERS

2006: "A Test of the Homogeneity of Asset Pricing Models", in *Multi-moment Asset Allocation and Pricing Models*, E. Jurczenko and B. Maillet eds. (with G. Barone Adesi and G. Urga)

REFEREE SERVICE

Journal of Econometrics, Econometric Theory, Review of Economic Studies, Journal of the American Statistical Association, Journal of Applied Econometrics, Econometrics Journal, Journal of Finance, Review of Financial Studies, Journal of Financial Econometrics, Quantitative Finance, Computational Statistics and Data Analysis, International Journal of Forecasting, Journal of Probability and Statistics, Journal of the Korean Statistical Society, US National Science Foundation (NSF), Economic and Social Research Council (ESRC)

PARTICIPATION AT PROGRAM COMMITTEES

Econometric Society European Meeting (Malaga, 2012 and Gothenburg, 2013), Annual Conference of the Society for Financial Econometrics (Oxford, 2012, and Singapore, 2013), Conference on New Tools for Financial Regulation (Paris, 2012), Workshop on Large Portfolios, Concentration and Granularity (Paris, 2010), Credit Conference (Venice, 2010)

SEMINARS AND WORKSHOPS

January 2002, USI Finance Seminar, University of Lugano: "Duration Time Series Models with Proportional Hazard"

January 2002, Séminaire du Laboratoire de Finance-Assurance, CREST, Paris: "Duration Time Series Models with Proportional Hazard"

June 2002, Multi-moment Capital Asset Pricing Models and Related Topics Workshop, Paris: "Testing Asset Pricing Models with Coskewness"

September 2002, Swiss Statistical Day, Bern: "Model Uncertainty and the

Non-robustness of Affine Term Structures"

December 2002, Advanced Finance Seminar, Institute of Banking and Finance, University of Lausanne: "Efficient Nonparametric Estimation of Models with Nonlinear Dependence"

March 2003, Séminaire du Laboratoire de Finance-Assurance, CREST, Paris: "Spread Term Structure and Default Correlation"

Mai 2003, University of Konstanz: "Constrained Nonparametric Dependence with Applications to Finance"

June 2003, MICFINMA Workshop, Louvain-la-Neuve: "Duration Time Series Models with Proportional Hazard"

June 2003, Finance Research Seminar, Cass Business School, London: "Constrained Nonparametric Dependence with Applications to Finance"

June 2003, AFFI International Conference, Lyon: "Spread Term Structure and Default Correlation"

August 2003, European Meeting of the Econometric Society, Stockholm: "Efficient Nonparametric Estimation of Models with Nonlinear Dependence"

September 2003, Credit Conference, Venice: "Spread Term Structure and Default Correlation"

October 2003, NCCR-Finrisk Evaluation, University of Zurich: "Model Uncertainty and the Non-robustness of Affine Term Structures"

November 2003, Joint Seminar Econometrics and Methodes Quantitatives Appliquées à la Finance, CORE, Louvain-la-Neuve: "Efficient Nonparametric Estimation of Models with Nonlinear Dependence"

August 2004, European Meeting of the Econometric Society, Madrid: "Stochastic Migration Model with Application to Corporate Risk"

September 2004, Credit Conference, Venice: "Stochastic Migration Model with Application to Corporate Risk"

December 2004, Brown Bag Seminar, University of St. Gallen: "Efficient

Derivative Pricing by the Extended Method of Moments"

December 2004, USI Finance Seminar, University of Lugano: "Efficient Derivative Pricing by the Extended Method of Moments"

January 2005, IV Workshop on Quantitative Finance, Bocconi University, Milan: "Efficient Derivative Pricing by the Extended Method of Moments"

February 2005, Séminaire du Laboratoire de Finance-Assurance, CREST, Paris: "Efficient Derivative Pricing by the Extended Method of Moments"

August 2005, World Congress of the Econometric Society, London: "Efficient Derivative Pricing by the Extended Method of Moments"

February 2006, Workshop "Risk Management: From Basel II to Basel III", Monte Verità, Ascona: "Efficient Derivative Pricing by the Extended Method of Moments"

March 2006, Econometrics Seminar, London School of Economics, London: "Efficient Derivative Pricing by the Extended Method of Moments"

May 2006, International Conference in High-Frequency Finance, Konstanz: "Efficient Derivative Pricing by the Extended Method of Moments"

June 2006, Econometrics Seminar, University of Geneva, Geneva: "Tikhonov Regularisation for Nonparametric Instrumental Variable Estimators"

July 2006, ESRC Annual Meeting, Bristol: "Tikhonov Regularisation for Nonparametric Instrumental Variable Estimators"

September 2006, Econometrics Seminar, University of Toulouse, Toulouse: "Tikhonov Regularisation for Nonparametric Instrumental Variable Estimators"

January 2007, Séminaire Malinvaud, CREST, Paris: "Tikhonov Regularisation for Nonparametric Instrumental Variable Estimators"

March 2007, Meeting of the Swiss Society of Economics and Statistics, St. Gallen: "Tikhonov Regularisation for Nonparametric Instrumental Variable Estimators"

April 2007, Invited talk at the Workshop on Statistical Inference for Dependent Data, University of Hasselt, Hasselt: "Efficient Nonparametric Estimation of Models with Nonlinear Dependence" and "Tikhonov Regularisation for Nonparametric Instrumental Variable Estimators"

August 2007, European Meeting of the Econometric Society, Budapest: "Tikhonov Regularization for Nonparametric Instrumental Variable Estimators"

November 2007, Econometrics Seminar, University Cà Foscari, Venice: "Efficient Derivative Pricing by the Extended Method of Moments"

January 2008, Econometrics Seminar, Queen Mary, London: "Nonparametric Instrumental Variable Estimation of Quantile Structural Effects"

January 2008, Finance Seminar, Cass Business School, London: "Efficient Derivative Pricing by the Extended Method of Moments"

March 2008, Financial Risks International Forum 2008, Paris: "Approximate Derivative Pricing for Large Classes of Homogeneous Assets with Systematic Risk"

May 2008, Econometrics Seminar, Leuven University, Leuven: "Nonparametric Instrumental Variable Estimation of Quantile Structural Effects"

May 2008, Econometrics Seminar, Mannheim University, Mannheim: "Non-parametric Instrumental Variable Estimation of Quantile Structural Effects"

June 2008, Finrisk Research Day, Gerzensee: "Approximate Derivative Pricing for Large Classes of Homogeneous Assets with Systematic Risk"

August 2008, Econometric Society European Meeting, Bocconi University, Milan: "Efficiency in Large Dynamic Panel Models with Common Factors"

November 2008, Banque de France Conference on Term Structure Modeling and Macroeconomics, Paris (discussant)

November 2008, Workshop on Unobservable Factor Models, Cemmap, London: "Efficiency in Large Dynamic Panel Models with Common Factors"

March 2009, Financial Risks International Forum 2009, Paris (session chair)

May 2009, Workshop on Inverse Problems in Statistics and Econometrics, Toulouse University, Toulouse: "Nonparametric Instrumental Variable Estimation of Quantile Structural Effects"

May 2009, Financial Econometrics Conference, Toulouse (discussant)

June 2009, Finrisk Research Day, Gerzensee: "Efficiency in Large Dynamic Panel Models with Common Factors"

August 2009, Econometric Society European Meeting, Pompeu Fabra and Autonoma Universities, Barcelona: "Approximate Derivative Pricing for Large Classes of Homogeneous Assets with Systematic Risk"

March 2010, Workshop on Large Portfolio, Concentration and Granularity, Paris: "Granularity Adjustment for Risk Measures: Systematic vs Unsystematic Risks"

April 2010, Finance Seminar, HEC Geneva: "Granularity Adjustment for Risk Measures: Systematic vs Unsystematic Risks"

April 2010, Econometrics Seminar, Einaudi Institute for Economics and Finance, Rome: "Efficiency in Large Dynamic Panel Models with Common Factors"

May 2010, Financial Econometrics Conference, Toulouse, "Semi-parametric Estimation of American Option Prices"

June 2010, Finrisk Research Day, Gerzensee: "Granularity Adjustment for Risk Measures: Systematic vs Unsystematic Risks"

February 2011: Finance Seminar, Imperial College, London: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

February 2011: Financial Econometrics Workshop, ECARES, Bruxelles: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

May 2011: Financial Econometrics Seminar, CREST, Paris: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

October 2011: Econometrics Seminar, CORE, Louvain: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

November 2011: Econometrics Seminar, CEMFI, Madrid: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

May 2012: Econometrics Seminar, Leuven University: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

June 2012: Econometrics Seminar, Rotterdam University: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

June 2012: Annual Conference of the Society of Financial Econometrics, Oxford: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

September 2012: Finance Seminar, University of Luxembourg: "Time-Varying Risk Premium in Large Cross-Sectional Equity Datasets"

November 2012: Finance Seminar, ESSEC Business School, Cercy-Pontoise: "Survival of Hedge Funds: Frailty vs. Contagion"

January 2013: Finance Seminar, ICMA Center, Reading: "Survival of Hedge Funds: Frailty vs. Contagion"

REFERENCES

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Prof. Christian Gouriéroux, CREST, Laboratoire de Finance-Assurance, 35, Bd. G. Peri, 92245 Malakoff, France. Tel: +33 141 17 35 93. E-mail: gouriero@ensae.fr; and Department of Economics, Toronto University, 150 St. George Street, S107A, Toronto, Canada. Phone: +1 416 978 4479. E-mail: c.gourieroux@utoronto.ca.

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