Jean-Michel MAESO

Professional background

Since October 2015	 EDHEC-RISK CLIMATE IMPACT INSTITUTE (Nice), senior quantitative researcher, permanent contract Applied research in finance using stochastic modeling, machine learning, econometrics and optimization Current research interests include: machine learning techniques applied to sentiment analysis, investment solutions for retirement investing, factor investing in government and corporate bond markets, equity and fixed income portfolio construction, pricing (coding in Python, R, Matlab and VBA) Management of several research chair projects sponsored by banks and asset managers (Bank of America, Amundi, Lyxor and Banque de France Gestion) Writing and publication of academic and in-house papers Creation of the course "Basics in Statistics" for the online MSc in data management and business analytics Instructor of two out of eight courses of the Machine Learning Applications elective in the MSc in Financial Markets (natural language processing and convolutional neural networks) Instructor of the elective Innovations in Investment Management in the MSc in Financial Economics Follow-up of several students' MSc thesis
Sept 2014-July 2015	COVEA FINANCE (Paris), senior quantitative analyst, permanent contract
Schr 2014-July 2012	Development of a quantitative research department under the direct supervision of the CIO. The desk is in charge of investments in structured products
	 Research, development and implementation of investment solutions (structured products and systematic strategies) on equities, fixed income, credit and currencies (coding in Matlab and VBA) Bimensual meeting with the CIO: trade ideas proposals, tools development, projects in progress Quaterly meeting with the CEO concerning the desk development
	 Participation to investment committees: presentation of trade ideas and quantitative studies Direct relationship with structured products desks of banks: trade ideas, quantitative research, trade executions
April 2013-August 2014	 CARTEGO FINANCE (Paris), quantitative strategist, permanent contract Asset allocation, bespoke investment solutions and risk management for institutional long-term investors (pension funds, listed companies, insurances, SWFs, family offices) on an international perimeter Development and implementation of quantitative strategies, portfolio optimization and risk & performance analysis (coding in R and VBA) Participation to investment and risk committees Supervision of a junior quantitative analyst
Sept 2011-March 2013	STRAFI (Paris), financial engineer, permanent contract
	 Strategy proposals for hedging interest rate (swap, cap, floor, collar, swaption) and FX risks (forward, vanilla option, accumulator, cross currency swap)
	 Pricing tools development for derivatives, strategy simulations, efficiency tests and stress tests (coding in VBA)
	 Daily and bimensual macroeconomic notes redaction Customer relationship management
April 2010-August 2011	MAZARS (Paris), analyst, permanent contract (including a 4-month end-studies internship) Quantitative models review and risk modeling for Natixis on a toxic credit derivatives portfolio (CDS, CDO, CDO^2, RMBS, CLO)
	 Pricing validation of the financial guaranty granted by BPCE to Natixis via the Black and Scholes model
	 Follow-up of the provisioning of assets wrapped by monolines or CDPCs and market risk indicators (sensitivities, limits, stress tests and VaR)

Educational background

Jul 2019 – Dec 2022	UNIVERSITÉ NICE CÔTE D'AZUR, PhD in Applied Mathematics (Nice)
	PhD in applied mathematics: "Stochastic modeling applied to portfolio optimization problems"
	Maximizing an Equity Portfolio Excess Growth Rate
	Measuring Portfolio Rebalancing Benefits in Equity Markets
	 Holistic Goals-Based Investing Framework for Analyzing Efficient Retirement Investment Decisions in the Presence of Long-Term Care Risk

ÉCOLE CENTRALE LYON, Graduate Engineering School (Lyon)

Msc in mathematical engineering in a top tier French engineering school

 Main courses include: stochastic calculus for finance, econometrics, probability theory and mathematical statistics, optimization, Monte Carlo methods, operational research, financial theory

Academic publications

- Cross-Sectional and Time-Series Momentum in the US Sovereign Bond Market, *The Journal of Fixed Income*, Winter 2022, 31(3), 20-40. Co-written with R.Rebonato and L.Martellini.
- Maximizing an Equity Portfolio Excess Growth Rate: A New Form of Smart Beta Strategy?, Quantitative Finance, March 2020, 20(7), 1185-1197. Co-written with L.Martellini
- Measuring Portfolio Rebalancing Benefits in Equity Markets, *The Journal of Portfolio Management*, March 2020, 46(4), 94-109. Co-written with L.Martellini
- Factor Investing in US Sovereign Bond Markets: A New Generation of Conditional Carry Strategies with Applications in Asset-Only and Asset-Liability Management, *The Journal of Portfolio Management*, Quantitative Special Issue 2020, 46(2), 121-140. Co-written with R.Rebonato and L.Martellini
- Defining and Exploiting Value in US Treasury Bonds, *The Journal of Fixed Income*, Fall 2019, 29 (2), 6-25. Co-written with R.Rebonato and L.Martellini
- Factor Investing and Risk Allocation: From Traditional to Alternative Risk Premia Harvesting, *The Journal of Alternative Investments*, 2017, 20(1), 27-42. Co-written with L.Martellini

Chapters in book

• "The handbook of fixed-income securities", 9th edition, edited by Frank Fabozzi, John Wiley, July 2021: Chapter on "Factor Investing in Sovereign Bond Markets" (with F. Fabozzi, L.Martellini and R. Rebonato)

Working papers

- The Impact of Climate Change News on Green-minus-Brown Portfolios. Co-written with D.O'Kane. To be submitted to *The Journal of Banking and Finance*.
- Holistic Goals-Based Investing Framework for Analyzing Efficient Retirement Investment Decisions in the Presence of Long-Term Care Risk.
 Co-written with L.Martellini and V.Milhau. To be submitted to *Insurance: Mathematics and Economics*.

Seminar and conference presentations

2017

Princeton University, Wealth Management Systems for Individual Investors (Four-University Rotating FinTech Conference)

 Presentation entitled "Mass-Customisation of Goal-Based Investment Solutions: The New Frontier in Digital Wealth Management Services"

Tutorial classes and demonstrations

Languages and computer skills

English	Fluent
German	Basic knowledge
Microsoft	Windows environment, Pack Office
Programming	Python, R, Matlab, VBA
Financial data	Bloomberg, Reuters, Datastream, CRSP

Interests and activities

Sport	Competitive tennis (2022-2023 French ranking: 2/6)
Associations	President and coach of the Ecole Centrale Tennis Club
Teaching	Private lessons in mathematics, finance and physics (up to classes préparatoires)
	Tennis lessons

References

COQUERET Guillaume MARTELLINI Lionel MILHAU Vincent O'KANE Dominic PATRAS Frédéric RUBENTHALER Sylvain Associate professor of finance and data science at EM Lyon Professor of finance at Edhec Research director at Edhec-Risk Institute Professor of finance at Edhec Research director at CNRS Maître de conférences at Université Nice Côte d'Azur coqueret@em-lyon.com lionel.martellini@edhec.edu vincent.milhau@edhec.edu dominic.okane@edhec.edu frederic.patras@unice.fr sylvain.rubenthaler@unice.fr