Loïc **Maréchal**

PH.D. IN FINANCE · VISITING LECTURER

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I have a Ph.D. in finance, and I am placed in between the financial industry and academia. I am passionate about interdisciplinary research at the intersection of finance, machine learning, natural science, and algorithmic trading.

Work experience

ESSEC Business School — Les Roches Hospitality Management School *Paris, France — Crans-Montana, Switzerland*

VISITING LECTURER *Oct. 2020 - Present*

- Teaching at ESSEC Business school (M.Sc.): "Portfolio theory and investments analysis", forthcoming
- Teaching at the Les Roches (MBA): "Investment strategies for financial markets and asset management" — "Hotel valuation and performance" — "Financial lifecycle, fundraising, and communication", best MBA lecturer at Les Roches

University of Neuchâtel *Neuchâtel, Switzerland*

SCIENTIFIC COLLABORATOR AND TEACHING ASSISTANT *Sep. 2015 - Mar. 2020*

- Teaching: (M.Sc.) "Asset pricing" — "Research in financial analysis" — "Portfolio management" — (B.Sc.) "Principles of finance"
- Lecture design and teaching: "Introduction to web scraping and NLP in Java" — "The role of mathematics in economics"
- Database management for the Institute of Financial Analysis

Cargill *Geneva, Switzerland*

SENIOR COMMODITY MARKET ANALYST *Apr. 2014 - Aug. 2015*

- Supply and demand models development — Management of 30+ traders in EU, Russia and Ukraine for local data acquisition
- Systematic price forecasts based on fundamental data, order flows, and co-integrated markets
- 3D visualizations of backtests and geographical inventories based on in-house data — Automation of data acquisition

S&P Global — Platts *Lausanne, Switzerland*

COMMODITY MARKET ANALYST *Feb. 2011 - May 2013*

- Futures and spot prices modeling and forecasts based on supply and demand, meteorological, agronomic, and macroeconomic data
- Development and backtests of trading strategies based on supply and demand (LFT) or market microstructure (HFT) data
- Automation of data collection: web scraping, NLP, and financial data feed integration

Own account *Paris, France — Lausanne, Switzerland*

ALGORITHMIC TRADING *Feb. 2010 - Present*

- Quantitative analyses — Non-random patterns detection for systematic trading strategies
- Latency arbitrage between OTC and centralized markets — Triangular arbitrage on FOREX — Market making

Bunge Mathematical Institute *Warsaw, Poland*

QUANTITATIVE ANALYST *Jun. 2009 - Oct. 2009*

- Systematic trading strategies based on statistical filtering of fundamental data and seasonal patterns
- Co-integration tests of time-, quality-, and by-products- spreads in futures and option markets

Education

University of Neuchâtel *Neuchâtel, Switzerland*

PH.D. IN FINANCE *Sep. 2016 - Jul. 2021*

- Thesis: "Three essays on commodity markets"
- Study of commodity futures markets from asset pricing, risk management, and regulatory perspectives
- Dissertation committee: Profs. Michel Dubois, Tim Kroencke, Florian Weigert, Amit Goyal, Sofia Ramos, and Zeno Adams

University of Paris X — Warsaw School of Economics (SGH) *Nanterre, France — Warsaw, Poland*

M.SC. IN BANKING AND FINANCE *Sep. 2007 - Jan. 2010*

University of Versailles-Saint-Quentin-en-Yvelines *Saint-Quentin-en-Yvelines, France*

MAÎTRISE IN MANAGEMENT SCIENCES *Sep. 2006 - Jul. 2007*

University of Versailles-Saint-Quentin-en-Yvelines *Saint-Quentin-en-Yvelines, France*
B.Sc. in Economics *Sep. 2003 - Jul. 2006*

Skills

Programming Advanced: *Java, C#* — Basic: C
Data analysis Advanced: R — Intermediate: *Matlab, Python*
Typesetting Advanced: *LaTeX* — Basic: *Markdown*
DevOps Basic: *Google Cloud Platform*
Tools Intermediate: *Tableau, Office*
Languages Native: *French,* Fluent: *English*

Research, talks, and lectures

Research *Journal of Futures Markets*

Publication *Forthcoming*

- Do economic variables forecast commodity futures volatility? Journal of Futures Markets

Working papers

- The valuation effects of index investment in commodity futures (with M. Dubois)
- A tale of two premiums revisited
- Quantitative technology assessment for cyber-defence : A trend- and sentiment-analysis approach (with D. Percia-David, W. Blonay, S. Gillard, T. Maillart, and A. Mermoud)
- A “time-at-risk” investment indicator for cyber-defence (with D. Percia-David, S. Gillard, A. Mermoud, and T. Maillart)

Talks

The valuation effects of index investment in commodity futures

- Derivative Markets Conference 2019, Queenstown — ESSEC Workshop on Nonstandard Investment Choice 2019, Paris — Hedge Fund Research conference 2020, Paris, AFFI conference 2021, Nantes — CEMA conference 2021, Madrid — J.P. Morgan Center for Commodities (JPMCC) international symposium 2021, Denver

Do economic variables forecast commodity futures volatility?

- Volatility and Big Data Analysis in Financial Markets 2019, Kaohsiung — New Zealand Finance Meeting 2019, Auckland — IAF research day 2020, Neuchâtel

A tale of two premiums revisited

- IAF research day 2021, Neuchâtel — Derivative Markets Conference 2021, Auckland

Les marchés de matières premières sontils un nouvel Eldorado?

- “Ma thèse en 180 secondes”, University of Neuchâtel and TV interview, 2021

Lectures *University of Geneva*

Lecturer *2021*

- Lecturer for the LL.M. TAX and DAS in Asset Management, 2021
- Lecturer for the LL.M. TAX, 2019

Extracurricular activity

Neuchâtel, Switzerland
ASECO *2016–2018*
Member of the “Association du corps intermédiaire de la faculté des sciences économiques”

Saint-Blaise, Switzerland
Ichtus, sailing association *2021*
Member and volunteer

World
Misc. *Until now*
Ski, kitesurf, wingfoil, trail running, and hiking

Additional information

Misc. French citizen, Swiss residence (C permit — applying for the Swiss citizenship), and driving licence