ECONOMICS, FINANCE, CONTROL & LAW

Fei Liu

Assistant Professor in Finance

Contact

Email: fei.liu@ipag.fr

Phone: +33 1 40 79 64 40

Campus: Paris

Biography

Fei Liu is an assistant professor in Finance with a strong research interest in modeling financial time series. Fei focuses on the pragmatic applications of scientific results to real-world challenges in algorithmic trading and risk management. In addition, Fei's research explores the intersections of Artificial Intelligence (AI), Environmental, Social, and Governance (ESG) factors, and sustainable finance. A key focus is understanding the role of AI in financial decision-making, the integration of ESG considerations into quantitative models, and the implications of sustainability on financial stability and investment strategies.

Education

- PhD in Mathematics
  2014 – 2018, University of Liverpool, United Kingdom
  Project: Modeling and forecasting stochastic volatility in stock markets.

- Master of Philosophy (MPhil) in Mathematics
  2011 – 2013, University of Liverpool
  Project: Risk modeling in insurance and finance, identifying the roles of risks in insurance and finance in ruin

probabilities, determining risk measures.

- Bachelor's Degree in Mathematics
  2007 – 2011, University of Liverpool
- Passed preliminary examinations of the Society of Actuaries (SOA), including: Probability, Financial Mathematics, Models for Financial Economics, Models for Life Contingencies, Construction, and Evaluation of Actuarial Models.

Teaching Areas

- Statistic
- Probability
- Investment Management
- Quantitative Finance
- Financial Markets
- Risk Management
- Business Model

Research Areas

- Mathematical Finance,
- Algorithmic Trading
- Modeling of Volatility

Professional experiences

- Assistant Professor, IPAG Business School, Paris, 2019 - Present
  Courses taught: Statistics, Quantitative Finance, Risk Management, International Finance, Wealth Management, Python for Finance, etc.

- Guest Lecturer, EISTI – CyTech, Cergy, 2019-2021
  Course: FinTech, RegTech, and InsurTech.

- Teaching Assistant, University of Liverpool, United Kingdom, 2014 - 2016
  Courses: Statistics, Probability, Financial Mathematics.

- Management Intern, China Merchants Bank, China, 2013 - 2014.

Selected publications

- 1st revision submitted. MCDA Strategies for Portfolio Optimization: A Case Study on Vietnamese Stock Market Dynamics. Annals of Operations Research. 2025.

- 1st revision submitted. Influence of Social Sustainable Development Goals Sentiment on Listed Companies. Research in International Business and Finance, Special Issue on Social Finance. 2025.

- Portfolio management with ESG news sentiment. Bankers, Markets, and Investors. 2024 (FNEGE 4) DOI:10.54695/bmi.172.0072

- Sustainable Investing, Chapitre 13 : Portfolio Management with News-Based Sustainability Scores, pp. 337-374. Ron Große, Viet Hoang Le, Fei Liu, Hans-Jörg von Mettenheim. World Scientific Publishing. 2024. DOI : 10.1142/9789811297786_0013

- Analysis of the Relevance of Sentiment Data for the Prediction of Excess Returns in a Multi-Asset Framework (avec Desforges P, Geissler C). Journal of Forecasting. 2023. (FNEGE 3, ABS 2*) DOI : 10.1002/for.2967

- Deep Learning and Technical Analysis in Cryptocurrency Markets (avec Goutte S, Le VH, v. Mettenheim HJ). Finance Research Letters. 2023. (FNEGE 3, ABS 2*) DOI : 10.1016/j.frl.2023.103809

- News-based Sentiment: Can It Explain Market Performance Before and After the Russia-Ukraine Conflict? (avec Le VH, v. Mettenheim HJ, Goutte S). Journal of Risk Finance. 2022. (ABS 1*) DOI : 10.1108/JRF-06-2022-0168

- Pricing Inefficiencies and Feedback Trading: Evidence from Country ETFs (avec Kallinterakis V, Shao J). International Review of Financial Analysis. 2020. (FNEGE 3, ABS 3*) DOI : 10.1016/j.irfa.2020.101498

- Forecasting and Trading High Frequency Volatility on Large Indices (avec v. Mettenheim HJ). Quantitative Finance. 2018. (FNEGE 3, ABS 3*) DOI : 10.1080/14697688.2017.1414489

- Ruin with Insurance and Financial Risks Following the Least Risky FGM Dependence Structure (avec Chen Y, Liu J). Insurance: Mathematics and Economics. 2015. (FNEGE 3, ABS 3*) DOI : 10.1016/j.insmatheco.2015.03.007
