

WEI JIANG

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APPOINTMENT

Hong Kong University of Science and Technology
Assistant Professor of Quantitative Finance, August 2019–

International Monetary Fund
Visiting scholar, July 2023–

National University of Singapore, Risk Management Institute
Research Fellow, December 2017– August 2019

EDUCATION

Ph.D. in Quantitative Finance, National University of Singapore, 2017

M.Sc. in Mathematical Finance, Peking University, 2012

B.Sc. in Mathematics, Peking University, 2009

RESEARCH INTERESTS

Corporate Finance, International Finance, FinTech, Stochastic Modelling, Applied Probability

RESEARCH

Publications

1. A q Theory of Internal Capital Markets, with Min Dai, Xavier Giroud, and Neng Wang, **Journal of Finance**, forthcoming
2. Asymptotic Analysis of Long-Term Investment with Two Illiquid and Correlated Assets, with Xinfu Chen, Min Dai, and Cong Qin, **Mathematical Finance** 32(4), pages 1133-1169 (2022)
3. Simulating Risk Measures via Asymptotic Expansions of Relative Error, with Steven Kou, **Mathematical Finance** 31(3), 907-942, (2021)

Working Papers

1. A p Theory of Government Debt and Taxes, with Thomas J. Sargent, Neng Wang, and Jinqiang Yang, **Journal of Finance**, **Revise & Resubmit**
2. Arrow-Barro Debt-GDP Dynamics, Wei Jiang, Thomas J. Sargent, Neng Wang and Jinqiang Yang, Submitted

3. Non-linear Dependence and Portfolio Decisions over the Life-Cycle, with Shize Li and Jialu Shen, Submitted
4. From Hotelling to Nakamoto: The Economics of Bitcoin Mining, with Min Dai, Steven Kou, and Cong Qin, **Management Science, Reject & Resubmit**
5. An Investment Theory with Lags and Adjustment Costs, with Shuaijie Qian, and Jialu Shen
6. Optimal Stockist Selection and Contract Design: Theory and Evidence from Supply Chain in India, with Jussi Keppo, Yu Long, and Omkar Palsule-Desai

Research Grants

1. RGC – Early Career Scheme (Project ID: 26211120, HK\$741k). 2021-2023. Project title: Optimal corporate investment with a generalized setup of investment frictions.
2. Hong Kong University of Science and Technology Start-up Fund. 2019-2024.

PRESENTATIONS AND DISCUSSIONS

Presentations ([†] by coauthor)

2023

AEA poster, AFA[†], UC Berkeley[†], Carnegie Mellon University[†], University of Missouri, CKGSB[†], Shanghai University of Finance and Economics, Shanghai Jiao Tong University, Zhejiang University, Conference on Fiscal Policy in an Era of High Debt, IMF[†], Silicon Prairie Finance Conference[†], POMS Annual Meeting 2023[†], China Financial Research Conference, Summer Institute of Finance Conference[†], Asian Meeting of the Econometric Society, NFA, The Minnesota Workshop in Macroeconomic Theory[†], Risk Management Annual Conference 2023, ICIAM 2023, Sydney Banking and Financial Stability Conference 2023[†], Hong Kong Economic Association 2023

2022

AFA (Virtual), MFA (Chicago), NBER Summer Institute[†], SFS Cavalcade Asia[†], AFBC, Fifteenth Annual Risk Management Conference[†], FMCG Conference, Soochow University, National Taiwan Tsinghua University, 6th PKU-NUS Conference on Quantitative Finance and Economics[†], Bachelier Finance Society Annual Meeting

2021 (Virtual)

NFA, IFORS, Analytics for X Conference[†], POMS-HK[†], 10th Asia Quantitative Finance Seminar, 5th PKU-NUS Annual International Conference on Quantitative Finance and Economics, 37th International Conference of the French Finance Association (AFFI), 7th Asia Quantitative Finance Seminar

2020 (Virtual)

Greater China Area Finance Conference, INFORMS, Annual Conference on Asia-Pacific Financial Markets, Tokenomics Conference, 3rd UWA Blockchain, Cryptocurrency and Fintech conference, 2nd International Symposium on PDE & Stochastic Analysis in Mathematical Finance

2019

China Fintech Research Conference 2019 (discussant), INFORMS (Seattle)[†], 6th Beihang IEB Forum: Frontiers in Theory and Practice of FinTech (Beijing), 4th Berlin-Princeton-Singapore Workshop on Quantitative Finance (Singapore), Thirteenth Annual Risk Management Conference (Singapore), Workshop on Stochastic Control in Finance (Singapore), Workshop on Fintech and Machine Learning (Singapore),

2018

INFORMS (Phoenix), 6th Asia Quantitative Finance Conference (Guangzhou), Twelfth Annual Risk Management Conference (Singapore), 3rd PKU-NUS Annual Conference in Quantitative Finance and Economics ((Presentation and Discussion) (Beijing), Nanjing University Youth Forum 2018 in Business School, SUSTech Global Scientist Forum 2018 in Department of Finance

2017 and earlier

1st Singapore-Munich Conferences on Innovations in Insurance, Risk, and Asset Management (Singapore), 2nd Paris-Asia Conference in Quantitative Finance (Suzhou), Berlin-Princeton-Singapore Workshop on Quantitative Finance (Berlin), NUS-USPC Workshop on New Challenges in Financial Risk Control (Singapore), 5th NUS Workshop on Risk and Regulation (Singapore), 1st PKU-NUS Annual International Conference on Quantitative Finance and Economics (Shenzhen), 4th NUS Workshop on Risk and Regulation (Singapore), NUS-UParis Diderot Workshop on Quantitative Finance (Paris)

Discussions

1. Testing the Q-theory under Endogenous Truncation by Ilan Cooper, Daniel Kim, and Moshe Kim, AFBC 2022
2. The Cash-Cap Model: A Two-State Model of Firm Dynamics by Kakhbod, Reppen, Umar, and Xing, FMCG 2022
3. Idle Liquidity, CBDC and Banking by Dong and Xiao, 2019 China Fintech Research Conference

PROFESSIONAL ACTIVITIES

Referee

Review of Economic Dynamics, Management Science, European Economic Review, Operations Research, Mathematical Finance, Mathematics of Operation Research, Finance and Stochastics, Operations Research Letter, International Review of Finance

Conference Service

10th Asia Quantitative Finance Seminar (Organizer), Hong Kong - Singapore joint Seminar Series in Financial Mathematics / Engineering, 5th PKU-NUS Annual International Conference on Quantitative Finance and Economics (2021), INFORMS 2020 Annual Meeting

TEACHING EXPERIENCE

Hong Kong University of Science and Technology

IEDA3330 Introduction to Financial Engineering (Undergraduate, 2022–)

IEDA4331 Quantitative Methods in Financial Engineering (Undergraduate, 2019–)

IEDA4520 Numerical Methods for Financial Engineering (Undergraduate, 2020)