Qinyu Wu

Contact

Department of Statistics and Actuarial Science, University of Waterloo
Mathematics 3, 200 University Avenue West
Waterloo, Ontario, Canada N2L 3G1
Tel: +1 (226) 507-4495
Email: wu051555@mail.ustc.edu.cn; q35wu@uwaterloo.ca

Education

University of Waterloo, Department of Statistics and Actuarial Science
Postdoctoral Fellow   03/2023 – 03/2025
Supervisor: Prof. Ruodu Wang

University of Science and Technology of China, School of Management
Ph.D. in Statistics   09/2017 – 12/2022
Supervisors: Prof. Tiantian Mao, Prof. Taizhong Hu

University of Science and Technology of China, School of Management
B.S. in Statistics   09/2013 – 06/2017

Research Interests

- Risk Management
- Mathematical Finance
- Decision Theory
- Robust Optimization

Publications and accepted papers (∗ represents corresponding author)

- Han, X., Wang, R. and Wu, Q.* (2025). Monotonic mean-deviation risk measures. Accepted by *Finance and Stochastics*.

- Maccheroni, F.*, Marinacci, M., Wang, R. and Wu, Q. (2025). Risk aversion and insurance propensity. Accepted by *American Economic Review*.

- Wang, R. and Wu, Q.* (2024). Probabilistic risk aversion for generalized rank-dependent functions. *Economic Theory*, forthcoming.

- Wu, Q., Mao, T.* and Hu, T. (2024). Generalized optimized certainty equivalent with applications in the rank-dependent utility model. *SIAM Journal on Financial Mathematics*, **15**(1), 255–294.

- Han, X., Wang, B., Wang, R. and Wu, Q.* (2024). Risk concentration and the mean-Expected Shortfall criterion. *Mathematical Finance*, **34**(3), 819–846.

- Zou, Z.,Wu, Q., Xia, Z. and Hu, T.* (2023). Adjusted Rényi entropic Value-at-Risk. *European Journal of Operational Research*, **306**(1), 255–268.

- Wu, Q.* (2023). Second-order stochastic dominance with respect to rank-dependent utility model. *Journal of University of Science and Technology of China*, **53**(2), 1–6.

- Mao, T., Zhao, Q. and Wu, Q.* (2022). Worst-case conditional value-at-risk and conditional expected shortfall based on covariance information, *Journal of University of Science and Technology of China*, **52**(5), 31–39.

- Mao, T., Wu, Q. and Hu, T.* (2021). Further properties of fractional stochastic dominance. *Journal of Applied Probability*, **59**(1), 202–223.

- Li, L., Wu, Q. and Mao, T.* (2020). Stochastic comparisons of largest-order statistics for proportional reversed hazard rate model and applications. *Journal of Applied Probability*, **57**(3), 832–852.

Working Papers

- Mao, T., Wang, R. and Wu, Q.* (2022). Model aggregation for risk evaluation and robust optimization. *arXiv*: 2201.06370.
- Wu, Q., Li, Y. M. J. and Mao, T.* (2022). On generalization and regularization via Wasserstein distributionally robust optimization. *arXiv*: 2212.05716.
- Bellini, F., Mao, T., Wang, R. and Wu, Q.* (2024). Disappointment concordance and duet expectiles. *arXiv*: 2404.17751.
- Wu, Q.*, Yang, F. and Zhang, P. (2022). Conditional generalized quantiles based on expected utility model and equivalent characterization of properties. *arXiv*: 2301.12420.
- Champers, C., Miller, A., Wang, R. and Wu, Q.* (2024). Max-stability under first-order stochastic dominance. *arXiv*: 2403.13138.
- Wang, R. and Wu, Q.* (2024). The reference interval in higher-order stochastic dominance. *arXiv*: 2411.15401.
- Wang, R. and Wu, Q.* (2024). Prudence and higher-order risk attitudes in the rank-dependent utility model. *arXiv*: 2412.15350.

Peer-review Service

- Management Science, Operations Research, Mathematics of Operations Research, Journal of Mathematical Economics, Mathematics and Financial Economics

Teaching Experience

Teaching Assistant, University of Science and Technology of China

- Probability Theory and Mathematical Statistics (Fall 2016, Fall 2017)
- Advanced Probability Theory (Fall 2018)
- Stochastic Process (Spring 2019, Spring 2021)
- Econometrics (Fall 2020)
- Convex Optimization (Fall 2021, Fall 2022)

Presentations at Conferences/Workshops/Seminars

- Weekly Seminars on Risk Management and Actuarial Science (online), University of Waterloo (Nov 2020).
- International Conference on Asymptotic Statistics and Risk Measurements (online), University of Science and Technology of China (Dec 2020).
- The 12th National Seminar on Probability Limit Theory and Statistical Large Sample Theory, Guizhou University of Finance and Economics (Aug 2021).
- The 12th Risk Management and Actuarial Forum in China (online), Central University of Finance and Economics, Beijing, China (Dec 2021).
- The 25th International Congress On Insurance: Mathematics and Economics (online), Sun Yat-sen University, Guangzhou, China (July 2022).
- Weekly Seminars on Risk Management and Actuarial Science, University of Waterloo (Nov 2023)
- International Conference on Insurance and Actuarial Science 2024, Nankai University, Tianjin, China (June 2024)
- 27th International Congress on Insurance: Mathematics and Economics, DePaul University, Chicago, USA (July 2024)
- 25th International Symposium on Mathematical Programming, Montréal, Canada (July 2024)
- 5th Waterloo Student Conference in Statistics, Actuarial Science and Finance, Waterloo, Canada (Oct 2024)

Honors and Awards

- Acdemic Scholarship, First Prize, University of Science and Technology of China (09/2017, 09/2018, 09/2019, 09/2020, 09/2021)
- USTC–Suzhou Industrial Park Scholarship (12/2021)