Qinyu Wu

Contact

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Education

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

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

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

Research Interests

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

Publications

- 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.
- Mao, T., **Wu, Q.** and Hu, T. (2021). Further properties of fractional stochastic dominance. *Journal of Applied Probability*, **59**(1), 202–223.
- Guo, C., Du, X., **Wu, Q.** and Mao, T. (2021). Measure of riskiness based on RDEU model. *Journal of University of Science and Technology of China*, **51**(1), 65–74.
- 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.
- 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.
- Han, X., Wang, B., Wang, R. and **Wu, Q.*** (2023). Risk concentration and the mean-Expected Shortfall criterion. *Mathematical Finance*, 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*, forthcoming.

Working Paper

- Mao, T., Wang, R. and **Wu, Q.*** (2022). Model aggregation for risk evaluation and robust optimization. *arXiv*: 2201.06370.

- **Wu, Q.***, Yang, F. and Zhang, P. (2022). Conditional generalized quantiles based on expected utility model and equivalent characterization of properties. *arXiv*: 2301.12420.
- Wang, R. and **Wu, Q.*** (2022). On the equivalence between concavity and quasi-concavity in probabilistic mixtures. *arXiv*: 2209.03425.
- **Wu, Q.**, Li, Y. M. J. and Mao, T. (2022). On Generalization and Regularization via Wasserstein Distributionally Robust Optimization. *arXiv*: 2212.05716.
- Maccheroni, F., Marinacci, M., Wang, R. and **Wu, Q.** (2023). Risk Aversion and insurance propensity. *arXiv*: 2310.09173.
- Han, X., Wang, R. and **Wu, Q.*** (2023). Monotonic mean-deviation risk measures. *arXiv*: 2312.01034.
- Champers, C., Miller, A., Wang, R. and **Wu, Q.*** (2024). Max-stability under first-order stochastic dominance. *arXiv*: 2403.13138.
- Bellini, F., Mao, T., Wang, R. and **Wu, Q.*** (2024). Expectile preferences. *arXiv*: 2404.17751.

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

- The 12th National Seminar on Probability Limit Theory and Statistical Large Sample Theory, Guizhou University of Finance and Economics (Aug 2021).
- International Conference on Asymptotic Statistics and Risk Measurements (online), University of Science and Technology of China (Dec 2020).
- The 12th Risk Management and Actuarial Forum in China (online), Central University of Finance and Economics, Beijing, China (Dec 2021).
- Weekly Seminars on Risk Management and Actuarial Science (online), University of Waterloo (Nov 2020).
- The 25th International Congress On Insurance: Mathematics and Economics (online), Sun Yat-sen University, Guangzhou, China (July 12th-15th 2022).
- Weekly Seminars on Risk Management and Actuarial Science, University of Waterloo (Nov 2023)

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)

Skills

- Programming: Matlab, R and Python