Finance Research Seminar

Fri, Oct 2nd, 3:30-5:00; WU-H46-SR1

Zhou, Xunyu (University of Oxford) Non-Expected Utility Maximisation

Abstract:

A new portfolio choice model in continuous time is proposed for both complete and incomplete markets, where the quantile function of the terminal cash flow, instead of the cash flow itself, is taken as the decision variable. This formulation covers a wide body of existing and new models with law-invariant preference measures, in particular those with non-expected utility criteria, including the goal-achieving model, Yaari's dual model, Lopes' SP/A model, behavioural model under prospect theory, models with coherent risk measures, as well as those explicitly involving VaR and CVaR in objectives and/or constraints. A solution scheme to this quantile model is proposed, and then demonstrated by solving analytically the goal-reaching model, Yaari's dual model, and a model involving coherent risk measures.