Atelier de recherche du laboratoire ACT&RISK
Titre : Bilateral Risk Sharing with Heterogeneous Beliefs and Exposure Constraints

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Résumé

We study bilateral risk sharing under no aggregate uncertainty, where one agent has Expected-Utility preferences and the other agent has Rank-Dependent Utility preferences, with a general probability distortion function. We impose exogenous constraints on the risk exposure for both agents (as a reflection of risk management constraints, regulatory constraints, etc.), and we allow for any type or level of belief heterogeneity. We show that Pareto-optimal risk-sharing contracts can be obtained via a constrained utility maximization under a participation constraint of the other agent. This allows us to give an explicit characterization of optimal risk-sharing contracts. In particular, we show that an optimal contract is a monotone function of the likelihood ratio, where the latter is obtained from Lebesgue’s Decomposition Theorem.