

# Abstract: "Preference for Diversification: Different but Intricate Dimensions of Uncertainty Aversion"

We study the preferences of agents for diversification and better outcomes when they are facing both, in Frank Knight's formulation, measurable as well as unmeasurable uncertainty. Following Anscombe and Aumann, such a situation can be modeled by preferences expressed on stochastic kernels, that is scenario dependent lotteries.

By means of automatic continuity methods based on Banach-Dieudonné's Theorem on Fréchet spaces, we provide a robust representation. This gives us some insight into the nature of uncertainty aversion these preferences are expressing. We further investigate under which conditions these two intricate dimensions of uncertainty can be disentangle into a distributional uncertainty, in the direction of von Neumann and Morgenstern's theory, and a probability model uncertainty, in the spirit of risk measures. These results allow in particular to address both Allais as well as Ellsberg's paradox.

Joint work with P. Cheridito, F. Delbaen, and M. Kupper.