Consumption smoothing and subjective discounting in the presence of background risk

Marc Willinger*1 and Mickaël Beaud*†2

1Laboratoire Montpelliérain d’Économie Théorique et Appliquée (LAMETA) – Université de Montpellier, Université de Montpellier – 34960 Montpellier cedex 2, France
2Laboratoire Montpelliérain d’Économie Théorique et Appliquée (LAMETA) – Université de Montpellier, Université de Montpellier – Rue R. Dugrand, 34 000 - Montpellier, France

Abstract

We provide experimental evidence about consumption allocation decisions between two future dates in the presence of a multiplicative mean-zero (background) risk. The background multiplicative risk can affect either of the two dates, both dates or neither date. Following Andreoni and Sprenger (2002), we vary the delay between the two dates and the interest rate. We replicate some of their findings. We categorize subjects into two broad categories, with respect to the no risk reference situation: risk-avoiders and risk-seekers. Risk-avoiders always lower their consumption at the sooner date when there is background risk at this date, while risk seekers increase it. At the aggregate level we observe an increase in sooner consumption. Symmetrically, risk seekers lower their consumption at the sooner date when there is background risk at the later date, while risk avoiders increase it. However, again we observe an increase of sooner consumption at the aggregate level in this case. Since the frequency of each type of subjects is almost the same in our sample, it means that the risk seekers’ adjustments dominate when the risk is at the sooner date, while the risk avoiders’ adjustments dominate when the risk is at the later date. We provide a theoretical framework to account for such asymmetric adjustments in a heterogeneous population.

*Speaker
†Corresponding author: beaud@lameta.univ-montp1.fr