

Recommendations and challenges regarding the construction of climate change impact scenarios in health and life insurance

Stéphane Loisel, Chair professor of risk and actuarial science,

Efab, Lirsa, Conservatoire National des Arts et Métiers, Paris

Abstract: Following initial pilot stress test exercises proposed by insurance and banking regulators, insurance and reinsurance companies face the challenge to design climate change impact scenarios up to time horizons ranging from 2050 to 2100, much beyond the traditional 3 to 5-year view usually provided in their Own Risk and Solvency Assessment. We provide general recommendations for the construction of such scenarios and illustrate them in the context of health and mortality risks of a Metropolitan France insurer.

The talk is based on a joint paper with A. Stephan (Guy Carpenter, Paris) and R. Vigneron (Univ. of Lyon and ACTIONS research chair), as well as on a paper with E. Raynal (Univ. Of Lyon and Galea et associés).