Abstract

Risk measurement as prescribed in the Solvency 2 regulation is essentially based on a one year horizon. This yearly classical accounting view is not necessarily in line with the reality of the long term aspect of life insurance and pension liabilities. Investment risks and longevity risks are the main drivers for these kinds of product and both are clearly affected by the time horizon of the liabilities. This long term character can have significant impact as well in the valuation process (through for instance the liquidity premium or the matching premium) as for the solvency requirement.

The purpose of this paper is to analyze for the long term pension business the importance of the time horizon for a sound valuation and solvency analysis of market and longevity risks.

Topics
Actuarial models, Longevity risk, solvency analysis, matching premium

(*) Professor, Université Catholique de Louvain (UCL), Institute of Statistic, Biostatistic and Actuarial Science (ISBA)
20 Voie du Roman Pays , 1348 Louvain la Neuve , Belgium, (pierre.devolder@uclouvain.be)

(**) Research Fellow, University of Florence, Department of Mathematics for Decisions, Via delle Pandette, 50124 Firenze, Italy