

ASSET LIABILITY MANAGEMENT APPLIED TO A TRADITIONAL OPEN ANNUITY PLAN

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Abstract

For insurance companies, building a sound annuity plan is a challenging problem. For this reason, such products must be managed according to the best practice in the market which, for annuity plans, is the Asset Liability Management (ALM). ALM corresponds to the exercise of managing risks resulting from disruptions that affect differently the assets and the liabilities. This work presents an ALM model via stochastic optimization with chance constraints and dynamic induced by a rolling horizon. The model is applied to an annuity plan with minimum guarantee of future payment. Additionally, the proposed method is compared with its deterministic version and some further analysis are done.