FLEXIBLE GUARANTEES IN INSURANCE POLICIES:

A PROBABILISTIC MODEL

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Abstract

The instability of financial markets leads to a more accurate management of families' saving, because it is no longer enough to offer safety and social security, but also a significant return.
This has promoted the great success of life insurance policies, with benefit that is linked with financial entities such as stocks, mutual funds and indices.
Then it is interesting to analyse alternative participation and indexation mechanisms. Indeed, the mathematical structure refers to the option model.
Aim of this paper is to study a particular "linked" policy, offering a "probabilistic" guarantee.
The pricing is calculated by solving a suitable stochastic optimisation problem.