Longevity Risk Management in Incomplete Markets using a Least Squares Monte-Carlo Approach

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Abstract

This paper proposes a unified framework for measuring and managing longevity risk. Specifically, we propose to use a flexible simulation based approach that has been shown to be successful in pricing financial derivatives. This approach allows us to model and measure more precisely the overall longevity risk exposure of a pension fund. Based on this Least Squares Monte-Carlo approach, derivative products can be designed that enables the fund to manage its risk exposure efficiently.

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