

## **Mortality derivatives as hedge instruments: the case of mortality forwards**

We examine how mortality forward contracts can be used to hedge mortality-dependent financial exposures. The paper is divided into two parts. The first part considers preliminary modelling issues - namely the modelling of spot and forward mortality rates, and the modelling of spot and forward mortality volatilities – which provide the building blocks for the later analysis. The second part then considers the mortality risks faced by a hypothetical annuity provider who faces an exposure to a single cohort, and examines the effectiveness of hedging strategies using mortality forward contracts. We examine a variety of strategies for hedging the annuity-providers exposure to longevity risk and compare the risk profiles with and without hedging.

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