

**PRICING LIFE EXPECTANCY**

**- A FRAMEWORK FOR LONGEVITY OPTIONS -**

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by

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## **ABSTRACT**

It is widely accepted that hedging smoothens cash flows of a corporation and thus reduces the cost of financial distress. For many underlying risks such as changes in interest rates, credit spreads, commodity prices or FX rates, financial markets provide derivative solutions for transferring risk. However, the risk of changing mortality rates is more difficult to deal with as appropriate risk management tools barely exist. Life insurances and pension funds are the most obvious, but not exclusive entities being exposed to unexpected changes in mortality. As they underwrite obligations with potentially vast payoffs, it is crucial to establish a well functioning market for longevity derivatives to transfer the risks efficiently.

## **KEYWORDS**

Longevity derivatives, longevity forward, longevity options, longevity risk, mortality rates, mortality risk, stochastic mortality