Modelling and managing longevity risk

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Abstract. In this talk, we first explain challenges regarding human longevity modelling and forecasting. In particular, we present the impact of characteristics of individuals like education and income levels, as well as geographical location and marital status. We then introduce an optimal stopping problem related to sequential testing of changing longevity patterns. We show that the optimal strategy is given by the so-called cusum strategy, when the Lorden criterion is used. We discuss practical issues related to an illustration on a real-world longevity example.

Joint work with Nicole El Karoui and Yahia Salhi.

References

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