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## Redistribution of Longevity Risk: The effect of heterogeneous mortality beliefs<sup>\*</sup>

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## Abstract

Existing literature regarding the natural hedge potential that arises from combining different longevity-linked liabilities typically does not address the question how changes in the liability mix can be obtained. We consider firms who aim to exploit the benefits of natural hedge potential by redistributing their risks, and characterize the risk redistributions that will arise when the parties bargain for a redistribution of risk that weakly benefits them all. We analyze the effects of heterogeneity in the beliefs regarding the probability distribution of future mortality rates on the properties of these risk redistributions, and provide a numerical illustration for a case where an insurer with a portfolio of term assurance contracts and a pension fund with a portfolio of life annuities redistribute their risks.

JEL-Classification: C71, C78, G22, J11 Keywords: Risk redistribution, Longevity risk, Nash bargaining, Heterogeneous beliefs.

nk Enrico Biffis, Poter Borm

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