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Practical Applications of State-of-the-Art Longevity Research

Longevity 14

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Topic	Practical Relevance
Quantification of Diversification Benefits	<ul style="list-style-type: none"> • Development of an appropriate approach to incorporate the benefit of geographical diversification among different countries for longevity risk, and examination of the underlying drivers of the amount of diversification benefit. • Development of an appropriate analytic approach to incorporate diversification benefits between mortality and longevity risks, taking into account age and geographical differences. • Application and parameterization of non-Gaussian copulas for incorporating diversification among different blocks of business.
Basis Risk	<ul style="list-style-type: none"> • Development of techniques to determine an appropriate haircut for basis risk in capital relief calculations, in particular, for Solvency II (or similar regulatory capital regimes) and/or economic capital.
Morbidity Risk	<ul style="list-style-type: none"> • The application of longevity modeling techniques to morbidity risk modeling for disability and long-term care blocks of business.
Parameter Uncertainty	<ul style="list-style-type: none"> • Best practices for incorporating parameter uncertainty into longevity and morbidity modeling.

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