

CEPAR Longevity Risk Workshop hosted by PwC

**6 July 2012, 8.30am to 5pm
PwC Darling Park Tower 2, 201 Sussex Street, Sydney
Wombarra Rooms 1 & 2**

Modelling longevity dynamics for superannuation, pensions and annuity business

Presented by Professor Annamaria Olivieri, University of Parma, and Professor Ermanno Pitacco, University of Trieste.

Topics

1. **The basic mortality model:** Age-discrete models: life tables; Age-continuous models: force of mortality, survival function; Parametric models.
2. **Forecasting mortality: an introduction:** A dynamic approach to mortality modelling; Projection by extrapolation of annual probabilities of death: using a projected table; Projecting mortality in a parametric context; The Lee-Carter method: an introduction; APC models; Projections and scenarios; Mortality by causes.
3. **The longevity risk:** The longevity risk: aggregate risk vs. individual risk; Modelling the longevity risk: an experience-based framework; Longevity risk in life annuities; Managing the longevity risk; Reinsurance; Alternative Risk Transfers

References

- E. Pitacco, M. Denuit, S. Haberman, A. Olivieri (2009), *Modelling longevity dynamics for pensions and annuity business*, Oxford University Press
- A. Olivieri, E. Pitacco (2009), Stochastic mortality: the impact on target capital, *ASTIN Bulletin*, **39** (2): 541-563