Longevity Seven

Programme

(Version: 6 September 2011)

Day 1 - Thursday, 8 September 2011

9.00–10.00	**Plenary Session I** **"Longer and longer lives: Some remarkable new research findings"** Prof. Jim Vaupel, Max Planck Institute for Demographic Research, Rostock
10.00-10.30	**Plenary Session II** **"Longevity bonds and the Financial Stability of retirement systems"** Ivan Zelenko, World Bank
10.30–11.00	Refreshment Break
11.00–12.30	**Plenary Sessions III-V** **"The role of reinsurers in longevity risk transfer"** Cord-Roland Rinke, Hannover Re **"Index-based longevity risk transfer to capital markets"** Hendrik Rogge / Stefan Sachsenweger, Deutsche Börse **"Crossing the pond: UK risk transfer techniques have reached the US"** Amy Kessler, Prudential Retirement / Tim Gordon, Aon Hewitt
12.30–13.30	Lunch
13.30–15.00	**Breakout Session I**
15.00–15.30	Refreshment Break
15.30–17.00	**Breakout Session II**
19.15-20.00	**Reception**
20.00-22.30	**Gala Dinner**

Day 2 - Friday, 9 September 2011

9.00-11.00 **Breakout Session III**

11.00–11.30 Refreshment Break

11.30–12.30 **Plenary Sessions VI-VII**
"Longevity as the new asset class"
Guy D. Coughlan, Pacific Global Advisors

"Micro vs. macro longevity indices"
Jeff Mulholland, Société Générale

12.30–13.30 **Final Panel and Conclusion: How to make this new asset class accessible to investors (Chair: Guy D. Coughlan)**

Participants:

- **Klaus Mössle** (Fidelity)
- **Marcus Mecklenburg** (BVI)
- **Axel Gerling** (Commerzbank)
- **Jens Massmann** (Ernst & Young)
- **Jeff Mulholland** (Société Générale)
- **Ivan Zelenko** (World Bank)

13.30–14.30 Farewell Lunch

Breakout Session Plan

Session Overview

		Panel A	Panel B	Panel C	Panel D
	Time\Location	‘DZ Bank’	‘Paris’	‘Commerzbank’	‘Deutsche Bank’
Session I	Thu, 8 Sept, 13:30-15:00h	**Risk Management I**	**Modelling I**	**Households I**	**Pension Plans**
Session II	Thu, 8 Sept 15:30-17:00h	**Risk Management II**	**Modelling II**	**Risk Management III**	**Annuities**
Session III	Fri, 9 Sept 09:00-11:00h	**Modelling III**	**Pricing**	**Households II**	**Modelling IV**

Session Topics

Breakout Session I – A: Risk Management I
(Session Chair: Andrew Cairns)

“Delta and Gamma Hedging of Mortality and Interest Rate Risk”
Elisa Luciano, Luca Regisz, Elena Vigna
(Discussant: M. Martin Boyer)

“Longevity Risk Management in Incomplete Markets using a Least Squares Monte-Carlo Approach”
Lars Stentoft, M. Martin Boyer, Amélie Favaro
(Discussant: Andrew Cairns)

“Robust Hedging of Longevity Risk”
Andrew Cairns
(Discussant: Elisa Luciano)

Breakout Session I – B: Modelling I
(Session Chair: Malene Lamb)

“A Time-Dependent Age-Factor Extension to the Lee-Carter Model for Mortality Reduction Factors”
Ralph Stevens
(Discussant: Yefu Kou)

“Fuzzy formulation of the Lee-Carter model forecasting with age-specific enhancement”
Yefu Kou, Hongjun Li, Ken Seng Tan
(Discussant: Malene Lamb)

“Mortality Forecasting at Advanced Ages: Applying the Lee-Carter Model to an Economic Panel”
Malene Lamb
(Discussant: Ralph Stevens)

Breakout Session I – C: Households I
(Session Chair: M.A. Milevsky)

"Managing Systematic Mortality Risk with Group Self-Pooling and Annuitisation Schemes"
Michael Sherris, Chao Qiao
(Discussant: Ralph Rogalla)

"Life Cycle Portfolio Choice with Stochastic Longevity and Variable Investment-Linked Deferred Annuities"
Ralph Rogalla, Vasily Kartashov, Raimond Maurer, Olivia S. Mitchell
(Discussant: M.A. Milevsky)

"Yaaris LifeCycle Model in the 21st Century: Consumption Under a Stochastic Force of Mortality"
M.A. Milevsky, H. Huang, T.S. Salisbury
(Discussant: Michael Sherris)

Breakout Session I – D: Pension Plans
(Session Chair: Don Yeo)

"Managing Capital Market and Longevity Risks in a Defined Benefit Pension Plan"
Yijia Lin, Samuel H. Cox, Ruilin Tian, Jifeng Yu
(Discussant: Marek Szczepański)

"The Design of Supplementary Pension Schemes in Poland and Longevity Risk: Current Situation and Proposed Changes"
Marek Szczepański
(Discussant: Don Yeo)

"*Mandating Life Annuities in Singapore"*
Don Yeo, Yanying Chen, Daphne M. Wee
(Discussant: Yijia Lin)

Breakout Session II– A: Risk Management II
(Session Chair: Henri Loubergé)

"Using Life Settlements to Hedge the Mortality Risk of the Life Insurers: An Asset-Liability Management Approach"
Jennifer Wang, Ming-Hua Hsieh, Cheng-Hsien Tsai
(Discussant: Nadine Gatzert)

"The Impact of Natural Hedging on a Life Insurer's Risk Situation"
Nadine Gatzert, Hannah Wesker
(Discussant: Henri Loubergé)

"Reinsurance and Securitization: Application to Life Risk Management"
Henri Loubergé, Pauline Barrieu
(Discussant: Jennifer Wang)

Breakout Session II – B: Modelling II
(Session Chair: Patrick Brockett)

"Modelling Mortality Trend Under Modern Solvency Regimes"
Matthias Boerger, Daniel Fleischer, Nikita Kuksin
(Discussant: Daniel H. Alai)

"Rethinking Age-Period-Cohort Mortality Trend Models"
Daniel H. Alai, Michael Sherris
(Discussant: Patrick Brockett)

"Life Settlement Pricing"
Patrick Brockett, Yinglu Deng, Richard D. MacMinn
(Discussant: Matthias Boerger)

Breakout Session II – C: Risk Management III
(Session Chair: Enrico Biffis)

"Bargaining for Over-The-Counter Risk Redistributions: The Case of Longevity Risk"
Tim Boonen, Anja De Waegenaerez, Henk Nord
(Discussant: Colin O'Hare)

"Death and its Determinants"
Colin O'Hare, Declan French
(Discussant: Enrico Biffis)

"Informed Intermediation of Longevity Exposures"
Enrico Biffis, David Blake
(Discussant: Tim Boonen)

Breakout Session II – D: Annuities
(Session Chair: Mark Warshawsky)

"Profit Participation Annuities: A Business Profitability Analysis within a Demographic Risk Sensitive Approach"
Valeria D'Amato, Emilia Di Lorenzo, Albina Orlando, Maria Russolillo, Marilena Sibillo
(Discussant: Andreas Hubener)

"Optimal Purchase of Life and Longevity Risk Insurance Products for Retired Couples"
Andreas Hubener, Raimond Maurer, Ralph Rogalla
(Discussant: Mark Warshawsky)

"The Life Care Annuity: A New Empirical Investigation of an Insurance Innovation"
Mark Warshawsky, Jason Brown
(Discussant: Valeria D'Amato)

Breakout Session III – A: Modelling III

(Session Chair: Cheng-Hsien Tsai)

"A Two-Population Mortality Model with Transitory Jump Effects"

Rui Zhou, Johnny Siu-Hang Liy, Ken Seng Tan

(Discussant: Matthias Boerger)

"Coherent Projections of Age, Period and Coherent Dependent Mortality Improvements"

Matthias Boerger, Marie-Christine Kohler

(Discussant: Chou-Wen Wang)

"Mortality Modelling with Levy Processes: A Cox Process with Leptokurtic Intensity"

Chou-Wen Wang, Hong-Chih Huang, I-Chien Liu

(Discussant: Cheng-Hsien Tsai)

"Modeling the Dynamics of Mortality Rates as Transformations"

Cheng-Hsien Tsai, Fang-Shu Linus Chan, Cary Chi-Liang Tsai

(Discussant: Rui Zhou)

Breakout Session III – B: Pricing

(Session Chair: Hsin Chung Wang)

"Coherent Pricing of Life Settlements under Asymmetric Information"

Nan Zhu, Daniel Bauer

(Discussant: Hua Chen)

"Living with Ambiguity: Pricing Mortality-Linked Securities with Smooth Ambiguity Preferences"

Hua Chen, Michael Sherris, Wenge Zhu

(Discussant: Tzuling Lin)

"Population and Asset Pricing"

Tzuling Lin, Richard MacMinn, Larry Y. Tzeng

(Discussant: Hsing Chung Wang)

"Regular Discount Sequence and Longevity Bond"

Hsin Chung Wang, Jack C. Yue

(Discussant: Nan Zhu)

Breakout Session III – C: Households II
(Session Chair: Anthony Webb)

"Longevity Risk, Subjective Survival Expectations, and Individual Saving Behaviour"
Thomas Post, Katja Hanewald
(Discussant: Jyun-Ji Tien)

"How the Households Adjust their Consumption and Investment Plans under Longevity Risk"
Jyun-Ji Tien
(Discussant: Katja Hanewald)

"Individual Post-Retirement Longevity Risk Management under Systematic Mortality Risk"
Katja Hanewald, John Piggott, Michael Sherris
(Discussant: Anthony Webb)

"How has the Financial Crisis Affected the Incomes of Households Entering and in Retirement?"
Anthony Webb, Richard W. Kopcke
(Discussant: Thomas Post)

Breakout Session III – D: Modelling IV
(Session Chair: Sharon Yang)

"Modelling Dependent Data for Longevity Projections"
Gabriella Piscopo, Valeria D'Amato, Steven Haberman, Maria Russolillo
(Discussant: Jack C. Yue)

"Modelling Mortality for Countries with Small Populations"
Jack C. Yue, Hong-Chih Huang, Hui-Ting Wang
(Discussant: Yahia Salhi)

"Quickest Detection of Changes on the Mortality Index Trend"
Yahia Salhi, Nicole El Karoui, Stéphane Loisel, Christian Mazza
(Discussant: Sharon Yang)

"Panel Co-integration Analysis of Short-run and Long-run Relationship for a Multi-cultural Mortality Index"
Sharon Yang, Jr-Wei Huang
(Discussant: Gabriella Piscopo)