



International Association for the
Study of Insurance Economics

Études et Dossiers

Études et Dossiers No. 317

2nd International Longevity Risk and
Capital Market Solutions Symposium

24 April 2006, Chicago

August 2006

Working Paper Series of
The Geneva Association

© Association Internationale pour l'Etude de l'Economie de l'Assurance

The Geneva Association Working Paper Series “Études et Dossiers” appear at irregular intervals about 10 - 12 times per year. Distribution is limited.

The “Études et Dossiers” are the working paper series of The Geneva Association. These documents present intermediary or final results of conference proceedings, special reports and research done by The Geneva Association. As they contain work in progress or summaries of conference presentations, the material must not be cited without the express consent of the author in question.

Layout & Distribution: Valeria Kozakova

Table of contents

PROGRAMME	0-1
LIST OF SPEAKERS	0-3
LIST OF PARTICIPANTS	0-4
PENSIONS, RISKS AND CAPITAL MARKETS <i>by Adair Turner</i>	1-1
DEMOGRAPHIC ISSUES IN LONGEVITY RISK ANALYSIS <i>by Eric Stallard</i>	2-1
THE POLITICAL ECONOMY OF GOVERNMENT ISSUED LONGEVITY BONDS <i>by Jeffrey R. Brown and Peter R. Orszag</i>	3-1
PRICING LIFE SECURITIZATIONS AND THEIR PLACE IN OPTIMAL ILS PORTFOLIOS <i>by Morton Lane</i>	4-1
SECURITIZATION OF LIFE INSURANCE ASSETS AND LIABILITIES <i>by J. David Cummins</i>	5-1
ANNUITIZATION LESSONS FROM THE UK: MONEY-BACK ANNUITIES AND OTHER DEVELOPMENTS <i>by Tom Boardman</i>	6-1
LONGEVITY BONDS: CONSTRUCTION, VALUATION AND USE <i>by D. Blake, A. J. G Cairns, K. Dowd and R. MacMinn</i>	7-1
LONGEVITY/MORTALITY INDEX TRADING: FROM THEORY TO PRACTICE <i>by W. Dave Dowrich</i>	8-1
KILLING THE LAW OF LARGE NUMBERS: FINANCIAL VALUATION OF MORTALITY RISK VIA THE INSTANTANEOUS SHARPE RATIO <i>by Moshe A. Milevsky</i>	9-1
MULTIVARIATE EXPONENTIAL TILTING AND PRICING IMPLICATIONS FOR MORTALITY SECURITIZATION <i>by Sameul H. Cox, Yijia Lin and Shaun Wang</i>	10-1
A TWO-FACTOR MODEL FOR STOCHASTIC MORTALITY WITH PARAMETER UNCERTAINTY <i>by Andrew Cairns</i>	11-1
<u>GENERAL INFORMATION</u>	
List of past Etudes et Dossiers	12-1
'The Geneva Association'	12-3

2nd International Longevity Risk and Capital Market Solutions Symposium

24 April 2006

Programme

8:00-8:10 **Introductory Remarks**
Richard MacMinn, Illinois State University
Sam Cox, Georgia State University
David Blake, Cass Business School

8:10-8:55 **Pensions, Risks and Capital Markets**
by *Adair Turner*, Merrill Lynch Europe

8:55-9:30 **Demographic Issues in Longevity Risk Analysis**
by *Eric Stallard*, Duke University

9:30-10:00 Coffee break

Session Chair: *Patrick Brockett*, University of Texas

10:00-10:25 **The Political Economy of Government Issued Longevity Bonds**
by *Jeffrey Brown*, University of Illinois

10:25-10:50 **Pricing Life Securitizations and their Place in Optimal ILS Portfolios**
by *Morton Lane*, Lane Financial LLC

10:50-11:15 **Securitization of Life Insurance Assets and Liabilities**
by *J. David Cummins*, Wharton

11:15-12:30 Lunch

Session Chair: *David Blake*, Cass Business School

12:30-12:55 **Annuitization Lessons from the UK: Money-Back Annuities and Other Developments**
by *Tom Boardman*, Prudential UK

12:55-13:20 **Longevity Bonds: Construction, Valuation and Use**
by *Kevin Dowd*, University of Nottingham

13:20-13:45 **Longevity/Mortality Index Trading - from Theory to Practice**
by *Dave Dowrich*, CSFB

13:45-14:15 Coffee break

Session Chair: *Tony Webb*, Boston College

14:15-14:40 **Killing the Law of Large Numbers: Financial Valuation of Mortality Risk Via the Instantaneous Sharpe Ratio**
by *Moshe Milevsky*, York University

14:40-15:05 **Multivariate Exponential Tilting and Pricing Implications for Mortality Securitization**
by *Yijia Lin*, Georgia State University

15:05-15:30 **A Two-Factor Model for Stochastic Mortality with Parameter Uncertainty**
by *Andrew Cairns*, Heriot-Watt University

15:30-16:00 Coffee break

Chair: *Adair Turner*, Merrill Lynch Europe

16:00-17:00 **Roundtable Discussion**
Discussants:
Nirmaljit Singh Paul, World Bank
Jeff Katz, MARC
Tom Boardman, Prudential UK

17:00-18:00 Reception

List of speakers

Blake , David Cass Business School	Boardman , Tom Prudential UK
Brockett , Patrick University of Texas	Brown , Jeffrey University of Illinois
Cairns , Andrew Heriot-Watt University	Cox , Sam Georgia State University
Cummins , J. David Wharton School	Dowd , Kevin University of Nottingham
Dowrich , Dave CSFB	Katz , Jeff MARC
Lane , Morton Lane Financial LLC	Lin , Yijia Georgia State University
MacMinn , Richard Illinois State University	Milevsky , Moshe York University
Paul , Nirmaljit World Bank	Stallard , Eric Duke University
Turner , Adair Merrill Lynch Europe	Webb , Tony Boston College

List of participants

Afambo, Edoh	Balevich, Igor
Bauer, Daniel	Blancher, Nicolas
Bouriaux, Sylvie	Boyer, Martin
Brockett, Patrick	Chen, Yung-Ping
Ciampa, Paul	Coughlan, Guy
Cox, Samuel	Dasgupta, Partha
Garnsworthy, Charles	Hall, Dale
Hattori, Paul	Hermes, Sharon
Hickman, James C	Imbarrato, Mario
Ivanovic, Brian	Jurin, Bruce
Karmarkar, Neel	Kiffel, Edward
Klymchuk, Taras	Ko, Bangwon
Kwon, Hyuk-Sung	Li, Siu Hang
Linz, Heinrich	Mangini, Leonard
Morule, Karabo	Munger, MaryAnn
Ng, Andrew C Y	Ong, Alen
Ostaszewski, Krzysztof	Perez, Maria
Russell, Tom	Schreiner, John
Sharma, Vinaya	Shin, Kee Chul
Tzeng, Larry Yu-Ren	Webb, Anthony
Weber, Frederik	Winkler, Michael
Zeldes, Stephen	Zlogar, Albert