# **About the Speakers**

## Mark Azzopardi

Mark Azzopardi is Head Of Insurance & Pensions at BNP Paribas. The Insurance & Pensions team comprises and number of actuaries, bankers and accounting and regulation experts who design and market products aimed at helping insurance companies and pension funds manage their economic and regulatory capital. Mark graduated in Mathematics from Cambridge University in 1988, and qualified as a fellow of The Institute Of Actuaries in 1991.

#### **Professor David Blake**

Dr David Blake is Professor of Pension Economics and Director of the Pensions Institute at Cass Business School, City of London, and Chairman of Square Mile Consultants, a training and research consultancy. Formerly Director of the Securities Industry Programme at City University Business School, Research Fellow at both the London Business School and the London School of Economics and Professor of Financial Economics at Birkbeck College, University of London. Consultant to many organisations, including Merrill Lynch, Deutsche Bank, Union Bank of Switzerland, Paribas Capital Markets, McKinsey & Co., Financial Research Services Ltd, James Capel, Schroders, UNESCO, Taunton Cider Company, Hill and Knowlton, the Independent Television Companies Association, the Office of Fair Trading, the Office for National Statistics, the National Audit Office, the Government Actuary's Department and the World Bank.

David Blake was a student at the London School of Economics in the 1970s and early 1980s, gaining his PhD on UK pension fund investment behaviour in 1986. His research interests include the modelling of asset demands and financial innovations, the investment behaviour and performance of pension funds and mutual funds, and pension plan design. He has published in major economics and finance journals in all these fields. He is author of *Financial Market Analysis* published by Wiley in 2000, *A Short Course of Economics* published by McGraw Hill in 1993, *Modelling Pension Fund Investment Behaviour* and *Issues in Pension Funding* both published by Routledge in 1992, and *Pension Schemes and Pension Funds in the United Kingdom* published by Oxford University Press in 2003.

In June 1996, he established the Pensions Institute at Birkbeck College. The Pensions Institute undertakes high quality research on all pension-related issues and publishes details of its research activities on the internet (<a href="http://www.pensions-institute.org">http://www.pensions-institute.org</a>). He regularly speaks at international conferences on pensions and pension funds in the UK, Europe, the Far East, Australia and the Americas.

# **Tom Boardman**

Prudential is one of the UK's best known financial services groups, with a significant market presence in the USA and Asia. In his current role Tom is responsible for developing the strategic policy positioning of Prudential UK, focusing in particular on the development of long-term savings products.

Tom spent his early career with Prudential in a variety of management roles including Operations Director for Corporate and Individual pensions.

In the mid-1990s Tom left Prudential to set up and run Nationwide Building Society's Bancassurance operation, remaining involved as a non-executive director of the Life and Unit Trust companies until 2004.

In the late 1990s Tom worked as an independent consultant. He led the *Mellisa* US study tour to research the 401K market ahead of the launch of UK Stakeholder pensions. This project included representatives of the UK government, industry bodies and insurance and fund management companies.

He is the co-author of the prize winning "Reinventing annuities" paper presented to the Staple Inn Actuarial Society in January 2001 and was a member of the Actuarial Review of Retirement Income Working Party.

Tom rejoined Prudential in 2001 as Managing Director of Prudential Annuities and Prudential Retirement Income which are market leaders in the UK, writing individual and bulk annuity business in excess of £2Bn in 2003.

#### **Professor Andrew Cairns**

Andrew Cairns is Professor of Financial Mathematics and head of department in the Department of Actuarial Mathematics and Statistics at Heriot-Watt University. He is currently visiting the Isaac Newton Institute, Cambridge. His research interests include asset-liability modelling for pension plans and modelling and analysis of mortality-linked securities. He recently authored the textbook "Interest Rate Models: An Introduction" published by Princeton University Press and has developed a flexible new family of interest-rate models designed specifically to tackle problems involving long-term risk management and pricing of long-term interest-rate derivatives. He has been an editor of the international actuarial journal ASTIN Bulletin since 1996.

# **Simon Carne**

Twenty years after qualifying as an actuary, Simon Carne works as a consultant and commentator on the interaction of economics and finance with regulatory issues. Last year he wrote, *Being Actuarial with the Truth*. He has been a regular guest columnist for the Financial Times on finance and regulation. He is a council member of the Institute of Actuaries, [currently focussing on the profession's regulatory affairs and the Morris Review commissioned by the Government last year]. He has also been a Visiting Lecturer at City University, Department of Economics, on the MSc in Economic Regulation and Competition.

#### **Professor Samuel H Cox**

Dr. Samuel H. Cox is a tenured full professor and Thomas P. Bowles, Jr. Chairholder in Actuarial Science at Georgia State University. Dr. Cox has taught actuarial science, risk management and insurance, and mathematical risk management at GSU since 1994. He is co-author of textbooks in financial economics, life insurance mathematics, and finance. His papers have been published in top ranking actuarial science, mathematics, and risk management and insurance journals. Dr. Cox helped create the *North American Actuarial Journal* and served as its first editor. He has held several leadership positions in the actuarial profession, including a three-year term on the Board of Governors of the Society of Actuaries (2001 – 2003). Dr. Cox served as a consultant in 2000 – 2001 to DFA Capital Management Company, helping develop mortgage-backed security and foreign exchange rate models. In 2002 he served as a consultant to Allianz Financial & Insurance Services, helping with credit derivatives models. He has taught seminars and short courses on actuarial and financial mathematics in Poland, China, Russia, Colombia, Switzerland, and Chile. The sponsors included the Society of Actuaries, the Institute of Actuaries, the Swiss Association of Actuaries, the Government of Canada, and ASTIN.

Dr. Cox is a Fellow of the Society of Actuaries (1980), a Member of the American Academy of Actuaries (1980), a Chartered Property and Casualty Underwriter (1996), a CFA charterholder since 2003, and a Corresponding Member of the Swiss Association of Actuaries (1995, honorary member since 2002).

### **Eugene Dimitriou**

Eugene is a Vice President in Morgan Stanley's Global Capital Markets. His primary focus is the coverage of UK life assurers and in the structuring of fixed income and equity derivatives as risk management solutions.

Heavily involved in risk management of annuity books including creation of a risk transfer structure to allow life assurers to pass longevity risk into the capital markets.

Eugene is a qualified actuary. Prior to joining Morgan Stanley he spent 7 years working in traditional actuarial roles, mostly at Mercers.

## **Professor Kevin Dowd**

Kevin Dowd is professor of financial risk management at Nottingham University Business School, where he works within the Centre for Risk and Insurance Studies. His research interests cover

monetary and financial economics and public policy, as well as financial risk management. He is also particularly interested in longer-term insurance and pensions risks, and is currently working on an ESRC-funded project on risk measurement in UK financial institutions.

#### Mark Duke

Mark Duke is a principal and leader of Towers Perrin's pensions actuarial practice in the UK. He joined the company in 1986.

He advises employers on all aspects of the design and management of their pension arrangements. He has developed particular expertise in the way pension costs are recognised in company accounts, the way pension issues are handled when businesses or companies are bought and sold and the application of good governance practices to pension schemes. In addition, he is currently working with companies to help them integrate the management of their benefit plans with their overall management of business risk, in particular, focusing on the impact of the company pension plan on shareholder value. Mark has an Honours degree in Statistics and is a Fellow of the Institute of Actuaries. He is a regular contributor of articles to magazines and the press.

#### **Francis Fernandes**

Head of Actuarial, Financial Markets Advisory Francis is Head of Actuarial for the bank's new Life & Pensions team within Financial Markets Advisory. Francis is involved in providing advice on solutions to pension issues for trustees and corporate sponsors.

Prior to joining ABN, Francis was a partner with pension actuaries Lane Clark & Peacock. He is a regular commentator on pensions issues in the media, has written widely on pensions and has presented at many conferences in the UK as well as in the Netherlands, Malaysia and Egypt. He qualified as an actuary at Watson Wyatt, lectured for three years at City University London in financial risk management and pensions and serves on a number of the UK actuarial profession's committees.

In his spare time, Francis studies Classical Guitar part-time at the Guildhall School of Music & Drama.

#### **Adrian Gallop**

Adrian is an actuary in the Government Actuary's Department of the United Kingdom. He is a member of the team which produces the national population projections for the UK and constituent countries and has particular responsibility for demographic matters relating to mortality. Other areas of responsibility include providing advice to other government departments on pensions.

## **Professor Steven Haberman**

Steven is Professor of Actuarial Science and the Deputy Dean of Cass Business School, City University. He graduated in mathematics from the University of Cambridge, qualifying as a Fellow of the Institute of Actuaries in 1975, and obtained his PhD and DSc in actuarial science from City University. He has worked at Prudential Assurance and for the Government Actuary's Department, and has been a member of the Council of the Institute of Actuaries. He has written over 125 papers on a wide range of topics, including mortality and morbidity models, annuities, insurance pricing and pension mathematics. His papers have won research prizes from the Institute of Actuaries and the Society of Actuaries (US). He is co-author of four books, including most recently for CRC Press: the second edition of 'Modern Actuarial Theory and Practice' and 'Actuarial Models for Disability Insurance'. He is one of the Founding Editors of the Journal of Pension, Economics and Finance.

## **Farooq Hanif**

Farooq is a Senior Equity Analyst at Lehman Brothers, specialising in the UK insurance sector. Farooq is a Fellow of the Institute of Actuaries and graduated from Magdalen College, Oxford University with a BA (Hons) in Chemistry. Farooq started his working career at William M Mercer, as an actuarial trainee advising company pension schemes on liability and investment issues. Before moving to his current role Farooq also worked for Egg plc and HSBC Investment Bank."

## **Chris Hatry**

Chris's responsibilities include advising on matching, risk management and regulatory issues on Legal & General's internal annuity matching portfolios (over £10bn of assets). He also responsible for the design of liability matching products for pension clients.

After qualifying as an actuary, Chris has had a wide range of experience in Legal & General, including IT, Pensions, Investment Management and International he took up his current role in July 2003. He has a doctorate in theoretical physics.

## **Andrew Hughes**

Andrew is an actuary with over 11 years of experience within the UK Life Insurance industry. In 1993, he started work with Provident Mutual (now part of the AVIVA group) in his seven years at the AVIVA group he performed a variety of actuarial roles. In 2000, he joined Munich Re UK Life Branch working on financial reinsurance and capital market solutions for cedants. He has been working for Standard and Poor's since September 2004, where he is responsible for Life Securitisation in Europe as well as being primary analyst for a small number of large European Life companies.

#### Michael Johnson

Michael Johnson is a Consultant with Towers Perrin in the London office of Tillinghast. He has more than 20 years of capital markets experience, most recently as a Director at HSBC where he was responsible for origination and structuring of securitisations across a wide range of conventional and alternative asset classes including private equity, hedge funds and venture debt, utilising a variety of risk transfer and funding tools. This included the development and implementation of the first master trust securitisation vehicle for corporate loans.

Prior to that he combined capital markets and treasury skills to create and market 'differentiating' products, notably credit derivatives, structured notes and general liability indexation. This followed seven years in Latin American investment banking, focused on debt trading and arbitrage of domestic fixed income instruments.

Michael trained with JP Morgan in the US, then worked in credit analysis and fixed income sales and trading.

He holds a bachelor's in engineering from Durham University, sponsored by the UK's Ministry of Defence.

## **Gavin Jones**

Gavin is a Strategy Research Actuary at Swiss Re, where he focuses on mortality risks undertaken by the reinsurer's Life & Health Business Group. Prior to joining Swiss Re in November 2004, he worked as Mortality Risk Actuary at Prudential UK where, writing in a personal capacity, he co-authored 'Financial Aspects of Longevity Risk' with Stephen Richards. Gavin Jones has a PhD in mathematics from Cambridge University and is a Fellow of the Institute of Actuaries.

## **Ronald Klein**

Ronald Klein gained a Bachelor of Science (BS) in Mathematics and Computer Science from the State University of New York at Binghamton in 1980 and qualified as a Fellow of the US Society of Actuaries in 1987 and as a Member of the American Academy of Actuaries in 1984.

Ronald joined The Mutual Life Insurance Company of New York (now Axa) in 1980 and held various positions during a 12 year tenure including pricing and financial actuary for the Individual Disability Income department, actuary for the Agent Compensation department and actuary for the Reinsurance department. He joined Life Re in 1992 as Pricing and Marketing Actuary and became Chief Pricing Officer of North America upon the purchase of Life Re by Swiss Re in 1998.

In 2002 he was made Chief Pricing Officer for the Life & Health Business Group and was situated in London. This involved developing global pricing guidelines, determining if risk management guidelines were adhered to in pricing, developing risk mitigation initiatives for the business group, providing support in developing business opportunities around the world and assisting in sharing knowledge between local business offices. In 2004, Ronald moved back to the US to head sales and marketing for Swiss Re Life & Health North America. With a staff of 25, he is responsible for all individual and group life and health sales in the US, Canada and the Caribbean. In addition, Ronald is

responsible for marketing activities including strategic planning, client events, brochures and communications content.

## Professor Richard D. MacMinn

Professor Richard D. MacMinn, BA, MA, PhD, is the first holder of the Edmondson-Miller Chair in Insurance and Financial Services at Illinois State University and was previously the first holder of the Swiss Re Chair in the Management of Risk at the University of Nottingham. He is the editor of the Journal of Risk and Insurance, the lead journal in the world on insurance and risk management, published by the American Risk and Insurance Association. He is also an associate editor for the Asia-Pacific Journal of Risk and Insurance, the Journal of Insurance Issues and the Quarterly Journal of Economics and Finance. Professor MacMinn served as a board member of the Asia-Pacific Risk and Insurance Association from 2000-2003, is currently a board member for the American Risk and Insurance Association and is a member of the American Risk and Insurance Association, Asia-Pacific Risk and Insurance Association, European Group of Risk and Insurance Economists, Southern Risk and Insurance Association, Western Risk and Insurance Association, American Economic Association and American Finance Association. He has published in journals including the Journal of Risk and Insurance, Insurance: Mathematics and Economics, Geneva Papers, Journal of Political Economy, Quarterly Journal of Economics, and Journal of Finance. He has thrice won the prestigious Mehr Award in addition to a number of other awards from the American Risk and Insurance Association, Casualty Actuarial Society, and General Insurance Research Organization in the United Kingdom for his publications.

#### **Arnaud Marès**

Arnaud Marès has been Head of Portfolio Strategy at the United Kingdom Debt Management Office (DMO) since July 2004. Prior to joining the DMO, Arnaud has been a senior economist at the European Central Bank (from 1999 to 2004) and before that has held various positions in the capital markets department of Banque Indosuez and Crédit Agricole Indosuez, in Paris and London. Arnaud is a French citizen and is 37.

The DMO was established as an executive agency of HM Treasury in April 1998 to carry out Government debt management (issuing gilts and managing the gilts market) and cash management (balancing the Government's daily cash needs by issuing Treasury Bills and conducting other transactions in the sterling money markets). The DMO is legally and constitutionally part of HM Treasury, but as an executive agency, it operates at arm's length from Ministers.

# **Terry Raby**

USS is one of the largest UK pension schemes with about £20 billion under management. It provides what is in many respects a cutting edge pensions environment – for example, in responsible investment, trusteeship and pensions software.

Terry has held senior positions in financial services internal audit for about 20 years, specialising in pension schemes during the last 10 years.

In his professional activities, Terry is a director of the Pensions Research Accountants Group, a body of professionals working in the pensions field which provides guidance on many aspects of the operation of pensions schemes. PRAG is part of the UK accounting standards process through writing Statements Of Recommend Practice for pension schemes accounts. Terry was formerly chairman of PRAG's internal audit and Turnbull working parties.

He is a regular contributor to other industry working parties and conferences on topics such as trustee training, responsible investment and operational risk in pension schemes.

Terry is a certified practising accountant (ASCPA) qualified in mathematics, computing science, accounting and philosophy.

## **Philip Roberts**

Phil Roberts is a consultant with the Tillinghast business of Towers Perrin, based in London and is currently leading Tillinghast's research activities on with-profits business.

He joined Tillinghast in 1994 following three years at the Equitable Life Assurance Society.

Phil has been involved in a wide variety of assignments which have included the demutalisations of Old Mutual and Scottish Life, and more recently assisting companies with their realistic balance sheet submissions and establishing their ICA.

Phil has a wide experience of both UK and international actuarial issues having also worked in Australia, South Africa and Norway.

Phil has a First Class BSc (Hons) in Physics from Manchester University, a Diploma in Actuarial Science from City University and is a Fellow of the Institute of Actuaries.

## **Jeff Sayers**

Jeff Sayers is an actuary at Morgan Stanley, responsible for the UK Insurance sector. His role focuses on the capital, risk and ALM dialogue across CFO, actuarial and CIO functions. Jeff has executed transactions including capital raising, securitisation, credit risk mitigation, and other highly structured risk management and derivative strategies for UK insurers. In particular, Jeff was responsible for Norwich Union's ERF4 transaction last year, which transferred, inter alia, the longevity risk embedded in equity release mortgages into the capital markets.

# **Shaun Wang**

Shaun is the director of actuarial science programs in the Department of Risk Management and Insurance at Georgia State University's Robinson College of Business and holder of the Robert W. Batten Chair of Actuarial Science. He is an internationally renowned expert on the quantification and measurement of risk and a leading actuarial scholar in enterprise risk management. He holds memberships in the American Academy of Actuaries and the American Risk and Insurance Association.

As an active researcher, Dr. Wang has published extensively on the topics of risk measurement, correlation modeling, and the pricing of risk, in such leading journals as the ASTIN Bulletin, the Journal of Risk and Insurance, The North American Actuarial Journal, and Insurance: Mathematics and Economics. He also serves or has served in the past on the editorial boards of many of these publications.

Prior to joining the Georgia State faculty, he was assistant vice president and group research director at SCOR\*a global reinsurance company. While at SCOR, Dr. Wang developed a universal pricing formula\*now commonly known as the Wang transform\*for insurance risks, credit risks, and weather derivatives. He extended the Wang transform to analyze catastrophe bond transactions, corporate bond yield spreads, and applied the new 2-factor model to the pricing of aggregate stop-loss reinsurance and catastrophe reinsurance.

Dr. Wang is an experienced educator, with visiting professor appointments at the University of Copenhagen in Denmark, as well as at Nankai University and Peking University, two of China's leading academic institutions. He has also held permanent teaching positions at the University of Waterloo and Concordia University in Canada. He holds an undergraduate degree in mathematics from China's Beijing University and a doctoral degree in statistics from the University of Waterloo.