INSURANCE RISK RESEARCH CONFERENCE

Goodwood Park Hotel, 22 Scotts Road, Singapore 228221 Thursday, 27 June 2013

With Asia experiencing rapid growth and changing dynamics, the insurance industry will be faced with significant increases in demand and capital requirements. The fast pace of change, and the growing complexity and interconnectedness of financial and economic systems, make it vital for critical understanding of risk to increase in support of the economic stability of the region.

This conference tackles the important area of insurance and related risk in the Asia Pacific region and presents an opportunity for dialogue with leading experts on important issues.

Keynote Speakers:

Michel M. Dacorogna,

Group Deputy Chief Risk Officer, SCOR

Greg Taylor,

Actuary, Taylor Fry Consulting Actuaries

Conference rates and registration

Public SGD200 SAS members and students SGD100

For general enquiries, please email Valerie De Souza at d-irfrc@ntu.edu.sg or visit www.irfrc.com

Please click here to register.







CONFERENCE PROGRAMME

Goodwood Park Hotel, 22 Scotts Road, Singapore 228221 Thursday, 27 June 2013

Registration from 8.15 am

9.00 - 10.45 - Session 1 Chair - Michel Dacorogna, SCOR, Switzerland

9.00 Opening remarks

Ravi Kumar, Shaw Chair Professor and Dean, Nanyang Business School, Nanyang Technological University Jill Hoffman, President, Singapore Actuarial Society

9.30 ERM in an optimal control framework

Greg Taylor, Taylor Fry Consulting Actuaries, Australia

10.15 Can expert knowledge compensate for data scarcity in crop insurance pricing? Zhiwei Shen, Humboldt-Universität zu Berlin, Germany

10.45

*** Tea Break **

11.15 - 12.15 - Session 2 Chair - Paul Embrechts, ETH Zurich, Switzerland

11.15 There is a VaR beyond usual approximations

Marie Kratz, ESSEC Business School Paris-Singapore

11.45 The marginal cost of risk, risk measures, and capital allocation George Zanjani, Georgia State University, USA

12.15

*** Lunch ***

14.00 - 15.00 - Session 3 Chair - Greg Taylor, Taylor Fry Consulting Actuaries, Australia

14.00 Mortality Indexes: Construction, modeling, and applications
Jackie Li, Nanyang Technological University, Singapore

14.30 Cultural influence on insurance consumption: An analysis of the Chinese insurance market Zhenzhen (Tina) Sun, Siena College, New York, USA

15.00

*** Tea Break ***

15.30 - 16.45 - Session 4 Chair - Wai-Sum Chan, The Chinese University of Hong Kong

15.30 Consistency analysis of risk benchmarking vs. solvency capital requirement - Experiences from China's P&C insurance industry

Zhigang Xie, Shanghai University of Finance & Economics, China

16.00 Adding time diversification to risk diversification, the case for equalization reserves for natural catastrophes

Michel M Dacorogna, SCOR, Switzerland

17.00 End

Financial Training Scheme Grants

The Monetary Authority of Singapore (MAS) administers Financial Training Scheme (FTS) grants to financial sector organisations that sponsor eligible Singapore based participants to training programmes that meet qualifying criteria. For more details, please visit www.mas.gov.sg, or contact the MAS via fsdf@mas.gov.sg.

Hotel registration

For hotel room reservation please contact Goodwood Park Reservations team at Tel <u>+65-67301811</u> or email <u>rmresv@goodwoodparkhotel.com</u>. Preferential deluxe single room rate of SGD295++ per room per night, inclusive of breakfast and internet access. Please state the conference name when booking. Rooms are subject to availability.

SPEAKERS

Wai-Sum Chan

CUHK Business School, Hong Kong

Director, Insurance, Financial & Actuarial Analysis Program

Michel M Dacorogna SCOR, Switzerland

Group Deputy Chief Risk Officer

Wai-Sum Chan is a fellow of the Royal Statistical Society, U.K., and a Fellow of the Society of Actuaries. He is a Chartered Statistician, U.K., and a Chartered Enterprise Risk Analyst, US. Areas of research focus include the modeling of actuarial assumptions, law & actuarial science, financial econometrics and clinical statistics. He holds the 2006 Edward A. Lew Research Award (Second Prize), the Committee on Knowledge Extension Research (CKER) of the Society of Actuaries, USA.

Michel Dacorogna is scientific advisor of SCOR. He conducts research in the field of insurance mathematics, capital management and risks. He is also involved in presenting to management and to customers SCOR models and capital management techniques. Member of the board of the SCOR Science Foundation and of the joint Research Center on Insurance Risk with the Nanyang Technological University of Singapore, he makes sure that SCOR sponsorship is well put in use and known in the academic world and recognized by the industry. The author and co-author of more than 70 publications in refereed scientific journals, he is often invited to present his results in international conferences and specialized seminars. His work is referenced in many publications. One of the papers he co-authored was the most quoted paper over 5 years in the Journal of Banking and Finance. He received his Habilitation, Ph. D. and M. Sc. in Theoretical Physics from the University of Geneva in Switzerland and did a post-doc at the University of California in Berkeley.

Paul Embrechts

ETH Zurich, Switzerland

Professor of Mathematics Paul Embrechts is Professor of Mathematics at the ETH Zurich, Switzerland, specialising in actuarial/financial mathematics and quantitative risk management, areas in which he has published extensively. Previous academic positions include the Universities of Leuven, Limburg and London (Imperial College). He has held visiting professorships, among others, at Paris 1 – La Sorbonne, ESSEC Paris, the Scuola Normale in Pisa (Cattedra Galileiana), the London School of Economics (Centennial Professor of Finance) and has an Honorary Doctorate from the University of Waterloo, Heriot-Watt University, Edinburgh, and Université Catholique de Louvain. He is an Elected Fellow of the Institute of Mathematical Statistics, Honorary Fellow of the Institute and the Faculty of Actuaries and the Royal Association of Belgian Actuaries.

Jill Hoffman

The Singapore Actuarial Society

President

Jill Hoffman is a graduate of the University of Waterloo, Canada with a Bachelor of Mathematics. She received her Fellowship into the Society of Actuaries and the Canadian Institute of Actuaries in 2001. She started her career in Canada working for several large insurance companies before moving into individual life consulting. After working with a prestigious consulting firm for several years, she moved to The Bahamas, to work for a local life insurer as the Resident Actuary. She moved to Singapore in 2007, working for Munich Re as a Business Development Actuary. In 2010, she became the Head of Pricing and is also the Deputy Managing Director. After serving as Honorary Secretary of the Singapore Actuarial Society for two years, she was elected as President in March 2010.

Marie Kratz

ESSEC Business School Paris-Singapore

Director of the Research Centre on Risk-CREAR

Ravi Kumar

Nanyang Business School, Nanyang Technological University, Singapore

Shaw Chair Professor and Dean

Marie Kratz is professor of mathematics at ESSEC Business School. Her research fields are applied probability, with a focus on extreme values, risk analysis and Gaussian processes. These fields find natural applications in Finance and Actuarial Sciences, which are the focus of the Research Center she manages: CREAR- Center of Research in Econo-finance and Actuarial Sciences on Risk- at ESSEC. The projects within CREAR are done in collaboration with the insurance industry and international academic partners. She holds a PhD and Habilitation in Applied Mathematics (UPMC, Paris 6) and was a visiting scholar at the Center for Stochastic Processes, Chapel Hill, North Carolina and Cornell University.

Ravi Kumar, Dean of the Nanyang Business School at Nanyang Technological University (NTU), studies global operations, with an emphasis on improving performance through cellular design and integrated decision-making. He has published in Management Science, Marketing Science, Journal of Economic Theory, Production and Operations Management, and Journal of Management Information Systems, and serves as senior editor for Production and Operations Management. He won several awards for teaching excellence at the University of Illinois and received Marshall's Golden Apple Award. He has consulted with Rolls Royce, BMW, Motorola, and Reuters, among others. He was on the faculty at USC Marshall School of Business from 1987 to 2013 and dean of the College of Business at Korea Advanced Institute of Science and Technology from 2009 to 2011.

SPEAKERS

Jackie Li

Nanyang Business School, Nanyang Technological University, Singapore

Assistant Professor

Jackie Li is an Assistant Professor in the Division of Banking and Finance at Nanyang Business School (NBS). He is a Fellow of the Institute of Actuaries of Australia (FIAA), and he obtained his PhD degree in Actuarial Studies from the University of Melbourne. His main research areas are stochastic loss reserving for property and casualty insurance, and mortality projection methodologies. Before joining Nanyang Business School, Jackie worked as an actuary in the areas of general insurance as well as pension consulting.

Zhiwei Shen

Humboldt-Universität zu Berlin, Germany Zhiwei Shen started as a research assistant and a doctoral candidate in the Department of Agricultural Economics at Humboldt-Universität zu Berlin in 2009. Currently, he is also a member of the Collaborative Research Center (CRC) 649 on Economic Risk. Areas of his research focus include rural development, climate risk management and agricultural insurance, especially index-based insurance. Recent projects are:

- Coping with Systemic Risk in Index-based Crop Insurance. Zhiwei Shen, Martin Odening. Agricultural Economics.
- Can expert knowledge compensate for data scarcity in crop insurance pricing? Zhiwei Shen, Martin Odening, and Ostap Okhrin, submitted to American Journal of Agricultural Economics.
- Optimal Design of Multiyear Crop Insurance Contracts. Zhiwei Shen, Maria Osipenko and Martin Odening, in progress.

Zhenzhen (Tina) Sun Siena College, New York, USA

Assistant Professor of Finance

Greg Taylor

Taylor Fry Consulting Actuaries, Australia

Actuary

Tina Sun is currently an assistant professor of Finance at the School of Business, Siena College. Her research interests include risk management, investment management, bond valuation and corporate finance. She has published her work in journals including Financial Review, European Journal of Finance, Journal of Accounting and Finance, Applied Economics among others. She teaches managerial finance and advanced investment courses at the undergraduate level. She received her Ph.D. in finance from the University of Rhode Island in 2010.

Greg Taylor is a co-founder of Taylor Fry Consulting Actuaries, a mid-range Australian consultancy with national coverage. He has worked as a consultant for 34 of the past 36 years. Prior to that he was Associate Professor of Actuarial Studies at Macquarie University in Sydney. He holds a Bachelors degree in Mathematics and Physics, a doctorate in Actuarial Mathematics and a doctorate in Theoretical Physics. He is a Fellow of the Institute and Faculty of Actuaries (UK), Fellow of the Institute of Actuaries of Australia, Fellow of the Institute of Mathematics and its Applications, and a corresponding member of the Association of Swiss Actuaries. He maintains an active research career in parallel with his consulting, and has been awarded a Gold Medal by the Institute of Actuaries of Australia, a Silver Medal by the Institute and Faculty of Actuaries, and the Order of Australia by the Australian Government for his collective works.

Zhigang Xie

Shanghai University of Finance & Economics, China

Professor, Insurance & Actuarial studies

Zhigang Xie is professor of insurance & actuarial studies at Shanghai University of Finance & Economics (SUFE). He joined SUFE in 1996 after receiving a PhD at The University of Leeds, UK. Since 1997 he has been the program chair of the actuarial studies at SUFE. His main research interest is insurers' risk management, reserve and solvency assessment and regulation, particularly for P&C insurers. He maintains active involvement in projects of the China Insurance Regulatory Commission for the designation of the risk-oriented regime of solvency supervision. Since 1997, he has regularly taken part in activities in promoting the actuarial profession in China, particularly in building the Chinese actuarial education and examination system. He has been the editor for The Actuarial Communications, Journal of Actuarial Committee of Shanghai Insurance Institute, which is the sole actuarial journal in China and has significant influence over the development of Chinese actuarial education, research and profession. He is a fellow and board member of the China Association of Actuaries (CAA), and is also one of the board members of China Insurance Institute and in the editing committee for The Insurance Studies.

George Zanjani,

Georgia State University, USA

AAMGA Distinguished Chair in Risk Management and Insurance George Zanjani is an associate professor in the Risk Management and Insurance Department of Georgia State University. He is also the inaugural holder of the American Association of Managing General Agents (AAMGA) Chair in Risk Management and Insurance. His published work includes insurance papers in the *Journal of Financial Economics, Journal of Public Economics, Journal of Risk and Insurance* and the *American Economic Review*. Prior to joining the department, he served as an economist at the Federal Reserve Bank of New York (2000-2008) specializing in policy work relating to insurance issues in the broader financial system. He also worked as an actuary at Fireman's Fund Insurance Companies (1990-1994), focusing on commercial insurance pricing and heading the firm's workers' compensation actuarial unit in 1994. He has served on working groups formed by the Committee on the Global Financial System and the Presidential Working Group on Financial Markets. He is an associate of the Casualty Actuarial Society and holds a Ph.D. in Economics from the University of Chicago. He has served as president of the American Risk and Insurance Association (2012-2013) and president of the Risk Theory Society (2011-2012).