Actuaries' Club of Boston

Spring CPD Series 2022

5/16/2022 - 5/20/2022 at 11AM ET



| Date | Time | Session/Presenter(s) | | |
|-----------|--------------|--|--|--|
| Monday | 11AM-12PM | Climate Risks and Opportunities for Insurers | | |
| 5/16/22 | | Louis Xisuo Liu, PhD, CFA, ASA, MAAA, Wellington Management | | |
| | | Tim P. Antonelli, CFA, FRM, SCR, Wellington Management | | |
| Tuesday | 11AM-12:30PM | ASOP #11: Treatment of Reinsurance in Financial Reports | | |
| 5/17/22 | | (Professionalism) | | |
| | | Annette V. James, FSA, MAAA, FCA, NovaRest Actuarial Consulting | | |
| | | Leonard Mangini, FSA, MAAA, FRM, Mangini Actuarial and Risk Advisory LLC | | |
| | | Jeremy Starr, FSA, MAAA, Jeremy Starr Consulting LLC | | |
| Wednesday | 11AM-12PM | Pension Risk Transfer ("PRT") 101 | | |
| 5/18/22 | | Rob Forte, FSA, MAAA, Oliver Wyman | | |
| | | Tyler Keenan, FSA, MAAA, CERA, Oliver Wyman | | |
| | | Sydney Rubert, FSA, MassMutual | | |
| Thursday | 11AM-12PM | Panel Discussion: Impact of 7702 Interest Rate Changes on Life Insurance | | |
| 5/19/22 | | Products | | |
| | | Neil Drzewiecki, MassMutual | | |
| | | Andrew Champi, Penn Mutual | | |
| | | Kim Curley, FSA, MAAA, Protective Life | | |
| Friday | 11AM-12PM | VM-20 Updates and Hot Topics | | |
| 5/20/22 | | Simon Gervais, ASA, Oliver Wyman | | |
| | | Catherine Murphy, FSA, MAAA, FCIA, John Hancock | | |

Detailed session descriptions and speaker profiles on following pages.

| Pre | sident: | Vice President: | Secretary: | Treasurer: | MAML Liaison: |
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| Caitli | n Hassey | Daniel Thomas | Erika Dochney | Erica Masciadrelli | Daniel Richards |

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Monday 5/16/22 11AM-12PM

Climate Risks and Opportunities for Insurers

Louis Xisuo Liu, PhD, CFA, ASA, MAAA, *Wellington Management* Tim P. Antonelli, CFA, FRM, SCR, *Wellington Management*

Session Description: Integrating both climate risks and opportunities into an insurers strategic plan will require significant shifts in traditional business practices such as strategic asset allocation and enterprise risk management. In this session we will explore what climate science predicts in the years to come and how that may impact an insurer's business model, and will provide a roadmap for how you can address the challenges in product design and pricing assumptions, particularly for long dated products.

Louis Xisuo Liu: As a quantitative strategist, Louis works on strategic asset allocation, customized benchmark construction, and other specialized risk management, ALM, and portfolio construction and management topics for insurance, pension, and other liability-driven mandates. He heads the research and development of our proprietary Liquidity Evaluation Framework (LiEFTM), the security-level liquidity scoring system and the SEC NPORT reporting tool. He is a member of the investment science department and a founding member of our Liability-Driven Investing (LDI) Team.

Prior to joining Wellington Management in 1996, Louis was an assistant vice president of Lincoln Investment Management Inc. and worked in quantitative research, MBS portfolio management, and global bond portfolio management (1993 – 1996). He was also an instructor of mathematics and statistics at Wayne State University (1989 – 1993), and an assistant research professor at the Institute of Applied Mathematics of the Chinese Academy of Sciences (1985 – 1988).

Louis holds both a PhD (1993) and an MA (1989) in statistics from Wayne State University. He has an MS in operations research from the Institute of Applied Mathematics at the Chinese Academy of Sciences (1985) and a BS in mathematics from the University of Science and Technology of China (1982). He holds the Chartered Financial Analyst designation. He is also an associate of the Society of Actuaries (ASA) and a member of the American Academy of Actuaries (MAAA).

Tim P. Antonelli: As an insurance multi-asset strategist, Tim is responsible for identifying, sharing, and acting upon the major business trends affecting insurers globally and their investments across all asset classes. In this capacity, he is charged with synthesizing information on capital management, regulatory changes, and increasingly ESG and climate implications, that drive insurers' investment behaviors and decisions.

Tim also develops thought pieces for internal and external use that help Wellington Management and our clients stay ahead of major business and regulatory challenges. Additionally, he has regular interactions with various insurance industry regulatory bodies, rating agencies, and industry trade organizations such as the National Association of Insurance Commissioners, BaFin, Bermuda Monetary Authority, National Association of Mutual Insurance Companies, American Council of Life Insurers, and the Property Casualty Insurance Association of America. He also collaborates with the Woodwell Climate Research Center, a top-ranked independent climate science think tank, and Wellington's Climate Research Team in scoping out projects and tools that can be additive to our research and investment process; identifying risks and opportunities to geographic regions, industries, and individual securities; and developing actionable climate insights for our insurance clients. He is an active member of Wellington Management's Solvency II Working Group.

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Prior to his current position, Tim served in a relationship management role for the firm's insurance clients (2012 – 2018). Before joining Wellington in 2012, he worked as an associate within the Reinsurance Group at Goldman Sachs (2007 – 2012). Tim earned his BS in both finance and accounting, magna cum laude, from Northeastern University. He holds the Chartered Financial Analyst designation and is a member of the CFA Institute and the CFA Society Boston. He also holds the financial risk manager designation, the sustainability and climate risk certification, and is a member of the Global Association of Risk Professionals.

Tuesday 5/17/22 11AM-12:30PM

ASOP #11: Treatment of Reinsurance in Financial Reports (Professionalism) Annette V. James, FSA, MAAA, FCA, NovaRest Actuarial Consulting Leonard Mangini, FSA, MAAA, FRM, Mangini Actuarial and Risk Advisory LLC Jeremy Starr, FSA, MAAA, Jeremy Starr Consulting LLC

Session Description: ASOP #11 Treatment of Reinsurance or Similar Risk Transfer Programs Involving Life Insurance, Annuities, or Health Benefit Plans in Financial Reports was adopted by the Actuarial Standards Board in 2021. Since last updated in 2005, significant new guidelines and requirements for life insurance policies and annuity contracts have emerged, from the Consumer Protection Act, international coverage agreements, PBR, Actuarial Guideline 48, Own Risk and Solvency Assessment to the Affordable Care Act and increased reinsurance in long term care and health insurance. Join us for a panel discussion with several of the authors of the ASOP (Leonard Mangini, Annette James, and Jeremy Starr) discussing the new guidance and changes. Please bring your questions and be ready for full audience participation.

Annette V. James, FSA, MAAA, FCA, Principal of NovaRest Actuarial Consulting has over 25 years of senior level actuarial experience. Prior to joining the NovaRest team in 2020, she served as Lead Actuary and regulatory health actuary with the Nevada Division of Insurance. Annette has extensive experience in financial reporting, evaluating and monitoring the financial health of insurance companies, participating in risk-focused financial examinations, measuring the impact of health insurance reform and other policy options affecting the health insurance market, analyzing health rate filings, and providing consulting services to health plans and healthcare provider groups. Annette is a frequent speaker at national actuarial conferences and an active volunteer in the actuarial and regulatory community. She serves as a member of the American Academy of Actuaries' (Academy's) Board of Directors, chairs the Academy's Health Equity Work Group, is the chairperson of the Actuarial Standards Board's Health Committee, and has served on several task forces to update actuarial standards of practice (ASOPs), including ASOP No. 28 - Statements of Actuarial Opinion Regarding Health Insurance Assets and Liabilities, and ASOP 11 - Treatment of Reinsurance or Similar Risk Transfer Programs Involving Life Insurance, Annuities, or Health Benefit Plans in Financial Reports. Annette earned a BS in Actuarial Science from Drake University.

Leonard Mangini, FSA, MAAA, FRM, brings clients over 30 years of expertise, having held senior Financial Reporting, Pricing, Reinsurance, and Risk Management roles at Manulife, ACE, AXA, and USLIFE, He has assisted clients with PBR, IFRS 4, IFRS 17, and US GAAP reporting and implementation issues, Product Development, Traditional and Accelerated Underwriting Design, Analysis of Block and Flow Reinsurance, Risk Management, M&A, and Expert Witness/Litigationsupport at E&Y, Milliman, and now President of his own firm, Mangini Actuarial and Risk Advisory LLC.

In his last direct company role, Leonard was Deputy Global Corporate Chief Actuary for 100+ products in 19 business units across the US, Canada, and Asia and served on the Global Product Risk and ALM Committees. In prior reinsurance roles, he was an internal-Board member, President, Chief Actuary, Chief Pricing Officer, and Chief Risk Officer. He co-founded a US life reinsurer and consulted with several Fin Tech Incubators. He is an external Appointed Actuary and performs Statutory and GAAP Actuarial Audit Support for Accounting Firms.

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Leonard is a Fellow of the Society of Actuaries (FSA), a member of the Caribbean Actuarial Association (CAA), a GARP Financial Risk Manager (FRM), a Fellow of the Academy of Life Underwriting (FALU), a Member of the American Academy of Actuaries (MAAA) and the International Actuarial Association (IAA). Mr. Mangini earned an MS in Computational/Quantitative Finance and a BS in Mathematics and Physics with a Minor in English.

Jeremy Starr, FSA, MAAA has been President of Jeremy Starr Consulting LLC since 2014, a consulting firm specializing in reinsurance activities including expert witness, optimization of reinsurance programs, reinsurance agreement regulatory compliance, and recapture programs. In prior positions he has, among other things, helped reinsurers enter new lines of business, run the reinsurance assumed division of a major insurer, and worked on life securitizations at an investment bank. He has extensive industry volunteer experience including being chair of the American Academy of Actuaries, American Council of Life Insurers, Society of Actuaries reinsurance committees. Currently he is a member of the Actuarial Standards Board Life Insurance Committee. He is the author of the reinsurance chapter in the SOA International Accounting Standard textbook and led task forces that wrote the reinsurance financial reports ASOP effective in 2022 and the Credit for Reinsurance Practice Note. Jeremy earned a Bachelor of Arts in Physics and Mathematics from Binghamton University.

Wednesday 5/18/22 11AM-12PM

Pension Risk Transfer ("PRT") 101

Rob Forte, FSA, MAAA, *Oliver Wyman* Tyler Keenan, FSA, MAAA, CERA, *Oliver Wyman* Sydney Rubert, FSA, *MassMutual*

Session Description: The last few years have seen significant growth in the Pension Risk Transfer ("PRT") market. This session will provide a dual insurance carrier and consulting perspective on the PRT market, with a particular emphasis on the motivation for PRT transactions. In addition, the speakers will provide an overview of the mechanics of pensions and discuss industry trends.

Rob Forte is a Principal with the Actuarial Practice of Oliver Wyman and is based in Boston. He has over 13 years of actuarial experience spanning the insurance carrier and actuarial consulting spaces. Rob has expertise in many applications of actuarial modeling and financial reporting for a wide variety of life and annuity products under U.S. Statutory and U.S. GAAP regimes including Long Duration Targeted Improvements. He is an expert in annuity products and financial reporting bases including FAS 133, AG-33, AG-35, and LDTI / MRBs.

Rob specializes in leading actuarial model builds and conversions spanning all types of annuity products and software vendors. Rob came to Oliver Wyman in 2019 from PricewaterhouseCoopers, where he was a Manager in the Actuarial Services practice. Prior to that, Rob spent 9 years on the insurance carrier side at John Hancock, where he held a variety of roles including asset modeling, fixed annuity modeling, variable annuity modeling, life insurance product development, U.S. Statutory financial reporting, and long-term care insurance modernization. With his prior experience at a Big Four audit firm, he is familiar with insurance accounting issues.

Rob is a Fellow of the Society of Actuaries (FSA) and a Member of the American Academy of Actuaries (MAAA).

Tyler Keenan is a Manager with the Actuarial Practice of Oliver Wyman and is based in Boston. His expertise is in Prophet liability modeling and he has led and supported several Prophet model builds, conversions, and validations. Other specialties include pricing, enterprise risk management, and financial analysis for a variety of insurance products. He is currently engaged in leading the PRT and annuity model builds for a multi-year Prophet model conversion and modernization initiative for a large carrier.

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Prior to joining Oliver Wyman in 2020, Tyler spent 5 years at Unum where he held various roles including individual disability pricing and modeling, enterprise risk management, and voluntary benefits financial planning.

Tyler is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries, and a Chartered Enterprise Risk Analyst.

Sydney Rubert is the Head of PRT Business Development at MassMutual and is based in Seattle, WA. In this role, Sydney owns the underwriting and pipeline of PRT transactions, provides actuarial support to various teams, and leads the introduction of new analytical and data management technologies to enable data driven decision making across Institutional Solutions.

With nearly 10 years of experience, Sydney joined MassMutual in 2018 and has held various roles within the PRT Pricing team. Prior to joining MassMutual, Sydney held positions in Asset Liability Modelling and Annuities Planning and Forecasting.

Thursday 5/19/22 11AM-12PM

Panel Discussion: Impact of 7702 Interest Rate Changes on Life Insurance Products

Neil Drzewiecki, *MassMutual* Andrew Champi, *Penn Mutual* Kim Curley, FSA, MAAA, *Protective Life*

Session Description: At the end of December 2020, Congress enacted the Consolidated Appropriations Act, 2021, which included revisions to Section 7702. Effective for policies issued after Dec. 31, 2020, the fixed 4-percent and 6-percent minimum annual effective rates under these tests were changed to refer to a market-based rate called the "Insurance Interest Rate." This session will begin with a brief overview of these changes. Then, we will shift into a panel discussion with three life insurance product leaders to discuss how these changes have impacted life insurance product design and strategy.

Neil Drzewiecki is the Head of Life Products for MassMutual Life Insurance Company. He is responsible for Life Insurance Product Development & Implementation of new products for both their Career Agency and third-party distribution channels. In his prior role at MassMutual, he was Head of Pension Risk Transfer & Institutional Actuarial for the MassMutual Institutional Solutions line of business where he was responsible for the Pension Risk Transfer and other Institutional Longevity businesses as well as pricing for other Institutional Solutions businesses. His 29 years of experience also includes Risk Officer for the Retirement Services business line, leading various strategic projects in MassMutual's U.S. Insurance businesses, as well as a variety of roles in both the Institutional and Workplace lines of business. His experience includes In-force Management, Financial Reporting & Valuation, Product Development, and Systems. He also managed pricing and developed Individual and Worksite Life Products and has experience as a systems business analyst at other companies.

Neil earned a Bachelor of Science degree in Mathematics and Actuarial Science from the University of Connecticut and holds a Masters of Business Administration from the University of Massachusetts. He is a Fellow of the Society of Actuaries and is a Member of the American Academy of Actuaries.

Andrew Champi serves as the Director of Product Strategy and Competitive Analysis at Penn Mutual. With respect to product strategy, he leads the efforts to review our product portfolio and provide recommendations for changes to our product offerings, using industry and societal trends as well as information gathered from contacts both inside and outside our industry. He also leads a series of cross-functional teams to generate ideas and evaluate the feasibility of concepts for products and/or features to support our product strategy. In addition, he serves as the main

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product liaison to our field partners while managing his team of competitive product analysts. Over his 12 years at the Penn Mutual Life Insurance Company, he has been involved in various roles related to Product Development and Strategy, including sales and product marketing, idea generation and feasibility, product training and support, and the New Business and inforce support of insurance products.

Kim Curley is Vice President Executive Benefits & SPWL Products for Protective Life. At Protective Life, Kim supports the Retirement Division in a product strategy and life insurance product development role with emphasis on product solutions for Bank and Corporate Owned life insurance purchasers and the Bank wealth transfer market. Kim has 36 years of experience in the life insurance industry with Security Life of Denver Insurance Company, ING, Voya Financial, Great-West Financial and Protective Life. Kim's actuarial experience includes life product development and supporting activities, life insurance illustrations, valuation, and product technical support. Kim is a Fellow of the Society of Actuaries and Member of the American Academy of Actuaries. She also maintains Series 6 and 26 securities registrations.

Friday 5/20/22 11AM-12PM

VM-20 Updates and Hot Topics Simon Gervais, ASA, *Oliver Wyman* Catherine Murphy, FSA, MAAA, FCIA, *John Hancock*

Session Description: Overview of upcoming changes to VM-20 and other hot topics, focusing on the impact of future mortality improvement ("FMI") factors, changes to the economic scenario generator ("ESG"), and the Actuarial Guideline for Asset Adequacy Testing ("AAT").

Simon Gervais is a Senior Manager with the Actuarial Practice of Oliver Wyman and is based in Hartford. He has over 7 years of actuarial experience in actuarial consulting. Simon's areas of expertise include actuarial modeling and financial reporting for a wide variety of life and annuity products under GAAP LDTI and U.S. Statutory regimes. Simon joined Oliver Wyman in 2015 and has led multiple valuation model builds using the Moody's Analytics AXIS[™] platform, focusing on VM-20 and GAAP LDTI. He is an Associate of the Society of Actuaries.

Catherine Murphy is Vice President & Deputy Appointed Actuary at John Hancock. Catherine has held several Finance, Pricing and Valuation roles within Manulife and John Hancock over 25+ years. Catherine holds a BMath degree from the University of Waterloo, is a Fellow of the Society of Actuaries, a Member of the American Academy of Actuaries and a Fellow of the Canadian Institute of Actuaries.