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CORRESPONDENTS' REPORT FROM THE SOA 2014 ANNUAL MEETING

By Robert Berendsen, Thomas J. Egan Jr., Frank Grossman, Warren Manners, Jon Mossman, & Emmanuel Vézina

Your correspondents couldn't have asked for better weather in Orlando during the 2014 SOA Annual Meeting held at the Rosen Shingle Creek facility from Oct. 27-29. Just imagine them—notepads in hand, with their faithful portable typewriters and SLR cameras slung over their shoulders, tip-toeing around the alligators basking in the warm Florida sunshine in their quest to bring you the latest news. Shades of Hemingway! Well, maybe it wasn't quite like that—given the ubiquity of modern wireless devices and the advent of the responsible drinking ethic. But hopefully you will find their brief reports about various Investment Section sponsored sessions and events diverting nonetheless.

SECTION COUNCIL FACE-TO-FACE MEETING

On Sunday afternoon prior to the Annual Meeting, a special face-to-face meeting of the Investment Section Council was held. Attendees included not only current council members, but our three newly elected members, too: Jon Mossman, Jeff Passmore and Peter Sun. Section activities during the past 2013-14 year were reviewed, and some attention was given to our plans and resources for the upcoming year. Our board partner, Evan Inglis, took a few minutes to share his perspective on the section's role and function. At length, presentations and expressions of thanks were extended to our outgoing council members, Larry Zhao and Tom Anichini (who succeeded one another as council chairs) as well as Mike Kirchner. The meeting was followed by a pleasant group dinner. [FG]

ECONOMIC CAPITAL: KEY MODELING CONSIDERATIONS (SESSION 38)

This session was sponsored by the Investment Section and the Joint Risk Management Section, and was moderated by Robert Berendsen. You had to show up early to get a seat at this one. Some braved standing for its full duration.

Seasoned practitioners know that making the right choices when building stochastic models for economic capital modeling is crucial to being able to deliver reliable information and support timely decision making. Speakers Daniel Finn and Takeko Uemoto were on hand to help us make the right choices by sharing their experiences and insights into developing such models.

Daniel started off by providing a quick overview of what economic capital models are and how they differ from other actuarial and accounting models that actuaries use. He then focused on economic scenario generators (ESGs), its many instruments, how to ensure each instrument is well tuned, and in particular how to get all the instruments to produce harmonious economic scenarios.

Takeko then built on that. She considered the asset and liability models that use the economic scenarios as input and walked us through five key areas for actuaries to consider when building economic capital models for insurers, including tools that can be employed to make our models perform better, make them "sing."

Now, go and make your own music! And, if going solo is intimidating, ask a friend and start a band! [RB]

SMART—AND DUMB—THINGS ABOUT SMART BETA (SESSION 87PD)

Lucky were those who made it to this early session, as it offered them great insight to rethink their 401(k) investment strategies for 2015. In fact, Paul Brett Hammond and Felix Goltz offered a practical and thoughtful view of the buzz around smart beta. Part of the session centered on discussing key myths on the subject, most notably that smart beta is "smarter." In other words, embracing the smart beta theory as-is goes hand-in-hand with accepting that other beta is dumb. Technically, if some kind of beta was of superior intelligence, it wouldn't stay as such for long as investors would fully take advantage of it. As everyone recalls, there's no such thing as a free lunch or for that matter, the only free lunch is proper investment diversification. Ultimately, while there is global recognition that there is something interesting in smart beta, investors' caution is warranted to navigate all the myths around it. [EV]

USE OF EFFICIENT FRONTIERS IN STRATEGIC ASSET ALLOCATION (SESSION 101PD)

Sean Kane from Cardinal Investment Advisors spoke about traditional Markowitz Mean-Variance (MV) efficient frontiers. An efficient frontier represents all combinations of assets that maximize return for a given level of risk. The inputs into an MV frontier are, not surprisingly, means, variances and correlations of asset class returns. This approach is based on the assumption that returns are normally distributed. The most important take away is that an MV frontier is very sensitive to its inputs and therefore the frontier is subject to "garbage-in-garbage-out."

Ken Griffin from Conning presented on a simulation modelling approach to developing efficient frontiers. This uses an economic scenario generator (ESG) to project a set of paths of asset class returns as well as paths of liabilities to determine efficient frontiers in asset-liability space rather than an asset only frontier. Using this approach, liability duration matching will become an obvious effective risk reduction technique. [JM]

TAIL RISK HEDGING (SESSION 133)

Jeff Burt and Mike DePalma co-presented a session on the importance of managing tail risk, which was streamed via the Internet to offer a virtual session for members not physically present at the annual meeting. Jeff is an executive vice-president—Financial Solutions with Hanover Life Reinsurance of America; and Mike is senior vice-president and CIO of Quantitative Investment Strategies with AllianceBernstein, and is based in New York.

The presenters took care to define what comprises a tail risk, referencing Nassim Taleb and the term "black swan event." Mike described how tail risk can impact an asset portfolio, which is often the conventional sense of the potential hazard posed by tail risk. But Jeff examined how tail risk in terms of expected mortality experience is also present on the other side of the balance sheet, in many life insurance companies' liability portfolios.

Both gentlemen then proceeded to describe how tail risk could be mitigated, recognizing that there is often a cost associated with the benefit of reduction of risk. A key issue regarding tail risk is at what point does one recognize the financial threat posed by a black swan event? Both Mike and Jeff agreed that it was generally better to do this before rather than after a catastrophic event—maybe even as early as the liability pricing or asset purchase decision!

Such was the crush at the floor mic near the conclusion of the session, that some attendees jumped straight to their comments and questions for the panelists—completely forgetting to state their names for the session recording. Carried away by their enthusiasm for the session's topic, as it were. You had to be there. [FG]

Attendees at the Investment Section Council Face-to-Face Meeting on October 26 included (from left to right): Peter Sun, Larry Zhao, Frank Grossman, Tom Egan, Jon Mossman, Tom Anichini, Evan Inglis, David Schraub, and Emmanuel Vézina. (Photograph credit to Leslie Smith.)

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David Stalker (left foreground) and Terry Sakurada (right foreground) consider their moves during the Thomas C. Barham III Speed Chess Tournament on October 28. (Photograph credit to Larry Lickteig.)

Steve Stockman (left) accepts his first place tournament prize and certificate from Albert Moore (center) while tournament director Carolina Blanco (right) looks on. (Photograph credit to Frank Grossman.)

THOMAS C. BARHAM III SPEED CHESS NETWORKING EVENT (SESSION 145)

On Tuesday evening, after a busy day of shuttling between presentations, 21 actuaries matched wits at the fourth Thomas C. Barham III Speed Chess Tournament. Smart moves, oversights and blunders were all in abundance, yet good humor and sportsmanship prevailed throughout the rounds. At the end of the contest, hearty congratulations went to the first-place winner Steve Stockman, and Larry Lickteig who was runner-up.

Our tournament director Carolina Blanco, international chess master (IM), then gave a short presentation on "What Should You Do When Losing is Not an Option?"—attracting two more meeting attendees who didn't play in the tournament. Most everyone knows that the object of chess is to beat one's opponent, but sometimes the emphasis on winning a point, or perhaps drawing so as to gain a half point, can be particularly important. Carolina discussed how a good chess player needs to adapt his or her plan to changing circumstances. Maintaining mental toughness is vital, but it's also necessary to appreciate how the delicate balance of risk and reward can evolve during a match.

Following Carolina's chess lecture and despite the late hour, she obliged all comers—including (the dauntless) Jeff Stock, Dave Diamond and Mark Tanner—in blitz games at 6:1 odds. Each of the challengers had three minutes on their side of the chess clock while Carolina took but 30 seconds to complete all her moves. And the verdict? Let's just say that Carolina is and remains an IM for good reason. (You can check it out yourself on YouTube thanks to Jeff Stock.) [FG]

INVESTMENTS STRATEGIES AND ALTERNATIVE INVESTMENTS IN INSURANCE AND PENSION PORTFOLIOS (SESSION 172PD)

The purpose of the session was to provide insights into how insurance and pension investment strategies have evolved in response to a changing economic climate and

THE PERCENT OF ASSETS DEVOTED TO ALTERNATIVE INVESTMENTS HAS INCREASED IN BOTH THE UNITED STATES AND CANADA AVERAGING NEARLY 20 PERCENT IN 2013.

changing regulatory standards. The use of alternative investments in both insurance and pension portfolios was also discussed.

Kelly Featherstone of AIMCO Investments explained that alternative investments are generally considered to be anything that is not stocks, bonds, or cash. Each alternative has unique features but they generally share the following characteristics: relative illiquidity, complexity, higher transaction or management costs, low correlation with traditional assets, non-normal or nonlinear return profiles, infrequent valuations, and difficult to benchmark. Alternative investments are usually used to improve the expected return, reduce the risk of the portfolio and/or hedge liabilities. The percent of assets devoted to alternative investments has increased in both the United States and Canada—averaging nearly 20 percent in 2013.

Ming Chiu of AIG then discussed strategic asset allocation for global multiline insurer's portfolios. He explained how asset portfolio optimization approaches have moved over time from Mean-Variance Analysis to the Black-Litterman Model and now to the Risk Factor Based Asset Allocation Approach. He explained the four steps for the Risk Factor Based Approach: Investment & Risk Driver Choice, Risk Factor Scenario Generation, Asset Value and Return Distribution, and Portfolio Optimization.

Kathleen Brolly of Bank of America Merrill Lynch presented next, and examined asset allocation strategies to reduce the asset risk in pension plans. She described the importance of changing from an asset-only perspective to an asset-liability perspective. The asset-liability approach focuses on how the effect of asset changes relative to liability changes will affect the funded status from one period to the next. She showed how stochastic projections can demonstrate the future probability distribution of the funded status for various alternative asset mixes. A Glide Path can be used to move from the current asset mix to an asset mix with less funded status volatility. Finally, she demonstrated an approach to

Larry Lickteig (left) receives his runner-up tournament prize and certificate from Albert Moore (center) and tournament director Carolina Blanco (right). (Photograph credit to Frank Grossman.)

monitoring and reporting on the funded status movement from period to period. [TE]

PREDICTIVE MODELING FOR ACTUARIES: MACHINE LEARNING, PREDICTIVE MODELING AND INSURANCE RISK MANAGEMENT (SESSION 183PD)

This year's annual meeting had no shortage of sessions covering predictive modeling, eight in all, covering a wide range of products, sectors, modeling techniques and insurance applications. Given the big data revolution that is all around us this is not a surprise. Figuring out how to distill meaning and strategic direction from these massive and disparate data sources is "big" business and techniques, both new and old, are rapidly being developed to help make sense of it all.

The focus of this session, sponsored by the Investment Section and moderated by Warren Manners, was on one

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such technique known as Agent Based Modeling or ABM. Jeff Heaton kicked things off by explaining that ABM is a technique employing relatively simple algorithms or rules-of-thumb that define how agents behave and interact with one another. Here agents were defined as entities such as policyholders, insurance Agents (with a capital A), insurance companies and even nations. Using these simple algorithms these agents are then allowed to interact in a simulated environment, the results of which emerge organically. The idea is to allow the outcome of this simulation to evolve through the so called "butterfly effect" rather than working backwards from an a-priori view of the outcome.

Anand Rao followed Jeff with an example of a simulation model being developed by PwC coined Behavioral Simulation. Behavioral Simulation leverages the abilities of ABM to model complex systems but looks to behavioral economics to define the algorithms that drive behavior. This approach is designed to simulate how individuals really make decisions based on cognitive, heuristic, emotional and social factors as they navigate life cycle changes and environmental factors.

The session ended with Jeff and Anand fielding questions from the audience including how their models compared with those employed by the U.S. armed services, and whether they see application of ABM in the field of hedging variable annuities. [WM]

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