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# Highlights of the June 2012 Life and Annuity Symposium

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**K**urt and I wanted to share some of our personal highlights from the Society of Actuaries June 2012 Life & Annuity Symposium in Los Angeles. We encourage members of the Product Development Section to take advantage of our LinkedIn group so you can share your thoughts on any of the sessions you attended at the Life and Annuity Symposium as well as any others topics of professional interest.

## Session 31: "Life Insurance Illustration Regulation: 15 Years Later" (Jim Filmore)

One of the most memorable sessions for me was "The Life Insurance Illustration Regulation: 15 Years Later." In that session, Kurt Guske moderated speakers Gayle Donato and Donna Megregian. The presentations started with a recap of why the life illustration regulation was created: namely, to address concerns regarding illustrations that were potentially misleading due to vanishing premiums, illustration of aggressive non-guaranteed assumptions (such as interest or dividends) or use of inconsistent terminology in illustrations created by different companies. The Life Insurance Illustration regulation was effective for certain life policies with non-guaranteed elements issued after Jan. 1, 1997. They highlighted key elements to consider when demonstrating that a policy is not lapse supported and that it also meets the self-support test. A large part of the discussion revolved around special considerations regarding indexed universal life and in-force policy testing. Throughout the presentation, Gayle and Donna polled the audience to see how they interpret or would apply sections of the regulation and Actuarial Standards of Practice (ASOP) 24. That certainly made for a lively debate as it appears there are still grey areas when it comes to application of the regulation and ASOP. If you missed the meeting, then the PowerPoint slides can be found on the SOA website under Day 2, Session 31; the session recording is also available. However, nothing can replace being there to participate in the debate, which continued even after the session ended.

## Session 53: "Advanced Mortality Topics" (Jim Filmore)

Kimberly Steiner moderated this session with Tim

Rozar and Lloyd Spencer as the speakers. In this session, Tim and Lloyd both did a great job covering a variety of topics related to mortality. Consequently, I found this session to be particularly interesting and relevant to my role as an individual life pricing actuary.

Tim opened by sharing some news: The global death rate has remained constant at 100 percent. Personally, I found that news shocking as I have been waking up daily at 5 a.m. to do a boot camp workout. I may start "sleeping in" to 6 a.m. given that immortality is apparently not feasible.

Next, Tim went into mortality topics such as compression, deceleration and seasonality. He defined compression as, "the tendency of older age mortality to improve at a slower rate than younger ages, leading to a rectangularization of the survival curve." Essentially, that means mortality improvements at younger ages are redistributed to deaths at older ages. I would add that you may also have heard others refer to this as a "squaring of the survival curve." Tim illustrated this point by graphing mortality in the United States and other markets (Canada, Australia, etc.) by issue age band and calendar year. There was a consistent downward trend in all issue ages as one moves forward in time. However, the younger issue ages had a steeper decline in mortality by calendar year. The phrase "rectangularization" or "squaring" of the survival curve comes from the graph that Tim displayed showing the percent surviving (y-axis) by attained age (x-axis). Over time, that graph has essentially moved from a diagonal line from the top left to the bottom right to an inverted hockey stick (an analogy hopefully appreciated by our members in cold weather locations in both the United States and Canada). If you can't visualize, then it may help to view slide 16 in the hand outs from this session, which can be found on the SOA website.

The next topic covered was mortality deceleration, which Tim defined as "the tendency for the rate of increase in mortality rates to slow down at older ages." Tim gave examples of other organisms (non-humans) showing that they typically exhibit this same mortality deceleration at their respective advanced ages.

Tim then defined mortality seasonality as “the tendency for deaths to be correlated with seasonal weather patterns.” He dispelled some common myths with respect to the seasonality of mortality and clarified any elements of truth in those myths.

Lloyd Spencer then took over as presenter and gave his thoughts regarding pricing life products with limited underwriting. He moved on to speaking about emergence of post-level term experience. In particular, I recall him displaying a graph containing data points of the post-level shock lapse rate and the resulting observed mortality. I enjoyed his reference to the “ocular method,” which he used to draw the trend line for the data points. If you don’t remember that from your statistics course, I encourage you to re-read your old textbooks (just don’t spend too much time on that one). Lloyd then went through additional post-level term analysis, including strategies that could be implemented to maximize profitability. Lloyd mentioned the “slow boil” method of raising post-level term rates as opposed to a rapid increase in rates. Personally, I have always used the “boiling a frog” analogy, but Lloyd’s use of lobsters in his analogy sounds tastier.

### Session 64: “Life and Annuity Product Development Strategies in the Wake of Low Interest Rates” (Kurt A. Guske)

In this session, it was my pleasure to moderate for an all-star cast of presenters: Rob Stone, David Weinsier and Tim Pfeifer. These experts discussed life insurance and annuity product development, in-force strategies, and pricing and risk management techniques to address risk in the current low interest rate environment. Rob focused on life products and risk management tools. David discussed annuity and in-force strategies. Tim talked about product alternatives and insurance company reactions to the environment, and gave some insights for how to handle the future.

#### **Life and Universal Life With Secondary Guarantee (ULSG) Products**

Rob’s discussion centered around universal life policies. He started with the fact that the ULSG market will continue to increase due to a market need. These products are easy to understand and for the agent to

“... the ULSG market will continue to increase due to a market need”

explain, and they provide a permanent product sale for the agent. In addition, there is not a lot of accumulation potential in today’s economic environment.

With the continuing ULSG market, Rob expressed concern with the long-term interest rate risk and how to evaluate the risk. Displaying a lot of pretty graphs, he suggested using deterministic interest rate scenarios, stochastically-generated scenarios, or a combination of deterministic and “hand-picked” stochastic scenarios to perform risk analysis. Deterministic scenarios are easier to explain the results to management as leaders can relate to the likelihood of the scenarios happening, for example, a Japan scenario.

One key takeaway for me on the impact of low interest rates was the realization that the long-term life statutory valuation rate for 2013 new issues is dropping to 3.5 percent.



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#### **Annuity and In-Force Management**

David emphasized active in force management to combat the effects of low interest rates. On the asset side, he discussed several macro-hedging techniques such as structured trades, swaps, swaptions, and forwards to protect GAAP income and capital. On the liability side, he discussed how companies have lowered credited rates and increased non-guaranteed charges, fees and COIs.

David also talked about how companies are turning their attention toward fee-based products, revising profit targets based on a risk free rate plus spread approach, and lowering comp.

Lastly he emphasized that regardless of the strategy your company chooses, for capital planning and risk analysis it is critical to have the necessary tools in place for financial forecasting. The financial forecasting tools

enable strategic business decisions to be made under a wide range of potential economic scenarios in order to measure accounting and economic impacts.

#### **New Product and Corporate Strategies**

Tim stated there's no silver bullet for dealing with interest rates. There are risks to interest rates falling further as well as rapidly increasing.

Company reactions to the low interest rate environment include lowering crediting rates, lowering guaranteed rates on new products, and increasing policy loads.

Product strategies include indexed products—especially with guaranteed lifetime withdrawal benefits (GLWB) to provide future income. He expects to see more market value adjustments. There will be pressure for more levelized compensation.

A key takeaway from Tim's discussion was the fact that 7702 guidelines become more artificial the further interest rates fall. There could be issues with policies complying as a result. □