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Highlights of the **May 2013 SOA Life & Annuity Symposium**

By Jim Filmore and Kurt Guske with various contributors

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This article contains a summary of some of the presentations given at the May 2013 SOA Life & Annuity Symposium. This article does not cover all sessions that are related to product development, but shares observations that have been made by various members of the SOA Product Development Section Council. We encourage everyone to join our LinkedIn group where you can participate in discussions on these or any other topics that are relevant to our business.

Sessions 13 & 28 – Life Protection Product Update (by Kurt A. Guske)

- Moderator/Presenter: Robert P. Stone (Milliman)
- Presenter: Elizabeth H. MacGowan (National Life)
- Presenter: Jeremy Allen Bill (Midland National Life)

The purpose of this session was to provide an update of life insurance products serving the protection market, as well as the near-term outlook for these products. Elizabeth discussed trends in the term insurance marketplace. Rob followed with insights about the universal life market. He touched on UL with and without lapse protection and focused mostly on indexed UL. Jeremy wrapped up the session by outlining the recent changes to Actuarial Guideline 38 (AG38) which affect lapse protection UL contracts.

Trends in the Term Insurance Marketplace

Elizabeth reviewed term sales trends, pricing and regulatory environment, and industry responses to the environment. According to LIMRA's preliminary estimates for 2012, over one-third of life insurance policies sold are term insurance. She stated term has held steady in the marketplace over the last 12 years. Term market share is twenty-one percent based on annualized premium according to the same LIMRA source.

She demonstrated average premiums per term policy have increased since 1987 according to LIMRA sales survey and compared this trend to average U.S. household income according to Bureau of Labor Statistics over the same time period. A key takeaway is that term purchasers are paying premiums at a level they can afford and not necessarily what protection they need.

The term pricing environment is driven by high reserve requirements, declining interest rates, improving longevity, and regulatory changes. She stated that due to Regulation XXX, term insurance requires a high amount of capital for an extended time period. This makes capital financing a major issue when pricing term. She admitted that, in the absence of reserve financing, pricing returns are low.

The industry response to high capital requirements is reinsurance. She stated fifty-six percent of life insurance is reinsured, according to SNL Financial's SNL Data Dispatch dated 11/26/12. Of the fifty-six percent reinsured, fifty percent of that reinsurance is ceded to affiliates of the direct companies. This means twenty-eight percent of all life insurance is ceded as captive reinsurance.

A key takeaway is that most of the top twenty life insurance carriers use reinsurance captives and have been expanding their use over the last five years. This is based on 2011 data with the same SNL data source.

Universal Life (UL) Products

Rob demonstrated that while term growth rates from 2011-12 remained stable by production, UL annualized premium is up eight percent year to date, according to LIMRA's US Individual Life Insurance Sales Summary Report, fourth quarter 2012. UL captured forty percent of the annualized premium market in 2012 versus twenty-one percent in term. According to Milliman UL/IUL surveys, UL with secondary guarantees continues to dominate UL sales, with sixty-eight percent year-to-date 9/30/12.

He explained that Indexed UL (IUL) sales are a growing market, from $695 million sales in 2010 to $973 million in 2011 and $1.3 billion in 2012 according to AnnuitySpecs' Sales & Market Report 4th Quarter 2011. Rob pointed out that companies are leaning on IUL as an alternative to Universal Life with Secondary Guarantees (ULSG), as it illustrates well in the current environment. He posed the question of whether the market is leaning too much on the IUL product.

Actuarial Guideline 38 (AG38) update

Jeremy briefly outlined the chronology of AG38, from the advent of Regulation XXX in 2000 to Actuarial Guideline 38 ("AXXX") in 2002 to the "bifurcated" approach adopted in September, 2012. He discussed the latest approach is effective January 1, 2013 with separate rules for in-force policies (Section 8D) and new business (Section 8E).

Section 8D requires additional reserves potentially on selected in-force UL with secondary guarantee policies based on the deterministic reserve methodology outlined in the valuation manual (VM20).

Section 8E deals with how gross minimum premiums are calculated in step one of the AG38 calculations. He explained two permitted methods, "certain designs" (Method 1) and "other designs" (Method 2). He stated most companies avoid method 2, which requires demonstrations of multiple premium patterns to establish the gross minimum premium requirement. Under Method 1, there are three designs, one of which can be used. In order to use any of these designs, a special certification is required by an appointed actuary and a company officer.

Jeremy discussed potential impacts. He shared that, according to benchmarks prepared by his company, level pay premiums from March 2012 to January 2013 have increased five-point-three percent on average for the top five companies and five-point-nine percent for the top ten (the top companies changed over this time period). Single pays have increased thirteen-point-seven percent on average for the top five companies and nineteen-point-one percent for the top ten. He commented a handful of carriers have pulled out of UL with secondary guarantee products.

Session 29 – Risks in Products (by Donna Megregian)

- Moderator: Jim Filmore (Munich Re)
- Presenter: Donna Megregian (Milliman)
- Presenter: Blake Hill (Manulife)

This session started with Blake Hill of Manulife discussing how return of premium on critical illness poses risk in the design. Similar to return of premium on term in the United Sstates, there are concerns related to the lapse-supported nature of the policy and providing additional value related to the cost for the option.

Donna Megregian of Milliman took a step back from a specific product to throw out a wide range of risks within contracts, products, assumptions, regulation, and other areas. Concerns included policy form language, optionality within products, consistency and documentation of assumptions, and concerns related to keeping products compliant with the tax code.

Jim Filmore of Munich Re was also able to add perspectives on risks in products such as secondary guarantee universal life from a reinsurer's perspective. As actuaries, we are responsible for quantifying and qualifying risks. The more we know about the risks out there, the better we can mitigate those risks during the pricing, development, and inforce management processes for all parties involved.

Session 36 - Illustration Compliance (by Donna Megregian)

- Moderator & Presenter: Donna Megregian (Milliman)
- Presenter: Susan K. Bartholf (American Family)
- Presenter: Gayle L. Donato (Nationwide)

Most of the audience had some form of experience related to illustration testing, so this session was much focused on practical applications and concerns related to The Life Illustration Model Regulation and Actuarial Standard of Practice (ASOP) 24. In a fairly open panel session, Sue Bartholf of American Family, Gayle Donato of Nationwide, and Donna Megregian of Milliman discussed topics related to indexed universal life issues, in-force modeling, and one-time expense. Using polling, the audience was able to anonymously provide opinions and feedback on some of the topics as well.

This session was not endorsed by the SOA or AAA, and any recordings or takeaways from the session should be deemed the panelist opinions. The slides will be made available on the SOA website, but please be cautious when looking at these or any slides which, without proper context, may be misinterpreted or misunderstood. We recommend that you contact the panelist if you have specific questions.

If you missed this session but plan to attend the annual meeting, a session is planned to have a workshop related to illustration issues. Attendees to this session are encouraged to actively participate in subjects and bring topics for discussion. Space will be limited, so please register for the session.

Session 86: Delphi Study in Real Time - Life & Annuity Products & Product Development (by Paula Hodges)

- Moderator & Presenter: Paula Hodges (Ameritas)
- Presenter: Albert Abalo (Oliver Wyman)
- Presenter: Ben Wolzenski (Actuarial Innovations)

This session utilized the Delphi method to develop several predictions about developments in the life and annuity market over the next seven years. For those not familiar with the Delphi method, it is a process whereby a facilitator collects information from a group of experts on a particular subject matter. After collecting a first round of opinions, the facilitators share the aggregated results with the group. At that time, the group continues to participate anonymously, but with the benefit of the opinions, and sometimes commentary, from the other experts. Another round of polling takes place, and this continues until the results are stabilized. This method has proven to be very predictive. In this session, the audience was utilized as the experts, and here are a few of the predictions made:

By the year 2020, U.S. and Canadian bond yields will be between three percent and five percent, but will remain relatively unchanged for the next three to five years. As this will challenge the spreads that insurance companies require, the burden will be passed along to consumers (higher prices), agents (lower commission), employees (lower wages and layoffs), and the company itself (lower profits). The group felt that a reasonable IRR expectation in this environment is less than ten percent.

Life insurance products that will take off in the next few years are expected to be whole life and indexed universal life, while the indexed annuities will see the largest amount of growth in the annuity space.

With the aging of the current field force, alternative avenues will be sought by both consumers and insurance carriers. Therefore, marketing of life and annuity products is expected to shift to financial advisors for annuity sales and to the internet for life products.

Not surprisingly, the biggest issues facing insurers over the next seven years is expected to be the low interest rate environment and the shifting demographics, impacting both the distribution force and the insured population.

This was a very interesting session, showing how additional information and the anonymity of the experts influenced changes in the ultimate consensus of the group. I look forward to the year 2020 when we can validate the opinions of the experts that were in the room for this enjoyable session.

Session 88 – Older Age Mortality (by Jim Filmore)

- Moderator: Jim Filmore (Munich Re)
- Presenter: Tim Rozar (RGA)
- Presenter: Dieter Gaubatz (Munich Re)

At this session, two industry mortality experts, Tim Rozar and Dieter Gaubatz, shared their insights regarding older age mortality.

Tim started off the session by discussing the results of the research project titled "Report on the Survey of Older Age Mortality and Other Assumptions" that RGA conducted on behalf of the SOA Product Development section. Tim's presentation covered the following topics

i. Product design and sales trends by age
ii. Underwriting requirements at older ages
iii. Actuarial assumptions at older ages including selection factors, preferred discounts, mortality improvement, and lapse assumptions.
iv. A comparison of cognitive function and physical function tests used in older age life insurance and long-term care insurance.

Observations from Tim's presentation include the following:

- The percentage of in-force life products on individuals with attained age greater than 65 has risen steadily since the late 1980's and peaked in around the year 2006. Universal Life with Secondary Guarantees (ULSG) has the highest percentage of the inforce business on individuals with attained ages greater than 65 followed by accumulation universal life products.

- In general, companies increased both per life retention and capacity (retention plus reinsurance) between 2005 and 2011. However, the increases were smaller at the older issue ages.

- Availability of riders (such as WOP, ADB, terminal illness acceleration) tends to decrease at the older issue ages.

- Cognitive testing tends to start at issue age 70 with Delayed Word Recall being the most common cognitive test used for individual life and Enhanced Mental Skills Test (EMST) being the most common cognitive test used for Long-Term Care.

- Physical function tests tend to start at either issue age 70 or issue age 75 with "Timed Get Up and Go" being the most common test in life underwriting and "Gait and Chair Rise/Stand" being the most common tests in Long-Term Care underwriting.

- Enhanced Mental Skills Test (EMST) had the highest perceived predictive value when it comes to cognitive testing while 10-Word Delayed Word Recall had the highest perceived protective value. The difference is that protective value takes into account both the usefulness and the cost of the test while predictive value only considers the usefulness of the test.

- Some tests are more liberal at issue age 80 as compared to issue age 45 (blood pressure, family history, and maximum weight) whereas other tests are more conservative (minimum cholesterol, minimum weight).

- The average select period was shorter for Long-Term Care companies as compared to Life companies (comparison made on companies that were in both markets).

- The 2008VBT has a shorter and steeper selection period at the older issue ages. This was also true for respondents of the survey. However, it was noted that there was a significant variance in the survey results especially at the older issue ages.

- Some companies limit the availability of preferred classes at the older issue ages.

- Preferred discounts are generally less at the older issue ages.

- Mortality improvement assumptions tend to be lower for females and for both genders as the issue age increases.

Dieter's presentation covered the following topics:
i. Importance of the senior market
ii. SOA 2008-09 individual life intercompany study
iii. 2014 VBT table development
iv. Experience interpretation issues
v. Other considerations in using experience as a guide.

Observations from Dieter's presentation include the following:

- While the percentage by count of policies issued above age 70 may be small, they make up a greater percentage of the face amount and an even greater percentage of the first duration expected claims.

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- Comparisons were made between the select periods by issue age from the 2008VBT and the draft version of the 2014VBT.

- It was noted that certain sources of information regarding older age mortality have data errors. For example, Part A of Medicare is free which results in late reporting of deaths covered under that source.

- Life span is the oldest age to which someone can live whereas life expectancy is the average remaining future life time for which someone is expected to live.

- Annual population mortality improvement adjusted to remove AIDS deaths was lower on a percentage basis (and negative at the older ages) in the time period from 1992-2002 as compared to 2002-2010.

- Annual population mortality improvement adjusted to remove AIDS deaths was higher across all ages for males as compared to females in the time period from 2002-2010. ◻