SOCIETY OF ACTUARIES Reinsurance Section

Reinsurance news

Issue 74 | November 2012

1 A Primer on Reinsurance Pricing Strategy A Checklist for Optimizing Reinsurance Negotiation
By Larry Warren

3 Chairperson's Corner Changing Seasons and Completing Missions
By Kelly Levy

5 Incoming Chairperson's Column
By Scott Meise

13 Interview With Alan Ryder, President & CEO of Aurigen Capital Limited
By Alan Ryder

16 Whose Job Is It Anyway?
By Ross A. Morton

18 Term Conversions — A Reinsurer's Perspective
By Tony Zajac

22 Life And Health Reinsurance: Dynamic Duo
By Jane Cheng

24 What is the "New" Normal? As an Insurer, are You a Part of It?
By Natalie Ho

A Primer on Reinsurance Pricing Strategy A Checklist for Optimizing Reinsurance Negotiation

By Larry Warren

This article is written with the assumption that both the reinsurer and the direct writer would each benefit from fully exploring all appropriate assumptions and considerations directly and indirectly impacting reinsurance pricing. Such assumptions and considerations are discussed below. The reinsurer benefits by being able to offer the lowest YRT rates and the most competitive pricing that it can justify, enabling it to win a share in the pool. The direct writer benefits by giving the reinsurer the additional insights and justification for a lower priced quote, thus reducing their reinsurance premiums and increasing bottom line net income. This "negotiation process" should be looked at as more of a useful educational process. With less information the reinsurers may be more conservative in their

CONTINUED ON PAGE 7

Published by the Reinsurance Section Council of the Society of Actuaries

This newsletter is free to section members. Current issues are available on the SOA website (www.soa.org).

To join the section, SOA members and non-members can locate a membership form on the Reinsurance Section Web page at http://www.soa.org/reinsurance.

Reinsurance news

Issue 74 | November 2012

Call for Articles for next issue of Reinsurance News.

While all articles are welcome, we would especially like to receive articles on topics that would be of particular interest to Reinsurance Section members.

Please e-mail your articles to Richard Jennings (*richardcjennings@gmail.com*) or David Xia (dxia@scor.com).

Some articles may be edited or reduced in length for publication purposes.

Chairperson's Corner By Kelley Levy

Changing Seasons and Completing Missions

Kelly Levy is vice president, capital management with Great-West Life in Toronto, Ontario. Kelly can be reached at kelly.levy@gwl.ca.

Interesting perhaps that my first column as Reinsurance Section chair was composed on a trans-Atlantic flight and yet again, I find myself almost a year later sitting on that same long flight, pounding out my final chairperson column. Although this particular flight may now be a familiar path, the Reinsurance Section Council, however, forged a new path this year. I suppose we have actually gone "back to the basics" of the Reinsurance Section Council mission.

The mission of this section is to provide a leadership role to the actuarial and reinsurance communities as a resource for both the pooling and dissemination of intellectual capital and the identification of significant trends and events with an overriding objective of enhancing the understanding of reinsurance for all our stakeholders, actuarial as well as non-actuarial. Our current Life Education and Reinsurance Navigation (LEARN) program, which brings reinsurance education to state departments, continues to be an important part of fulfilling this mission. I am pleased that under the direction of the incoming chair, Scott Meise, and a stellar planning committee, the Reinsurance Section will be offering a new Reinsurance Boot Camp following the Life and Annuity Symposium in the spring of 2013 in the beautiful city of Toronto. This initiative will be a further example of our commitment to the section mission.

The Reinsurance Council also aimed for and achieved the goal of having greater representation of actuaries working for direct writers. Really, these people are the actuaries closest to policy-level risks and we need to have them and their knowledge involved in leading the Reinsurance Section forward. The section elections bring a new season and a new set of council members. Thank you to all who offered their names for the ballot. Mike Mulcahy, Scott Campbell and Richard Lassow have now begun their three-year terms with the council. I'd like to thank the outgoing council members for their valued contributions to furthering the work of the Reinsurance Section. Thank you to both outgoing council members, Ed Martin and Michael Shumrack, for your support of the section. Thank you also to all the volunteers who presented meeting sessions, wrote articles and furthered research, all for the goal of benefitting the section membership over the last year.

It is certainly hard to believe that as the seasons fly by, another SOA Annual Meeting passes and a new (and for all those snow lovers, perhaps this time a more Canadian) winter quickly approaches. The year 2012 to this point has been a rather "odd" year indeed. During the year, we saw:

CONTINUED ON **PAGE 4**

Chairperson's Corner … (cont.)

- In the United States, the worst drought in a half century;
- In Europe, the Euro debt crisis continues and some nations within the zone strike in opposition to austerity measures;
- Worldwide, insurers battle with the demons associated with an extended low interest rate environment;
- In the United Kingdom, the queen of England celebrated both her Jubilee and an Olympic Games; and
- In Canada, the Canadian teams are again kept from hoisting the Stanley Cup (OK, maybe that one wasn't so odd after all).

Of course, these are not all items that impact our day-to-day work, but I do believe actuaries and the actuarial profession continue to be resilient in the face of change and in the "changing of seasons." Actuaries' leadership, risk assessment, valuations, product pricing and reinsurance coverage risk mitigations continue to put the profession in a positive light around the globe. I wonder, sometimes out loud, if we've ever been in the midst of greater change in areas affecting the risk counters. Regulatory review in terms of capital requirements, Own Requirement Solvency Assessments (ORSA) and accounting changes such as with international financial reporting standards (IFRS)—to name a few—are underway in Canada, the United States and Europe. The risk profile of retained versus reinsured business has been shifting risk back to the direct writers. The list could be a long one, but change is certain.

Although it is our nature to resist change, Harold Wilson, the late British Prime Minister, wisely said, "He who rejects change is the architect of decay. The only human institution which rejects progress is the cemetery." And so, as I end this term as chairperson, I hope that you, individually and as a member of the actuarial profession, do your best with what the next season or mission may bring, perhaps remembering another quote by Mr. Wilson: "Courage is the art of being the only one who knows you're scared to death." ■

Incoming Chairperson's Column

By Scott Meise

When I think about the turns my life has taken over the past couple of years, I am reminded of the Michael Scott quote from the TV show *The Office*. When asked about his philosophy for success, his response was:

"My philosophy is basically this. And this is something that I live by. And I always have. And I always will. Don't ever, for any reason, do anything to anyone, for any reason, ever, no matter what, no matter where. Or who, or who you are with, or where you are going, or where you've been, ever, for any reason whatsoever. …"

After this, there's a cut to him explaining to the camera:

"Sometimes I'll start a sentence, and I don't even know where it's going. I just hope I find it along the way."

There have been some times over the past couple of years that I've felt like I just started running without necessarily knowing where the finish line was, because when I started to figure things out I didn't want to still be at the starting line. For those of you who don't know me, I've been on the Reinsurance Section Council for the past couple of years, and I'll be rotating into the chairperson role this fall. When I first ran for the council, I figured it would be a great place to network, keep abreast of developments, help and learn from research, etc. A year into my three-year term, I was offered the opportunity to come to London with my company, and I took it. Oh, and my wife and I also had our third child last year—not a problem, kids today pretty much take care of themselves, right? It's a lot harder to concentrate on the musical genius of Jedward when kids are spreading toys all over the house like Johnny Appleseed (google "Jedward Waterline Eurovision 2012." You'll thank me.)

In an industry where you'd expect the players to value predictability, I was running full-speed in the opposite direction. I was talking to someone recently about what I do, and I said that my company and my department "drag you, kicking and screaming, to knowledge." I honestly believe this—that my time in reinsurance has consistently put me in a place where I had to rise to the occasion. Sometimes I've done so admirably, sometimes I've left a little to be desired, but I've always come out on the other side knowing a lot more, connecting more of the dots that I'd seen up to that point in my career. I may be tethered to the backs of some pretty impressive people, but at least I can speak some of the same language as them due to these experiences.

So, when I was running full-speed away from predictability, it was nice to find myself surrounded by a bunch of other people doing the same—looking for ways to get involved, to learn, to contribute to the base of knowledge. That has certainly been the case over the past couple of years on the

CONTINUED ON **PAGE 6**

Scott Meise, FSA, MAAA, is VP and actuary, Global Financial Solutions with RGA. He can be contacted at smeise@rgare.com.

Reinsurance Section Council. From the LEARN team that travels to state insurance departments to talk about reinsurance, to the planning committee for the Intro to Reinsurance Bootcamp we'll be holding next May in Toronto, to the people on the Reinsurance Section Council and research groups themselves, I've found people looking to put time back into the profession, and I've benefited from knowing them.

When I think of where I want to be with my knowledge of the industry, I think there are three steps to an actuary's career:

How?
Why?
Why Not?

"How" relates to the things that we learn early in the process, what to do to give valuable information to those that can use it. "Why" occurs after that point—why do we do what we do, and how do we use it. The last category, "Why Not," is for people that know the "How" and "Why" well enough that they are able to question the rules they've already learned and figure out new and better ways of doing things. I've had the fortune of working with a decent number of them recently, and they are essential to the reinsurance industry, where we're constantly trying to add value to insurance companies.

My goals for the upcoming year at the Reinsurance Section Council are to continue the good work that has come before me and to try and be as customer-focused as we can—to help those already at the "Why Not" stage network, research and add value back to the community, and to help those at the earlier stages in their progression. To the extent that you have thoughts in that direction or simply want to know more about what the Reinsurance Section Council is already doing, I encourage you to contact us with ideas and/or volunteer with us to the extent that you can. I think you'll find yourself dragged in a good direction as well! ■

pricing, while conversely with more information the reinsurer can use a sharper pen. The more knowledge and insights the reinsurer has about the direct writer's business which may impact current mortality and future mortality patterns, the greater the likelihood that its quote will be more competitive.

Obtaining reinsurance quotes may be a simple matter, but the selection of which reinsurers should participate in the bidding and the negotiation processes calls for special insights. We know that there is often a big disparity in the reinsurance quotes obtained from reinsurers competing for our business. It is necessary to understand the underlying reasons for big disparities in reinsurer pricing. We need to recognize each reinsurer's methodology and assumptions which are driving its pricing. In most of what follows, I assume that the direct writer wants a first dollar quota share YRT reinsurance arrangement, but similar concepts apply to coinsurance as well.

Outlined below are some of the most important assumptions and associated considerations that impact reinsurance pricing. These items are offered as a checklist for careful joint review by the reinsurer and the direct writer.

ASSUMPTION A. CHOICE OF MORTALITY TABLE

Probably the most important assumption (and certainly the one with the largest financial impact) made in reinsurance pricing is the mortality table believed to have the appropriate slope for the client company's mortality. We place the slope consideration at the top of our list as the paramount feature justifying painstaking research as part of the reinsurance pricing negotiation process. Most reinsurers currently use either the 1975 – 80 select/ultimate table or the 1990 – 95 select/ultimate table (2001 VBT) when developing quotes. The former table models relatively flat durational mortality progression while the latter exhibits the opposite. Mortality rates in this more modern table exhibit marked and steep progression after issue. Once the issue of table suitability has been addressed, the chosen standard mortality table should be fine-tuned to reflect anticipated experience by developing scaling factors to initially assure a perfect fit. The working mortality table to be assumed for pricing purposes will reflect best estimates of the slope of future mortality experience. It may transpire that the table finally adopted is a hybrid table of intermediate slope exhibiting features of more than one standard table.

Considerations in Choosing a Mortality Table with Appropriate Slope

1. Underwriting Rules/Guidelines/Practices

Variations in underwriting rules, guidelines and practices obviously impacts future mortality patterns. While underwriting guidelines vary from company to company, the degree to which the underwriters adhere to the guidelines (i.e., the frequency of underwriting exceptions) must certainly be recognized. Special underwriting programs such as table shaving, special credits, etc., must be properly defined and disclosed and can affect the overall slope.

Generally, tighter underwriting requirements and stricter adherence to the underwriting rules and guidelines, will produce lower mortality rates on the outset and sharper increments in duration-specific slope.

2. Average Size of Policy (Face Amount)

The distribution of face amount per life insured plays a dramatic role in the overall underwriting screening process. For example, two companies may have identical stringent underwriting guidelines, yet one company (company A) operates in a market where face amounts in excess of $500,000 are the norm while another company (company B) may be issuing policies with face amounts averaging $100,000. Thus the actual underwriting requirements being obtained by company B would be very limited relative to company A, giving rise to relatively weak selection and an expectation of higher mortality rates with a flatter durational slope.

3. Distribution System

The distribution system of the ceding company or for a particular product can have a significant impact on the degree of potential anti-selection. Anti-selection will

CONTINUED ON **PAGE 8**

Larry Warren, FSA, MAAA, is executive vice president and chief actuary for National Benefit Life Insurance Co. He can be contacted at larry.warren@primerica.com.

likely impact the mortality level and durational slope. Brokers writing for multiple companies will seek out deficiencies in companies' product designs, underwriting, or pricing and exploit these to the detriment of the direct writer and its reinsurers. Career agents writing for only one company will generally produce business with less potential anti-selection.

4. Market Segment (Upscale, Middle America, geographic location, etc.)
It is well known that each market segment will exhibit its own variation in mortality patterns resulting from social, economic, geographic, and cultural differences. Companies underwriting middle market risks with lower average face amounts are likely to experience higher mortality rates, and flatter durational slope.

5. Average Issue Age Distribution
A younger average issue age distribution linked with a low average face amount per life will generally have less stringent underwriting requirements and likely flatter durational slope.

6. Other Important Points
It should be noted that studies have shown that the impact of choosing one mortality table or another in projecting the present value of future mortality can produce a swing of up to 20 percent or more in reinsurance YRT rates and hence turn a competitive quote into an uncompetitive one. This impact varies by issue age and gender distribution. For additional information, see the author's article "The Relationship of Mortality Projections and the Underlying Mortality Tables Used." In the August 2002 issue of the SOA publication, *"Product Matters!"*

It is therefore of utmost importance that you identify and explain all possible characteristics and aspects of your business including those shown above in Assumption "A" (Choice of Mortality Table) to each reinsurer quoting, that would tend to justify an assumption of a flatter mortality slope than the 1990 – 95 (2001 VBT) select/ultimate table. The reinsurance quote may be expressed as a percentage of the 1975 – 80 select/ultimate table even though the reinsurer based its pricing on a steeper scale. In that case you would still have ample opportunity to convince the reinsurer that a flatter slope is more appropriate for your business and have them improve their quote.

Techniques for generating a hybrid, modified, or redesigned table exhibiting a flatter and more appropriate mortality table can be addressed during the negotiating process. Some techniques are discussed in the author's article, "Generalized Mortality Table Analysis," in the March 2003 issue of the SOA publication, *Reinsurance News*.

If after reviewing the various aspects of your business and you cannot find any attributes which could justify a flatter slope, then I would recommend that the following point be raised with the reinsurers to encourage them to assume a flatter slope than the 1990 – 1995 mortality table (2001 VBT).

The 1990 – 1995 mortality table was based on intercompany mortality experience from calendar years 1990 – 1995. It is a known fact that the lapse rates for policies during this period were very high compared to current levels. Therefore one could argue that the slope of this table is artificially high due to the anti-selective lapses which occur when lapse rates are atypically high. Consequently current mortality slopes should be expected to be flatter than the 1990 – 1995 mortality table.

ASSUMPTION B.
MORTALITY IMPROVEMENT FACTORS

Another very important assumption is the extent that mortality improvement is factored into the pricing (i.e., the reinsurer's mortality assumption for your business). For example, a 1 percent annual mortality improvement factor over 20 years produces a decrease in the present value of future claims ranging from 7 – 10 percent depending upon issue age. As a result of the fact that reinsurers commonly build future mortality improvements into their pricing, coupled with the fact that projecting future mortality is an art as well as a science, it is not unusual to find reinsurers who will offer a YRT reinsurance premium rate scale (even after factoring in their expense and profit margins) which is lower than the ceding company's pricing mortality assumption.

> "ANOTHER VERY IMPORTANT ASSUMPTION AND SPECIAL CONSIDERATION IS THE REINSURER'S END-OF-TERM PRICING."

The Mortality and Underwriting Survey Committee of the Society of Actuaries has recently published the results of the latest (March-April 2011) survey on mortality improvement. The results of practices of direct writers and reinsurers was published separately with a comparative analysis.

ASSUMPTION C. REINSURER'S EXPENSE ASSUMPTIONS

The reinsurer's expense methodology and assumptions (per unit, per policy, percent of premium) can have a significant effect on pricing. For example the per unit expense that a reinsurer may assume (unless subject to a reasonable cap) could lead to unrealistically high total treaty expenses where large business volumes are involved and can lead to substantially less competitive or even uncompetitive quotes.

ASSUMPTION D. END OF TERM PRICING

Another very important assumption and special consideration is the reinsurer's end-of- term pricing. Studies invariably confirm the severe anti-selection process occurring at the end of each level premium paying period. Severity of anti-selection varies from company to company and product to product. Many factors come into play that influence the end of term anti-selective continuation rate and the resulting anticipated deterioration in mortality experience of the term portfolio. The magnitude of the direct writer's renewal premium after the initial level term period (typically an A.R.T. ranging from 200 – 300 percent of the 2001 CSO) impacts the degree of the shock lapse rate and resulting anti-selection. The degree of mortality deterioration varies according to a number of factors such as the length of level term period, the magnitude of the renewal premium following the initial level premium term perios, issue age, duration, risk class, and gender. Due to the complexity and subjectivity involved in recognizing, measuring, and evaluating each of these parameters in pricing post-level-term-mortality, the reinsurers naturally tend to be very conservative in pricing for continuation. This can turn what would have otherwise been an attractive quote into one which is unacceptable. Technical approaches based on tools such as the Dukes-McDonald Method or the Becker-Kitsos approach are valuable in determining the appropriate end-of-term mortality assumption and hence in judging whether the reinsurer's end-of-term pricing is equitable and reasonable. To address this problem and potentially enhance your quote, it might be prudent for the ceding company to request each reinsurer to provide a quote predicated on the condition that at the end of the level-term period, the reinsurer has the unconditional right to increase premiums and the ceding company has the unconditional right to recapture if rates are increased beyond those in the contract. (Whether or not the reinsurer actually increases their premium rates.)

IMPORTANT ADDITIONAL CONSIDERATIONS

1. Reinsurance is not a commodity

Purchasing First Dollar Quota Share YRT Reinsurance is not exactly like purchasing a commodity where reinsurers with the lowest prices are necessarily the best deals. Credit rating, financial strength, services provided, jumbo limits, facultative capacity, and transactional facility (ease of doing business) are some of the important attributes that should be recognized when selecting reinsurers.

2. Treaty Language and Provisions

Treaty language and provisions often vary from rein-

CONTINUED ON **PAGE 10**

surer to reinsurer and play an important role in the amount of effort and manpower which will be needed in the overall administration of the reinsurance arrangement, meeting the expectations of both parties, and the associated costs. Provisions such as Errors and Oversights and Policy Changes should be crisply and clearly written to prevent potential future disputes. Inclusion in your treaty documents of specific clarifying examples may be helpful in heading off future disagreements, but the examples also work against you if they are not clear and do not take into consideration all possible interpretations and applications.

Writing, defining, and structuring treaty language and provisions is a specialist task requiring painstaking attention to detail that could pay dividends in the event of a dispute. Elaborating on this aspect is beyond the intended scope of this article, but it is worth mentioning two particular treaty provisions that, if not drafted with precision, can have significant financial impact.

Reinsurer Premium Guarantee Provision

The Premium Guarantee language must be clear, effective and have teeth. As we indicated earlier in our discussion, the reinsurer's choice of which mortality table to assume (i.e., which mortality table they believe reflects the appropriate slope for the particular company's mortality that they are quoting on) and what level of mortality improvement factors to assume, have the greatest financial impact in pricing. There is clearly a significant amount of judgment and subjectivity involved in these two important assumptions and hence in projecting future mortality which the reinsurer uses in developing their pricing.

In a scenario where the actual claims are following the slope of the 1990–95 mortality table and reinsurance premiums have been based on the 1975–80 mortality table, the mortality claims will increase at a faster rate than the reinsurance premiums. In a few short years the reinsurers would find themselves in a situation where mortality claims are now considerably higher than the reinsurance premiums. This observation, or shall we say revelation, comes at a time as the experience unfolds, when the reinsured block of in-force business has become quite large and is generating significant losses to the reinsurers. A similar effect would also occur if the mortality improvement that the reinsurer built into their pricing fails to materialize.

In order to avoid or mitigate the recurring impact of significant losses, the reinsurers may attempt to raise rates especially when the Premium Guarantee Provision in the treaty is weak, unclear or ambiguous, which has very often been the case in YRT reinsurance.

An example of recommended Premium Guarantee language in YRT treaties that should prevent the reinsurer from raising its premium rates on in-force business is as follows:

"We anticipate that the YRT rates shown in this agreement will be continued indefinitely for all business ceded under this agreement. However, because of statutory deficiency reserve requirements, the only guaranteed premiums are premiums equal to the 2001 CSO Mortality Table discounted with the maximum prevailing statutory interest rate according to the issue year."

AND

*"We may only increase YRT rates if we increase rates for our entire class of YRT business with **each** of our clients. If we increase YRT rates, then you have the right to immediately recapture without penalty or recapture fee, any business affected by such increase."*

The original intent of the first paragraph of the Premium Guarantee provision was to guarantee the current reinsurance premium rates in a way that the reinsurer would not have the ability to raise its rates. If the reinsurer however, explicitly guaranteed the current rates, it would be required to set up deficiency reserves. Therefore, the actual language was constructed in a way that falls far short of actually guaranteeing the treaty rates.

The first paragraph, although quite common, gives the direct writer very limited protection against the reinsurer from actually increasing its rates on in-force business for any reason it considers justified or even for any reason at all. The lack of clarity and ambiguity in this paragraph can lead to disputes and arbitration proceedings with serious financial repercussions to the direct writer.

The second paragraph, denies the reinsurer the right to raise the treaty YRT rates unless it also raises YRT rates applicable to all other clients. Thus, by virtue of the second paragraph, a reinsurer experiencing significant losses as in the scenario alluded to above can only raise rates if it does so globally across all its YRT treaties, even in respect of clients with favorable experience. Only a reinsurer exiting the YRT business would follow this course of action. Even in such an extreme case the direct writer would have the ability to recapture without fee or penalty.

Clearly, addition of the second paragraph virtually ties the reinsurer's hands and substantially protects the ceding company.

Recapture Provision

In a reverse scenario from the one discussed in the Premium Guarantee Provision, if the actual mortality claim rates are following the slope of the 1975 – 80 mortality table and the reinsurance premium rates have been based on the 1990 – 95 table, then the reinsurance premiums will increase at a faster rate than the death claims. After a few years the direct writer will find itself in a situation where the YRT reinsurance premiums are now considerably higher than its mortality claims. This usually occurs at a time when the reinsured block of in-force business is quite large and is generating significant reinsurance losses to the direct writer. The direct writer will be strongly motivated to improve its situation and will likely attempt to recapture its business.

The Recapture Provisions in most reinsurance treaties are unclear and/or ambiguous for first dollar quota share arrangements, usually to the detriment of the reinsurers. For example, some treaties have no limitation at all regarding the business eligible for recapture. They merely allude to a recapture period (often shown on a separate schedule page). Other treaties refer to the fact that facultative and reduced retention cessions are not eligible for repature, but never clearly indentify quota share arrangements as reduced retention. In addition, treaty provisions are often silent as to whether an increase in the ceding company's quota share retention (e.g., 10 percent to 100 percent), represents a true increase in retention scale or not. Of course the ceding company would assert that it is, in order to strengthen its justification to recapture. Since it is typically the reinsurers' intent that quota share business not be subject to recapture, the treaty provision language must deal with this issue clearly and unambiguously.

Until such time that the reinsurers revise and clarify the recapture provisions in their treaties, we will find direct writers falling into the scenario above, whose management teams will be compelled to focus on any ambiguous, unclear, or vagues treaty language to recapture their business which is experienceing significant reinsurance losses. For additional information and details of the importance of this issue, see the author's article "The Recapture Provision, Is It Up To Date?" in the March 2004 issue of the SOA publication *Reinsurance News*.

Another helpful article titled, "How To Lose A Million Bucks Without Really Trying: Oversights In Negotiating Reinsurance Treaties," may be found in the January 2011 issue of *Reinsurance News.*

3. How many Reinsurers should be selected to participate in the Pool?

There is no universal answer to this question. A higher number of reinsurers participating in your pool (e.g., six to eight) may increase the number of facultative outlets for your underwriters and increase automatic binding limits. It would certainly add stability to the pool in the event that some reinsurers decide to drop out after giving the required notice of termination. These are all important attributes that a pool of many reinsurers would have.

In today's business environment where most companies are very cost conscious, I suggest that a smaller reinsurance pool be considered.

There is typically an increase in overall reinsurance costs as we increase the number of participating reinsurers in our pool. When a large number of reinsurers

CONTINUED ON **PAGE 12**

participate in the reinsurance pool there is an added burden and hence added cost relating to managing paperwork and assisting the reinsurers as they routinely and periodically perform on-sight underwriting, administration, and claims audits. Additional costs which can become significant relate directly to higher aggregate reinsurance premiums due to the fact that in forming your pool typically the lowest priced reinsurers are selected first, and therefore each additional reinsurer will have higher reinsurance premium rates than the previous ones.

Let's assume that a pool consisting of only three or four reinsurers can be formed which will support both the automatic binding limits and facultative outlets that your underwriting team requires. This should not be too difficult to obtain. Then the remaining attribute that is still lacking is stability; thus we must be able to assure that, if one or two members terminate, there is sufficient time to find replacement reinsurance companies before actual termination takes place.

I am suggesting that establishing stability in a smaller reinsurance pool can be accomplished during the negotiation process by requiring that the customary 90-day notice of termination be changed to a 365-day notice of termination. We now will have produced the same attributes of a large reinsurance pool with stability, lower reinsurance premiums, and a less costly smaller pool.

4. Modification or Changes to Underwriting Guidelines or Requirements

A. Minor Changes in Underwriting

When the direct writer modifies or changes their underwriting guidelines or requirements there will be no credible mortality experience (reflecting this change or modification) to rely upon for some time afterwards. Without credible mortality experience the reinsurer will typically be more conservative out of necessity. If the underwriting guidelines or requirements were recently tightened, then the credible mortality experience reflecting the previous underwriting standards could be used as a starting point. A scaling factor recognizing the anticipated improved mortality can then be negotiated with each reinsurer. Some reinsurers will be more optimistic than others in their assumption of the level of mortality improvement resulting from the tightened underwriting, which naturally can provide an opportunity for obtaining a more competitive quote from an aggressive reinsurer. Naturally all of the considerations previously discussed earlier in this article should be addressed in the negotiation process.

When, on the other hand, underwriting guidelines or requirements are to be loosened, the rationale for this modification should be carefully explained to each reinsurer. The direct writer's underwriting department can be very helpful in communicating to each reinsurer what impact if any, this underwriting change is expected to have on mortality for new business and hopefully that the mortality experience reflecting the previous underwriting standards can be used without any upward adjustment.

B. Major Changes in Underwriting

Significant changes in underwriting requirements continue to be made over the years throughout the industry. For example, the transition from using blood and urine to oral fluid (subject to age and face amount limitations) was a major change in underwriting. Some reinsurers were initially more cautious than others in determining what impact this would have on mortality rates and how to reflect this in their pricing. Even today there is still a noticeable variation in reinsurer pricing differentials when comparing blood-tested business and non-blood-tested (oral fluid) business. We will address this issue further in our discussion on Flexible Reinsurance Selection Procedure below.

Increasingly companies are moving away from oral fluid testing towards the use of the prescription drug (Rx) data base, subject to age and face amount limitations, and often with the incorporation of automated underwriting programs. The objective is to accelerate, simplify, and streamline the agent and customer application and underwriting process.

Exactly what impact this will have on mortality rates and how to reflect this in their pricing is currently a big challenge to both direct writers and reinsurers alike. It should therefore come as no surprise that currently there is a significant variation among reinsurers in their pricing differential between blood-tested and non-blood-tested (using an Rx data base) business.

CONTINUED ON **PAGE 27**

Interview With Alan Ryder, President & CEO of Aurigen Capital Limited

By Alan Ryder

Reinsurance News: **First, thank you, Mr. Ryder, for taking the time to speak with us. For our readers who may not be familiar with your work, could you tell us a little about Aurigen and your role within the organization?**

Aurigen Capital Ltd. is a Bermuda-based insurance holding company formed in 2007 with $506 million of initial capital commitments to focus on the life reinsurance business in North America. We now have operating companies in place to transact reinsurance in Canada, Bermuda and, most recently, the United States. We have deployed about $270 million of capital and surplus and have access to a similar amount of additional capital from four large private equity firms — Bregal Capital, EdgeStone Capital Partners, Pine Brook and Soros Strategic Partners.

Aurigen was founded by four seasoned life reinsurance professionals in Toronto. The firm has grown to more than 45 employees in three countries. The management team now consists of 17 professionals averaging more than 20 years of experience. I am one of the founders and serve as CEO of both the holding company and its Canadian operating subsidiary.

Reinsurance News: **Judging from your biography, it appears that you have always operated at a different speed than most people. You became CFO of Canadian General Life only six years out of college, and, a few years later, you were already founding new companies. It looks like you've never slowed down. What drives you?**

Aurigen happens to be my third life reinsurance start-up. Somehow I got there one step at a time. I have never felt ambitious and have never had a career plan. But I have also never let myself be anything less than I could be. So I guess that I have been driven by trying to reach my potential. Along the way, I have tried to be around exceptional people, for both the learning experience and the energy and smarts that they bring.

Reinsurance News: **What are some of the highlights of your career thus far?**

Twice, early in my career, someone gave me a chance, and the scope, to do work that was a stretch for me. In both cases, in a short period of time, I managed to achieve a lot. After that, I had an entrepreneurial urge and formed a successful business development consultancy with an incredible partner. Until that stage of my career, I had never fully appreciated the synergy of human and financial capital. Since then, I have had two great opportunities, including Aurigen, to work that synergy.

Reinsurance News**: Aurigen was created to fill in the gap that GE left behind in the Canadian life reinsurance market. How would you judge your progress so far in capturing market share from the top three reinsurers?**

Aurigen has been steadily climbing the business relationship ladder with primary companies in Canada since it formally entered that market in 2008. Our market share is now around 5 percent and we have treaties in place with the top accounts in Canada. This is a long-cycle business and market share is a lagging indicator of market acceptance. Our "won share"—the reinsurance volumes awarded versus reinsurance volumes offered to the market — is much higher than our market share. And Aurigen's perception in the market, as measured by reinsurance consumer surveys, is rapidly rising. All in, we are very pleased with our progress.

Reinsurance News: **Now that Aurigen has opened an office in the United States, have your firm's objectives changed?**

Not really. Our long-term goal has always been to become a prominent, international life reinsurance business. Our U.S. company is an important step along that journey.

Reinsurance News: **With U.S. life reinsurance cession rates in decline, what is your strategy to compete in this market?**

Aurigen USA represents fresh, credit-worthy capacity that is unencumbered by legacy issues created by

Alan K. Ryder, FSA, FCIA, MAAA, is president and CEO of Aurigen Capital Limited in Hamilton, Bermuda. Alan can be reached at alan.ryder@aurigenre.com.

consolidation. In addition, many of our targeted clients are now overexposed to one or more of their current reinsurers as continued consolidation has undone the intended diversification of yesteryear.

Our U.S. strategy will be similar to that in Canada, namely to provide fresh and effective risk and capital management solutions relating to the full spectrum of mortality and longevity risks. And while our U.S. company may be relatively new, it's management team, led by Mike Pado as CEO, is highly experienced and engaged in the U.S. market. We believe that this formulation will provide us with access to opportunities to grow our business in a prudent manner, despite falling cession rates.

Reinsurance News: **What would you say are the major differences between the Canadian and U.S. life reinsurance markets?**

From a distance, the two markets might look similar, but for size. Up close, there are three other important differences. First of all, the regulatory environments are not at all similar. Secondly, the Canadian market is much more concentrated — there are many fewer primary companies and fewer reinsurers. Finally, the U.S. market has generally better-developed access to capital. These differences have many implications for the consumption and structuring of reinsurance.

Reinsurance News: **Last December, you completed Canada's first embedded value securitization. Do you foresee these types of transactions becoming more commonplace in the future?**

A securitization is complex and there are a limited number of buyers, so I don't foresee many companies wanting to execute on them in the near term. Reinsurers, however, are the natural aggregators of "pure" insurance risk and are better positioned to transfer this risk into the capital markets. Aurigen wanted to do this securitization to create the technology to access the capital markets in this fashion. So we will do more of these in the future.

Reinsurance News: **Do you believe more investors will be comfortable with these instruments, given the number of assumptions and complexities in an embedded value calculation?**

This is the big challenge to the marketplace. Prior to 2008, this kind of securitization was "wrapped" in a way that enabled less sophisticated investors to acquire the paper. Today, the environment is best described as "buyer beware" — only sophisticated investors can evaluate the risk profile. I don't see this changing quickly unless some kind of wrapper returns to the market.

Reinsurance News: **If the insurance securitization market continues to grow, will investment banks be competing with reinsurers for business? If so, what role will reinsurers play in the long-term?**

A more liquid market in this kind of paper would generate competition for reinsurers. Today, however, transaction costs are high and there are relatively few buyers. Accordingly, a liquid market is off in the future. The most likely players in the near term are the reinsurers themselves, acting explicitly or implicitly as a conduit to the capital markets. So it could easily be the case that the securitization market is more opportunity than threat for reinsurers.

Reinsurance News: **Your firm advocates running a lean organization that eschews layers of management. This seems to coincide with your emphasis on delivering more attentive service to your clients, but how will this management philosophy adapt as Aurigen continues growing?**

Newer and smaller firms are naturally more nimble than larger and established ones. And such nimbleness permits a firm to offer more customized levels of service. Aurigen wants to offer a stronger customer service model both because it is better positioned to do so and because our market research suggests that customers want that. Growth brings a challenge to any organization. To remain nimble in the face of growth, it is important for Aurigen to be properly structured to support the customer service culture and to remain very focused on things it can do well.

Reinsurance News: **What are your priorities now? What are your plans for the future?**

Aurigen has three priorities today. The first is to continue to expand our offering and market presence in Canada. The second priority is to establish a prudent position in the U.S. market. Our third priority is to extend our direct access to the capital markets to the benefit of customers and current investors.

Reinsurance News: **Finally, we've read that you created a popular hockey statistical analysis website, *hockeyanalytics.com*, as a hobby. Baseball enthusiasts have been successful in predicting performance from such analysis because of the immense number of statistics tracked in each game. Do you expect hockey analytics to approach a similar level of data mining and predictive capability?**

When I started *hockeyanalytics.com* nearly 10 years ago, I discovered that there were approximately two

> **"THE MOST LIKELY PLAYERS IN THE NEAR TERM ARE THE REINSURERS THEMSELVES, ACTING EXPLICITLY OR IMPLICITLY AS A CONDUIT TO THE CAPITAL MARKETS."**

other like-minded people on the planet. The application of analytic techniques to hockey has come a very long way since then and there are now an uncountable number of "analysts" out there. As was the case with baseball, these people can be categorized by two main descriptions. There are outsiders, peeking into the game as permitted by information that is in the public domain. And there are contrarians, questioning traditional views and the utility of standard measures of performance. That this kind of analysis becomes more commonly discussed and used by insiders is inevitable. It happened in baseball, before the Internet, and it has to happen in hockey. I think that it is happening quite quickly.

Hockey has an important limiting feature. Baseball is a game of discrete events and states. This lends itself to a full, factual record of the game. Hockey is fluid and defies such a record. It will therefore always be a much more challenging game to rationally interpret. Notwithstanding this, hockey analysts have developed useful predictive tools to cut through the fog of randomness and the clutter of useless measurements.

Reinsurance News: **We appreciate the time you've spent with us. Thank you, and good luck to you, your firm and your Maple Leafs.** ■

Whose Job Is It Anyway?

By Ross A. Morton

Ross A. Morton is reassurer, advisor and mentor to a variety of people and companies. Ross can be reached at ross@rossmorton.com.

By chance, my reading today was the 1932 underwriting manual of the Canada Life Assurance Company titled, "Some Impairments and Their Significance in Life Underwriting." Calm down, dear reader, there is no need to try and order it from Kindle, Apple or Kobo since it is not in digital format. In fact, I may have the only written edition in existence thanks to my curiosity about life insurance history and a good and elder sage who entrusted me with the aging paper document to keep and protect. It was a page turner; not since reading a recent John Grisham book have I experienced such fervor to reach the end.

Imagine a year when amongst the C's of impairments you have "character" and, better yet, the descriptive words that followed: "character, in conjunction with habits, morals and business reputation, and general standing in the community, has a most important bearing upon underwriting. Unfavorable character affects mortality and each case requires a thorough investigation and will be dealt with on its merits. Unpromising for benefits." The applicant may very well pass the character test but doubtful they will be granted benefits like waiver of premium or double indemnity.

Imagine a year when amongst the D's of impairments you have "Diabetes Mellitus, which if definitely diagnosed, should be discouraged." The writer of the manual rarely uses the word decline and seemed to prefer "discouraged" to tell the lay underwriter to not accept.

Lastly, imagine a history of an applicant fully recovered from a duodenal ulcer (look it up—we used to rate for it up until the 1980s) being rated under the manual's instructions stating: "Ratings vary from $5 per mil (thousand for younger people) per year for four years within the second year after full recovery, to $5 per mil for one year in the fifth year after full recovery."

Now, fast forward back to today and imagine declining all HIV positive applicants for insurance in North America while dozens of insurers in countries supported by the same reinsurers we have here in North America accept a segment of this HIV positive group at an ever-decreasing extra premium and less restrictive product. Just as I read underwriting rules from 80 years ago and shake my head, I know all too well that future insurers will read what we did in 2012 and shake their heads as they try to fathom why the statistics and the market tell us what we are doing by declining HIV positive applicants is as bad as declining all diabetics in 1932.

To compound the issue, the subject of insurability of HIV positive individuals is not even discussed among actuaries or underwriters or medical directors in their yearly conferences. There was, however, a breakthrough of sorts in May 2012 when the Canadian Institute of Underwriters (CIU) had a panel titled "HIV: Time to Take a Risk." The panel heard facts, figures and the reality of HIV stigma, including the (in)ability to find insurance protection, as presented by leaders from the AIDS Committee of Toronto and the Toronto People with AIDS Foundation. The audience of risk takers showed by their responses they understood there is a segment of the HIV positive group that could be insured. The audience knew something should be done. The problem is who leads the charge. Should it be the CIU executive? No, I surmise they do not see that as one of their mandates and would prefer to follow some other industry group's leadership. The CIU brought

"WHOSE JOB IS IT ANYWAY TO FIND A WAY TO INSURE THE SELECT HIV POPULATION IN THE NORTH AMERICAN MARKET?"

the subject to the forefront and believe it is now the job of an organization like the Canadian Institute of Actuaries (CIA) or the Canadian Life and Health Insurer Association (CLHIA) (the last time they did anything in the area of risk selection, it backfired and all they accomplished was to anger the leadership of the underwriting fraternity).

Now that the underwriting leadership feels it has done its part, who will step up? Whose job is it anyway to find a way to insure the select HIV positive in the North American market (or let's contain ourselves to Canada where free medical care is a given). In no uncertain words, I was told the CIU was not going further with it but once somebody tells them what to do with HIV, they will do it. Fair enough.

In Europe, from what I can learn, it was insurers in countries like the Netherlands who started some seven years ago to take the risk and over time refined their restrictions to allow for a broader inclusion rate. In Europe in general, it was more recently that reinsurers held significant conferences (e.g., Swiss Re in January 2012) where they publicly supported the discussion and offered their capacity to support the insurers in their endeavors to insure the most selective group of HIV positive. The Swiss Re seminar papers available online are fantastic even to someone who is not an actuary.

Bring those seminars to Canada. Talk about the subject. Analyze the statistics that are far better than those we used to start accepting diabetics. Be of good character and do what is timely and right. Either step up as a company or as an organization and take this subject one step further than the CIU and its underwriters did in May 2012.

So again, whose job is it anyway to turn the page and actually add a new page to our underwriting guides (so those underwriters can use it!) by defining which subgroup of HIV positive is insurable NOW? Imagine catching up to European counties in their risk selection advances, which are now actually old news.

If you are reading this, then I say it is your job. ■

Term Conversions – A Reinsurer's Perspective

By Tony Zajac

Tony Zajac, FSA, MAAA, is 2nd Vice President, Individual Life with Munich American Reassurance Company. He can be contacted at: tzajac@munichre.com

The right to convert a term life policy to a permanent plan has been a key component of term products for many years. This valuable option allows term policyholders, with certain restrictions, to switch to a permanent plan without new underwriting. At the point of sale, the conversion privilege can alleviate concerns about either losing coverage at the maturity of the term product or having to pay rapidly escalating premiums to keep coverage in place after any level-premium period. As with any valuable option, term conversions have a material cost; one that could easily be underestimated if not carefully evaluated.

DIRECT WRITER TERM CONVERSION CONSIDERATIONS

Because conversions are an option, policyholders will decide whether or not to exercise them based on their situation during the conversion period. Mortality anti-selection will occur for those choosing to convert to a permanent plan, since conversions include insured individuals who need to continue coverage and cannot qualify for a new policy at standard rates.

Estimating the impact of conversion mortality anti-selection has been difficult.

- Administrative systems have not always been programmed to contemplate tracking term conversions. Systems may not have identified converted policies separate from original issue permanent policies. Even if they did, they may not have tracked from which term policy or plan it was converted.
- Level term products often allow conversions up to the end of the level period. In most cases, it would make sense for the insured to wait as late as possible to convert to a permanent product, since the term premiums will generally be less expensive than permanent plan premiums for the same attained age. This means historical experience may understate the potential total number of conversions from more recently issued term plans, where policies are still far from the end of the level period.

Sparse experience data, when combined with vigorous price competition, gives just the right set of conditions for the market to under price the true cost of term conversions.

Conversion Privilege Restrictions

Typically, conversions are permitted only for a specified number of policy years, usually with a maximum attained age. For example, a level term product may restrict conversions to the level premium period or attained age 70, whichever is the earliest. These restrictions reflect the fact that the likelihood of an insured developing an "uninsurable" condition increases with both time since issue (as the benefit of underwriting wears off) and with higher attained age (as a greater percentage of deaths occur from chronic conditions).

Conversion privileges may also vary depending on product design and features. For example, products may not allow conversion privilege while a policy is being paid by a waiver of premium rider during a qualifying disability. Some insurers have different portfolios of term products, with one having more restrictive conversion privileges than the other. Several insurers use an annual renewable term (ART) or other short-guarantee design as a means to attract younger buyers at a low cost. The goal of these designs is converting them to a profitable permanent plan once the policyholder can better afford the premiums. For these plans, conversions are actively encouraged, and conversion credits are often provided for the insured (as a first-year premium discount) while commissions on conversion are given to the agent.

Pricing Impacts

There are two primary ways to cover the additional cost of anti-selective mortality due to term conversions.

1. **Include excess mortality in permanent product pricing.** This choice is popular because level-period term is very price sensitive, and places the anti-selective mortality into the product that is directly affected by the actual increased claims. There are two key difficulties with this approach.

   First, it is difficult to predict exactly what the conversion utilization rate will be on the term product, especially if the conversion privilege extends for many years. Second, it is even more difficult to estimate the volume of permanent product sales that would absorb the excess mortality from these conversions.

> **"... IT MAY BE DIFFICULT TO DEVELOP A COMPETITIVE TERM PRODUCT THAT FULLY ABSORBS THE REALISTIC COST OF CONVERSION MORTALITY."**

As a result, even with a good estimate of the excess mortality per converting policy, it would be difficult to estimate an actual load. To safely cover this risk, insurers can apply a conservative load to the permanent plans at the risk of affecting their own competitiveness. Using optimistic assumptions to price the conversion mortality load would risk harming the financial performance of the permanent block. Even worse, ignoring conversion mortality in the permanent pricing altogether would risk needing to raise COI rates or cut dividends if excess mortality is extreme. One other option is to develop a conversions-only product. Be mindful that this option may make the conversion alternative less than attractive.

2. **Include excess mortality in the term pricing as part of a cost of conversion.** This has the advantage of aligning the cost of the conversion option to the term product that created the option. This option may include other costs, such as agent compensation for conversions or conversion credits given to policyholders; allowing a proper comparison of profitability across products.

Term products are often price competitive with lower profit margins. In this case it may be difficult to develop a competitive term product that fully absorbs the realistic cost of conversion mortality. This may require the insurer to scale back the availability of the conversion option. One example would be to limit conversions to the first 10 policy years instead of allowing conversions throughout the level period. Another idea is to have two term products, where one has lower premiums but also more restrictive conversion provisions.

REINSURER TERM CONVERSION CONSIDERATIONS

Reinsurance treaties cover term conversions in one of two ways. A common method is to keep any term conversions in the original treaty at a point-in-scale yearly renewable term (YRT) rate. If this is the case, the reinsurer needs to allow for a higher mortality rate for the conversions than would be used in pricing if the conversions were not reinsured at all. This can show up in rates in a different manner, depending upon whether the treaty is coinsurance or YRT.

- If the treaty is coinsurance, the YRT rates would apply only to the conversions. These YRT rates can fully reflect the extra mortality due to conversions.
- If the treaty is YRT, the extra mortality must be reflected either by increasing the overall YRT rates or using a separate set of YRT rates to be applied point-in-scale to converted policies.

In either case, the extra mortality assigned to conversions may have been underpriced by reinsurers in the past. Like direct writers, reinsurers have had a lack of useable conversion experience data. Reinsurance transaction files in the past had less than perfect indicators about conversion status, whether the treaty was a term treaty keeping conversions or a permanent treaty covering converted policies. As a result, reinsurers, like direct insurers, often priced for conversion mortality without the benefit of solid experience data.

Another common method to reinsure conversions is to cover converted policies as part of the permanent treaty covering the permanent plan to which the policies convert. This becomes problematic for the reinsurer if the cedant has a material amount of term conversions. If the reinsurer already covers all the term products that can convert into the covered permanent plan, it may be sufficient for the reinsurer to review and compare the YRT rates in the permanent pool with the expected mortality used to price the originating term pool(s). If the YRT rates adequately cover the expected mortality including anti-selection upon conversion, then pricing should be adequate.

If the permanent pool covers conversions from term plans not already ceded to the reinsurer, there are three areas of uncertainty in determining the correct load for conversion anti-selection:

- Uncertain mortality from the originating term block of business, both before and after reflecting an adjustment for anti-selection.
- Uncertain volume of term conversions coming from these plans.
- Uncertain volume of originally issued permanent products relative to term conversion volume.

CONTINUED ON **PAGE 20**

The interaction of these three unknowns can produce a great deal of uncertainty on conversion mortality. If reinsurers can quote a separate YRT scale for converted policies, the risk is confined to the uncertainty on the level of mortality from the originating term plan. If cedants require a single YRT scale covering both original-issue and conversion policies, it may be necessary to put a substantial load on the YRT scale.

CONCLUSION

Term conversions have been around for quite some time, yet their impact on product profitability remains a mystery for many in life product development. Uncertainty has come from the gaps in experience data, driven by sub-optimal tracking of conversions in years past. Since a substantial amount of conversion experience occurs in later policy years near the end of the level term period, only now are trends emerging on credible company data. It may take several more years for this data to be of sufficient use for an industry-wide study that could be helpful to better benchmark conversion mortality. In the meantime, experience should be gleaned from the best available sources.

For insurers with relatively credible and robust conversion experience, company-specific data should be reviewed. Even if not credible at a granular level, this experience can validate conversion mortality assumptions used.

For insurers selling term life insurance with conversion options, reinsurers can provide objective feedback on assumptions settings based on the experience they have internally. If the direct writing company has even rudimentary conversion experience to share, the reinsurer can compare this experience with their own more credible base, and provide meaningful insight to the direct writer.

Direct insurers and reinsurers have a vested interest in understanding the risks and financial impact of term conversions on their blocks of business. We can expect the knowledge base on conversions to grow as the industry puts proper focus on their impact on product performance. ■

Life And Health Reinsurance: Dynamic Duo

By Jane Cheng

This article is reprinted with permission from the September 2012 issue of *The Actuary* (UK).

Jane Cheng is a senior consultant at NMG Consulting. She can be contacted at jane.cheng@nmg-group.com.

The UK and Ireland (UK&I) is the second largest market for individual life reinsurance after the US, in terms of both new and in-force reinsurance premiums.

The market's cession rates for individual business are the highest globally. Cession rates for group business are, paradoxically, among the lowest at just 5%. For 2011, individual new reinsurance premiums were £265m, while group in-force reinsurance premiums were slightly below £100m.

The UK&I also has the largest longevity reinsurance segment of any region globally, including reinsurance solutions for impaired life annuities, which provide enhanced annuity payments for sub-standard lives.
For individual life and health risks, reinsurance premiums have been in decline since 2006 (Figure 1). The key drivers have been a growing preference for risk premium structures by insurers; regular decreases in reinsurance premium rates; and falling sales in the primary market, triggered by the global financial crisis. The fall in reinsurance premiums for mortality risk has been the largest in proportional and absolute terms.

Group in-force reinsurance premiums have also declined to just 3% of total in-force reinsurance premiums. This drop is partly due to the concentrated nature of the primary market, as insurers have made less use of group facilities offered by reinsurers – in contrast to the trend in most other developed markets.

However, it is important to recognise that the reduction in individual new reinsurance premiums has not reduced the relevance of the reinsurance industry in the UK&I. The key drivers of reinsurance premium decline, particularly shifts towards risk premium structures and lowered reinsurance rates, implies unchanged volumes of risk transferred, and in recent years the pressure on cession rates has been upwards, not downwards.

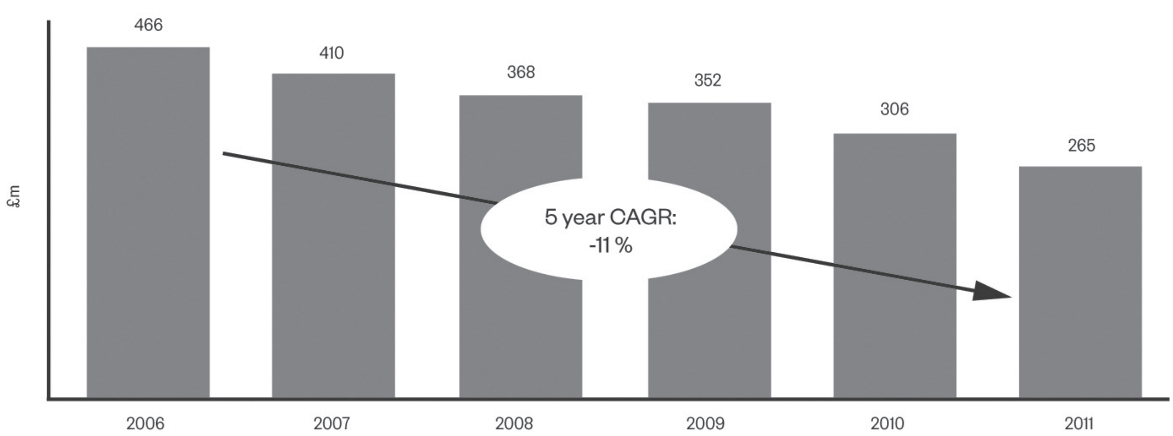
So while the growth outlook is more modest than in most of the leading growth economies (Figure 2), there are few markets, if any, where reinsurance is as fundamental to the functioning of insurance as a whole.

Arguably, there is no other market where life reinsurers are as interwoven into the functioning of the insurance industry as in the UK&I: insurer business models outsource most individual biometric risk; (reinsurance) actuaries' pricing models are granular in their design; and with insurers so heavily dependent on reinsurance pricing, reinsurers focus on working with insurers to find new underwriting and product models in search of differentiation in the primary market.

The tenure of this model is related to a period of innovation in the wholesale risk segment, including mainstream new risk classes, new processes and continually refined pricing models. Many of these innovations are

Figure 1

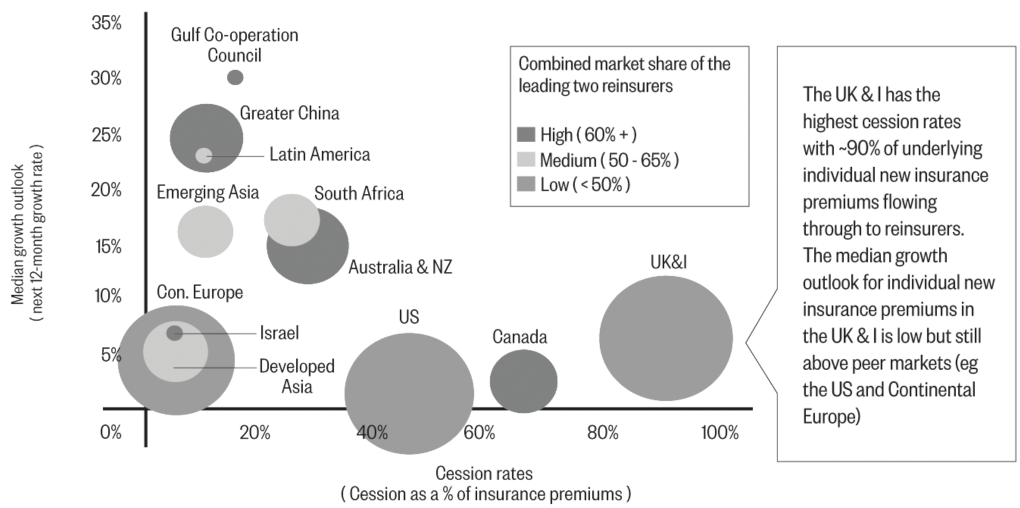
Individual new reinsurance premiums (UK&I, 2006-11, £m)



Source: NMG's Reinsurance Premium Monitor – UK&I, 2006-11 relevant to other markets, so an active operation in the UK&I is an important platform for the global success for any reinsurer.

The UK&I is the most competitive reinsurance market globally. The top six 'global' life reinsurers, as well as two other specialist reinsurers, are active and providing services from within the UK&I. Indeed, 70% of individual new cessions arise from the top six largest cedants and 95% from the 10 largest, so reinsurers are required to compete for almost all business. Competing reinsurers are well invested with high-calibre teams, spanning actuarial, underwriting and claims, and often include a specialist annuities area. Insurers are aware of the spectrum of potential reinsurance partners and typically invite all parties to tender on a 12- to 18-month cycle, with independent decisions made for awards for each risk class. The quality of a reinsurance offer is important to the ultimate award, but with many attractive reinsurance partners, it is often easier for insurers to let price govern the decision which to select. With this process having operated for more than a decade, reinsurers generally report low pricing margins and minimal embedded value on new business, and in 2011, prices fell once again in several of the large reinsurance tenders.

Figure 2
Global reinsurance premiums (2011)



Source: NMG's Global Life Reinsurance Insights programmes, and relevant industry statistics by country

In contrast to the other large single markets, there are relatively few constraints on the location or form of reinsurance capital, so the barriers to entry are likely to remain low.

For how long will the UK&I market retain its distinct profile with respect to cession rates? Detractors believe that under Solvency II, cession rates will fall as insurers begin to favour portfolio diversification over the simplicity of outsourcing risk to reinsurers. In most cases, the view is that cession rates will remain at current levels for the foreseeable future, supported by attractive reinsurance pricing and a level of certainty in respect of risk cost. Also, several insurers have business models premised on 'locked in' risk profits, and the lowering of the cost of risk, which is something that reinsurance partnerships and regular tender processes have achieved. Changing this may prove difficult.

However, recent falls in industry reinsurance premiums may well continue for a few more years, owing to further rate reductions, and to a probable continuation of shift to risk premium structures.

Perhaps the biggest risk to cession rates might be a material rise in reinsurance premiums for new business, likely triggered by a sustained period of sub-optimal returns for reinsurers. This could affect competitive activity in the primary market, particularly as experience variations are likely to arise from different operating processes among insurers, so rate rises will not affect all insurers equally.

Reinsurers constantly need to re-evaluate the trade-off between expected pricing margins, customer value and 'staying in the game'. Evidence suggests that, in contrast to non-life markets, reinsurers cannot easily re-enter life markets. Thereafter, they struggle with customer retention and are disadvantaged in understanding trends and the consequent ability to attract new business. ■

What is the "New" Normal? As an Insurer, are You a Part of It?

By Natalie Ho

Natalie Ho is AVP at LOGiQ[3] Corp. in Toronto and responsible for Marketing and Branding. She can be reached at natalie.ho@logiq3.com or @ho_natalie.

I wrote an article for the July 2011 issue of Reinsurance News on communication and insurers jumping on the social media band wagon. It is evident that social media is not a "fad"; it is here to stay. Most insurers may argue that it is tough to measure the return on investment of social media and how it may directly impact their bottom line—but many other industries have successfully figured out how to use social media to make their businesses more profitable. The introduction of social media has changed the way retailers market their products and services, consumers make purchases and, most of all, how people behave.

There has been an increase in white papers and articles on insurers and social media (refer to the SAS paper "What's Not to 'Like'? What Social Media Can Do for Insurers" and "The Use of Social Media in Insurance" from the National Association of Insurance Commissioners). With so much valuable content out there, you are likely not interested in me writing about why the insurance industry should adopt social media or "Top Tips to Make your LinkedIn Profile Better." Therefore, I'll focus on my views toward the "new" normal. I want to help you understand that the introduction of technologies such as mobile devices, tablets and social media has created a "new" normal in our business environment and fundamental global shifts in our culture and consumption of information.

IT'S ABOUT RIGHT NOW

The introduction of mobile devices, tablets and communication tools has made everything extremely accessible. These tools have created a culture shift—we are operating in a "right now" mindset. That is the new normal. With a flip of a switch—or should I say, a swipe or a click—we can make a purchase online through PayPal, share photos instantly with Instagram, manage our bank accounts via online banking and banking apps, tell people what we're doing via Facebook, tell people what we like on Pinterest and find out what is happening in the world through Twitter. It is instant news, instant data; it's about right now, real time.

Typical companies only draw from experience in the distant past or only plan business far into the future, being in "campaign" mode. Very few companies operate effectively in the present, this concept of right now that we are all accustomed to in our every day life. So, how can insurers operate in this "right now" culture?

Insurers are becoming increasingly proactive in this "right now" culture. Areas of the insurance value chain where insurers can support the "right now" culture are as follows:

VALUE CHAIN	EMERGING CONSIDERATIONS
Customer Insight	- Understand the entire lifecycle of a customer, not just at time of underwriting, but right now and in the future - Use of social and interest graphs to gain customer insight
Product Development	- Ask prospects and customers what they want right now - Not only based on experience data but rather on niche markets and targeted offerings
Marketing	- Utilize the power of influencers - Use peer recommendations - Create content by repurposing content by customers (content curation)
Sales	- Deliver personal and relevant content to drive sales - Study recommendations and reviews
Services	- Create "right now" customer service—what are people saying online? - Increase overall customer experience by being accessible
Renewal	- Stay in touch with customers right now, not at time of renewal - Communicate consistently to drive higher retention rates
Claims	- Stay connected right now to assist in claim investigation - Make it accessible to file a claim any place, anytime

Source: Partially adapted from Ernst & Young, "Social Media in Insurance—How to Interact Better With Your Customers?" July 2011.

IT'S ABOUT VALUE AND INTEREST

Every minute of the day, as a global economy, 571 new websites are created, 27,778 blog posts are published on Tumblr, 47,000 app downloads are made on the Apple app store, over 100,000 tweets are generated and more than 2 million search queries are completed on Google (DOMO, "Data Never Sleeps: How Much Data is Generated Every Minute?" June 8, 2012). With the enormous amount of data and content generated every minute, how do people decide what to consume? This is where value and interest play an important role. Is it of value to me? Do I find this interesting?

We no longer need to sit through commercials during our favorite TV show or flip through the newspaper during our morning coffee. Rather, we are more interested in what our trusted network is sharing and recommending because we generally value the opinions of our friends, family and colleagues. The shift in how we consume content has created many challenges but also opportunities for businesses. What are insurers doing to leverage on this culture shift?

Facebook inadvertently maps a person's social graph. You can discover a person's social behavior—what social activities they participate in, places they have visited, and who they socialize with—by browsing through their Facebook page.

Insurers can use this as an opportunity to gather investigative information about policyholders. Particularly useful for workers' compensation benefits, courts are now ordering injured workers to produce their Facebook pages or other social media sites for inspection by insurance company lawyers. In a survey of insurance companies, 25 percent of respondents said they are planning activities around social media in the core areas of underwriting, policy and claims (SAS, "What's Not to 'Like'?").

If Facebook maps a person's social graph, then Pinterest, a social scrapbook that allows users to add favorite images onto their pinboards, essentially maps a person's interest graph. Pinterest drives 1.9 billion page views per month, with the majority being female in its demographics, and an average order value when Pinterest follows through on a purchase from a product

is $179.36, compared to $80.22 generated through Facebook (Chafkin, Max, "Can Ben Silbermann Turn Pinterest Into the World's Greatest Shopfront?" Fast Company, October 2012). How can Pinterest create an opportunity for insurers? Pinterest allows insurance companies to capture the interest of potential consumers through the use of appealing imagery. Insurance companies such as North Coast Life Insurance and American General Life and Accident Insurance Company have Pinterest pages and several pinboards, showcasing images that represent a healthy life, family, love, relationships, protection, and financial security, all aspects that are important to purchasing life insurance. Also, females are typically the decision-maker in buying life insurance; with 79 percent of Pinterest users being female, it is a channel to reach the female population. Of course, imagery itself is not enough; it must be backed up with valuable content, but capturing the interest of a prospect is the first step! Remember, it's about value and interest.

Imagine gaining insight on each policyholder by mapping their social and interest graphs over their entire lifetime—this will be extremely powerful for areas such as new business, customer retention, underwriting and claims.

CONTINUED ON **PAGE 26**

IT'S ABOUT SHORT AND SWEET

Have you heard of the term "stream economy"? Gary Vaynerchuk, New York Times best-selling author, describes the way we consume data now as stream economy. It is this scrolling and swiping habit that Apple has instilled in our lives, and the 140 character limit that Twitter created—all demanding a very fast and hyper way to consume content. I'm not suggesting we should be writing in 140-character increments, but rather, to understand that the business world now requires a very specific skill set to understand the effects of micro-content and how it can capture the attention of our audiences in this fast-paced economy.

To illustrate the culture shift of content consumption, let's use the example of browsing a website. As recent as a few years ago, website developers will say the most important content should appear on the top half of any webpage, reason being people will not read anything that appears below what a computer screen can fit. Fast forward to 2012. Apple's creations have changed the way we consume website content; we swipe and swipe until we see something that interests us, and then we stop.

How does your insurance company website look? Is it jam-packed with content on every corner? Is it too lengthy to consume? Rather than squeezing all the content on the first half of a Web page, learn how to write spurts of short and sweet content to capture attention that then drives action. Also consider using Twitter to generate micro-content that is then linked to lengthier content.

The tools available to consumers and businesses have created many challenges but also ample opportunities. Learning how to use the tools is just the first step. Understanding how our behaviors have changed—and defining this "new" normal—is what the competitive advantage truly is. How do we, our industry as a whole, continue to operate with the speed of this evolving "new" normal? ■

4. Flexible Reinsurance Selection

After discussing and fully exploring all appropriate assumptions and considerations with each reinsurer as outlined in this article it may be advantageous to consider the feasibility of using a Flexible Reinsurance Selection Procedure (FRSP), a term which I took the liberty to coin which will be addressed shortly. Typically on a first dollar quota share arrangement each reinsurer would assume a fixed percentage of the face amount for each and every life reinsured regardless of the risk classification of that life (e.g., Male/Female, smoker/nonsmoker, blood tested/non-blood tested, etc.). The ranking of the various reinsurance quotes is then developed by applying weights to the YRT rates of each reinsurer based on an assumed distribution of new issues by underwriting risk classification.

Some reinsurers have very competitive rates for male lives, but are not as competitive on female lives. This typically happens when reinsurers build in aggressive mortality improvement factors for male risks but little or no mortality improvement factors for female risks. Similarly, some reinsurers can have very competitive rates for blood-tested business, but uncompetitive rates for non-blood-tested business (This disparity can be especially pronounced in those situations when the use of the prescription drug data base replaced the collection of oral fluid and urine.).

In these situations, one should consider using an FRSP by reinsuring the blood-tested business and the non-blood-tested business separately. This would enable the direct writer to choose one group of reinsurers with the lowest prices for their blood-tested business and another group of reinsurers with the lowest prices for non-blood-tested business. Of course some reinsurers will be competitive for both blood-tested business and non-blood-tested business and will be chosen for both risk pools. A similar approach could be employed when and if a big a disparity in rates exists between male and female lives.

It is hoped that the ideas touched upon in this article will give the reader additional insights and knowledge into the important pricing concepts and considerations which are called upon in reinsurance pricing, and will serve as “A Checklist For Optimizing Reinsurance Negotiation.” ■

SOCIETY OF ACTUARIES Reinsurance Section

475 N. Martingale Road, Suite 600
Schaumburg, Illinois 60173
p: 847.706.3500 f: 847.706.3599
w: www.soa.org

Reinsurance news