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SECTION

# Reinsurance News

ISSUE 82 • SEPTEMBER 2015

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# Reinsurance News

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## 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  
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gmail.com](mailto:richardcjennings@gmail.com)) or Ronald Poon-Affat  
([rpoonaffat@rgare.com](mailto:rpoonaffat@rgare.com)).  
Some articles may be edited or  
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# Chairperson's Corner

By Michael Mulcahy

In the year's first issue of Reinsurance News I talked a bit about what the Reinsurance Section Council had planned for 2015. For the third and final issue in November, I'll most likely give a recap of what the council accomplished during the year. For this "middle" issue, I'm going to give a short editorial comment on the middle market. Specifically, I want to talk about service to the middle market based on my own experience.

There is (and has been for years) a tremendous amount of talk about the middle market. Much of that talk is focused on streamlining the underwriting process to make it faster and less invasive. And the industry is finally making progress in that area. Reinsurers are often leading the way, providing research or stepping in to take less defined risks. The improved underwriting process is expected to make it easier to find alternative distribution systems to "reach" the middle market. This will be increasingly important with the younger generations. They want to do everything on the Internet, without ever talking to anyone, no less stopping to see someone in person.

Our industry wants to be able to reach the middle market, but will we be ready to provide them with the ongoing service that they expect? If my experiences are the norm, I'm afraid the answer is no.

My wife and I have three term policies between us, with three different insurance companies. All the purchases were started through Internet searches. Here's a list of items I find lacking in the way these policies are serviced:

1. None of the agents involved has ever reached out to me after the policies were issued.

If the companies were contacting me directly, this wouldn't be an issue. But as I discuss below, they are not. The lack of follow up is probably to be expected given that I went through independent websites to pick a policy and got assigned an agent. Clearly insurance companies can no longer rely on agents to be their primary point of contact with their middle market clients.

2. The only item I receive in the mail is an annual bill.

This applies for all three companies. The bill shows the amount of the premium due. That's it. No face amount. No projection of expected premiums due in the future (or date that the level premiums period expires. No letters asking me if I have other insurance needs they can help with. Nothing.

3. None of these companies contact me by email.

I don't even know if the companies have my email address. So when I moved and forgot to change my address with one of the companies, I only found out when the lapse notice eventually was forwarded to me two months later. Then I had to go through reinstatement.

4. I don't know how to access my information online for any of the policies.

Note, I didn't say "I can't access my information online." Maybe there is a way to do it. For at least one of the policies I tried but gave up in frustration before even finding out if it was possible. For every other financial company I deal with, "online" is the primary (if not only) way that I access my account information. Banks, brokerage accounts, credit cards, mutual funds, IRA's, 401k's—everything. Even old accounts I don't pay attention to. The financial companies provided me with information by mail and encouraged me to sign up for online access and I finally did. And when I log in, I am encouraged to consider other available

products. Some may find the promotions annoying, but it's easy to ignore them, and once in a while the promotions have value.

From my listed complaints above it appears the companies issued the policies and then forgot I existed. They don't care about me. Maybe my experience is not typical and I just have three behind the times insurers. But I've asked others and I have heard of similar experiences.

We in the insurance industry need to improve the way we interact with our customers so we can catch up with the rest of the financial world. The old distribution systems that have failed to reach the middle market are also not suited to service that market. If we don't give our clients access to policy information in a way that is in line with what they expect, we may find when we finally reach those in the middle market we aren't able to keep them. ■



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# Results of the 2014 SOA Life Reinsurance Survey

By David Bruggeman

Both U.S. and Canadian life reinsurers were coming off declines in new business production going into 2014. For the United States, the period of decline had reached 11 straight years, while Canadian life reinsurers had recorded two straight years of declining production. With signs of an improving economy, the industry was hopeful 2014 would bring increased new business writings. The results from the 2014 SOA Life Reinsurance Survey reveal what happened in the North American life reinsurance market in 2014.

## ABOUT THE SURVEY

The SOA Life Reinsurance Survey captures individual and group life data from U.S. and Canadian life reinsurers. New business production and in force figures are reported with reinsurance broken into the following three categories:

(1) Recurring reinsurance: Conventional reinsurance covering an insurance policy with an issue date in the year in which it was reinsured. For the purpose of this survey, this refers to an insurance policy issued and reinsured in 2014.

(2) Portfolio reinsurance: Reinsurance covering an insurance

policy with an issue date in a year prior to the year in which it was reinsured, or financial reinsurance. One example of portfolio would be a group of policies issued during the period 2005-2006, but being reinsured in 2014.

(3) Retrocession reinsurance: Reinsurance not directly written by the ceding company. Since the business usually comes from a reinsurer, this can be thought of as “reinsurance of reinsurance.”

## UNITED STATES

2014 was an active year for U.S. life reinsurers. Although there were no major acquisitions

within the industry in 2014 such as SCOR’s acquisition of Generali in 2013, there were several large blocks of business that found new homes in 2014. Notable 2014 happenings in the U.S. life reinsurance industry include:

- RGA announced an agreement to retrocede approximately \$200 billion of their U.S. individual life block to Pacific Life.
- Canada Pension Plan Investment Board (CPPIB) acquired Wilton Re for \$1.8 billion.
- RGA agreed to buy Aurora National Life Assurance Co., a wholly owned life insurance subsidiary of Swiss Re.
- RGA reached an agreement with Voya Financial to reinsure a \$100 billion block of level term business.

Also, while not a professional U.S. life reinsurer but certainly worth noting for life reinsurance purposes, New York Life agreed to assume a 60 percent share of John Hancock’s in force par life closed block. The block consists of 1.3 million policies

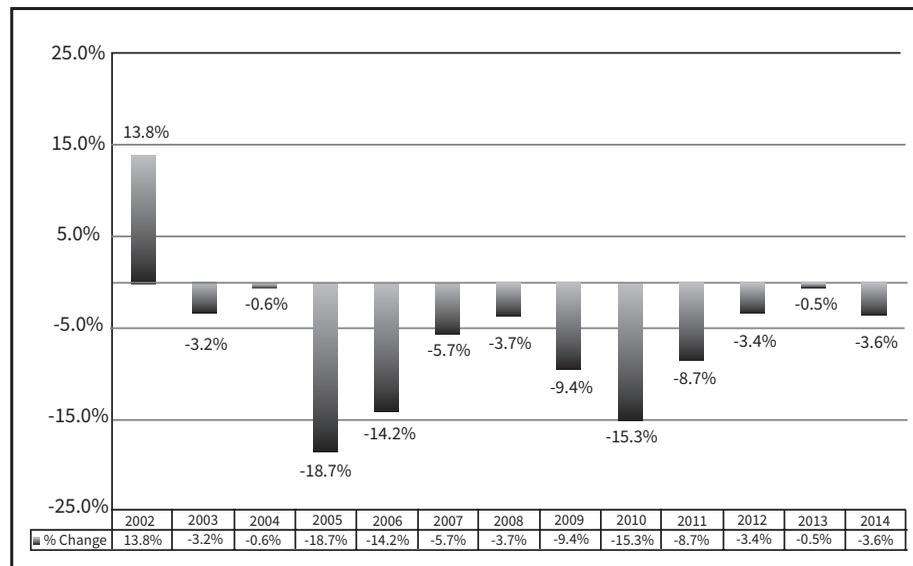
## RECURRING

In total, U.S. life reinsurers reported \$427 billion of recurring new business. This is just slightly down from \$443 billion reported in 2013 and represents a 3.6 percent decline. The decline in 2014 marks the 12th consecutive year of decreasing recurring new business production. During this period, recurring business in the United States has fallen 60 percent.

The table below shows the annual percentage change in U.S. recurring new business production since 2000.

The cession rate is another measure used to gauge the life reinsurance market. It is simply

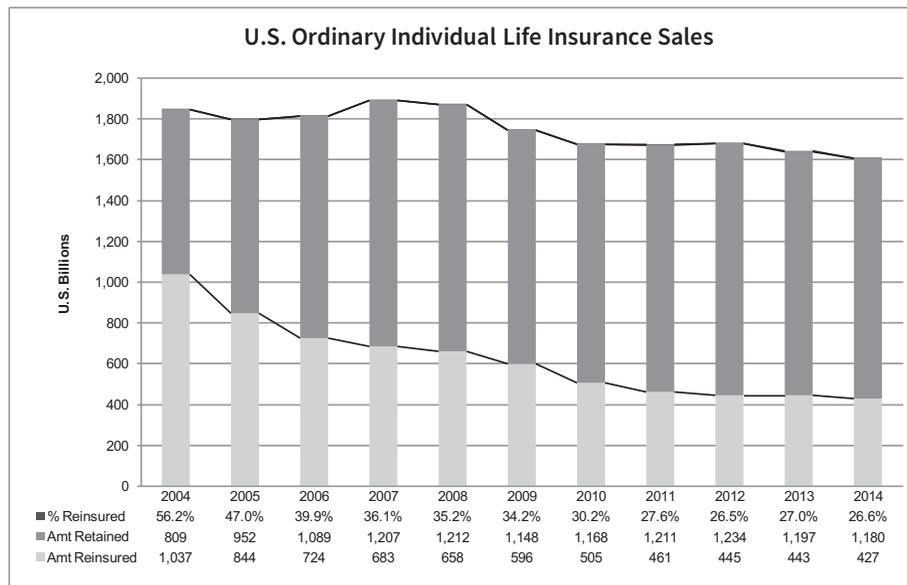
Annual Percentage Change in U.S. Recurring New Business (2000-2014)



the percentage of new business writings reinsured in that year. Specifically, it equals the ratio of recurring reinsurance over direct sales for that year. By face amount, 2014 direct sales were at their lowest level since 2002. LIMRA estimates direct sales fell 2 percent in 2014 compared to 2013.<sup>1</sup> This was primarily driven by a decrease in UL sales; however, 4th quarter UL sales rebounded with an 8 percent growth rate compared to 2013. VUL sales experienced an increase in 2014 and term sales were on par with 2013 levels. The 2 percent drop in direct sales along with the 3.6 percent decrease in recurring reinsurance produces an estimated 2014 cession rate of 26.6 percent. This rate is similar to those seen in the past few years.

The table above shows U.S. individual life sales from 2004-2014 split by amount retained and amount reinsured:

There are a few things worth noting when looking at the graph above:



- 1) The decline in the amount reinsured during this period. Reinsured production has fallen by almost 60 percent since 2004. In 2004, just over a trillion of life sales were reinsured – or 56 percent of all life sales. Jumping ahead to 2014, \$427 billion was reinsured for a cession rate close to 27 percent.
- 2) The amounts retained by the direct writers have stayed fairly constant over

the last eight years—hovering around 1.2 trillion.

- 3) The amounts reinsured have been stable over the last four to five years with cession rates ranging from the mid-to-upper 20 percent.

On an amount basis, the \$427 billion of recurring new business reported in 2014 is the lowest amount since 1996. It is true reinsurance production has dropped considerably over the last decade but the fact that

recurring levels have been very stable over the last four years is a promising sign.

Coinurance of level term products was the key driver behind the growth seen by the U.S. life reinsurance market in the early 2000s. This of course thanks to reserve Regulation XXX which became effective in 2000. However, coinurance production has steadily fallen over the years. It is estimated 22 percent of U.S. life reinsurance was issued on a coinurance basis in 2014. This is quite a drop from the 37 percent recorded just a few years ago in 2009 when the survey first started capturing YRT/coinurance splits. Even though the survey didn't start capturing YRT/coinurance splits until 2009, it is clear coinurance played a huge role for the life reinsurance industry in the early-to-mid 2000s. This is evident when looking at the coinurance percentage of the recurring reinsurance in force. On an in force basis, over 44 per-

Company	2013		2014		Change in Production
	Assumed Market	Business Share	Assumed Market	Business Share	
SCOR Global Life	125,025	28.2%	114,171	26.7%	-8.7%
Swiss Re	86,654	19.6%	89,719	21.0%	3.5%
Munich Re (US)	67,131	15.2%	70,297	16.5%	4.7%
RGA Re. Company	85,936	19.4%	67,277	15.8%	-21.7%
Hannover Life Re	47,096	10.6%	42,893	10.0%	-8.9%
Aurigen	1	0.0%	11,697	2.7%	1000+%
General Re Life	12,275	2.8%	10,769	2.5%	-12.3%
Canada Life	7,677	1.7%	8,501	2.0%	10.7%
Optimum Re (US)	6,858	1.5%	7,174	1.7%	4.6%
Wilton Re	4,389	1.0%	4,575	1.1%	4.7%
RGA Re (Canada)	2	0.0%	15	0.0%	650.0%
<b>TOTAL</b>	<b>443,024</b>	<b>100%</b>	<b>427,088</b>	<b>100%</b>	<b>-3.6%</b>

CONTINUED ON PAGE 6

cent of the reinsurance is still on a coinsurance basis. This is a much higher level compared to what has been seen from new business writings during the last five years. There was a lot of 90/10 first-dollar quota share coinsurance business of level term business written in the early 2000s brought on by the new reserve regulation. As direct writers found other options to handle reserve strain, the level of coinsurance has seen a downward trend for several years—a trend likely to continue in the near future.

The table on the bottom of page 5 shows the 2013 and 2014 recurring results at the company level.

SCOR's \$114 billion in recurring reinsurance led all U.S. life reinsurers in 2014. This garnered SCOR a 27 percent share of the market, but it does represent a 9 percent drop from what they reported in 2013. With a 3.5 percent increase in recur-

ring production in 2014, Swiss Re captured the second position. Their \$90 billion was good enough for a 21 percent market share. In the third spot was Munich Re. Munich wrote just over \$70 billion and had a 16.5 percent market share. RGA's recurring production fell over 20 percent in 2014, but their \$67 billion in production was still more than enough to grab the 4<sup>th</sup> leading recurring writer spot. Their market share was just under 16 percent. Finally, Hannover rounds out the top five with \$43 billion in recurring reinsurance which equals a 10 percent market share. Their production fell 9 percent in 2014. These top five reinsurers combine to capture 90 percent of the recurring market.

The remaining six reinsurers reporting recurring business in the United States, account for 10 percent of the market share with no individual market share above 3 percent. New to the

U.S. market, Aurigen swiftly moved to the sixth position by writing almost \$12 billion of NAR in 2014. Aurigen has been in the Canadian market a few years, but they just entered the U.S. market in 2013. General Re is next with \$10.7 billion—a 12 percent reduction from 2013. Canada Life's 11 percent increase placed them next with \$8.5 billion in recurring reinsurance reported. Optimum Re and Wilton Re both reported similar 5 percent increases. Optimum reported \$7.2 billion while Wilton reported \$4.6 billion.

#### PORTFOLIO

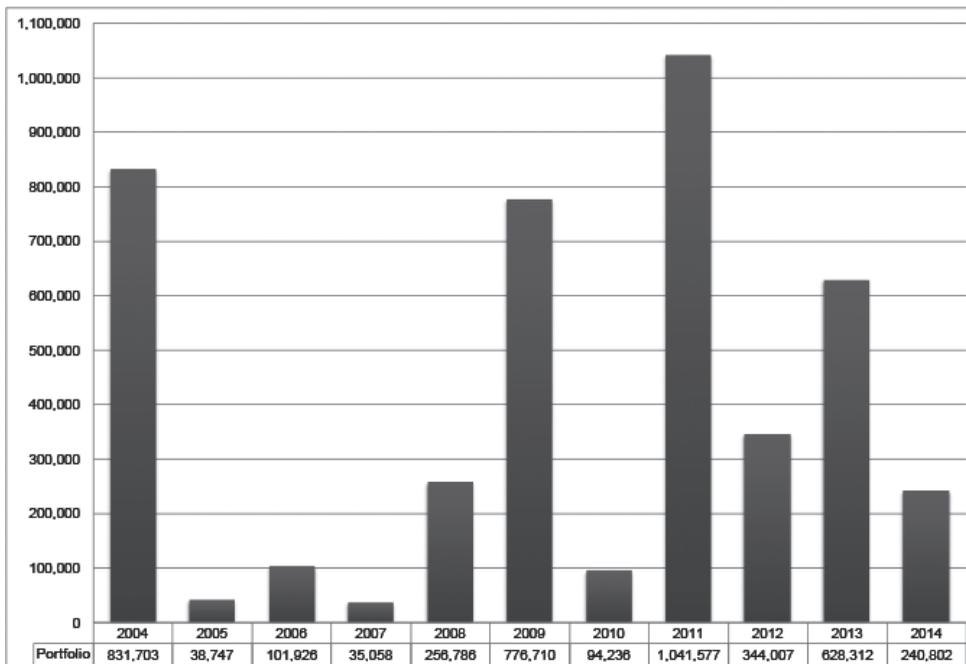
There were a number of block deals in 2014 that helped contribute to a solid year for U.S. portfolio—especially when considering there were no major reinsurer acquisitions within the industry as seen in previous years. For example, the spikes in the graph below for 2011 and 2013 figures reflect SCOR's

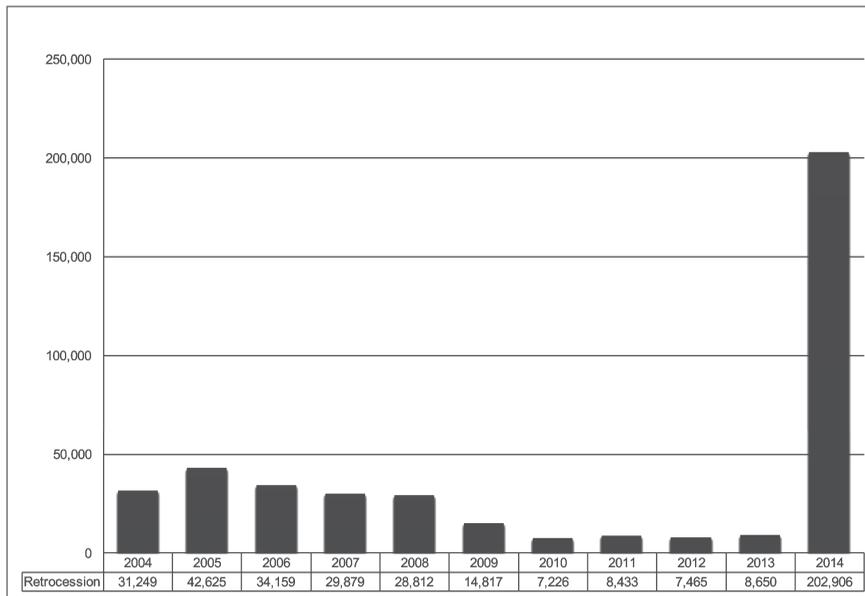
acquisition of Transamerica Re and Generali respectively. The 2004 and 2009 spikes are from an ING Re block moving first to Scottish Re in 2004 and then to Hannover in 2009. Sizable portfolio writings were reported in 2014 by RGA (\$103 billion), Hannover (\$90 billion) and Canada Life (\$35 billion). In addition, Munich, Optimum and Wilton also reported measurable levels of portfolio in 2014.

Overall, the portfolio market was active in 2014 and it is expected to continue to stay active in the near future as reinsurers with capital look to acquire blocks. With recurring business not expected to show sizable growth anytime soon, portfolio reinsurance is one way for reinsurers to add business.

#### RETROCESSION

Looking at the graph on the top of page 7, which shows retrocession production since 2004, you might think retrocessionaires enjoyed a banner year in 2014. As reported, retrocession in the United States went from \$9 billion in 2013 to over \$200 billion in 2014. This would seem to be an extraordinary increase, however almost \$195 billion of the \$203 billion in retrocession reported in 2014 came from the RGA/Pacific Life retrocession deal. If this one-time deal is excluded, retrocession amounts were similar to 2013 levels. U.S. retrocession writers include Pacific Life, Berkshire Hathaway and AXA Equitable. Much like recurring production, retrocession production has stabilized over the last five years after experiencing sizable declines.





## CANADA

Canadian new business recurring production was stable in 2014—recording just a 1.0 percent drop. This is the third straight year of decreasing production, but each of the annual decreases has been relatively small. On the direct side, LIMRA estimates 2014 direct sales in Canada fell 2 percent.<sup>2</sup> Coincidentally or not, this is identical to the drop in 2014 U.S. direct sales. In Canada, the small decrease can be traced to a decrease in term business. Both UL and WL experienced increases, but these increases could not overcome the decrease in term sales. One distinguishing characteristic of the Canadian market is the cession rate in Canada is much higher compared to the United States. For 2014, it is estimated the Canadian cession rate is in the 60 percent range. This is considerably higher than the

27 percent cession rate seen in the United States. Another major difference between the two markets is the level of coinsurance written. In Canada, less than 4 percent of new business was reported to be on a coinsurance basis in 2014. In contrast, 22 percent of the new business reinsurance in the United States was written on a coinsurance basis.

## RECURRING

The Canadian life reinsurance market has been dominated for quite some time by three reinsurers: RGA, Munich and Swiss. Each of these three companies reported similar levels of production in 2014 compared to 2013. RGA, the leading recurring writer, reported almost identical amounts of new business in 2014 as they reported

in 2013. They captured almost one-third of the market share. Munich Re's production was just 2 percent lower in 2014 and their market share remained just under 30 percent. Meanwhile Swiss reported a slightly larger 8 percent reduction, but still captured an 18 percent market share. As they have for years, these three companies combine to capture the vast majority of the recurring market in Canada. In 2014, RGA, Munich and Swiss combined for an 80 percent market share. SCOR, Aurigen and Optimum were the other three Canadian companies reporting recurring new business. SCOR's recurring fell 14 percent for an 8 percent market share. Aurigen increased their writings by 50 percent and captured a 7 percent market share. Optimum's 8 percent increase in production resulted in a 2014 market share just shy of 5 percent.

The following table shows recurring production by company for 2013 and 2014:

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Canada Ordinary Recurring Reinsurance (\$CAN Millions)					
Company	2013		2014		Change in Production
	Assumed Market	Business Share	Assumed Market	Business Share	
RGA Re (Canada)	45,763	32.0%	45,715	32.2%	-0.1%
Munich Re (Canada)	42,593	29.7%	41,593	29.3%	-2.3%
Swiss Re	28,095	19.6%	28,561	18.2%	-8.0%
SCOR Global Life (Canada)	13,968	9.8%	11,954	8.4%	-14.4%
Aurigen	6,668	4.7%	10,049	7.1%	50.7%
Optimum Re (Canada)	6,104	4.3%	6,600	4.7%	8.1%
<b>TOTAL</b>	<b>143,191</b>	<b>100%</b>	<b>141,772</b>	<b>100%</b>	<b>-1.0%</b>

## PORTFOLIO AND RETROCESSION

For the second straight year no portfolio business was reported in Canada. This is in contrast to the U.S. market which has seen quite a bit of block activity in recent years.

Retrocession continues to play a minor role in the Canada life reinsurance market. Comparing retro production to recurring production, which would be akin to a cession rate for the retrocessionaires or a “retrocession rate”, reveals recurring reinsurers are sending less than 1 percent of their business to retrocessionaires. The U.S. “retrocession rate” is also quite small at around 2 percent. The three Canadian retrocessionaires, Berkshire Hathaway, Pacific Life and AXA Equitable, collectively reported \$1.4 billion in retrocession new business. This is a 42 percent increase from 2013 levels.

## LOOKING AHEAD

There are many factors impacting life reinsurance production such as the economy, regulations and direct sales. The economy is showing signs of improving. For example, the U.S. economic outlook for the GDP is solid, the unemployment rate is improving and inflation is expected to remain low. Interest rates are still historically low and this has had a definite impact on life insurance sales. Some experts see life sales declining or stable at best in 2015 as life insurers continue to face pressure from low interest rates. Yet other experts think the strengthening economy may boost life insurance sales. Major rating agencies are in agreement about their outlook

Looking ahead longer term, it is possible the direct life market could be facing a whole new dynamic in the next five years.

for the U.S. life insurance industry. Both Fitch and Moody’s have placed a stable outlook for U.S. life insurers in 2015 and cite an improving economy but low interest rates as the key influencing factors.<sup>3,4</sup>

Looking ahead longer term, it is possible the direct life market could be facing a whole new dynamic in the next five years. According to a recent LIMRA survey, 57 percent of financial executives believe an outside source (such as Google or Amazon, for example) will be a disruptive force in the life insurance market within the next five years.<sup>5</sup> And a prior LIMRA survey on middle market consumers found 21 percent would be willing to buy life insurance online from a non-traditional source, such as Google or Amazon.<sup>6</sup>

Regarding regulation, indexed UL sales have been strong over the last several years and their policy illustrations are under increased scrutiny. The NAIC is in the process of updating the life insurance illustrations model regulation which will provide illustration actuaries with uniform guidance for IUL policy illustrations. Principle Based Reserving is likely at least a couple of years off in the United States, but there con-

tinues to be much discussion about the use of captive reinsurance in the interim period to lessen the reserve capital strain for direct writers.

Finally, there has been a lot of activity in the United States on the post level term front as business has reached the end of the level term period and experience is slowly emerging. Some ceding companies have been revising their post level term rates in hopes of improving profitability. Reinsurers have and will continue to play a part in this process. This may not translate to immediate growth in new business production, but may prove beneficial longer term as relationships are strengthened and reinsurer’s experience and knowledge become more valued by ceding companies.

Complete survey results can be found in the publications section of the Munich Re website, [www.munichre.com/us/life](http://www.munichre.com/us/life)



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## DISCLAIMER:

*Munich Re prepared the survey on behalf of the Society of Actuaries Reinsurance Section as a service to Section members. The contributing companies provide the numbers in response to the survey. These numbers are not audited and Munich Re, the Society of Actuaries and the Reinsurance Section take no responsibility for the accuracy of the figures. ■*

## END NOTES

- <sup>1</sup> LIMRA, “U.S. Individual Life Insurance Sales, Fourth Quarter 2014,” March 2015
- <sup>2</sup> LIMRA, “Canadian Individual Life Insurance Sales, Fourth Quarter 2014,” March 2015
- <sup>3</sup> Fitch, “2015 Outlook: U.S. Life Insurance,” December 2014
- <sup>4</sup> Moody’s, “US Life Insurance Industry: Outlook Remains Stable,” November 2014
- <sup>5</sup> LIMRA Industry Trends: “LIMRA Survey: More than Half of Financial Executives Surveyed Predict Outside Disruption in Life Insurance Market,” January 2015
- <sup>6</sup> LIMRA Industry Trends: “LIMRA Survey: More than Half of Financial Executives Surveyed Predict Outside Disruption in Life Insurance Market,” January 2015

# Risk Perspectives

By John Gordon

Over the years I have come to believe that the nature vs nurture debate is fundamentally flawed, in that it tends to exclude an increasingly important third influence: *culture*. And while that might seem an odd way to start an article on risk please bear with me, for I believe the role cultural influence has in shaping our thinking and our decision-making, on matters of risk and so much else, is quite profound.

Each of us views the world from a unique perspective, one shaped by a combination of our genes, formative experiences and cultural influences. Much has been written and much is now understood concerning the fallibility of the human brain when it comes to making what we like to think are rational decisions. Nobel Prize winning psychologist Daniel Kahneman's book *Thinking, Fast and Slow* provides a wonderfully readable synopsis on the subject. Less belligerent than Nassim Taleb (of Black Swan fame) but just as compelling, I'd recommend a reading of Kahneman to any actuary who still sees himself as a risk management expert.

As evidenced not least by the last financial crisis and its af-

termath, the challenge these findings represent for an entire discipline (economics) whose central premise is that humans behave rationally, is profound. Yet so far, beyond spawning a related discipline with the word "behavioral" appended, there has been little in the way of substantive reform to our economic model of choice itself. Neither, for that matter, are the implications much discussed by the representatives of professions whose trade is the deployment of a skillset rooted in rational analysis (for we actuaries, too—contrary to popular belief in some quarters—are only human).

What has any of this to do with a perspective on risk? Well, it matters because of the impact these distorting influences—let's call them *deflectors*—have on the efficacy of our decision-making.

Deflectors take many forms, and transcend the nature/nurture/culture spectrum. While our genes undoubtedly help to shape our individual capacity for rational analysis, and while experiences in our formative years (at home and in the classroom) undoubtedly help to shape our views on what constitutes 'normal' and what we regard as 'familiar,' it is the



*cultural* influences that tend to dominate.

It was evolutionary biologist and ethologist Richard Dawkins who coined the term meme to describe the mode of transmission of cultural ideas. In a kind of ideological evolution, cultural memes shape our thinking, which in turn shapes teaching, which in turn forms the backdrop and provides the building blocks for new cultural memes. In this sense, culture is little more than the direction in which the sum total of human thought collectively takes us. But it is the *means* by which this happens, the way some ideas catch on and others fall by the wayside that matters. Viewed from the confines of a single human lifetime we often barely notice this happening, yet a cursory glance through the history books is enough to confirm that it does.

For while it would be nice to think that, rather like its evolutionary equivalent (as most famously popularized in the phrase *survival of the fittest*), the best ideas would tend to promulgate and come to predominate, the history of human civilization tells a different story. It is a failure of memes more than genes that explains how a nation once famed for giving philosophy and democracy to the world became the problem child of Europe, and on a lighter note it is memes more than genes that explain why the nation that once gave us the Roman Empire, Michelangelo and Da Vinci is now better-known for its fashion, their footballers and cuisine.

Memes and genes are not unrelated, of course: It is genes that drive human frailties, and it is human frailties that lead our

CONTINUED ON PAGE 10

different cultures from time to time to adopt memes that are manifestly not in the long-term public interest. Frailties such as greed, tribalism (particularly in the form of its worst modern incarnation, nationalism), short termism, confirmation bias and the prevalence of ego are nearly as old as the evolutionary forces that once helped shaped them, but in a world whose pressing problems can only be solved by more cooperation not more competition they serve us increasingly poorly.

Why this matters so much now, and why I write about it here, is that one particularly destructive set of memes arguably represents the greatest risk to our collective long-term well-being in the history of human civilization, and may also be shaping up to inflict terminal damage on my chosen profession's reputation to boot.

There are few better illustrations of how our beliefs can compromise our thinking than the contradictory view that

... one particularly destructive set of memes arguably represents the greatest risk to our collective long-term well-being ...

many erstwhile intelligent, rational people appear to have of science. On the one hand, faith in a boundless capacity for scientific progress is advanced by those so-minded (a group that seems curiously to include a disproportionate number of people who appear to be quite ignorant of science themselves) as the principal justification for why the rest of us need not worry about how one of our most dangerous memes, an economic model predicated on limitless growth, can work on a planet of finite resources. On the other, many of those same individuals distrust science when it reaches

conclusions that conflict with their own belief systems, as evidenced for example by many people in the developed world's views on climate change.

I never thought I'd see the day, but how refreshing to see even the Catholic church now providing leadership on the subject of climate change. Indeed if public discourse is to be our guide, it would seem that Pope Francis, a man not known for making immodest claims about his own risk management credentials, is rather more cognizant of the big risks that now confront us than some professions that trade on the skillset.

His latest encyclical reaches out to many nonbelievers (in God or global warming). It is a damning critique of our modern consumer society and the economic system that promotes it, citing climate change, environmental degradation and resource depletion as consequential outcomes that pose a critical risk to our future well-being (or the long-term public interest, if you will). "Once we lose our humility, and become enthralled with the possibility of limitless mastery over everything, we inevitably

end up harming society and the environment," he notes. Quite.

The Pope also had this to say in relation to our present most destructive cultural memes of choice: "We need to reflect on our accountability before those who will have to endure the dire consequences." That was a reference to our collective generational legacy, but it does not require too great a leap of the imagination to envisage that one day it might apply to the members of a profession of self-confessed risk management experts that had little of any substance to say about the risks that mattered.

Why does this matter? It matters because our profession, despite the eminent qualification of its membership to comment on questions of risk, is conflicted by the need not to compromise the interests of any of its core constituencies. It is therefore left to nibble around the edges of the key challenges of our time, instead of providing the kind of thought leadership on the subject that the Pope's encyclical endeavored—with considerable success—to do. For a good illustration of what kind of form this nibbling tends to take, the article on limits to growth in the May online edition of the U.K. actuary magazine, which opines that actuaries need to think "carefully" about the link between sustainability and the financial system, provides a good example.

Back in 2008 I was naive enough to think that the financial crisis then unfolding might be grave enough to induce a change in approach on



matters of such profound public interest, but it is clear to me now (as it perhaps should have been then) that our profession as a whole is too conflicted to provide genuine leadership on profound matters such as these. Arguments in defense of the profession's relative anonymity on such matters are well-rehearsed and oft-deployed, but they ignore this crucial point: as and when change *does* come, as one way or another by design or accident it surely shall, history will not record them. As the Pontiff alludes to, the focus will be on accountability rather than excuses.

Our traditional response as individuals in such a situation is to fall back on that other habitual relic from our evolutionary

past, namely the herd instinct—or safety in numbers syndrome, as I like to think of it. If neither the profession nor the vast majority of its members see fit to pass comment, why should I? For the first 20 years of my professional life, that was me. But in my case, in the run-up to the last financial crisis all that changed. When I took a year off in 2006 two things happened, the first being a growing conviction that fundamental reform was needed (both inside and outside the profession) and the second (related) being that I came back less disposed towards maintaining a diplomatic silence.

In the wake of the Pontiff's latest encyclical, Canadian author, social activist and unlikely secu-

lar recruit to the Pope's climate change campaign Naomi Klein had this to say: "A lot of people have patted the Pope on the head but said he's wrong on the economics. I think he's right on the economics." As you may have gathered, so do I.

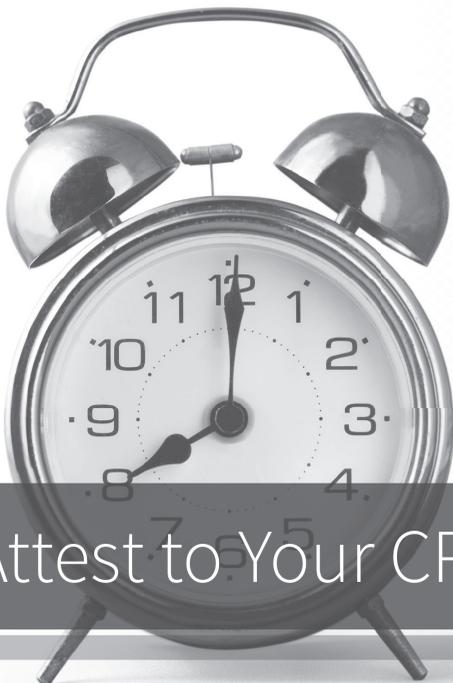
If the Pope and many others *are* right on the economics in present form, our profession's reputation will not fare well. If you agree, your risk management skills may be telling you what they once told me: Silence really ought not to be an option.

Speaking out may not change the world, but you never know. There may come a day when it might just spare your own professional reputation. ■

John Gordon is a U.K.-based independent actuary and consultant. His many roles in three decades of financial services industry experience have ranged from managing pricing and financial reporting teams, financial analysis, corporate governance and business process to leading big change initiatives.

John is the author of several books including *On the Role of the Actuary in a Changing World*. This is available on leading Internet book sites.

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# HED: Claims and Innovations in Australia: The Phoenix Rises

By André Dreyer

The mythological phoenix is known for spectacularly re-generating from its ashes every century. Australia's life insurance industry needs something special to rise from its ashes; claims management innovation promises to give the necessary impetus.

This article was adapted from an earlier article published by the *Asia Insurance Review*, "Special Focus on Life Reinsurance," June 2014 edition and is republished with their consent.

The past few years have been, at best, challenging for Australia's life insurers and reinsurers. Claims experience << for group disability providers had never before experienced a slump of the magnitude seen between 2012 and 2014, while individual disability providers have seen their experience yo-yo since 2011.

The unusually high and unexpected losses experienced by individual income protection (disability) insurers in Australia stemmed from several causes, from underestimating the length of time disability claimants would stay on claim (due to poor product design) to ineffective claims management practices.

By the end of 2013, overall Australian claims experience had deteriorated even more, with significant group lump-sum disability (total and permanent disability, or TPD) losses dominating. The worst, however, was still to come: 2014's large losses in individual income protection and group lump-sum disability combined to result in a record year for disability losses.

Losses attributable to individual policyholder lapsation worsened as well. According to fourth-quarter 2014 statistics from the Australian Prudential Regulation Authority (APRA), the country's financial services industry regulator, life indus-

try profitability is well below expectations, with individual lump sum's improving results the only bright light (see Figure 1 below).

## REINSURERS INCREASE CLAIMS RESERVES BY MORE THAN US\$1 BILLION IN 2013

The most common explanation offered for the Australian market's group disability losses is that the environment had changed so rapidly over the prior decade that using past claims experience to credibly price large group policies had become an unreliable predictor of future claims experience.

However, no one could have anticipated that claims experience would deteriorate as rapidly as it did from 2011 to 2013. Losses in 2013 were quite extreme, contributing to the country's four largest reinsurers collectively increasing reserves by more than US\$1 billion.

These losses sparked a genuine push for structural change in Australia's group disability market. Price increases alone are not likely to return group disability to sustained profitability. Changes to product design, conditions around eligibility for group cover and a paradigm shift in how claims are managed are essential.

Fortunately, by the end of 2014, many Australian life insurance companies had either completed or were planning to revise their claims practices. Some were even revisiting their entire approach to claims management.

Two approaches to tackle the challenges faced by Australian insurers' claims departments appear to dominate. One consists of improving current practices and optimizing the existing claims payment model. The second, bolder approach is to innovate.

Net Industry Profitability

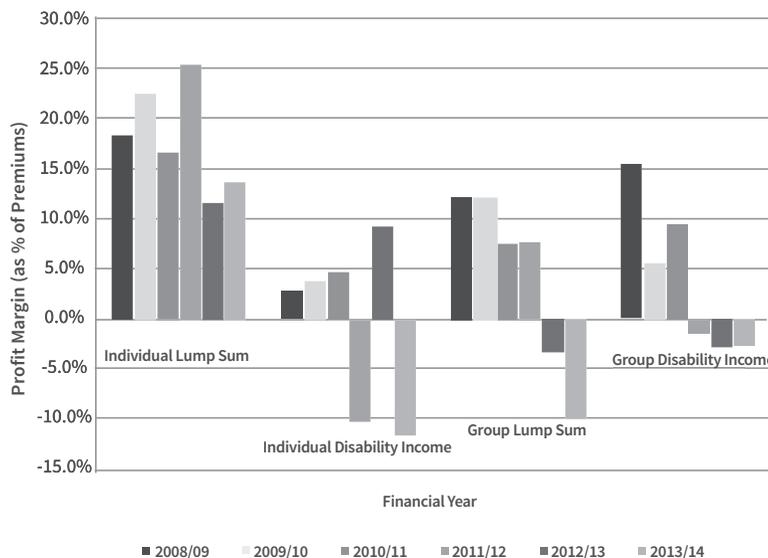


Figure 1: Australia's disability market performance still slumping

## INNOVATION – BURN IT TO THE GROUND

The global life insurance industry has witnessed several innovations over the past decade. Companies in many markets have moved from offering participating to nonparticipating (risk-only) life policies. Critical illness cover, invented 25 years ago and then covering only four impairments, has evolved into a range of offerings including severity-based, multi-pay, early-pay and single impairment policies. Insurers have also developed and introduced functional impairment disability policies to supplement and sometimes replace occupational disability policies.

Underwriting rules engines (UREs), which have been automating new business processes for life insurance companies around the world for more than a decade, were relatively late to Australia, yet were vigorously embraced. The country is now a leading user of e-underwriting.

Until recently, however, claims processes in Australia had seen little innovation. Indeed, few Australian insurers today have automated claims workflow systems. Over the past year, though, the country's life insurers have been implementing a once-in-a-generation sea change in claims management, with changes ranging from automating claim workflows to comprehensive makeovers of the claims management process. These changes were vital: The market could not continue to handle rising incidence rates and claims payment volumes, and insurers understood that rapidly growing demands



on claims professionals needed to be addressed. Pricing and product features may repair future generations of claims risk; however, companies need to address now how to improve the current handling of growing claims volumes and risk exposures.

### A NEW CLAIMS PARADIGM EMERGES

The goal of disability claims management is to provide necessary services, using appropriate resources, in cases where the claimant has the potential to recover, in order to promote maximum recovery and productivity.

Life insurers in Australia know that effective claims management can bring immediate bottom-line results. Hence, some are looking to invest as much as A\$50 million (US\$38 million) in the development of new claims systems and processes in the coming years.

Return-to-work and rehabilitation programs are proven, effective tools in disability claims management. However, the true potential of these management tools as well as others, if used smartly and effectively, has only recently become apparent. The industry is also benefiting from ideas found to be effective in other countries and for affiliated industries such as workers' compensation.

In the late 1990s, Canadian group disability insurers, under pressure for improved results, substantially reinvented their approaches to claims, which shifted the paradigm from claims adjudication (centered largely on the eligibility decision relying on medical diagnosis) to holistic case management (which extends its lens beyond the medical to such important elements as functional and vocational workplace factors). Not only did this broader perspective substantially impact eligibility decisions, it also provided the necessary under-

standing to properly manage a case to a positive resolution.

According to Ms. Maria Vandenhurk, founder and chief executive officer of Banyan Work Health Solutions,<sup>1</sup> Canada's fast-changing health landscape is again forcing group disability insurers to prepare for new challenges.

Canadian claims operations that have not already evolved to "best practice" are under considerable pressure to do so, due to challenges such as:

- Greater complexity in mental illness claims, and the increased presence of "coping with life" issues that are not specifically labeled as mental health. A preponderance of such claims are occurring among individuals under age 40, frequently indicating difficulty coping with "sandwich gen-

CONTINUED ON PAGE 14

eration” stress (simultaneous demands of child care and elder care), financial strain prolonging working careers (especially stemming from the financial crisis), marital breakdowns, and reduced resilience (or perhaps willingness) to work while managing unwelcome and stressful life changes.

- As in most developed markets, Canada’s population is ageing rapidly and a massive exodus of its Baby Boomer labor force is expected through the coming decade. Newer workforce members pose a high level of uncertainty in terms of disability incidence rates and cultural receptiveness to the industry’s claims management techniques.
- The continual and staggering rise of obesity throughout the world’s population is also evident in Canada. Obesity is linked to impairments such as diabetes and cardiovascular disease as well as to mental and other health conditions.

The resulting impact of these trends has been unprecedented. One example: 25 percent of mental health short-term disability claims outside of the province of Quebec were becoming long-term claims, and in Quebec, almost one in two converted to long-term claims! In the United States, by comparison, only 8 percent of mental health short-term disability cases converted to long-term claims.

... continued investments in claims systems, processes and professionals will be critical for Australia’s insurers.

Focus on prevention and minimization of illness and disability impact

“Best practice case management” is a model that focuses on prevention and minimization of the human and economic impact of illness and disability. Moves toward this model in Canada have thus far resulted in considerable gains for the country’s employees and employers. Active stakeholder engagement is central to the approach, involving the employee and employer, the insurer, treatment providers, and union representatives (where applicable). The end result is optimized quality of care, improved productivity and return-to-work rates, organizational health, and as a welcome by-product in Canada, regulatory compliance.

A growing body of medical and psychological research literature provides evidence that work is healthy and contributes to both quality of life and longevity. According to Ms. Vandenhurk, claims decision-makers need to believe they are doing good, seeing themselves as promoters of health and productivity.

In our view, a similarly holistic approach to claims management is much needed in Aus-

tralia. Such an approach, with a focus on incorporating claims assessment, planning, management, with medical and vocational aspects, workflow, use of resources and quality assurance, can help realize a lasting transformation of claim practices. Process improvements are achievable, and change is possible, as many of the practices are reasonably simple to understand, perhaps more challenging to implement, yet fundamentally all the same.

### CONCLUSION

Reinsurers and insurers have been leading the way in implementing new claims management practices in Australia since 2014. Going forward, continued investments in claims systems, processes and professionals will be critical for Australia’s insurers. The disability claims management innovations of the past few years are now part of Australia’s claims landscape, promising stronger and more effective financial outcomes for insurers. Investment in claims transformation and paradigm shifts are much welcomed, and promise to continue for several years to come. The resulting effect on the Australian market could be as exciting and grand as the rebirth of the mythical phoenix. ■

### END NOTES

<sup>1</sup> Banyan is based in Toronto, Canada, and now also has offices in Australia.



André Dreyer is vice president, Alternative Business Models, RGA Reinsurance Company. He was with RGA Australia

from 2010 to the end of 2014, and is now based in Cape Town, South Africa.

# SOA Annual Meeting Session 43 – Current State of the COLI/BOLI Market

By Gregory A. Brandner & David Elias

Session 43 addressed the Current State of the COLI/BOLI Market. Greg Brandner from Munich Re served as moderator, and he along with Julie Decker from RGA and Kelly Rabin from Milliman were the speakers.

Greg opened the session and provided an overview of the COLI/BOLI market as well as remarks about the changing profile of cases and market trends. Highlights of his presentation were:

- The average case size (i.e. number of lives per case) has been decreasing. There are very few new large cases being placed.
- The age profile of new COLI cases is shifting toward older issue ages.

- There is pressure in the marketplace to liberalize guaranteed issue limits. This pressure is being felt from several perspectives:
  - Prior to the early 2000s, the minimum case size for guaranteed issue was 25 lives or higher. Over the past 10-15 years, this minimum case size has been pushed down to 10 lives. Cases are being submitted to carriers today requesting guaranteed issue underwriting on groups as small as 5 lives. Most carriers and reinsurers seem to be holding the line at 10 lives out of concern over the significant anti-selection risk posed by smaller than 10 life groups.

- Ideally, to minimize the potential for anti-selection, the participation within a group should be 100%. Cases are being submitted to carriers today requesting guaranteed issue underwriting on groups with participation rates as low as 25%. Great care must be taken to avoid anti-selection when considering participation rates below 75%.
- The definition of “executive” covered by COLI/BOLI plans is being expanded to include employees at lower salary levels. Historically, minimum salary requirements to qualify for these executive benefit plans were typically in the range of \$100k-\$125k. Today, the minimum salary for inclusion in a COLI/BOLI case can be as low as \$50k.
- Executive Owned and worksite programs are becoming more prevalent.
- Technology and third-party data resources are increasingly being considered to

assist in the risk assessment process.

- Concentration of risk continues to be a challenge. Both direct writers and reinsurers have limited capacity in some locations, particularly Manhattan.

Greg summarized his view of the current state of the COLI/BOLI market as follows:

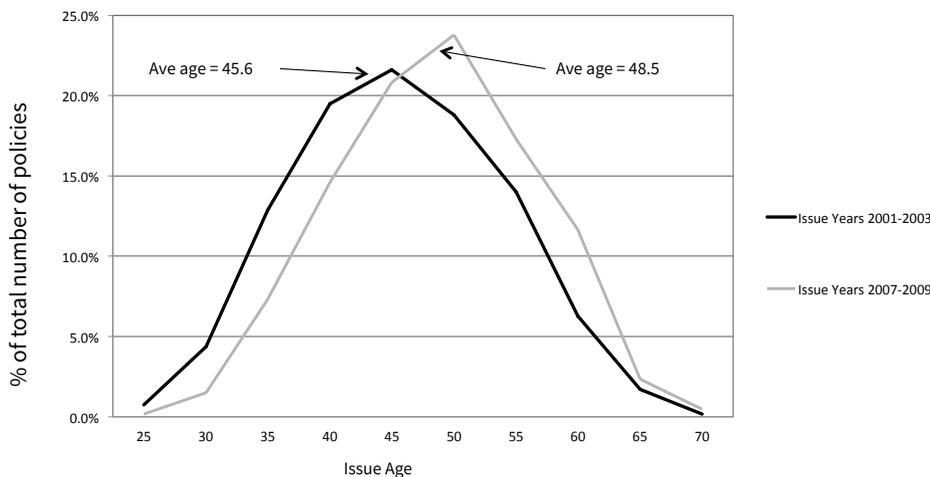
- The profile of a typical COLI/BOLI case is shifting, and the trends are not necessarily favourable.
- Historically, mortality experience has been very good (as good as fully underwritten experience).
- Will market pressures lead to a deterioration in experience?
- Can innovation and technology help?

Julie followed with a discussion of a recent market survey, lapse, and mortality experience studies.

A 2011 survey of direct COLI/BOLI writers showed

- Case sizes are shrinking and per life multiples are increasing, with specific insurer concerns about identifying and pricing impaired risks and ensuring the validity of group definitions.
- Marketing pressures are increasing, as attested by smaller case sizes, unique program designs and increases in replacement activity.

Issue Age Distribution



CONTINUED ON PAGE 16

Lapse and mortality experience shows that for RGA's book of COLI/BOLI and EOLI (Executive Owned Life Insurance) business:

LAPSES – CALENDAR YEAR

- EOLI lapses are higher than COLI/BOLI lapses on a calendar year basis—almost double.
- In both markets, lapses spiked during the financial crisis of 2008-2009.

LAPSES – POLICY YEAR

- EOLI lapse patterns by duration are similar to retail individual life lapse rates and generally higher than COLI/BOLI lapses in most durations.
- COLI/BOLI lapses tend to increase by duration until about duration six then start decreasing. For blocks that are predominantly BOLI, lapses tend to be lower and flatter by duration, around 2 to 3 percent per year.

MORTALITY

- COLI/BOLI mortality by count is approx 96 percent of fully underwritten individual life mortality for face amounts \$100k+. If substandard risks are excluded, the relative mortality increases to about 102 percent of fully underwritten.
- EOLI mortality is approximately 143 percent of fully underwritten individual life mortality. The increased mortality is primarily due to the impact of individual selection/anti-selection in the EOLI market (availability of voluntary supplemental coverage and/or the option of portability upon termination of employment). There may also be impact from lower socio-economic status, depending on the parameters of the program.

somewhat disturbing pattern as it relates to deaths due to cancer:

- the incidence of cancer deaths by count was almost double compared to fully underwritten individual policies and the general population, and
- the incidence of cancer deaths by face amount was almost triple compared to fully underwritten individual policies.

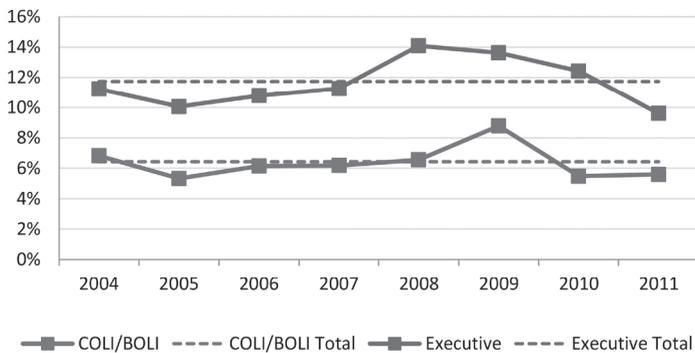
It appears that companies are being selected against, and there may be a need for more robust claims investigations for contestable claims.

Kelly rounded out the session by presenting some innovative ideas that might be helpful in setting COLI/BOLI mortality assumptions. The challenges of pricing COLI/BOLI business include the relatively limited credibility of a carrier's relevant mortality experience and the absence of an industry COLI/BOLI mortality table. She discussed ways to use prescription drug databases as a tool for setting mortality assumptions.

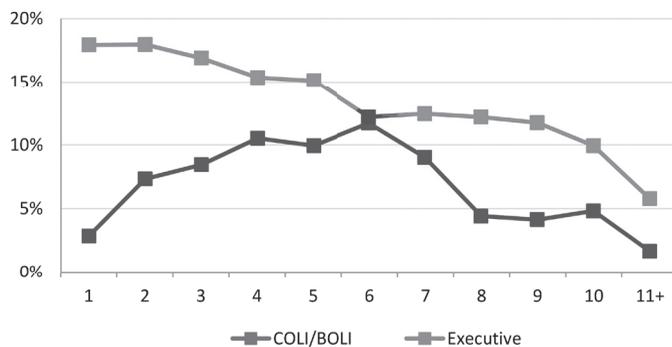
The examples presented utilized Milliman's prescription database tool. This tool captures Rx histories of applicants and runs this data through a predictive model to produce a relative mortality score for the group of lives as a whole. The Rx data is analyzed on a de-identified basis. Because the tool's output applies to the group as a whole, no individual information, rating or score is revealed. This is designed to protect individuals and avoid

- Both COLI/BOLI and EOLI have higher A/E's for the smaller face amount bands and lower A/E's for the larger face amount bands.
- For COLI/BOLI smaller face amounts are generally indicative of smaller case sizes, as face amount limits are generally a multiple applied to the number of lives in the group.
- For the EOLI market, where face amounts are usually a multiple of salary, mortality results are interpreted as a reflection of socio-economic factors.
- There has been an increase in early COLI/BOLI claims in recent years. A drill-down into cause of death during the contestable period showed a

Lapse Rate by Calendar Year\*



Lapse Rate by Policy Duration



confidentiality or other legal ramifications for the insurer. The minimum group size is 25 lives.

Applications of the tool include

- Rx histories can provide better case-level underwriting information than is available from GI applications and producers, thus enabling the carrier to vary the deal terms by group, whether by price or other criteria (e.g. underwriting multiples.)
- With the database tool, a company can compare in-force blocks of business, for example by distributor.
- Mortality assumptions can be used not just in pricing but also in business planning, DAC unlocking and cash flow testing.

Three topics were raised during the question and answer period.

- To Julie: Q – About how long is the select period based on your recent mortality study? A – Julie: Historically the selection slope has been similar to fully underwritten business, but it remains to be seen if that will hold true for the newer, smaller GI cases.
- To the panel: Q – Regarding concentration of risk, how do you cap face amounts payable in a catastrophe? A – Panel: Generally limitations are determined prior to issue rather than afterwards. Insurers and reinsurers have exposure limits based on their respective risk tolerance levels and financial resources. Manhattan capacity is a concern across the industry, and exposure limits such

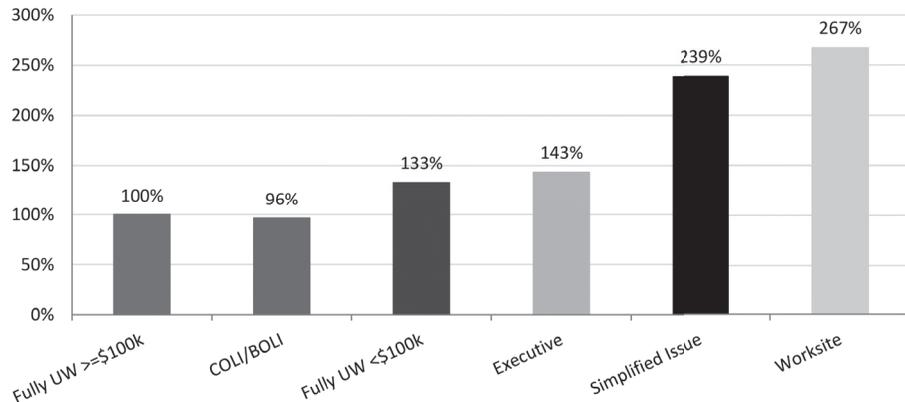
as \$100M of net amount at risk per location are common as a concentration of risk management tool.

- To the panel: Q – To what extent do BOLI and COLI mortality experience differ if any? A – Greg: One direct writer’s mortality study with more than 1,200 claims identified BOLI vs COLI data. In that study BOLI experience was approximately 10 percent higher than COLI.

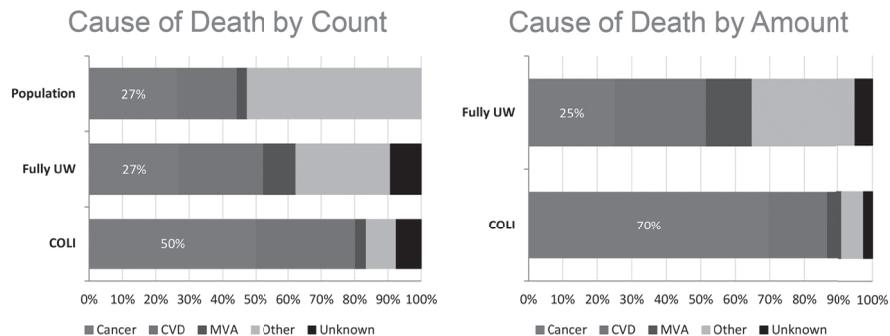
This is possibly attributable to smaller BOLI case sizes and/or lower face amounts. Kelly: BOLI cases written in the 1990s tended to be larger in size and their mortality tracked relatively closely to COLI mortality.

Copies of all three presentations and an audio recording of the session are available on the SOA website. ■

## Mortality A/E Relative to Fully Underwritten



## Contestable Period Claims – Cause of Death



Population data based on 2011 data for ages 25-64 from CDC, National Vital Statistics Reports, Vol. 61, No. 6, Oct. 10, 2012 (over 663,000 deaths)  
 Fully UW data based on RGA claims with dates of death 2009-2013, face amount \$100k+, issue ages 20-69, full underwriting, durations 1-2 (over 3300 claims)  
 COLI data based on RGA COLI/BOLI claims with dates of death 2009-20142Q, durations 1-2 (213 claims)



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# ReFocus 2016 – An interview with the ReFocus Committee

By Mike Kaster

I have been around the insurance and reinsurance industry for more years than I care to state. But in all my years, by far the best industry meeting I have attended is the ReFocus conference. This coming year will be the 10th anniversary, so as the committee prepares for another successful event, I asked a few committee members to share with me their perspectives on ReFocus over the years.

It was impossible to speak to them all, so I spoke to two of the longest tenured committee members, who both have been involved with all of the past nine ReFocus conferences. Mel Young is co-chair of ReFocus and Ronnie Klein has been a committee member from the beginning. The following are some excerpts from my discussions with them, in the form of a question and answer dialog.

## QUESTION 1. HOW DID REFOCUS GET STARTED?

RK—Each year I used to attend the Canadian Reinsurance Conference and wondered why we never had a U.S. Reinsurance Conference. At a reinsurance meeting a few people had discussions about this including Mel Young. While the initial intention was for ReFocus to be a reinsurance meeting, Mel had greater visions for it to be

the premier insurance industry meeting. However, the initial intent was for ReFocus to be a U.S. Reinsurance Conference.

MY—Yes, when the idea was brought to me to create a reinsurance focused meeting, I felt strongly that it can't just be about technical reinsurance topics. With a focus on industry issues, we would be more successful in attracting senior industry leaders. But it did start out with a U.S. reinsurance focus.

## QUESTION 2. WHY IS IT CALLED "REFOCUS"?

MY—Craig Baldwin, one of our original co-chairs was always good at taking ideas we generated and making them sound good. "ReFocus" just seemed to be catchy enough based on where we started, with a focus of the meeting being on reinsurance.

RK—Since the initial intent of the meeting was to be a U.S. Reinsurance Conference, the Re in ReFocus stands for reinsurance.

## QUESTION 3. THE EVENT HAS ALWAYS BEEN IN LAS VEGAS...WHY LAS VEGAS?

MY—We knew we wanted this to be not just a premier life

insurance industry event, but it also had to be a destination event. Florida seemed over saturated with events. We also wanted to be able to incorporate a golf event with the meeting, so we needed some place warm for our desired March timeframe.

RK—In our discussions about the conference, we discussed how the premier nonlife reinsurance conference is held each year in Monte Carlo (called Rendez-Vous). We felt that executives would know that the first week in March each year we would hold the premier life insurance conference in Las Vegas. While we continually receive requests to change locations from a few people, we want the consistency of holding the meeting in the same city each year.

## QUESTION 4. THE MEETING HAS A SPECIFIC TARGETED AUDIENCE... WHO IS IT DESIGNED FOR?

MY—We always wanted to try to attract senior individuals to the meeting. This has proven to be a challenge to maintain, but we make sure each year we address this issue. We tell people that this is not the same kind of meeting as other actuarial or industry meetings, but that this is meant to be strategic in its focus, so we need to attract the senior leaders of the industry.

## QUESTION 5. WHO IS THE MEETING NOT DESIGNED FOR?

RK—As Mel said, this is not an actuarial meeting where attendees will learn the specifics of a new regulation or latest

GAAP or Stat reserving interpretations. While these issues are very important, they are covered at a host of meetings held by various actuarial organizations. We are looking for a different type of audience. Each year a few people complain that there is not enough specific content at the meeting. We would tell those people that it is specifically by design that we don't include a lot of technical content.

## QUESTION 6. SINCE THE FIRST REFOCUS, WHAT IS THE MOST SIGNIFICANT CHANGE TO THE MEETING?

RK—From my perspective, the most significant change is in the attendance which grew from the mid 200s to the mid 600s. Obviously the meeting has been a great success. Other things that have changed are increasing time for networking including longer lunchtime slots and longer breaks. We also end the meetings a bit earlier to allow those going out to dinner or shows the ability to attend all meetings before leaving to their events.

MY—I think the biggest change is that we no longer focus just on reinsurance issues and have specifically toned down "reinsurance." We now try to focus on big industry themes and topics.

## QUESTION 7. REFOCUS SEEMS TO HAVE SOME PARTICULARLY INTERESTING KEYNOTE PRESENTERS... HOW DO YOU GET THESE SPEAKERS FOR THE EVENT?

MY—Since the meeting is jointly sponsored by the SOA and the American Council of Life Insurers (ACLI), we rely heavily on their influence. In particular, the ACLI has wide industry exposure, not just actuarial contacts. So they tend to take the lead on attracting these individuals.

RK—The types of keynote speakers we have been able to attract have really improved the reputation of the meeting and draws more people. Jeb Bush was a great speaker and draw, as were Michael Lewis with Billy Beane in 2014. Most of the industry people are recruited by Mel Young. His contacts and great salesmanship allow Mel to get executives to speak at ReFocus that would normally not volunteer to do so. We really appreciate this of Mel.

#### QUESTION 8. WHAT DO YOU THINK IS THE BEST PART ABOUT REFOCUS ... FROM YOUR PERSPECTIVE?

RK—Clearly the best part of ReFocus is the networking opportunity. I personally look forward to this more than anything. When I see some of my colleagues from Europe after the meeting and ask how they enjoyed the sessions, most say that they only attended one or two sessions. They say that they had too many client meetings and could not attend many sessions. This is music to my ears.

MY—I would echo what Ronnie said. People tend to tell me that they love attending ReFocus every year, to catch up with colleagues and to have significant business meetings and



contacts. This is great when I hear this and I'm very proud of this.

#### QUESTION 9. WHY DO YOU VOLUNTEER YOUR TIME TO PUT THIS INCREDIBLE EVENT TOGETHER?

MY—While working on ReFocus is a bit of a part-time job in the amount of effort, I absolutely love it. We have taken a concept and developed it into the premier life insurance industry conference. It's a pleasure to work on this with people like Ronnie and others.

RK—It is a lot of work to plan this meeting. It is also one of the most rewarding things that I do. I get to work with some of the most wonderful people in the industry including Mel Young, Pete Schaefer, Victoria Smith, Jay Semla, Doc Huffman, Joann Martin and Mary Ann Brown. Most importantly, we plan a meeting that over 600

people attend and rave about. It is worth all of the effort.

MY—In particular, I want to thank Victoria Smith from the ACLI for her invaluable contributions to ReFocus over the years. She will be leaving us after this year and she will be sorely missed. We have truly appreciated her efforts.

RK—I would also emphasize the contribution that Victoria has made to the meeting. She had the foresight to get a professional moderator, Bill Press, who adds to the professionalism of the meeting and always has great keynote speaker suggestions. We will miss her contribution greatly.

#### QUESTION 10. FINAL QUESTION—ANYTHING ELSE YOU WANT TO SAY ABOUT REFOCUS?

RK—My personal goal is to include more international sessions and also some nonlife ses-

sions. I would like ReFocus to be as well known in the industry as the Monte Carlo meeting is to the nonlife meeting.

MY—Thank you to all the hundreds of volunteers and staff that help us each year pull together an event that is near and dear to my heart. I personally look forward to this event each year to see some of my senior-level colleagues and to learn more about what is affecting them in their business life. Plus it's a lot of fun too! See everyone in Las Vegas, March 6-9, 2016 at the Aria Resort. ■



Mike Kaster, FSA, MAAA, is executive vice president for Willis Re. He can be contacted at [Mike.Kaster@willis.com](mailto:Mike.Kaster@willis.com).

# What Drives an Actuary to Buy a Safari Lodge in South Africa?

By Rolf Steiner

Probably there are better investment opportunities. The risk profile with bushfires and water shortage is not promising at all. A Life underwriter would maybe apply an extra-mortality for the likelihood to get eaten by a lion. Thus, the question is legitimate: What drives an actuary to buy a safari lodge in South Africa?

A good friend told me that if a man turns 40, he either has a lover, buys a motorcycle, or starts his own business. I am happily married and I have no flair for motorcycles, so the answer was clear. As I went through a quiet period at work, there was time to reflect: eighteen years of experience in reinsurance, still many years ahead of me—what's next? Suddenly, I rediscovered a passion from times when I was little boy and that had lain dormant in this hectic world: the African bush.

At the beginning, I had no idea how this passion should become part of the second half of my life. But suddenly, I knew. I typed into Google Search: "I want to buy a game lodge in South Africa." This was the start of an irresistible adventure.

Despite my desire for change I did not crash blindly into something of which I had no idea. I passed an online course about "Game Lodge Management" and became familiar with the complexity of such an operation located in the middle of the bush. I learned about the various types of employees used in a lodge, the handling of guests and travel agents, as well as safety and quality aspects of game lodge management. The course started with the sentence: "Only bad managers define profit as a goal, good managers accept profit as a side effect on the way to excellence." A refreshing start, especially if you come from the financial service industry, where we often forget this principle.

Three months later the passion had a name: "Rhulani," a small, private and unfenced five-star-lodge in the Madikwe Game Reserve. With 75,000 hectares, 66 mammals and more than 350 bird species, Madikwe is one of the biggest and most diverse ecosystems in the country, and totally malaria-free.

I remember very well the day I arrived at the lodge as the new owner, and all the staff lined up at the entrance. This day was at the end of a short negotiation process with South African

agents, lawyers and banks, that included a due diligence process. Everything went amazingly smooth and was transparent at all times and gave me an idea of South African hospitality. But this day was also the beginning of the adventure I looked for, and in which I have not found any negative surprises yet.

So, what is Rhulani all about? "Rhulani means 'relax' so we invite you to sit back and enjoy the African bush with us!" is the slogan of this unique place of untouched nature. When you arrive after a 4.5-hours drive from Johannesburg, the staff awaits you with a warm African welcome. A pleasant breeze blows through the open lounge, while you enjoy a refreshing drink, admiring stunning views to Botswana, and maybe with a thirsty elephant at the waterhole, right in front of you.

This moment of tranquility is when even actuaries admit that the beauty of wild nature is at least as fascinating as the exact calculations in a spreadsheet. But don't worry, you can take all your work with you as Rhulani has free Internet access. But, you might end up using the wifi rather to share amazing wildlife photographs with your friends than to respond to your emails.

Each time I close my laptop and open my eyes, I am amazed at how Rhulani is built perfectly to blend into its surroundings. It is only when you are here and observe the incredible wildlife that you truly appreciate how perfectly all the elements of nature interact. Rhulani wants you to feel, smell, see and hear

the bush, so great care is taken in creating the perfect balance of stimuli. It is a place to nourish the soul and lift the spirit, to celebrate life. The color palette – brown, beige and terracotta – is inspired by the changing colors of the earth, with added splashes of coral red and yellow symbolizing the African sunrise and sunset.

As a statistician, you are allowed to ask yourself what is the probability of meeting an aggressive buffalo when at night you are escorted to your room by your ranger. I can assure you, it is still safer than going to work in a big city. So, forget about statistics, just immerse yourself in this amazing world. Don't be surprised if you find yourself crying at the sight of a lion family resting in the grass, or when during dinner at the open boma fire, the ranger tells you, under the stars of the African sky, the story of Orion and Scorpio.

Mathematically, Rhulani offers a perfect balance. There is the absolute tranquility when you are in one of the nine spacious chalets, where you can spoil yourself with a massage on the private deck, or observe a passing zebra herd when out at the plunge pool. It is also possible to feel butterflies in your stomach, when you are on an extensive bushwalk, guided by experienced rangers. Maybe you will encounter one of the dangerous "Big 5" (lion, elephant, rhino, buffalo, or leopard). And you will also discover the beauty of some of the smaller bush inhabitants and take a millipede or a dung beetle in your hand.



Despite its overwhelming beauty, Rhulani also has its challenges. Surprisingly, these are very similar to challenges I have seen in my life as a reinsurer, so my technical background is not a barrier. On the contrary, I realize that a totally different background is a great advantage when you think about future innovation, as you do not fall into the traps of the usual dogmas of the industry.

One of my main challenges at the game lodge is to find the right workers, and motivate, train and reward them, and align their personal interests to Rhulani's interests. Most of my personal time is dedicated to handling guest feedback, understanding the future customer and improving Rhulani's quality every day. I have learned

through experience that "word of mouth" is the least expensive and most powerful marketing instrument. And this is really true. Our returning guests are our biggest asset. To gain new customers, one needs a solid social media strategy and an understanding that online channels are key for future sales.

The project "Rhulani" ([www.rhulani.com](http://www.rhulani.com)) is now over two years old. It has shown me that not everything in life can be explained by a mathematical formula, and that this is not necessary either. If it is the challenge of smoothing a mortality table or chasing an elephant out of the camp, what really matters is "passion." ■

Rolf was born in Männedorf/ Switzerland and graduated in

1995 with a diploma in mathematics, specializing in life insurance, at The SFIT in Zurich/Switzerland. He started in the reinsurance industry as a marketing pricing actuary with Union Re, and in 1997, joined Swiss Re to grow life reinsurance business in Latin America. In almost 17 years with Swiss Re, Rolf occupied several management positions and lived in Buenos Aires, Zurich, Rome, New York and since 2010 in São Paulo with the mission to set up a local reinsurance company in Brazil. From 2013 to May 2015, Rolf was dedicated to defining innovative value propositions for Swiss Re in the space of life primary value chain and primary medical insurance. Since June 2015, Rolf is back in Switzerland and has accepted a position as Head of

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# Reinsurance Research Review

By Ronora Stryker

Planning is underway on the 2015 Reinsurance Section's research agenda. A dedicated group of volunteers has been assembled to help the Reinsurance Section Council initiate and produce quality research that benefits Reinsurance Section members and to oversee the process. Ideas are generated by individual members of this research team as well as feedback from Reinsurance Section members usually through surveys. Topic areas currently being considered are diverse, ranging from longevity research to company practice surveys on administering reinsurance treaty terms.

Once the research team has identified a topic area to pursue, a project team (POG) is recruited to manage the study including defining the project scope, preparing solicitation materials to find a researcher, guiding the researcher to perform the study, and reviewing study deliverables. A POG was recently formed to investigate a study on group term conversion mortality experience.

This study is the second phase of a much larger study on term conversions. In the first phase, Lindsay Meisinger, Donna Megregian, and Derek Kueker of RGA conducted a

survey of U.S. life insurers on the assumptions and product features used for pricing and administering individual term conversions defined as when an individual term insurance policyholder exercises the option to convert to a permanent plan without underwriting. Results of the survey are available on the SOA website.

In addition, the RGA research team is working on an individual term conversion mortality experience study. Data has been collected and is currently being reviewed and analyzed. The results are targeted to be available by end of year.

Another project in progress examines retention management for life insurers. The study illustrates the impact of life insurance retention limits on retained reserves and required capital under Solvency II and a principle based framework. The study is intended to serve as a roadmap for companies to help them reexamine their retention limits and effectively manage their life insurance risk profile. Researcher Kai Kaufhold of Advanced Reinsurance Services has recently been engaged to perform the study. Since the project is in very early stages, no definitive completion date has been determined.



Two projects were completed this spring and summer. The first project examines living benefit riders. In U.S. life insurance and annuity markets, there is a growing demand for living benefit riders. These riders provide for the payment of all or a portion of the death benefit or account value upon the occurrence of a covered event prior to death. A Milliman team led by Carl Friedrich researched the topic and authored the summary report. The study focuses on living benefits triggered by a covered health event.

The report is available on the SOA website and identifies the various types of living benefit riders found in the marketplace, explains rider benefits and how they might vary by state, and provides historical sales data and general filing requirements. The report also explores how underwriting and

administration is handled, and examines direct and reinsurance pricing implications of the riders to the extent they impact policyholder optionality and base plan financial characteristics.

In addition, results of a survey of direct company practices around the riders are summarized. Reinsurers were also interviewed and provided perspectives on the various rider types including pricing considerations, contractual issues and administrative factors.

The following riders are included in the report:

Accelerated Death Benefits (ADB) for Chronic Illness

ADB for Terminal Illness

ADB for Critical Illness

Life/Long Term Care Insurance (LTCL) Accelerated Benefits

Life/LTCI Linked-Benefit Plans

Annuity/LTCI Linked-Benefit Plans

Annuity Enhanced Payout Benefits triggered by a qualifying health condition

Given the comprehensive nature of the report, individuals and companies can utilize the report to help enhance current practices in supporting these benefits.

The second project completed in June provides illustrative examples of how various accounting regimes apply to a range of insurance contracts. This research was performed by an Ernst & Young LLP team. The study investigates the differences that occur when measurement is made under different bases. The observations come from research performed on two products, term life insurance with reinsurance and deferred annuities, under five reporting bases:

1. U.S. Statutory requirements
2. U.S. Generally Accepted Accounting Principles
3. The Canadian Asset Liability Method
4. International Financial Reporting Standards
5. Market-consistent balance sheet

Through an analysis of income emergence under the measurement basis, the report shows the different philosophical foundations for each basis as well as identifies the differenc-

es. The report should help insurance companies and users of financial statements to become better educated on the interpretation of results reported under various accounting regimes and to understand better the implications of some of the proposed changes to financial reporting frameworks currently under consideration.

As this article illustrates, producing relevant research for its members is a priority for the Reinsurance Section Council and the council members are interested in hearing from you. If you have an idea for a research project that would benefit Reinsurance Section members or would like to help with Section research efforts, please contact Scott Campbell, research lead for the Reinsurance Section, at [scott2.campbell@prudential.com](mailto:scott2.campbell@prudential.com) or Ronora Stryker, SOA research actuary at [rstryker@soa.org](mailto:rstryker@soa.org). ■



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# New Brazilian Reinsurance Rules – A significant change of course

By João Marcelo dos Santos

NEW BRAZILIAN INSURANCE AND REINSURANCE RULES – ANOTHER CHANGE IN COURSE AS OF AUG. 3, 2015

When regulatory environments progress, they do so with uncertainty taking some steps forward, some back, and having periods of silence. The publication of National Council of Private Insurance (CNSP) Resolutions Nos. 321 and 322 (the last one was replaced by the CNSP Resolution No. 325) seem to duly fit this scenario.

In this context, to understand the impacts of the new rules and their relevance, we will make

some comments about the Brazilian reinsurance regulation, including a brief historical introduction to the reinsurance activity in Brazil and information about the most important events since the opening of the Brazilian reinsurance market.

## I. THE REINSURANCE MONOPOLY

The first major watershed for the Brazilian insurance market was the creation of the former Reinsurance Institute of Brazil (IRB) in 1939. That was a very important time for the country's economy in which strong industrialization and modernization of social relationships demanded a larger supply of insurance and reinsurance as instruments of protection.

Within this context, the IRB's operation as a regulator and monopolistic reinsurer was fundamental for the Brazilian insurance market and for strengthening the companies that operated on it. This occurred through the channeling of the state's efforts to encourage and direct insurance activities.

In 1967 an independent government agency was created whose function was to regulate and supervise the Brazilian insurance market, named SUSEP (in Portuguese "Superintendência de Seguros Privados"), the Private Insurance Oversight Office, while regulation of the reinsurance market remained with the IRB. Separation began between the functions of economic agent and those of regulatory agent and supervisor of private enterprise, though SUSEP had actually integrated into a structure in which state administration predominated.

By the 1980s, it became evident that change was necessary, because Brazilian society only had access to expensive products that were strictly regulated, even in terms of pricing. The negative effects were clearly felt of a closed insurance market both for the participation of foreign capital and for direct contact with the international reinsurance market.

At the end of the 1980s, the regulation underwent two major transformations. There was first a surge of deregulation (with the freeing up of premium charges and brokerage commissions, among other measures), SUSEP increased in importance, and the growing

modernization of the insurance business became more evident (i) the archaic vision in which regulation was confused with state planning of economic activities, and (ii) the inadequacy of a reinsurance monopoly.

In fact, the legal framework and existence of a self-regulating monopolistic IRB represented an artifact from the time in which the state "was" the economy and occasionally allowed private agents to operate in partnerships and under its close supervision.

In this context, transformations accelerated the following changes:

- 1997 – foreign capital was allowed on the insurance market;
- 1999 – the first, unsuccessful, attempt to privatize IRB Brasil Resseguros SA, with the passage of Law 9932;
- 2003 – the start of an intense process to adopt international regulatory and supervision standards, which ended with the passage of new rules for capital in 2006;
- 2005 – a bill of law was sent to Congress to open the reinsurance market;
- 2007 – Supplementary Law 126 was passed and its regulation finalized the first part of the history of an insurance market that was (i) strictly regulated, and (ii) closed off to foreign capital and to the international reinsurance market.



In 2008, finally the insurance market included the reinsurance business.

## II. OPENING OF THE MARKET

The opening of the Brazilian reinsurance market was based on the Supplementary Law No. 126/2007 and the legislation arising therefrom. Such rules, though not perfect, did the job of creating an environment reliable and attractive to international investments, and capable, to some extent, of fostering the local reinsurance market.

The structure established at that time was of Brazilian companies (local reinsurers) and foreign companies (admitted and occasional) operating in the same market. Under the rules published, local companies had the advantage of preferential offering (initially 60 percent of the risks ceded, currently 40 percent), while cessions to occasional reinsurers were limited. This resulted in a model that both attracted international groups to the local market and opened the doors for the reinsurance market to effectively become the driving force behind the development of the Brazilian insurance market.

Three years after the opening, naturally, imperfections and need for changes arose, and the response to it, which came up incorrect in its form, content and strength, was the enactment of CNSP Resolutions Nos. 225 and 232.

Aiming at protecting the local reinsurance market, rules on market reserve (in replacement of the preference rules) were



created and some strict limits were put to intra-group operations.

On December 10, the National Private Insurance Council - CNSP published Resolutions Nos. 224 and 225, among others. On account of their content and the deadline for their coming into effect, the impact of these new rules could not have been worse for Brazil's image in the local insurance and reinsurance market.

CNSP Resolution No. 224 prohibited the undertaking of any transaction between associate companies when the assignee is domiciled abroad, while CNSP Resolution No. 225 abolished the system of preferential offering to local reinsurers and effectively established a market reserve of 40 percent of all risks ceded in reinsurance.

Far more than a contradiction to a system that had been carefully discussed and de-

signed, the new rules affected the positive image which the Brazilian insurance regulation authorities were then building up and made room to a number of more serious problems. We may mention, but not limited to, the costs with a complex structure of risk placement (known as "triangulations") and the discouragement towards long-term investments based mainly on reliability.

Brazilian regulation underwent troubled times with some positive and negative initiatives and, in all cases, with a very deficient communication that aggravated the feeling of lack of direction accentuated by the enactment of CNSP Resolutions Nos. 225 and 232.

It is important to mention that, at this moment, there are 16 local, 36 admitted and 74 occasional reinsurers operating in Brazil.

## III. CNSP RESOLUTION NO. 322/15 AND CNSP RESOLUTION NO. 325/2015

Publication of CNSP Resolution No. 322 (replaced by CNSP Resolution No. 325) may be considered as an attempt to have SUSEP back reaching out for some rationality and safety in its actions.

Firstly, the intragroup risk placements will be progressively increased. Until Dec. 31, 2016, the limit of 20 percent of each cession will be maintained. This limit will be increased to 30 percent from Jan. 1, 2017; 45 percent from Jan. 1, 2018; 60 percent from Jan. 1, 2019 and 75 percent from Jan. 1, 2020.

Further, the market reserve was replaced by a dual system of (i) a preferential offer of 40 percent of the contracts to the local reinsurers and (ii) a pro-

CONTINUED ON PAGE 26

gressive reduction of the market reserve (40 percent until Dec. 31, 2016, 30 percent until Dec. 31, 2017; 25 percent until Dec. 31, 2018; 20 percent until Dec. 31, 2019; 15 percent until Dec. 31, 2020).

The progressive reduction of the restriction to intra-group operations is worthy of praise. The 20 percent limit of operations between related companies was contrary to the market expectations. In fact, the regulation had been structured on the assumption that local subsidiaries could do business in Brazil supported, also with regard to capital and subscription capacity, by their parent companies.

The criticism to be made to the new rule is that keeping the restriction in the long run—even at a much lower percentage but still applicable to every coverage—forces the ceding companies to keep complex structures of risk placement.

The same can be said as to the reduction of the market reserve. If the regulation authority believes that the market reserve is not positive, notwithstanding the fact that some of the worst effects thereof were mitigated by publication of CNSP Resolution No. 241 (that regulates the lack of capacity or interest of the local market in each risk), then the ideal would be to annul it. Keeping market reserve along with the preference rule sets an additional control, among many others, to be kept by Brazilian ceding companies. The costs associated with such controls are not insignificant, both regarding their imple-

## The progressive reduction of the restriction to intra-group operations is worthy of praise

mentation as well as their maintenance.

The CNSP made a mistake. The Resolution CNSP No. 232 was revoked, but the Resolution CNSP 225 was the one supposed to be revoked. The express revalidation of the preferential offer rules was also necessary. The result is unclear interpretation of the rule and the revocation of the list of insurance lines not subject to the intragroup limitations, with important negative impacts.

In this regard, at least part of this mistake was fixed, with the publication of CNSP Resolution No. 325, which “confirmed the CNSP Resolution No. 322 with amendments,” revoking the CNSP Resolution No. 232 and expressly maintaining the validity of CNSP Resolution No. 232.

It is important to mention that the same CNSP Resolution No. 322 created a Consulting Commission within the scope of CNSP in order to propose measures oriented to adopt the best world practices. Regardless of its practical results, it is clear the regulation authority’s intent to listen to the market and its institutions, particularly the National Federation of Reinsurance Companies.

### IV. CONCLUSION

Among some positive and negative aspects and doubts, the enactment of CNSP Resolution No. 322 indicates that SUSEP is willing to adjust the legislation, correcting mistakes and making progress in the implementation of reinsurance market rules compatible with international practice.

Full text of the legal document is set out here <http://www.legisweb.com.br/legislacao/?id=287784> ■



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# Term Conversion Survey Results

By Kyle Proebsting and Lindsay Meisinger

In 2014, the SOA Product Development and Reinsurance Sections, along with the Committee for Life Insurance research engaged Reinsurance Group of America to undertake a research project on term conversion experience.

The project was split into two phases:

- Phase 1 is an assumption survey which is focused on product features and conversion practices
- Phase 2 is an experience analysis of level term business as

it transitions from the term policy into the converted permanent policy

Phase 1 was completed by 21 companies that made up 52 percent of the 2013 term sales. This article summarizes some interesting findings from the survey. The complete survey report can be found at <https://www.soa.org/Research/Research-Projects/Life-Insurance/2015-survey-conversion-assumptions.aspx>. Throughout this article, graphs are pulled directly from the complete survey report for ease of reference for the reader.

## COMPANY INFORMATION

The first section of the survey focused on sales distributions

of the participating companies. On average, more than half of the survey respondents' new business in 2013 came from term policies, and approximately one-third of their in-force business is made up of term policies. Approximately 1.1 percent of respondents' term policies converted to permanent business each year. The phase 1 survey results were presented at the 2015 SOA Life and Annuity Symposium which included audience participation via polling questions. These polling questions helped to give further insight into the conversion process. The audience polling generally supported the previously mentioned statistic as approximately 61 percent of the attendees who selected an amount indicated that between 0.5 and 3 percent of their term policies have converted to permanent business annually.

When looking at the data (Graph 1) by policies issued in 2013 supplied by companies who provided a percentage of business converting each year, note a range of converting business is between zero and three percent. Furthermore, the information which has been presented by conversion percentage from largest to smallest does not indicate an apparent correlation between business mix and conversion percentage.

The proportion of inforce policies tells a very similar story in Graph 7. Companies were asked to provide three data points as of year-end 2013, including term business, non-converted permanent business (nonterm), and permanent business converted from term (con-

Chart 1

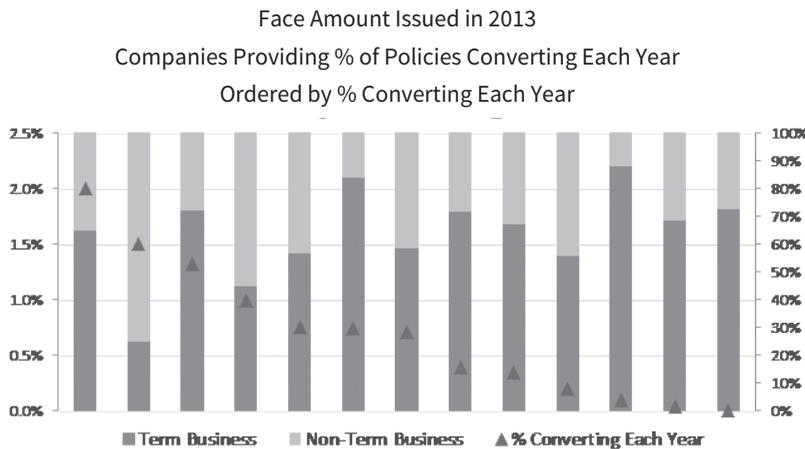
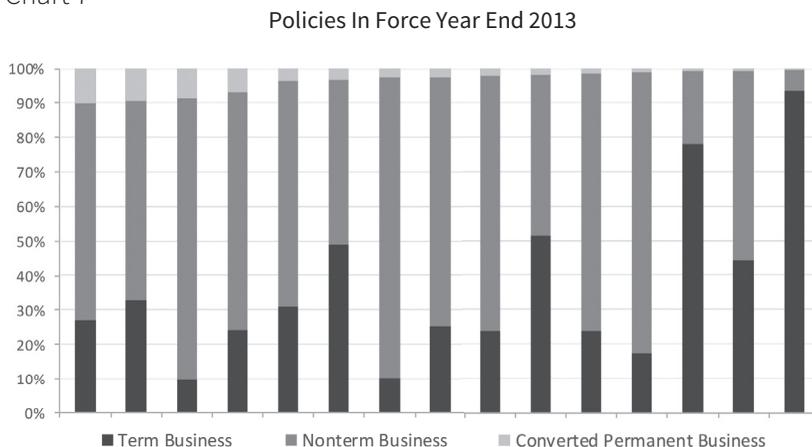


Chart 7



CONTINUED ON PAGE 28

verted permanent). The mix of inforce business attributed to converted permanent policies ranges from zero to 10 percent of the total in-force business for any given company who responded with each of three data points requested. For some companies, Graph 7 shows the overall percent of converted policies in force is not a small portion of in force business and should not be overlooked.

... some companies see anti-selective behavior of conversions is more prominent immediately after conversion and wears off in the later policy durations since the conversion.

The results of all companies were averaged by equal weight as well as weighted by face amount totals as of year-end 2013 in Graph 13.

Both averages show the same assumption trend in mortality since conversion: higher mortality immediately upon conversions as a percentage of PISM, grading down to little or no additional mortality after at least 15 years since conversion.

**CONVERSION BEST ESTIMATE MORTALITY**

The survey asked respondents to provide the best estimate mortality expectation for converted business as a percentage of non-converted permanent business issued at the same time of the original term policy, referred to as Point in Scale Mortality (PISM). For example, a term policy that converts in the 8th duration is compared to an underwritten permanent policy that is in its 8th duration.

Seventeen of 21 companies answered this question. Twelve companies provided a flat multiple of PISM. These multiples ranged from 100 percent, meaning no additional mortality for converted business to 200 percent, or two times the mortality for converted business as a percentage of non-converted business.

The remaining five companies provided mortality multiples which varied by duration since conversion.

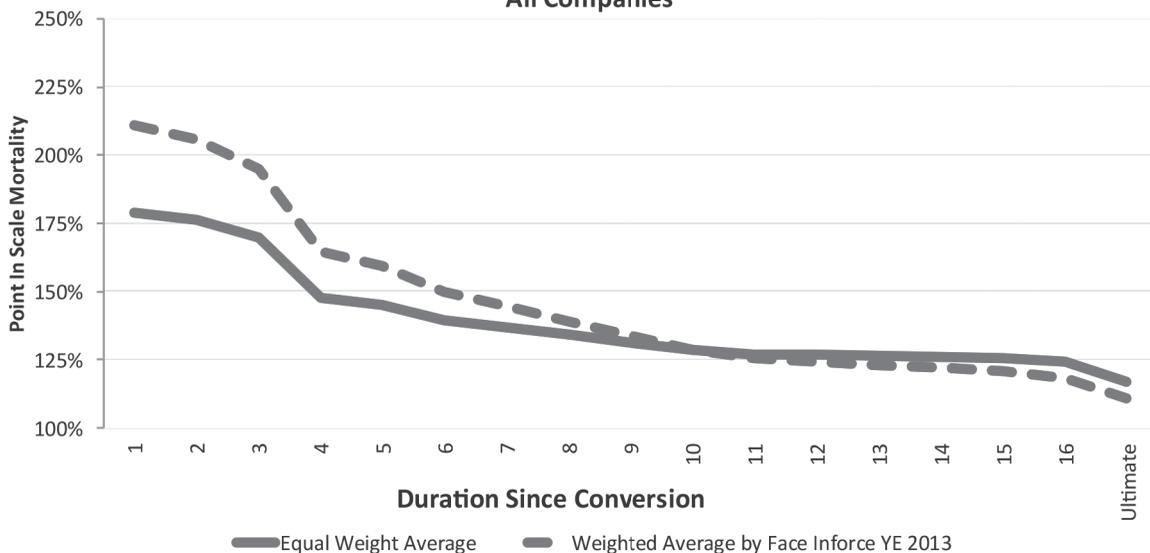
The multiples started anywhere from 200 percent to 500 percent (well above the flat multiples provided by the other twelve companies) grading down to approximately 150 percent or 100 percent, 10-15 years after the policy converted. This indicates that some companies see anti-selective behavior of conversions is more prominent immediately after conversion and wears off in the later policy durations since the conversion.

**CONVERSION PROCESS**

The conversion process, consisting of topics relating to administration, auditing and experience studies was also surveyed. While three of the 21 respondents indicated that conversions are coded as lapses or surrenders, the remaining 18 companies indicated that conversions are identified by their own individual code in company systems. Once the policy has been converted to a permanent plan, it can be coded as

Chart 13

**Multiple of Best Estimate Mortality Expectation for Converted Business  
By Duration Since Conversion  
All Companies**



in-force or new business. Eighteen of the 19 companies who responded indicated that they track converted policies as new business. Since conversions are technically a continuation of another contract, this administration process may be contributing to the fact that only nine of the 21 companies indicated that they could identify conversion on permanent plans as well as link the permanent plan back to the original term policy. Some of the companies expressed interest in improving this process.



Conversions are generally administered on the same systems as their permanent and term policies. While every company indicated that conversions and permanent policies are administered together, only 19 of the 21 respondents indicated that conversions and term policies are administered on the same system. For the two remaining companies the term and conversion policies would be administered on a different system depending on what type of product the policy would be converted.

The survey also asked each company if they had the ability to audit their conversion process. Only 10 of the 21 compa-

nies had the ability to audit and only three of those companies who audit are doing so on a regular basis (at least annually). Based on the findings of a conversion audit, two companies responded that they have enacted changes. The desire to improve current auditing processes tended to be a general theme among the respondents additional comments.

When asked about conversion mortality studies, 16 companies indicated that they are able to look at conversions separately from other data, six of which can review their mortality stud-

ies with and without conversions. Moreover, 13 of the 16 companies with the ability to look at conversions separately do perform separate conversion mortality studies.

#### CONVERSION PHILOSOPHY

When asked whether or not conversions were encouraged, only four of the 21 companies indicated that they are not encouraged, while two companies were unsure. The remaining breakdown shown in chart 18 saw eight companies encouraging conversions to any insured at any time, four companies encouraging conversions to any insured at certain times, and three companies encouraging conversions to certain insured at certain times.

This seemed to be the general consensus at the 2015 SOA LAS presentation as well, as 72 percent of the respondents fell

into one of the three encouragement camps and only nine percent claimed their company does not encourage conversion.

One of the hottest topics in the industry today is the idea and implementation of predictive modeling. When asked if predictive modeling is currently used to target conversions no company admitted to be doing so, however, two companies indicated that they have either begun to investigate it as a possibility or potentially will in the future.

Chart 19 (page 31) shows a majority of the survey respondents indicated that they build the cost of conversion into the term policy either implicitly or explicitly referring potentially to the mortality assumption already including conversions within overall prices, and explicitly re-

CONTINUED ON PAGE 31

Chart 18

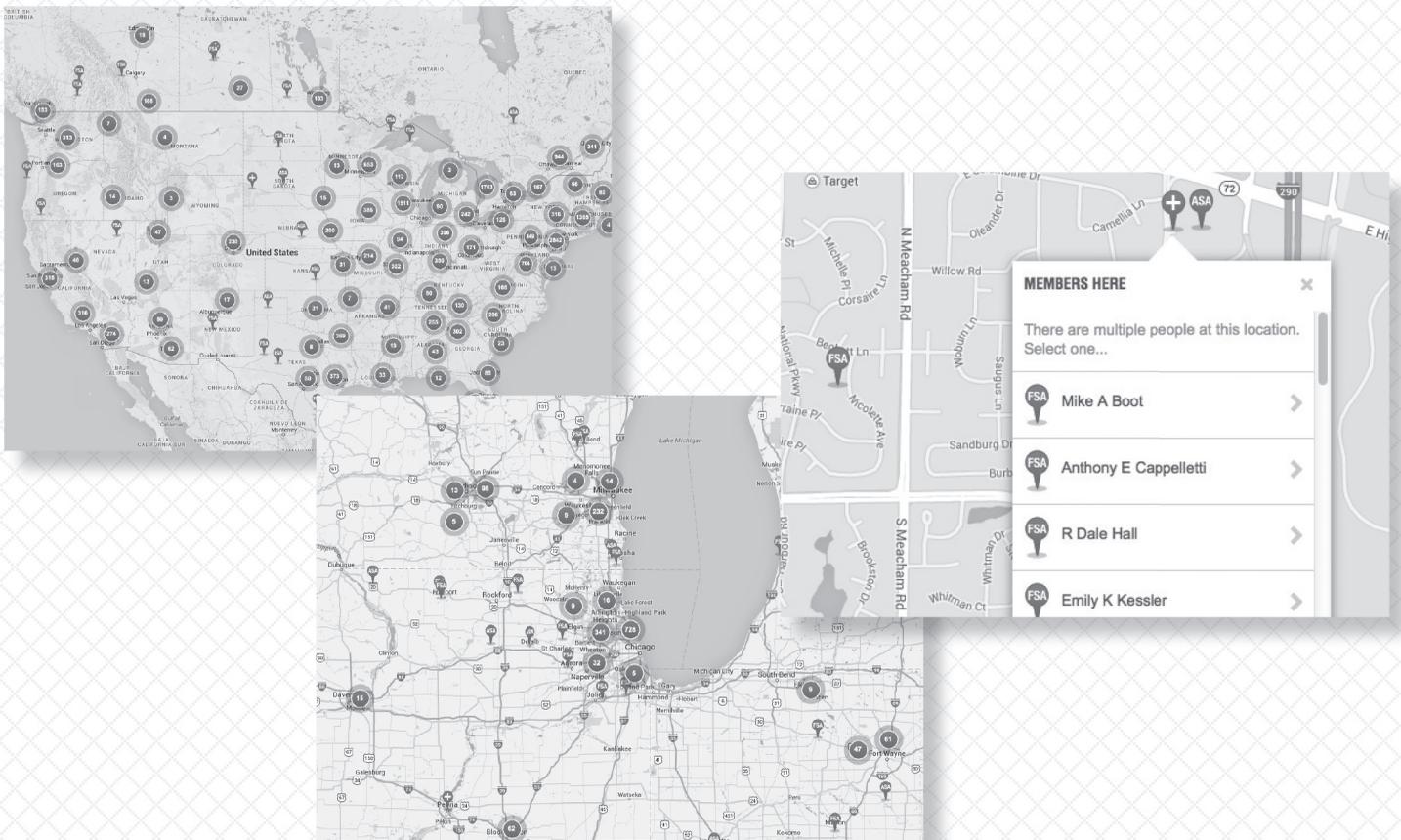
Conversion Philosophy	
Encourage Conversions	Responses
At any time to every insured	8
At certain points in time for every insured	4
At certain points in time to certain insured	3
We do not encourage conversions ever	4
Not sure	2

# SOA Explorer Tool

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ferring to potentially a per policy or per unit additional costs specific to conversions charged in pricing. Conversely and interestingly enough, at the 2015 SOA LAS presentation, most responses indicated that they believed the cost of conversion would be built into the permanent policy (48 percent total), not the term policy as the survey indicated. tly or explicitly.

### CONVERSION REINSURANCE

The survey concluded with a section on Reinsurance of converted policies. Almost all of participating companies (18/20) responded that they reinsure conversions. Two companies out of 17 respondents recapture the conversions and cede them to the permanent pool, while fifteen of the companies indicated the conversions stay with the original reinsurance pool regardless of permanent pool participation.

Slightly more than half of the companies (10/18) indicated paying separate rates for conversions regardless of participation in the permanent pool. These companies may recognize the conversion policies should be treated differently than the other reinsured permanent policies. Five (5/18) respondents pay permanent point in scale rates upon conversion

to reinsurers that are in both the permanent and term pools.

At the Life and Annuity Symposium a polling question was asked on the structure of reinsurance premiums. The largest portion of respondents, 39 percent, answered that they pay permanent point in scale rates. This differed from the survey report results above, where most respondents indicated

paying separate rates for conversions.

### PHASE 2

As indicated in the survey, most companies are identifying the conversions in their administration systems, but the issue is tying the permanent policy back to the original term policy.

CONTINUED ON PAGE 33

Chart 19

Conversion Philosophy	
Cost of Conversions	Responses
Implicitly built into the term policy	5
Explicitly built into term policy	7
Implicitly built into the permanent policy	5
Explicitly built into permanent policy	2
Not built into either term or permanent policy	1
Conversion has not cost	1

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Chart 20

Conversion Reinsurance	
Structure of Reinsurance on Converted Policies	Responses
We pay separate rates for conversion regardless of permanent pool participants	10
Reinsurers that are not in existing permanent pool are paid based on the reinsurance terms of the original term policy as if it didn't convert	1
Reinsurers that are in both the term and permanent pools are paid permanent point in scale rates upon conversion	5
We do combinations of the above depending on the reinsurer	2

This is the biggest challenge facing Phase 2 of this project in completing a mortality study on converted business when original issue date or durations since conversion is lost.

A goal of the Phase 2 Experience Analysis portion of this research project is to examine the mortality of converted business. It will be interesting to compare Graph 13 from the Conversion Best Estimate Mortality Section to the actual experience study results as they become available.

The remaining focus of Phase 2 is to analyze the level term business as it transitions into a converted policy. Conversion rates will be compared to the underlying conversion privileges where available.

This analysis is currently ongoing but a first look at results will be presented at the SOA Annual Meeting in October. ■



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