REINSURANCE SECTION
"A KNOWLEDGE COMMUNITY FOR THE SOCIETY OF ACTUARIES"

Reinsurance News

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newsletter for members of the reinsurance section

LIFE REINSURANCE DATA FROM THE MUNICH AMERICAN SURVEY

by David M. Bruggeman

Munich American's annual survey, which is conducted on behalf of the Society of Actuaries Reinsurance Section, covers Canadian and U.S. ordinary and group life reinsurance new business production and in force. The ordinary numbers are further subdivided into:

(1) Recurring reinsurance: conventional reinsurance covering an insurance policy with an issue date in the year in which it was reinsured;

(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, and;

(3) Retrocession reinsurance: reinsurance not directly written by the ceding company.

Complete survey results can be found at Munich American's Web site: *www.marclife.com* (look under Publications).

Life Reinsurance Production

It was another down year for the reinsurance industry in 2007. In the United States, all reinsurance categories reported decreases in production. This resulted in an overall decrease of 15 percent. Group and portfolio business recorded the largest decreases at 52.0 percent and 65.6 percent respectively. The decreases for recurring and retrocession were lower, but still significant.

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1 Included in the definition of recurring category is business assumed from the direct side of companies that also have a reinsurance division. Business assumed from the reinsurance division would fall under the retrocession category.

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Life Reinsurance Data … from page 1

In Canada, an overall decrease of 8.9 percent was reported. Recurring and retrocession business was fairly stable from 2006 to 2007 with very small decreases reported. On the other hand, group reinsurance in Canada dropped 72.0 percent. Portfolio business was the only category with an increase, however it should be noted there was minimal portfolio business written in 2006.

Life reinsurance production results for 2006 and 2007 are shown on page 3.

U.S. Recurring: Down Five Consecutive Years!

Once again, U.S. recurring business production fell from the previous year. Recurring production went from $724.2 billion in 2006 to $682.9 billion in 2007—a 5.7 percent decrease. This makes it the fifth consecutive year recurring production has decreased. The five straight years of decreasing production has resulted in recurring production being at its lowest level in 10 years. On the bright side (if there is one), the decreases are getting smaller. Production dropped 18.6 percent in 2005, followed by 14.2 percent in 2006 and 5.7 percent in 2007. If this trend continues and direct sales do not decrease in 2008, the U.S. recurring market may actually be poised for its first increase in quite some time. A most welcome happening!

The chart on page 3 shows the annual percentage change in U.S. recurring new business since 1997.

The 2007 U.S. recurring numbers by company are shown on page 4. The market continues to be very concentrated with the top five companies making up 83 percent of the market share—up from 77 percent in 2006. Further, the top three companies accounted for 63 percent of the market in 2007. In looking at the production numbers, distinct company groupings become evident.

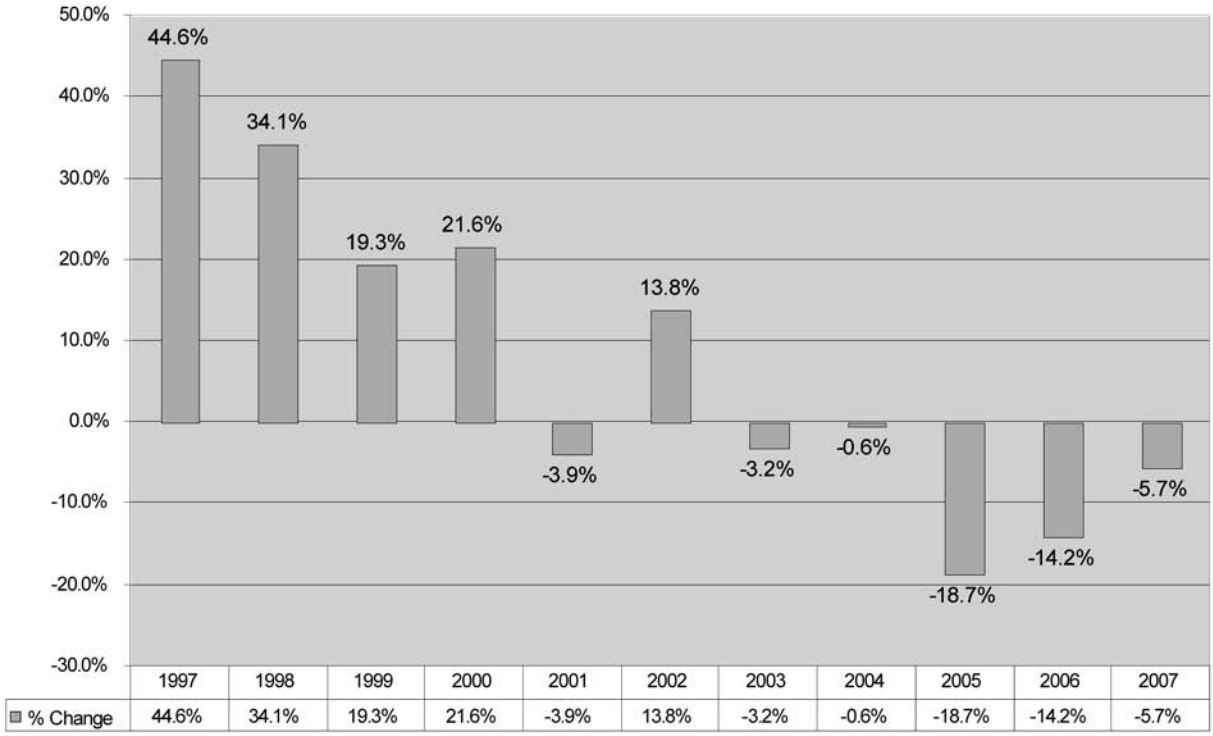
1. **Group One**: This group represents the three companies who had over $100 billion in recurring production in 2007: RGA, Transamerica Re and Swiss Re. Collectively, their market share was 63 percent with each individual company's market share around 20 percent. RGA was once again the top writer in 2007. They wrote $161 billion in recurring new business—a 3 percent decrease from their 2006 writings. Transamerica maintained

Life Reinsurance New Business Production

	U.S.			Canadian		
	2006	2007	Change	2006	2007	Change
Ordinary Life						
Recurring	724,260	682,936	-5.7%	141,445	139,495	-1.4%
Portfolio	101,926	35,058	-65.6%	140	7,897	5540.7%
Retrocession	34,159	29,879	-12.5%	3,828	3,824	-0.1%
Total Ordinary	860,345	747,873	-13.1%	145,413	151,216	4.0%
Total Group	45,776	21,954	-52.0%	29,579	8,268	-72.0%
Total Life	906,121	769,827	-15.0%	174,992	159,484	-8.9%

U.S. figures are in $US, Canadian figures are in $CAN

Annual Percentage Change in U.S. Recurring New Business (1997-2007)



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Life Reinsurance Data ... from page 3

the second position with $144 billion of recurring new business—this also represented a slight decrease from 2006 (1.5 percent). Swiss Re held the third spot with $127 billion in production—an impressive 23.8 percent increase from 2006.

2. **Group Two**: This group includes the two companies that wrote between $50- and $100-billion in recurring production. Generali's $74 billion in 2007 recurring production was a 17 percent increase over 2006. MARC's $60 billion in recurring put them in the fifth position overall, however their production dropped 26 percent from 2006.

3. **Group Three**: These companies, Canada Life, SCOR, Scottish Re, and General Re, all had recurring new business between $10- and $50-billion in 2007. Together, these four companies made up 13 percent of the market share. Noteworthy in this group are SCOR's 58 percent increase in production and Scottish Re's 60 percent decrease in production.

4. **Group Four:** This group of six companies each wrote less than $10 billion in recurring new business in 2007. Wilton, Optimum, Hanover, Ace Tempest, XL Re, and Employers Re make up this group. Collectively, their market share was 4 percent.

These groupings are not arbitrary as there are clear breaks between the groups. To illustrate, there is a $53 billion difference between the bottom Group One company (Swiss Re) and the top Group Two company (Generali). Similarly, there is a $34 billion difference between the bottom Group Two company (MARC) and the top Group Three company (Canada Life).

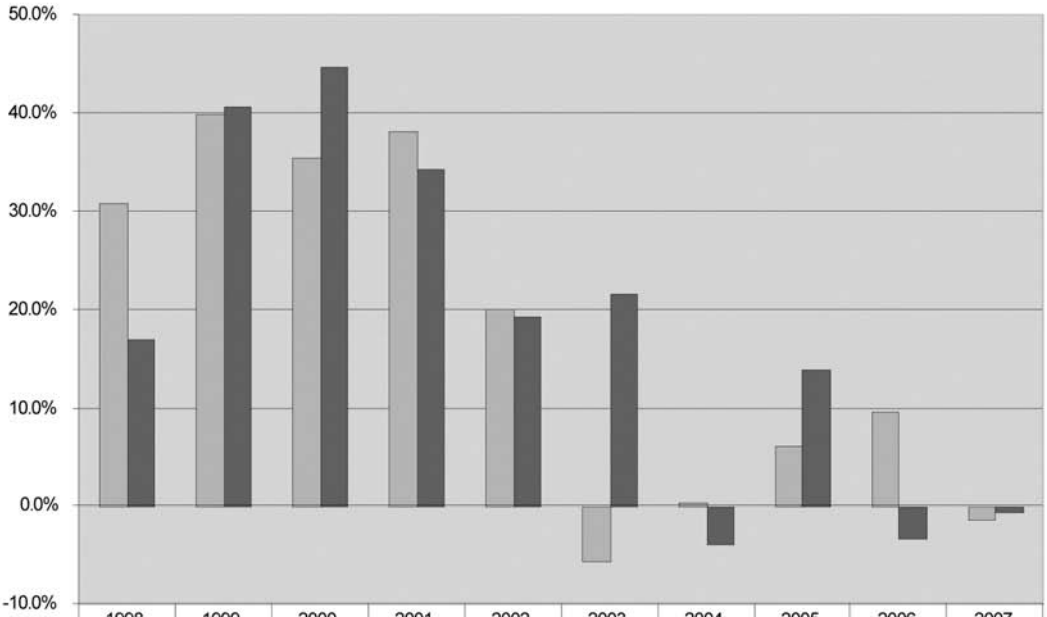
The three reinsurers reporting the largest increases in 2007 recurring new business were Swiss Re, Generali Re, and SCOR Life Re. Swiss Re's production jumped $24.4 billion, Generali Re's new business increased $10.8 billion and SCOR Life Re's writings rose $9.0 billion. The decreases of Scottish Re ($33.7 billion) and MARC ($20.9 billion) were the largest declines reported in 2007.

	2006		2007		
Company	Assumed Business	Market Share	Assumed Business	Market Share	Change in Production
RGA Re. Company	165,892	22.9%	161,091	23.6%	-2.9%
Transamerica Re	146,324	20.2%	144,104	21.1%	-1.5%
Swiss Re	102,241	14.1%	126,599	18.5%	23.8%
Generali USA Life Re	63,149	8.7%	73,985	10.8%	17.2%
Munich American Re	81,231	11.2%	60,321	8.8%	-25.7%
Canada Life	26,005	3.6%	26,116	3.8%	0.4%
SCOR Life Re	15,554	2.1%	24,520	3.6%	57.6%
Scottish Re (US)	56,506	7.8%	22,786	3.3%	-59.7%
General Re Life	20,009	2.8%	14,738	2.2%	-26.3%
Wilton Re	9,447	1.3%	7,142	1.0%	-24.4%
Optimum Re (US)	5,521	0.8%	6,546	1.0%	18.6%
Hannover Life Re	11,887	1.6%	5,525	0.8%	-53.5%
Ace Tempest	4,465	0.6%	5,154	0.8%	15.4%
XL Re Life America	202	0.0%	4,081	0.6%	1920.3%
Employers Re. Corp.	677	0.1%	228	0.0%	-66.3%
Revios	15,150	2.1%	0	0.0%	100.0%
TOTALS	**724,260**	**100%**	**682,936**	**100%**	**-5.7%**

Canada Recurring Business: Leveling Off?

Canadian recurring business fell 1.4 percent in 2007. This marks only the second time in over 10 years the Canadian market recorded a decrease in recurring production. The Canadian market appears to be mirroring the U.S. market with a three-year lag. Both markets have experienced dramatic growth followed by a leveling off period. The following chart shows the percentage change in Canadian recurring production compared to the U.S. change—but with a three-year setback. In other words, the 1998 Canadian change is compared to the 1995 U.S. change; the 1999 Canadian change is compared to the 1996 U.S. change and so on. It's surprising how well they are aligned, especially from 1998 to 2002, and again in 2005 and 2007. It will be interesting to see if this phenomenon holds true in the future.

Estimates of Canadian direct life sales have sales increasing 5 percent in 2007. If this is the case, the percentage of business reinsured in Canada would have dropped in 2007. One thing is for certain, there have been no changes to the top players in the Canadian market—RGA, Munich and Swiss still rule. In fact, these three companies accounted for over 95 percent of the reinsurance in 2007. RGA's 11 percent increase in production from 2006 put them in the top position with $48.7 billion of recurring written. RGA's market share was 35 percent. Munich Re (Canada) was close behind with a 34 percent market share and $46.9 billion of production. Swiss Re rounded out the top three with $36.4 billion in production and a 26 percent market share. Two of the top three companies, Munich Re (Canada) and Swiss Re did have decreases in production from 2006 to 2007.



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Canada	30.8%	39.8%	35.4%	38.1%	19.9%	-5.7%	0.3%	6.2%	9.6%	-1.4%
U.S. (less 3 Years)	16.9%	40.5%	44.6%	34.1%	19.3%	21.6%	-3.9%	13.8%	-3.2%	-0.6%

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Life Reinsurance Data ... from page 5

Canada Ordinary Recurring Reinsurance ($CAN Millions)

Company	2006 Assumed Business	2006 Market Share	2007 Assumed Business	2007 Market Share	Increase in Production
RGA Re (Canada)	43,722	30.9%	48,697	34.9%	11.4%
Munich Re (Canada)	53,448	37.8%	46,872	33.6%	-12.3%
Swiss Re	37,787	26.7%	36,360	26.1%	-3.8%
Optimum Re (Canada)	3,970	2.8%	4,174	3.0%	5.1%
SCOR Global Life	2,195	1.6%	3,390	2.4%	54.4%
Canada Life	1	0.0%	2	0.0%	100.0%
Revios	322	0.2%	0	0.0%	-100.0%
TOTALS	**141,445**	**100.0%**	**139,495**	**100.0%**	**-1.4%**

Totals for Canadian recurring ordinary reinsurance assumed in 2006 and 2007 are as shown in table above.

Portfolio and Retrocession Business

The U.S. portfolio market plummeted 66 percent in 2007. The lack of attractive merger/acquisition and inforce block deals in 2007 resulted in the lowest portfolio writing in 13 years. U.S. retrocession followed the recurring trend and recorded a decrease in 2007. What is noteworthy is the retrocession decrease was twice as high as the recurring decline (12 percent vs. 6 percent).

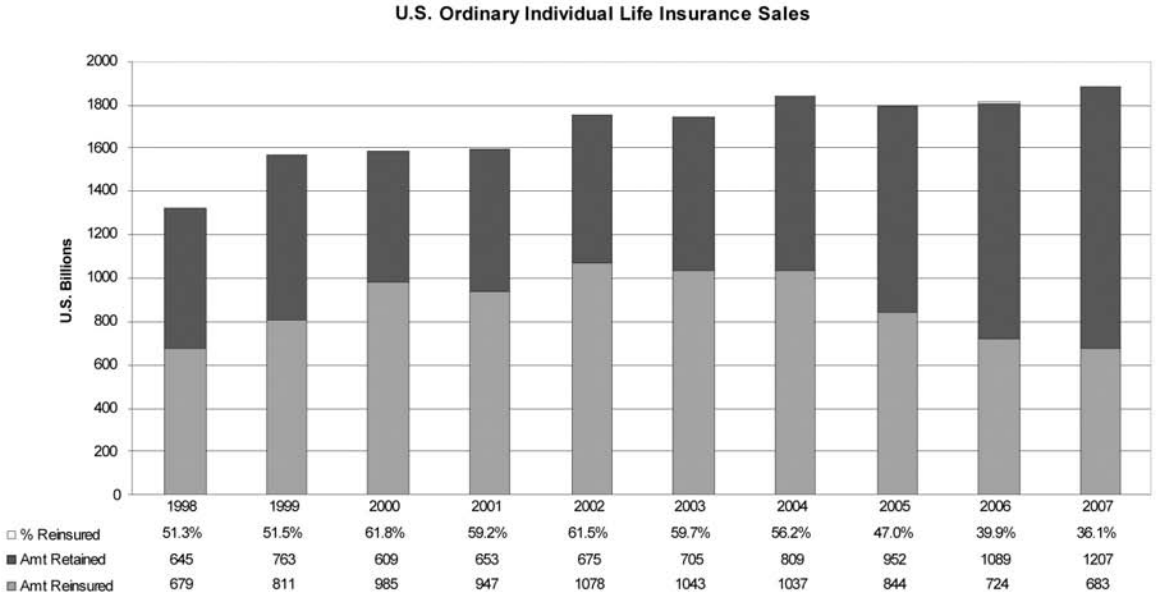
Canadian portfolio rose sharply in 2007, but this can be attributed to one company's writings (SCOR) and the fact that minimal portfolio business was written in 2006. The Canadian retrocession market remained about at the same level as in 2006. The very small decrease of 0.1 percent was in line with the small decrease reported by the recurring market.

Comparison With Direct Market

Preliminary estimates from the American Council of Life Insurers (ACLI) show U.S. ordinary life insurance purchases increasing 4.2 percent in 2007. If this estimate holds true, the percent reinsured rate (commonly called the cession rate) would have dropped to 36 percent. One would have to go all the way back to 1996 to find a lower cession rate. From 1998 through 2004, U.S. reinsurers enjoyed cession rates above 50 percent. In other words, more business was being reinsured than being retained by the ceding company. The cession rate has fallen quickly over the last five years—going from almost 62 percent in 2002 down to 36 percent in 2007.

What caused the drop? I believe we are still seeing the effects of the direct writer's dissatisfaction with reinsurers that peaked around 2004-2005. Over the last few years direct companies have lived through a repricing effort from some of the top reinsurers, a push for tighter treaty wording, and increases in underwriting and claims audits. As a result, relationships soured and direct companies began retaining more of their business—either by moving from a quota share to an excess retention basis or simply by raising their retention limits. With new retention limits implemented and in place, it has been difficult to induce them to lower these limits. It may take something like more competitive pricing, additional value added services from the reinsurers, or a mortality spike to get them to cede more business.

Another factor hindering the reinsurance market's growth can be traced to the term life market. Ceding companies continue to find alternate financial solutions to fund their Reg. XXX reserve strain



outside of reinsurance. Plus, many of the very capitalized companies don't have the increased need to use reinsurance for their term business. Reinsurers filled the need when Reg. XXX first became effective in 2000, but rising costs led direct writers to explore other solutions. With the reserve strain issue resolved, the need for reinsurance lessened. I have not seen actual numbers to support this, but I would not be surprised if the percentage of new term business being reinsured on a YRT basis as opposed to a coinsurance basis has increased over the last few years.

The graph above compares ordinary life new business totals with the recurring life reinsurance totals for the United States

Questions Abound For 2008

The results of the 2007 survey raise many questions about the future path of the U.S. and the Canadian reinsurance markets. The U.S. reinsurance market is trying to claw its way back after five consecutive years of decreasing production. While most would agree that reinsurer and direct company relationships have improved recently, those direct companies who did raise their retentions during the last few years do seem slow to change back. Further, it also appears reinsurance pricing may have loosened up lately, but will it be enough to prompt direct writers to lower their retentions or return to FDQS arrangements? If not, what will it take for direct companies to cede more business? U.S. life reinsurers will be trying to solve the answer to that question in 2008.

Meanwhile, the Canadian market showed signs of slowing down in 2007—recording only its second decrease in production in the last 10 years. Was this just a chance for the market to catch its breath before continued growth or has it actually reached a peak? Will the Canadian market display a similar trend that the U.S. market has been going through and experience further decreases? Check back next year for the answer to that question.

Finally, I would like to thank all of the survey participants for their continued support—this survey would not be possible without their help! ✺

Munich American Reassurance Company 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 American, the Society of Actuaries and the Reinsurance Section take no responsibility for the accuracy of the figures.

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EXECUTIVE PERSPECTIVES ON STRATEGY AND RISK IN REINSURANCE

by Gaetano Geretto

Attitudes on strategy and risk vary according to specific environmental circumstances for most companies. At best, they present insight into people's thinking at a specific point in time. This type of insight was gained at the end of last year through surveys of life reinsurance executives. What follows is an extract from the 2007 surveys in the U.S. market and, where appropriate, contrasts to the survey completed in 2005.

Methodology and Participation

The survey was developed in accordance with the U.S. Safe Harbor requirements of the Federal Trade Commission and the Department of Justice on anti-trust compliance. Simply put, the requirements are that the survey would need to be administered by an objective third party, be based on data that was at least three months old, and have at least five participants, where no single participant's data could present more than 25 percent of any statistic.

There were 16 participants to the survey (12 life reinsurers and 4 professional life retrocessionaires). Based on the data from the 2007 Munich American Re Survey of the U.S. life reinsurance market (which is in this edition of the Reinsurance newsletter), these respondents comprise 60 percent of the new business assumed and 58 percent of the inforce of recurring business in the U.S. ordinary life reinsurance market. The participants to the 2007 survey are as follows:

Reinsurers	Retrocessionaires:
ACE	AXA Equitable
Gen Re	Manulife Re
Hannover Life Re of America	RBC Financial
Max Re	Sun Life Re
Munich American Re	
Optimum Re	
RGA	
SCOR Global Life	
Swiss Re	
TOA Re (through RMA)	
Wilton Re	
XL Re	

STRATEGY: Industry

In reviewing strategy, it is usually of interest to executives to conduct a SWOT analysis (strengths, weaknesses, opportunities, threats) of the industry. In terms of strengths of the industry, U.S. reinsurance executives (including retrocessionaires) believe the greatest industry strength is **capable and experienced staff.** Executives felt that the greatest industry weakness to be the **lack of profitable products and services.**

There was consensus about the greatest industry opportunity as **knowledge of the emergent risks of life insurers.** However, U.S. executives see **entry into the industry of other financial institutions (including banks)** as the greatest industry threat.

STRATEGY: Company

The reinsurance executives were also asked to do the same SWOT analysis, but now focus it on their individual company. Not surprisingly, when compared to the industry SWOT analysis, some results were the same and some differed.

From a company perspective, similar to the greatest industry strength, the greatest company strength is **capable and experienced staff** in their company. The survey participants felt that the **lack of profitable products and services** was the greatest company weakness, similar to the findings from the 2005 survey.

Executives shared consensus about the greatest company opportunity as it is seen to be the development of **new risk management processes** such as securitization. Whereas the **lack of risk diversification (higher concentrations in mortality)** is viewed as the greatest company threat in 2007, the greatest company threat in 2005 was viewed to be the **weakening relationship with life reinsurers.**

STRATEGY: Lines of Business

The line of business credited with creating the most success for the industry and individual companies in the U.S. is Individual Mortality Yearly Renewable Term (**YRT**).

STRATEGY: Stakeholder Management

Among a list, the following was deemed as the most important strategic issue by respondents:

- "We work with **clients** to strengthen relationships into a win-win which recognizes the real costs of underwritten risks."

When respondents were asked to rank the various stakeholder interests that they manage, **shareholders** placed first and clients placed second.

With respect to their shareholders, **actual returns being below target** was the most contentious issue identified by respondents.

Resistance to more explicit treaty language on counter-party risk, data reporting, and underwriting was the most contentious issue of respondents with their clients, as it was in the 2005 survey. With respect to reinsurers dealing with their retrocessionaires, the most contentious issue in the survey was the **increase in rates** for **excess retrocession capacity,** whereas two years ago the most contentious issue was the continuing decrease in capacity.

With respect to reinsurers dealing with regulators, the most contentious issue was **demands** by regulators **for** more or **unnecessary information/data** about the business plan and the company's results, whereas two years ago, it was the lack of understanding of the risks and rewards involved in the company's various business lines.

Resistance to more explicit treaty language on counter-party risk, data reporting, and underwriting was the most contentious issue of respondents with their clients, as it was in the 2005 survey.

RISK MANAGEMENT

Risks

Executives responded that the risk that most needs mitigation in the United States is **mortality risk**. Respondents **purchased catastrophe cover** as the means to best mitigate risk, although having **site concentration limits in treaties** placed a close second.

When asked to rank the greatest risk to be managed in today's reinsurance world, the respondents believe that **excess capacity provided to the market at unsustainable prices** to be the greatest risk, whereas two years ago it had been sustained sub-par returns that taint the industry's risk management reputation.

Respondents were asked to rank a variety of options to improve the evaluation of their business. In 2005, the strengthening of the errors and omissions (E&O) clause in all treaties ranked first among U.S. respondents, whereas in 2007, the expectation of underwriting guidelines and **exception thresholds in the letter of intent and in all treaties** placed first.

Enterprise Risk Management

The measurement of GAAP earnings is the measure most often used to assess a change in risk (earnings or capital) by respondents as it was in 2005. A **decrease of greater than 20 percent** in this

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Executive Perspective … from page 9

measure would **require immediate action among more than one-third** of the 2007 survey participants, while half of the 2005 survey respondents would have taken immediate action when there was a greater than 10 percent decrease in earnings or capital using GAAP.

For reinsurers, the **risk appetite is generally developed jointly by company officers and the board of directors**, similar to the 2005 findings.

Sustainability

A **purchase of a block of business that is no longer strategic to the seller** is considered the best means to sustain one's business in the United States. The most likely function to be outsourced by U.S. respondents is **investment management**.

In terms of actions from the client base, the event or action which has most profoundly impacted the sustainability of the reinsurer's business is **clients' interest in retaining more risk and choosing to reinsure on an excess basis rather than a quota share basis which is starting to erode the reinsurer's revenue base.**

In terms of environmental conditions, the event or action which has most profoundly impacted the sustainability of the business is the **success of the alternative investment community in the STranger-Owned Life Insurance (STOLI) or Investor-Owned Life Insurance (IOLI) markets which puts the reinsurer's business at risk.**

Superior execution, knowledgeable staff, and **consistent risk management** are viewed as the criteria that company heads admire most in the life insurance, life reinsurance and life retrocession industries as follows:

Criteria\Industry Sector	Life Reinsurance	Life Retrocession	Life Insurance
Consistent Risk Management	3rd	2nd	1st
Superior Execution	1st	4th	2nd
Knowledgeable Staff	5th	1st	7th

In terms of specific criteria requiring improvement in their own company, reinsurance CEOs and business line leaders felt that **diversified products and services** placed first and **market presence** was a close second.

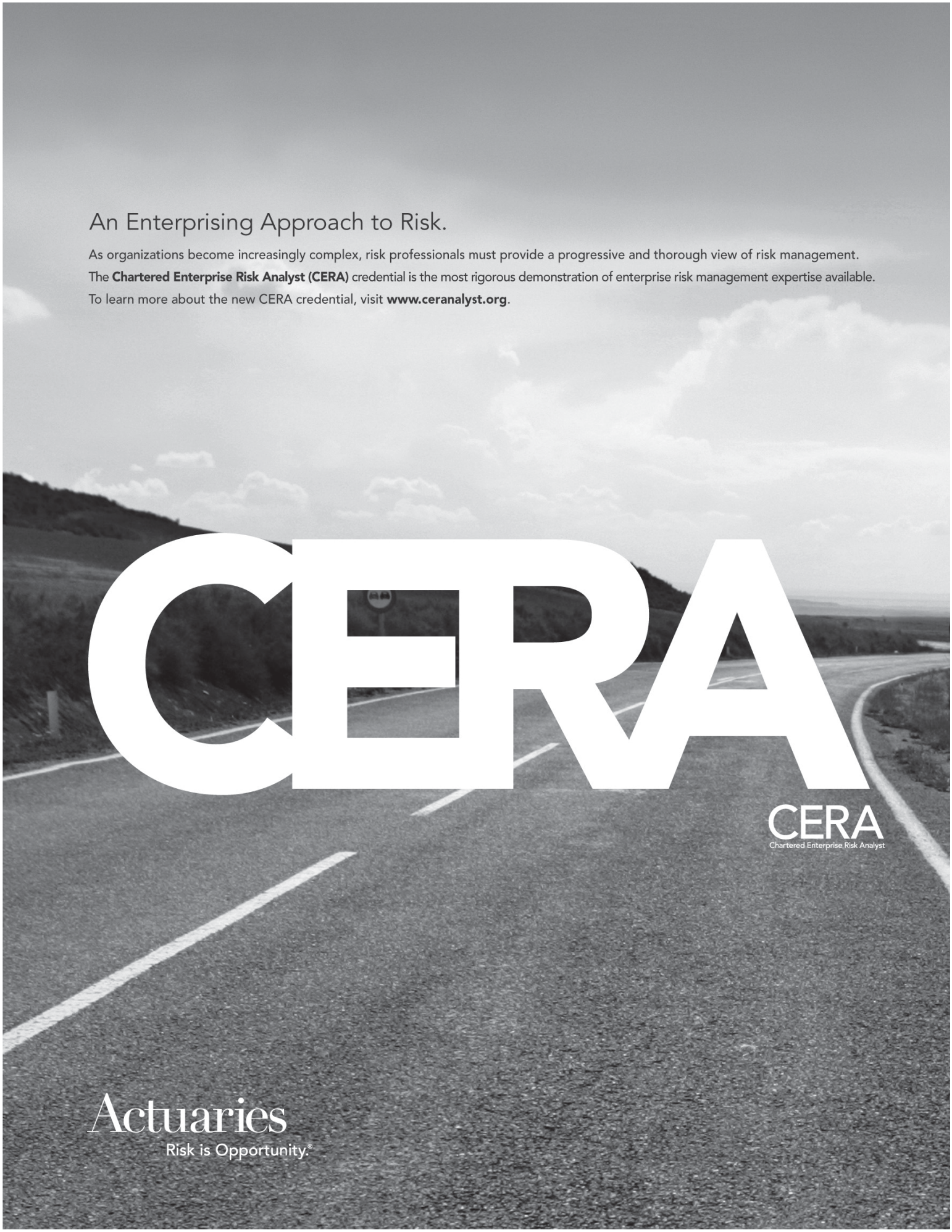
When applying the above criteria in the second column of the table above to the ranking of a list of retrocessionaires, **Manulife Re** was viewed as **most admired retrocessionaire.** Sun Life Re placed second among U.S. respondents.

When asked the same question regarding applying the criteria in the first column of the table above to a list of life reinsurers, **RGA** was the **most admired life reinsurance company** in the U.S. survey, followed by Swiss Re.

Conclusion

The results of the survey give a glimpse into the thoughts and concerns of life reinsurance executives with respect to the U.S. market. The insights reveal their apprehensions about the market today and how it has evolved over the last few years. The survey results also demonstrate the executives' strategic perspectives on their markets and the challenges of managing diverse stakeholder relationships. Their attitudes toward risk reveal how they choose to manage their businesses. The qualities that they admire in their clients, their peers, and their retrocessionaires provide insight to their pursuit of excellence as a quality and their on-going commitment to achieving this goal.

Despite the challenges in the market, executives in the life reinsurance industry are developing their strategic perspectives, managing various stakeholder relationships, mitigating a broad spectrum of risk, and sustaining their businesses such that a vibrant and dynamic life reinsurance marketplace flourishes in the United States. ✺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CHAIRPERSON'S CORNER

by Gaetano Geretto

The Spring Health meeting was recently held in Los Angeles on May 28-30. Our Health representative on Council, Michael Frank of Aquarius Capital, coordinated two sessions: "The Actuary as Dealmaker" and "Updates and New Developments in Health Reinsurance." These sessions helped attendees keep abreast of topical issues in Health Reinsurance. For more information, contact Mike at *Michael.Frank@AquariusCapital.com*.

I hope you were able to join us in Quebec City for the Spring Life Meeting which took place on June 16-18. This meeting was coordinated with the Canadian Institute of Actuaries and the Casualty Actuarial Society, especially regarding activities on day three of the conference. Patrick Stafford of Swiss Re developed sessions on a variety of subjects including captives, upcoming regulatory changes, international financial reporting standards (IFRS), and stochastic modeling on mortality. For more information, contact Patrick at *Patrick_Stafford@swissre.com*.

As well, during the Spring Life meeting in Quebec, members of the Reinsurance Section Council hosted the Reinsurance Section Hot Breakfast on June 17 which was a great opportunity to catch up with peers and old friends, and also be apprised of upcoming developments in life reinsurance. Our featured guest speaker was David Pelletier of RGA who shared with us developments with respect to principle-based assumptions (PBA) in actuarial practice. David shared with us his experience with PBA, how it developed in Canada and other countries, and what the implications may be for actuaries practicing in the United States.

From our last newsletter, you'll recall the developments in our section's research team headed by JJ Carroll of Swiss Re. The multiple decrement project using stochastic modeling has completed its first phase. The research team is now pursuing other research projects, specifically a literature review on longevity and two projects that address reinsurance implications of PBA. These latter two projects will be pursued together with other SOA sections, the Committee on Life Insurance Research, and the American Academy of Actuaries. Please be on the lookout for further developments in the coming months. For more information, please contact JJ Carroll at *jj_carroll@swissre.com*.

The Treaty Project continues to make progress under the stewardship of David Addison of RGA (daddison@rgare.com). The Treaty team and its sub-teams continue to address issues of concern to our membership. Members of this team are also doing a peer review of the updated American Council of Life Insurers' (ACLI) Treaty Sourcebook.

Planning is underway for the Annual Meeting in Orlando on October 19-22. Should you wish to be involved, please approach our Annual Meeting Coordinator, Steve Habegger of Swiss Re. (*Steven_Habegger@swissre.com*).

If getting to meetings proves difficult for you, through our upcoming series of webcasts, certain topics will be coming to you. David Rains of Guy Carpenter (*David.A.Rains@guycarp.com*) is coordinating a series of upcoming webcasts on subjects such as stochastic modeling on mortality, pandemics, PBA and its implications for reinsurance, reinsurance pricing drivers, catastrophe life reinsurance, and IFRS and its implications for reinsurance. Should you wish to get involved in these webcasts, please contact David directly. Otherwise, stay on the lookout for news about the timing of these upcoming webcasts.

These and other sessions are under the stewardship of Tim Ruark of Ruark Advisors, our Continuing Education coordinator on Council. If you'd like to learn more or if you'd like to be part of a panel or a continuing education initiative, please contact Tim at *tim@ ruarkonline.com.*

Our Communications and Publications group meets bi-monthly to develop and review content for our various newsletters. In addition to this edition, we plan to have fall and winter editions of the newsletter. If you'd like to contribute an article, please feel free to contact Bob Diefenbacher of Manulife Re at *Bob_Diefenbacher@manulife.com* or Richard Jennings, our newsletter editor, at *Richard_Jennings@manulife.com*.

Our elections to succeed members of Council will take place later this summer. When you receive your ballot, please vote for your choice of Council representative.

Finally, the 2nd annual life reinsurance conference, ReFocus, was held in Lake Las Vegas on March 2-4. Our ReFocus co-chairs, Craig Baldwin of Transamerica Re and Mel Young of RGA, led a strong organizing committee and produced a superb conference. The 3rd annual ReFocus meeting will be held at the Four Seasons Hotel at the Mandalay Bay Resort, Las Vegas, on March 1-4, 2009. Larry Carson of RGA, together with Craig and Mel, is assuming the leadership for this next ReFocus meeting. The leadership committee has crafted a solid set of tracks including life, health, annuity, legal and tax, underwriting and medical, financial, and marketing, with sessions to be composed of senior and expert speakers, in addition to a series of networking activities to further your reinsurance education. See The Future First and join us at ReFocus '09.

If you have any questions about our Section's activities or want to volunteer to serve as a friend of council, please don't hesitate to contact me at *gaetano.geretto@pelecanusadvisory.com*.

Bon voyage et bon été! (Safe travels and have a good summer!)

Gaetano Geretto
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LONGEVITY: MORTALITY IMPROVEMENT

by John Kingdom

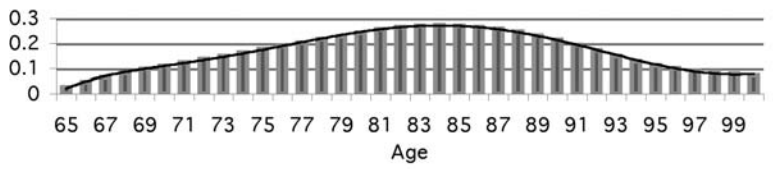
Editor's note: *This article appears with kind permission of The Actuary, Staple Inn Actuarial Society, London, United Kingdom.*

Over the last few years, the issue of longevity risk has gained prominence as mortality rates, and therefore life expectancies, have been improving at an accelerating and faster than anticipated pace.

In 2001, the Continuous Mortality Investigation (CMI) released the interim cohort projections, an extension of the 92-series projections which incorporated the so-called cohort effect.[1] Following that, the Medium Cohort (MC) projection was adopted by much of the industry for the valuation and pricing of annuity products. However, it is now generally accepted that the MC projection, unadjusted, is underestimating future improvements in mortality.

This article shares this view. In particular, the MC projection does not factor in material improvements in mortality rates for older ages. For example, consider Figure 1, which plots the cumulative improvement for males aged 65-100 under the MC projections in 2007.[2] As we can see, cumulative improvements for older ages are set to decelerate under the MC, and peak around the age of 85.

Figure 1: Cumulative improvement for males aged 65-100



I also discuss the notion of date thresholds which separate trends in mortality into two distinct periods: an early period with stable mortality rates and a later period with positive improvements taking place. These date thresholds tend to occur later on in time for older ages. Furthermore, it is not yet clear whether such a threshold has occurred for males currently aged 90 and above—given this, the potential exists for significantly greater improvements in mortality at such high ages.

I present a simple high-level theory for this pattern in mortality improvements which focuses on the effectiveness of medical advances on reducing mortality rates at different ages. I also suggest a possible way to model this which is based on the Lee-Carter methodology, a popular model for stochastic mortality.

Patterns In Mortality Improvements

Upon examination of past mortality trends, we can distinguish two inherent features, as briefly mentioned above.

The first feature is that, initially, mortality rates follow a path of no improvements; this is then followed by a cycle of accelerating and then decelerating improvements, before finally reverting again to a path of no improvements.

The second feature is that mortality improvements start to occur at a later date as we move up the age scale. For example, Figure 2 plots smoothened improvements in mortality rates since 1920 for males aged 45, 70 and 95.[3] We can see that, for males aged 70, improvements in mortality started to occur around 1955 and have been accelerating since. On the other hand, improvements for age 45 started to occur before 1920 and peaked around 1965, while at the other end, improvements

1 The cohort effect describes the phenomenon in the U.K. whereby population cohorts born between 1925 and 1945 have experienced faster improvements in mortality over their lifetime than adjacent generations. See, for example, Willets (1999) and Willets et al. (2004) for a description of this.

2 This plots the annual rate of improvement in mortality for someone aged 65 in 2007 versus the mortality rate of someone aged 65 in 2006, the improvement of someone aged 66 in 2008 versus someone aged 66 in 2006, someone aged 67 in 2009 versus someone aged 67 in 2006 and so on.

for age 95 seem to have picked up from around 1985—although these are not, in a statistical sense, significantly different to zero.

A Simple Theory

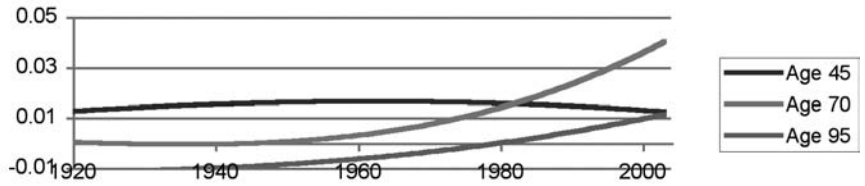
At high levels of mortality, gradual advances in medical science may not have a major impact on reducing mortality rates. For example, at older ages, individuals may suffer from multiple causes of ill-health, so treating one of those causes still leaves them vulnerable to others. Therefore, a significant amount of time and resources may be necessary before the medical knowledge and technology is available to reduce mortality rates. During this time, mortality levels will show little, if any improvement.

Once a breakthrough point is reached and mortality rates start to improve, more research may be required before substantial reductions in mortality are achieved. Therefore, mortality rates will start to improve slowly but at an accelerating pace as further innovations occur.

Finally, as medical advances continue, it takes an increasing amount of new medical advances to further reduce mortality rates. For example, it may not be very easy to reduce mortality rates of 0.4 percent for males aged 50. At this point therefore, mortality improvements start to slow down before stabilizing at a low level, perhaps close to zero.

As Figure 2 suggests, this cycle of accelerating improvements, decelerating improvements and stabilization occurs later for older ages. Arguing along the same lines, this is because mortality rates for older ages are more difficult to improve and so more time and medical progress is necessary to start this process. The necessary medical advances for this could start to occur in the near future, fuelled perhaps by large financial investments from pharmaceutical firms.

Figure 2: Smoothened improvement in males mortality for England and Wales



To model this, I estimate a Lee-Carter model with time-varying coefficients, using ONS data on male mortality in England and Wales. This approach is now described below.

A Lee-Carter-Based Approach

The standard Lee-Carter approach constructs a mortality index from the underlying data and models age-specific mortality rates as a function of this index. Each age-specific mortality rate then has a beta coefficient which measures its sensitivity to changes in the overall mortality index over the period analyzed.[4]

For any given age and time, the age-specific (log) mortality rate is given as:

$$\ln q_{x,t} = \alpha_x + \beta_x k_t + \varepsilon_{x,t}$$

where α is a constant, k is the mortality index, and ε denotes normally and independently distributed errors. Future mortality rates are then derived by projecting the mortality index k forward in time.

One drawback of the standard Lee-Carter approach is that the estimated coefficients remain constant within the projection period. As a result, ages which have experienced relatively high mortality improvements in the past and hence have high beta estimates will have relatively high projected future improvements. Likewise, ages which have experienced lower improvements in the past (e.g. ages greater than 80) will have

3 Source: Own calculations using data from the Office of National Statistics (ONS).

4 An analogy perhaps would be to think of the return on an individual stock and how it is related to the return on the market portfolio through its beta.

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low projected improvements. If, as argued above, mortality improvements for older ages are set to accelerate, this approach will underestimate life expectancy and hence will undervalue annuity products.

Table 1: Estimated Lee-Carter beta coefficients

	Age 30	Age 60	Age 75
1841-2003	0.0158	0.0053	0.0029
1920-2003	0.0132	0.0057	0.0044
1970-2003	-0.0004	0.0139	0.0109

For example, consider Table 1, which gives the beta coefficients obtained from running the Lee-Carter model using the time periods 1841-2003, 1920-2003 and 1970-2003. This shows how the beta coefficients can vary considerably as the estimation period is shortened.

At age 30, the beta coefficient starts off at a relatively high level and declines to a negative value (although this is not statistically different to zero). For older ages however, the beta coefficients increase as the time period is shortened. As discussed, this occurs because younger-age mortality showed most improvement in earlier years while in later years it was older-age mortality which improved the most.

In order to take this into account in my own estimates for life expectancy, I use the Lee-Carter approach but with time-varying coefficients. To do this I first examine the trends in the alpha and beta coefficients of the Lee-Carter model for ages 50-100 by estimating these for consecutive and rolling 30-year sub-periods.[5] Then, when projecting forward the mortality index k, I also extrapolate the alpha and beta coefficients of the model in a way that is consistent with previous trends in these.

In brief, the model projects an increase in the beta coefficients for ages above 80 and, in parallel, a fall in these for ages 50-80. At the same time, there is little change in the projected alpha coefficients—taken together, this implies an accelerating pace of mortality improvements for older ages and a fall in the rate of improvement for younger ages. The results are detailed below.

Table 2: Estimated life expectancy, males aged 65

Year	e(65)	Change
2004	18.7	0.19
2005	18.8	0.19
2006	19.0	0.18
2007	19.2	0.18
2008	19.4	0.18

Table 3: Estimated Average Improvement

Age group	This model	MC projection
65-69	2.0%	2.2%
70-74	1.7%	1.8%
75-79	1.9%	1.7%
80-84	2.1%	1.7%
85-89	2.8%	1.3%
90-94	2.5%	0.7%
95-100	2.0%	0.3%

Results

Using this method of projection to estimate mortality rates from 2004 onwards, I estimate life expectancy for males aged 65 in 2007 at 19.2 years. In contrast, using the standard Lee-Carter specification yields a life expectancy for 2007 of 18.3 years—0.9 years less.

The results imply an increase in life expectancy of 0.18 years per annum between 2004 and 2008. Compared to the cohort projections, this is equivalent (in value but not in shape) to assuming that improvements follow the MC with a floor of 1.8 percent. If we re-base mortality rates in 2007 and project these forward,[6] these projections are in fact equivalent to assuming the MC with a floor of 2.1 percent. What's more, unlike the MC projection, the bulk of these improvements occur for older ages—this is highlighted in more detail in Table 3.

5 In other words, I first estimate the model using data from 1841-1870, then 1842-1871, then 1843-1872, and do this for all 30-year sub-periods up to 1974-2003.

6 That is, if both my model and the MC model project from a common set of mortality rates in 2007.

The Cohort Effect

Although the model does not explicitly model cohorts, the projections suggest the presence of a cohort effect after 2003 which is centered around the 1935 cohort. For example, the 1935 cohort has an average projected lifetime improvements of 2.51 percent, against average projected lifetime improvements of 1.8 percent and 1.85 percent for the 1920 and 1950 cohorts.

That the model projects a cohort effect despite not modelling cohorts explicitly also presents another possible explanation for such phenomena on the basis of medical advancements and changes in lifestyle alone. Having said that, this does not invalidate other possible explanations which may also contribute to this effect in the U.K., such as, for example, the introduction of the NHS in 1948.

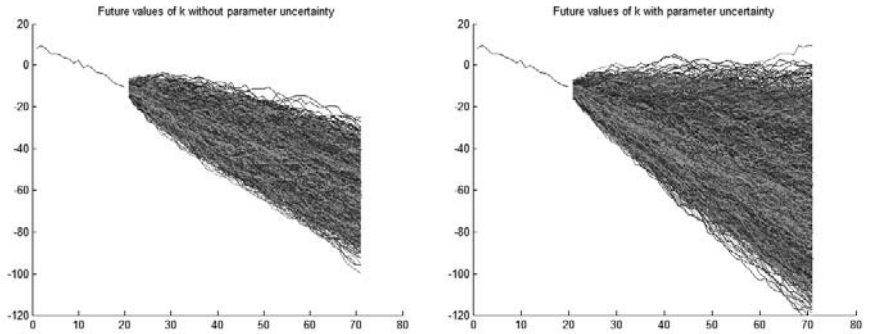
The Extent Of Uncertainty

There is a considerable amount of uncertainty in the model's projections. I derived a 1-in-200 stress test scenario by running a large number of stochastic simulations in the mortality index and capturing the 99.5th percentile for male life expectancy at 65 in 2007. The result is a life expectancy of 22.1 years, nearly 2.9 years higher than the best estimate of 19.2 years. This is equivalent to applying the MC with a floor of 3.7 percent.

These stress tests included two sources of uncertainty: straightforward statistical volatility arising from the random error terms in the model and parameter uncertainty, which is the risk that the estimated parameters of the model do not necessarily reflect the true underlying values.[7]

The simulations show that parameter uncertainty is an important risk that should be accounted for—if this is excluded from the model's simulations, the resulting stress test is equivalent to applying the MC with a floor of just 3.4 percent and yields a life expectancy of half-a-year less. The extent of this effect is illustrated in Figure 3, which plots possible future paths for the mortality index k with and without parameter uncertainty—as we can see, the projections which include parameter uncertainty have a considerably larger funnel of doubt.

Figure 3: Future projections of the mortality index with and without parameter uncertainty



Conclusion

In this article I argue that mortality trends are not stable over time and that mortality rates for the more advanced ages are set to accelerate in the near future.

I propose a model for this by using a Lee-Carter framework with time-varying coefficients. Based on this method, the best estimate for life expectancy for males in England and Wales is considerably stronger than that of the standard Lee-Carter approach and is equivalent to applying the MC projection with a floor of 1.8 percent in 2003 and 2.1 percent in 2007.

To conclude, the one central message of this article is that, when estimating life expectancy, care should be taken to account for how trends in mortality can change over time—by assuming that trends remain constant, one can underestimate life expectancy and therefore undervalue annuity products. ✺

John Kingdom, Ph.D., joined the Financial Services Authority, London, U.K., as a research associate in 2007 after completing a Ph.D. in Economics at the University of Southampton. The views expressed in this article are strictly his own personal ones. He can be reached at *john.kingdom@fsa.gov.uk*.

7 This is not to be confused for mis-estimation risk of current mortality rates, which is not included in this analysis.

SOMEWHERE OVER THE JUMBO?

by David Atkinson

The jumbo limit found in automatic reinsurance treaties is a source of increasing concern in the industry today. A jumbo limit is used in reinsurance agreements to manage retention by limiting automatic binding authority. The limit is compared to the total amount of insurance inforce and applied for on a life, in all companies. If the jumbo limit is exceeded on a life, there are two choices: retain the risk or submit on a facultative basis.

The increasing concern comes from this simple question: What happens if a direct writer is unknowingly over the jumbo limit when it automatically binds its reinsurers?

Most reinsurers are backed by automatic reinsurance agreements that also have jumbo limits. Retrocessionaires have been clear that, whether all inforce and applied for amounts on a life are known or unknown at the time of issue, the jumbo limit will be enforced at claim time. This leads to some thorny questions when there are multiple simultaneous applications—some applications may fall under the jumbo while others may be somewhere over the jumbo.

From a direct writer perspective, there is a very real chance that an applicant will fail to disclose all amounts inforce and applied for, whether purposely or by accident. Without accurate information, the direct writer cannot properly enforce the jumbo limit at the time of issue. To not know whether automatic reinsurance is truly in place is not an acceptable situation.

There are several factors that make this an increasing problem:

- The days of unlimited jumbos came to an end after 9/11 as reinsurers came to fully understand their risk accumulation, ultimately settling on $65 million as a limit that would align with their risk accumulation exposure;

- Available capacity in the market has shrunken due to the consolidation or exit of several reinsurers and retrocessionaires;

- The size and number of large amount policies continues to grow, especially at the older ages;

- The shopping of applications to multiple direct writers (often as trial apps) occurs in significant number. Multiple apps are sometimes placed with no disclosure to any one direct writer of the other apps placed;

- Insured's may not realize that any insurance sold to the secondary life settlement market should be included in an insured's inforce total even though the insured is no longer the policy owner or payor. Often these policies are not counted or included when answering the inforce and applied for in all companies question on the application;

- The stealthy nature of Stranger-Owned Life Insurance (STOLI) business may sometimes result in non-disclosure of other STOLI policies that are inforce or applied for.

The life insurance industry has no central repository for the accumulation and reporting of amounts inforce or applied for on a life. As a result, over the jumbo situations are at risk for not being discovered until time of claim. On a handful of cases, a retrocessionaire or reinsurer has seen enough inforce on a life to realize that the jumbo limit has been violated. If discovered before the end of the contestable period, rescission is a possible solution. If rescission is not workable and the insured is still alive, there may be an opportunity to cobble together available retention to cover the risk. However, not all over the jumbo problems will be resolved so easily.

A far better approach would be to prevent over the jumbo problems in the first place or at least discover them early on in the contestable period. We could do this by establishing an industry-wide central repository for the accumulation and reporting of amounts inforce and applied for on each life. There is a precedent for this kind of repository: Over 100 years ago, the industry established the Medical Information Bureau (now the MIB Group) to collect and share medical information in order to

prevent fraud. Today, the vast majority of individual life insurance is underwritten with the benefit of an MIB check for undisclosed medical information.

The industry is engaged in early discussions with MIB to establish such a repository. There are more questions than answers at this stage:

- For this repository to be useful, how many direct writers of large policies would be needed to contribute data?
- Would reinsurance and retrocessionaire data be beneficial?
- Should both in-force amounts and amounts applied for be reported?
- At what threshold should amounts be reported to MIB (for example, policy size over $2 million)?
- How might companies adapt existing workflows to access this information?
- How should MIB's development costs and ongoing costs be funded?
- How long would this take MIB to develop and how long would it take companies to start contributing data?
- Is there a way to structure this so that some benefit can be delivered immediately?

The central repository concept works best when the bulk of the industry supports the effort and contributes data. The motivations for this are:

- Nobody wants to explain why one death cost their company many millions more than the retention limit;
- Policyholders and beneficiaries may be counting on coverage that may not be available due to non-disclosure of amounts inforce or applied for;
- Underwriting decisions may be different if a larger total amount has been applied for than disclosed.

The life insurance industry has no central repository for the accumulation and reporting of amounts inforce or applied for on a life. As a result, over the jumbo situations are at risk for not being discovered until time of claim.

The over the jumbo problem is already a topic of discussion at many companies. The MIB Group is talking to many companies and investigating various alternatives. I encourage you to help shape the outcome by discussing this within your company and sharing your thoughts with the MIB Group.[1]

✺

Editor's note: *If you have any thoughts or opinions on this article, please submit your comments as a "Letter To The Editor" c/o the SOA or this newsletter's editor,* richard_jennings@manulife.com.

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2 David Atkinson, vice chairman and executive vice president of RGA Reinsurance Company, is co-author with Jim Dallas of *Life Insurance Products and Finance* and a board member of MIB Group.

SOLVENCY II—WHAT IT MEANS FOR REINSURERS

by Tim Goggin and Neil Chisholm

What is Solvency II? Solvency II is a radical overhaul of the European regulatory regime for insurers and reinsurers. Its proponents, as well as U.K. and E.U. industry bodies, believe that it will increase customer protection and international competitiveness across European markets. It will apply to insurers and reinsurers alike and the references in this article to insurers also include reinsurers.

Solvency II will introduce a risk-based approach for the calculation of insurers' regulatory capital, so that the level of capital which each firm is required to hold is tailored to the risks that firm faces.

National regulators will continue to be responsible for prudential supervision in each member state of the European Economic Area. Solvency II intends to create a uniform set of rules which the national regulators will apply.

What Has Been Agreed?

Following sufficient consensus amongst member states on the outline of Solvency II, the European Commission produced the draft Framework Directive in July 2007. The Framework Directive describes some important characteristics of the new regime:

(a) regulation will be about more than a capital buffer; it will also cover risk management;

(b) a firm's solvency requirement will be based on specific risks that firm faces;

(c) the solvency requirement will reflect a firm's insurance liability risk, but will be sensitive to all risks;

(d) there will be three pillars of regulation:

  (i) rules to define liabilities and the admissible capital to cover them;

  (ii) self-assessment by firms of their risks and solvency need followed by a regulatory assessment and (possible) adjustment;

  (iii) disclosure to the market as a means of maintaining discipline; and

(e) the regulation of insurance groups will change.

For now, we do not know what the detail of the regime will look like. However, the regulators have reached agreement on its shape and the insurance industry is broadly happy with it.

Where Will the Detail Be Found?

The European Commission will add much of the detail of Solvency II in technical implementing measures. In drafting this detail, the European Commission consulted with CEIOPS, a committee comprising the national insurance regulators of the member states. CEIOPS has been asking firms to simulate the effect of the proposed legislation on them. The responses are collated and recorded in CEIOPS' Quantitative Impact Studies (QIS). Over 1,000 firms took place in the last QIS in 2007, covering more than 60 percent of the market in most countries.

What Capital Will Insurers Need?

The new capital requirement starts with the "non-zero failure principle." Firms will not be required to hold sufficient capital to eliminate the risk of them ever becoming insolvent. They must hold enough capital to reduce this risk to below the agreed threshold of a one-in-two-hundred chance of failure over a 12-month period.

Capital Requirements

One of the most important features of Solvency II is the level at which insurers will have to maintain capital. This is called the Solvency Capital Requirement (SCR).

By the time a firm breaches its solvency margin under the current EU rules and triggers regulatory intervention, it is likely to be too late for effective remedial steps. Accordingly, a number of EU regulators have imposed stricter standards than the current European minimum, leading to a patchwork of differing solvency requirements across the EEA. Solvency II intends to set the SCR at a high enough

level that regulators intervene earlier, in time to supervise the firm's recovery.

Two important features of Solvency II contribute to the SCR. The first is that the SCR will be based on the risks actually faced by the firm. The current rules apply mechanical formulae to historic premiums and claims information. Under Solvency II the SCR will be forward looking and will take into account not only insurance risk, but also the particular market risk, credit risk and operational risk that a firm faces.

The second feature is that firms will be able to calculate their SCR using a standard formula or by reference to their own internal risk models. Before a firm is allowed to use its internal risk model, the model will have to be validated by the firm's national regulator.

It is also intended that there will be a trigger for serious regulatory intervention called the Minimum Capital Requirement. The level at which the MCR will be set is under discussion.

What Form Will The Supervisory Review Take?

National regulators will be actively involved in the calculation of a firm's SCR. An insurer will carry out a self-assessment of its capital needs based on a detailed review of its risks. This self-assessment will be known as an Own Risk and Solvency Assessment or ORSA. The national regulator will review the ORSA and notify the insurer whether it thinks the insurer's calculation is adequate, and if it is inadequate will indicate the extent to which the regulator regards it as insufficient.

If the national regulator thinks that an insurer's corporate governance, systems and controls and risk management are inadequate, the regulator will be able to require the insurer to put more capital in place. This process is inherently very subjective. Will regulators adopt and apply a consistent approach to validating ORSAs throughout the European Economic Area?

Group Supervision

Solvency II will introduce a new regime in relation to the supervision of insurance groups. The new rules will shift the focus from imposing additional regulation to one which recognizes the benefits that insurance groups can present.

The current regime seeks to ensure that groups do not make multiple use of the same capital. To that end, each insurer within a group must report the solvency position of the group as a whole and of various sub-groups within it.

Many commentators consider that large groups with diversified risks will be the main beneficiaries under the new regime. The European Commission believes that medium-sized niche insurers will continue to thrive, provided they have sufficiently strong governance and risk management systems.

Solvency II seeks instead to recognize the benefits of diversification and pooling of risk which occur within groups. In particular it will be possible in certain circumstances for parental support declarations to count towards subsidiary SCRs.

When Will These Changes Come Into Effect?

The deadline for full implementation set out in the Framework Directive is Oct. 31, 2012. Whether this can be achieved will depend on the speed of the proposal's passage through the European legislative process and on agreement over the detailed implementing measures.

continued on page 22

Solvency II: What in means ... from page 21

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Will Insurers Need More or Less Capital?

The SCR is tailored to each firm based on its particular risks, so the effect on firms will vary. The latest QIS (QIS3) contains some interesting findings on this:

(a) for 30 percent of respondents, the SCR results in an increase of more than 50 percent to their surplus available under the current rules.
(b) for 37 percent of respondents, their surplus shrinks by more than 50 percent when the SCR is calculated.

(c) 16 percent of respondents would need to raise additional capital to meet their SCR.

Many commentators consider that large groups with diversified risks will be the main beneficiaries under the new regime. The European Commission believes that medium-sized niche insurers will continue to thrive, provided they have sufficiently strong governance and risk management systems.

There will be an additional administrative burden for firms to bear in digesting and adapting to the new requirements. It is likely that smaller firms will find this cost harder to absorb. These factors may well lead to consolidation in the European insurance market.

How Will U.K. Insurers Have To Adapt?

It is tempting to look at the regime proposed by Solvency II and to conclude that the U.K. regime is already largely in line with the new rules. Since the end of 2004 U.K. firms have, after all, submitted individual capital assessments to the FSA.

However, the capital models adopted in the United Kingdom under existing rules may not quite bring firms into line with the requirements of Solvency II. They have been designed for the valuation of assets and liabilities. Under Solvency II they must also cover day-to-day risk management decisions. In addition, under Solvency II a firm must show that its internal model is widely used in the actual running of the firm before it is approved.

An important difference is that the FSA introduced its existing requirements relatively informally and had discretion to give firms time to adapt. It is likely that Solvency II will require its provisions to apply with full effect on implementation.

The Challenges Ahead

The Framework Directive seeks to achieve a common approach, but there are a number of areas which will be left to the judgment of national regulators. Consistency of approach at a national level is an important target but will not be measurable for some time. ✺

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- President-Elect roundtable discussion moderated by Past President Ed Robbins.
- Photographs and biographies of Board Candidates.
- Biographies of Section Council candidates.
- Entire ballots including the Board, Bylaws amendment and proxy information and Section Council candidates.

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Questions regarding the election or bylaws amendment can be sent to *elections@soa.org*.

LIMITED MEDICAL BENEFIT PLANS—WHAT INSURANCE COMPANIES, EMPLOYERS AND REINSURERS NEED TO KNOW

by Michael L. Frank

Why the Interest in this Product?

With the medical insurance market experiencing health care inflation of 10 to 13 percent and medical costs averaging above $8,000 per year per employee (less for single employees and more for employees with families), employers are looking at alternative options. Politicians and regulators are as well.

Health insurers and reinsurers are focusing on where the growth opportunity is for members. One area is the baby boomers and the industry is looking at Medicare and retiree-based products. The other area is the uninsured, which will be our focus for this article.

Based on a study from Goldman Sachs, the number of uninsured people (currently estimated at 47 million) is growing. Fewer employers offer health insurance coverage (approximately 60 percent today as compared to about 70 percent in 2000). Since 2000, the economy has added five million jobs, but the number of commercial covered lives has declined.

As a result, insurance companies and Health Management Organizations (HMOs) are developing new products while employers are searching for new products to provide lower cost solutions. Benefit offerings are focused either on catastrophic benefits or preventative care (both together are not an option).

One avenue approached is consumer-driven health plans, which would result in higher deductibles and increased cost sharing with employees. There is some traction in the market with these benefit plan options, however, the price point (cost savings) in certain markets and industries is not material enough (low enough) for certain classes of employees and industries.

The private equity and investment banking community is also interested in this space since it is a growing market and previous acquisitions in this arena (e.g., SRC by Aetna, Star HRG by Cigna, and others) have created interest for new entities to enter the market.

What Types of Benefits are Offered?

In the limited benefits arena, which some refer to as the "mini-med" market, there are two types of programs. One type is the Expense Level Reimbursement (ELR) and the other is an Indemnity/Fee Schedule Reimbursement (IFSR). For ELR, this closely resembles a traditional preferred provider organization (PPO) plan offering. It will include a deductible and coinsurance and an annual benefit maximum. The benefits become limited in nature since the benefit maximums are $10,000, $15,000, or $25,000 as an example. Some of the benefits could have inside limits (e.g., maximum hospitalization benefit, maximum surgical limit, etc.).

Two of the major players in this market are Aetna through its Strategic Resource Company and Cigna through its Star HRG acquisition. Additional players are entering the market (e.g., American Wholesale Insurance, others).

The majority of the ELR programs in the market are passive PPO network arrangements with no financial incentive or penalty for out of network usage (or

no cost incentive to go in-network). The advantage of incorporating a PPO network is to provide additional discounts especially to individuals that go in-network. Since products have a deductible and a coinsurance element, this reduces the cost to covered members that use a provider, since claims are discounted. The PPO network helps reduce claim costs to the health plan (hence lowering premium rates to the consumer) and reducing the out of pocket expenses to the covered member. The balance of incorporating the PPO network is the access fees charged for the network offset by the savings it can generate. Remember premium rates are lower so the per employee per month cost of a PPO network has to be evaluated further to make sure it is appropriate for the coverage offered.

For IFSR, the coverage is more of a fee schedule reimbursement whereby coverage for employees is a certain dollar amount per office visit or per hospital day reimbursement schedule. Fee schedules for outpatient surgery are based on a fee schedule by procedure cost. As an example, below is an illustrative plan design.

There are a variety of plans, some of which are richer and some not as rich for IFSR plan offerings. Some of the programs carve-out prescription drug coverage completely, or offer a discount card only. Typically the prescription drug benefits for this type of coverage have low maximums with many limited maximum benefits on a monthly basis (e.g., maximum of $25 to $50 of benefits per month).

A market has opened up for stand alone prescription drug coverage with a focus to offer complementary products to the limited benefits medical market. One company, Medco Health Solutions, along with their insurance carrier partner Nationwide, has developed a fully insured prescription program focused for the limited benefits market. Program is a $10.00 co pay (i.e., member cost per prescription) and covers generic drugs only (several thousand drugs are currently available on the program). The $10.00 co pay includes most 90 day generic prescriptions at Medco by Mail. It is a generics only program, but has significant discounts for brand and specialty medications. The program has no formulary or plan maximum.

Hospital Room & Board	$	500	(per day, up to 90 days a year)
Inpatient Surgery	$	1,500	(maximum surgical schedule)
Inpatient Anesthesia	$	150	(per procedure)
Outpatient Surgery	$	500	(surgical schedule)
Outpatient Anesthesia	$	50	(per procedure)
Doctor's Office Visits	$	35	(up to 4 visits per year)
Radiology & Cardiovascular	$	70	(up to 4 visits per year)
Pathology	$	35	(up to 4 visits per year)
Phys. Medicine & Chiropractor	$	35	(up to 4 visits per year)
Wellness	$	50	(up to 2 visits per year)
Emergency Room	$	50	(up to 3 visits per year)
Ambulance	$	100	(maximum 1 per year)
Prescription Drugs	$	35	($10 generic copay; $20 brand copay)
(max benefit amount per month)			

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Limited Benefits Medical Plans ... from page 25

The limited benefits medical market is growing. Some of the insurance companies and underwriting organizations that participate or have participated in the limited benefits medical market are Pan American, Elite Underwriters, Aegis, EXL, HM, American International Group (AIG), AEGON, American Medical & Life Insurance Company, Fairmont Specialty Group, etc. (There are others so my apologies for excluding any names from the list.) Two organizations, HM, a division of Highmark Blue Cross Blue Shield of Pennsylvania, and AIG have recently designed new products.

Reinsurers should be aware that when evaluating these programs, to keep in mind that the expense levels (as a percentage of premiums) might be higher than a typical first dollar medical program.

Target Market

The population interested in purchasing limited benefits plan is traditionally a younger population with targeted employee contribution rates equivalent to one to two hours of wages per week. Based on market feedback, this appears to be the target price point for employees to afford, especially among organizations such as food chains, blue collar industries, hotels, nursing, etc.

These same industries also have administrative challenges since these groups have higher turnover (one driver for this might be access to better benefits).

What Opportunities Exist for Reinsurers?

The opportunities for reinsurers historically have been limited. The majority of limited benefits medical business risk (and premium) have been retained by the issuing carrier. In healthcare, reinsurers have served a purpose in providing coverage for catastrophic claims risk. This opportunity has not presented itself since benefits are limited or capped so exposure for large claim cost was not a factor.

However, with a growing market and potential entrants (new insurance companies are entering the market), a growing demand exists for a reinsurance partner on a first dollar quota share reinsurance basis. This is both from a risk transfer and risk-based capital (RBC) basis.

What Challenges do Insurance and Reinsurance Companies Face in Underwriting This Business?

As actuaries, we like to look at historical experience on the group when pricing individual renewals as well as a block of business. For groups with limited benefits plans, there are several challenges that need to be managed through.

First, for the specific group, is there credible historical data? Typically employer groups that participate in limited benefits plans have higher turnover, so data becomes less credible plus sources and/or access to data is limited. Underwriters in the limited benefit market tend to focus on the characteristics of the group (e.g., age/sex, industry, funding level amounts or percentages by employer) rather than the experience of the group.

Second, carriers may not share historical claims experience (monthly claims, lag tables, utilization data) with its distribution (assuming the carrier even has) and distribution may not provide access to claims experience to the underwriters, including insurance carriers and reinsurers. They may restrict providing data unless a minimum group size (e.g., 500 lives, $3 million in annual premium) and if they provide, it will be limited in scope which will limit an underwriter's usage of it. As a result, companies focus more on manual rating with age/sex adjustments, if opportunity presents itself with data and regulatory environment, and industry.

Third, even if experience is available, and if it is adjusted for changes in population (low participation/high turnover) and plan design (e.g., a group with major medical going to a limited benefits plan, a group on an IFSR going to an ELR, etc.), then is the experience very credible?

Fourth, the industry does not have a lot of empirical data in this market. As a result, assumptions for plan design changes and rating adjustment becoming more art than science. The market will push for benefit enhancements (e.g., improving prescription drug benefits, increasing limits on surgical schedules, richer lab/radiology benefits, adjusting the pre-existing conditions requirement, etc.). The balancing act is that these adjustments will have potentially material selection issues beyond traditional plan changes (and traditional plan design factors), so actuaries and risk managers should be cautious and prudent in understanding the aspect of such changes.

Last, but not least, we have the industry rating dichotomy. As actuaries and underwriters, we have been trained that certain industries are a challenge and many companies for traditional major medical and stop loss have declined industries such as:

- Associations (especially Associations of "Air Breathers")
- Hotels/Restaurants
- Trucking Companies
- Companies with high concentrations of seasonal employees
- 1099 Employees
- Multiple Employer Trusts (METs)
- Multiple Employer Welfare Associations (MEWAs)
- Employees Leasing
- Medical Service Providers

These groups are normally rated up or declined due to selection issues and their lower participation levels. Typically these employers were found to have low amounts or percentages of benefits so low that participation resulted in significant anti-selection.

However, since benefits are limited in nature, organizations can have success underwriting these non-preferred industry classes. The limited benefits offering will likely discourage high cost groups from purchasing the coverage and may mitigate a material portion of the selection concerns. Insurance companies are typically able to charge a higher risk charge (e.g., 4 to 10 percent of premium) for limited benefits plans as compared to the 2 to 4 percent for traditional comprehensive medical plans.

How Do Pre-Existing Conditions Impact Underwriting?

An important area for limited benefits plans are pre-existing conditions. They assist in limiting the cost exposure due to adverse selection by reducing or excluding coverage if the condition is pre-existing.

What is a pre-existing condition? According to the Department of Labor, a pre-existing condition is a medical condition present before your enrollment date in any new group health plan. Under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the only pre-existing conditions that may be excluded under a pre-existing condition exclusion are those for which medical advice, diagnosis, care or treatment was recommended or received within the six-month period before your enrollment date (i.e., first day of coverage, or if there is a waiting period to get into the plan, the first day of the waiting period.)

If you had a medical condition in the past, but have not received any medical advice, diagnosis, care or treatment within the six months prior to your enrollment date in the plan, your old condition is not a pre-existing condition to which an exclusion can be applied. There are exceptions to what you can apply or not apply as a pre-existing condition. For example, pre-existing conditions typically are not applied to pregnancy, new born care, or children adopted under age 18. Also, genetic information may not be treated as a pre-existing condition in the absence of a diagnosis.

Application of pre-existing conditions may vary by state. For more information on this subject matter, visit the Department of Labor website at *http://www.dol.gov/ebsa/faqs/faq_consumer_hipaa.html* as well as your local state insurance departments.

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Other Underwriting Considerations

A strategy for limited benefit plans is to naturally limit the benefits. The hope with limiting the benefits is to exclude those higher cost individuals (high utilizers of cost). As an example, a limitation on prescription drugs of $25 to $50 per month in benefits means that the plan with participants that are high maintenance drug utilizers (those individuals that incur higher costs for prescriptions due to high utilization and may also incur higher medical expenses) will not be attracted to these types of plans.

In addition to age/sex underwriting, some organizations will establish underwriting guidelines on the allowable percentage of population over age 55 (for example) or limit/cap average age (e.g., groups with average ages over 50). This strategy is to attract a younger population that will have less utilization.

Some underwriters and insurance companies are trying to encourage greater participation and spread of risk by encouraging employers to contribute a portion of the cost. However, the majority of plans and participants in these programs still have no company subsidy (i.e., employee-pay-all benefits). As a result, participation in these plans is more likely to be in the 5 to 25 percent participation level (with 25 percent being on the very high end) as compared to the traditional medical market with participation rates in the 50 to 100 percent range (most commonly above 70 to 75 percent).

The employer purchasing decision is different for limited benefit plans than with traditional comprehensive medical plans. For traditional medical plans, the employer funds the majority of the cost. However, in limited benefit plans, the employees typically fund the majority, if not all, of the benefits. As a result, the economics of the lower cost medical plan are less of a factor (although they are still a factor).

Seamless administration is also a critical purchasing requirement since employers implementing a limited benefit plan for the first time do not budget for the potential maintenance and headaches that may come with these kinds of plans. As a result, a partnership with an insurance carrier and its administrator are critical, and can be as important as price for the product.

What Other Items Should Reinsurers Be Concerned with?

Reinsurers should be aware that when evaluating these programs, to keep in mind that the expense levels (as a percentage of premiums) might be higher than a typical first dollar medical program. First, some of the fixed expenses on the program are now being amortized over a lower premium amount.

The administration of the program is also more involved. The underlying population has more volatility (higher turnover) so there are more eligibility adjustments and transactions being done. Administrators of these programs may assume additional responsibilities such as COBRA administration, member communication, and handling of open enrollment (typically this is done by the employer but in the limited benefits world it is commonly handled by either the carrier, its administrator or TPA).

Participation in these programs is typically lower due to limited employer funding plus turnover of employees is high, so a significant amount of additional communication is required.

Finally, brokerage commissions are higher. For example, the traditional major medical and HMO markets tend to see commissions in the range of two to six percent depending on the group size and market segment. Naturally, the larger the group (and the higher the premium amount), the lower the commission rate since commission rates may be on a sliding scale based on number of lives and/or premium volumes.

In the limited benefits environment, commission rates are more commonly in the 10 to 20 percent range. One reason for this may be due to the fact that brokers are assuming some of the administrative functions highlighted above. Other reasons might

be due to the higher distribution costs. While the market is pushing for lower commissions, the norm is still around 10 percent.

How are the brokers selling the product?
The broker selling strategy for these types of limited benefit plans have taken two avenues. First, the lower the price, the easier the sale. If the premium is 25 to 50 percent of the cost of a traditional medical plan, it will be attractive to many employers. Employers should be aware that since the benefits covered are lower (25 to 50 percent of the traditional benefits), the costs are lower.

Employers and insurance carriers should considering exploring some additional strategies when purchasing or entering these product lines. First communication is key success factor. Employers and their members need to understand what is covered and not covered. Covered insureds or members are not great at reviewing their benefits and may not know what they are buying until after the fact.

Implementing a Two Prong Strategy—Offensive & Defensive Strategy for Communications

It is strongly recommend that brokers and insurance companies offer a complimentary product to go along with these benefit plans. For example, offer a buy up medical or a critical illness plan. The buy up medical plans are not easy to find and may be very costly or limited in scope. Another alternative is providing a critical illness plan. It creates an offensive and defensive strategy for employers and carriers.

First, the offensive strategy is that it provides an additional level of benefit, although limited, but important for certain high cost medical categories. For example, it will pay a fixed benefit for certain cancer, cardio or other pre-defined catastrophic medical costs. It does not coverage all of the costs for the benefits, but the benefit will augment potentially a material cost of care (not dollar for dollar though).

Some states are more advanced in the limited benefits market than others. Insurance companies and reinsurers entering a market should do their homework about the local state regulatory jurisdiction that they are interested in offering product.

The defensive strategy of offering the benefit is the educational impact. Individuals typically do not read their benefits or they may not thoroughly read it. However, it may induce some individuals to review their medical benefits or generate the question in their mind of the following:

- Do I need this extra benefit?
- Does my medical plan cover me for this?

The defensive strategy focuses on getting employees to read their benefits.

What other products are available to the consumer markets buying limited benefits medical? In addition to critical illness above, insurance carriers are offering benefits in life insurance, accidental death & dismemberment (AD&D), disability, dental, vision, legal and other voluntary benefits.

Due to the industry classes that buy these coverages and the potential selection issues, especially around the life and health benefits (e.g., part time employees eligible for benefits), the benefit amounts are limited in scope. For example, life insurance coverage may be a flat face amount of $5,000, $10,000 or $25,000. Similarly, disability and dental benefits may have limitations as well.

These additional benefits may create opportunities for insurance companies and reinsurers interested in expanding their product lines and obtaining additional premium or income opportunities.

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What About Requirements as Credible Coverage?

Some brokers are getting creative and marketing these limited benefits plans as a bridge plan. Employees join the plan and are able to accumulate coverage credit or accumulating credible coverage to avoid pre-existing conditions with the next plan that they will join (e.g., comprehensive medical plan). In order to avoid a pre-existing condition or waiting period, one would need to show evidence of credible coverage. The brokerage community may be looking at these plans as a way of dealing with this provision since an individual on a limited benefits plan may be perceived as credible coverage by a comprehensive medical plan. (We are not claiming that this is valid and is credible coverage, but limited medical plan brokers and administrators may be marketing as such.)

Regulatory Approval

Since these benefit plans are limited in scope and the industry does not have a significant track record with them, those companies entering the market should be aware of the regulatory hurdles of these benefits. For example, some state regulators may not be comfortable with the benefits due to their limited nature and would want proper communication and documentation highlighting the differences from a comprehensive medical plan.

Some states are more advanced in the limited benefits market than others. Insurance companies and reinsurers entering a market should do their homework about the local state regulatory jurisdiction that they are interested in offering product. Items to review should include but not be limited to the following:

- Filing requirements
- Rating restrictions (e.g., community rating, minimum loss ratios, ability to adjust rates and frequency they can be adjusted, etc.)
- Mandated benefits—Will these benefits be deemed comprehensive medical benefits?
- Local players in the markets approved to date
- Local programs sponsored by state regulators which may complement or compete with various products.

For example, some state regulators may require minimum statutory benefits to be included such as mental health or substance abuse, maternity, etc., while other states have developed programs to support the uninsured market including Medicaid, Child Health Plus, Family Health Plus, etc. New York State, as an example, also has a program called Healthy New York to address medical business for lower income individuals. Insurance companies should evaluate how their programs for limited benefits medical compete with plans offered in their local market.

Insurance companies and reinsurers should also take notice of loss ratio requirements for pricing. Limited benefit medical plans may have higher administrative expenses resulting in higher reinsurance ceding allowances. If an insurance company or reinsurer is writing a limited benefits medical line of business, then they should ensure that enough room exists to meet the insurance carrier and reinsurance profit objectives after expenses, and are not restricted by regulatory requirements for minimum loss ratios. ✺

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UPDATE IN THE EMPLOYER STOP LOSS MEDICAL INSURANCE MARKET

by Michael L. Frank

The focus of this article is to provide background to actuaries on the updates in the employer stop loss medical insurance market including underwriting and pricing trends.

What are some recent developments in this stop loss insurance market? First, there is an increase in inquiries pertaining to Aggregating Specific Deductibles (ASD). With ASD, there are two layers of deductible.

In exchange for the policyholder assuming an additional layer of claims, the stop loss insurance premium is reduced. Stop loss underwriters are using this provision to assist in mitigating premium rate increases. This provision may also be appropriate for employer groups that financially can afford to retain additional risk.

The first level, the individual deductible, acts in a similar manner as a standard individual stop loss deductible, whereby individual claimants incur covered expenses which are applied to the individual deductible. However, instead of receiving reimbursement for claims in excess of the individual deductible, these covered expenses are applied toward the second level, the ASD. This second level of risk is the amount over and above the individual deductible which the policyholder, in this case, the self-funded employer group, agrees to assume.

The policy provision provides an additional deductible to the purchasing employer group, since in addition to meeting an individual deductible (e.g., $100,000 per person), there will be an ASD amount that the employer may need to reach in order to obtain reimbursement from the stop loss insurance policy. For example, an ASD might be $75,000, so before the stop loss underwriter pays a claim above the $100,000 individual deductible, the employer will retain risk for a total of $75,000 above the deductible as an additional deductible before claims are reimbursable.

It should be noted that this provision is not new, but its frequency of use is much greater. In the late 1990's and early 2000's, reinsurers and stop loss carriers may require that their underwriting organizations, if using an outside entity such as a managing general underwriter (MGU), to send in cases with ASD for facultative review.

In today's stop loss market, ASD options are more popular and part of the regular underwriting process. ASD options are not only offered in the self-funded employer stop loss market, but also available in the HMO reinsurance, insurance company portfolio excess and the provider excess reinsurance market.

From a pricing perspective, it should be noted that the marketplace is currently giving full credit for the ASD to the premium as long as the relationship of the ASD to the premium is reasonable.

What other trends are in the market? Industry is recognizing the need and implementing more standardization of Disclosure Forms.

Disclosure forms are used by stop loss underwriters to assess potential large claimants for the purposes of risk assessment, which may result in adjustments in premium rates or may be used for other underwriting purposes (e.g., lasering).

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What is lasering? For the new business or renewal specific stop loss quote, a stop loss carrier may place a higher deductible on certain individuals or even exclude them from coverage. As an example, an anticipated claim such as a transplant might be excluded or have a higher deductible.

The market in general will consider lasering individuals when underwriting new business. However, upon renewal, insurance companies will not typically laser high-risk claimants unless coverage initially was sold on that basis and the need for the laser continues. There is a trend to look at lasering as an option for renewals by stop loss carriers so that their rate quotes will be more competitive on a renewal (remember a new company submitting a bid that is not the incumbent might use a laser to lower rates).

What are disclosure forms used for? In general, the documents are intended to help facilitate the sharing of health data information between self-insured entities/TPAs and stop-loss insurers/MGUs for the purpose of medical stop-loss underwriting. The underwriter obtains detailed information on known claimants so that they can make underwriting decisions for pricing (e.g., use of discretionary discounts, lasering of deductibles, etc.).

Some of the adverse results of disclosure statements are that it creates additional opportunity to deny claims (e.g., the individual was not on the disclosure statement) and have resulted in litigious issues beyond just the denial of the claim (e.g., professional liability claims to the TPA, etc.).

Why have disclosure forms become more important in underwriting? With the continual pressure in the industry to have market level pricing, underwriters are using disclosure statements as a critical rating factor to identify an employer group's unique claims experience in addition to the review of demographic (e.g., age, sex, industry, etc.) that are part of the manual rating process.

The information on disclosure forms will assist an underwriter in identifying premium rating adjustments and/or identifying individuals within a group that might be adjusted for lasering, i.e., a different deductible or exclusion for a specific individual due to a catastrophic medical condition (e.g., transplant, cardio, cancer, etc.).

What information is requested on a disclosure statement? For stop loss disclosure statements, information on existing and potential large claims is requested. The following individuals are typically requested:

- Individuals currently disabled or confined in a medical facility (e.g., hospital).
- Individuals that have been pre-certified within the last three months.
- Individuals that received medical services during the current plan year the cost of which exceeds the lesser of, 50 percent of the lowest Specific Retention Amount applied for or $50,000, and for which bills have been received and processed by the by the Claims Administrator (TPA) and entered into their Claims System.
- Individuals that have been identified as a candidate for Case Management and as having the potential to exceed during the policy period, the lesser of, 50 percent of the lowest Specific Retention Amount applied for, or $50,000.
- Individuals that have been diagnosed, during the current plan year, with a condition represented by any of the ICD-9 codes contained in the attached list and have also received medical services costing $5,000 during the same period.

One unique item to the current disclosure forms is the request for ICD-9 codes. Naturally the ICD-9 codes may vary so a wide range of codes may result in inclusion of more individuals on the list. Historically ICD-9 codes were not consistently requested and this is an important focal point on the new forms.

The challenge with disclosure forms is that some third party administrators (TPA) may not comply with the form. The reasons vary and may include a combination of items:

- The TPA does not want to create the extra reporting to accommodate this, beyond just providing 50 percent notifications, i.e., claims that reach 50 percent of the deductible. Many TPAs are not providing reporting for ICD-9 codes.

- The TPA may not be contractually required by employer groups in the TPA agreement, which typically gets negotiated prior to the selection of stop loss.

- Stop loss carriers do not consistently enforce the provisions in this statement so this becomes a balancing of whether missing information is critical as compared to a nice to have. All readers might agree that information is important to have but there are differences in opinions on whether certain items are a deal breaker.

The last point is important since stop loss writers with an existing relationship with a TPA will over time develop a process of what they deem to be acceptable, resulting in a preferred TPA status for reporting purposes. The standard form helps develop a benchmark for reporting. However, consistent compliance by TPAs and enforcement of the form by underwriters may be challenging.

Are there any other noteworthy items on the disclosure form? The new forms do not have prognosis requested on the forms. The older industry forms included prognosis, but the reality is that most third party administrators will not give much detail on prognosis.

In addition, the standard form has three signature lines on the form: Plan Sponsor (Employer), Claims Administrator (TPA), and Agent/Broker. The goal is to have all accountable or perceived accountable participants to take ownership in completing the form so that any pertinent information such as known claimants can be identified and disclosed to the stop loss underwriter. A challenge is when a claimant becomes a known claimant and this is an evolving process and we will attempt to address in future newsletters.

The three signature process is not bullet proof since individual large claimants could still potentially slip through the cracks and not be included on a disclosure form. As an example, a TPA may not know of a large claimant until they are notified as such via claims submission or large case management. There may also become an inherent lag in reporting, since TPAs report off of their data warehouses, and there might be a lag from the time that reporting is available (e.g., 30-day lag), plus the lag as a result of the delay from the time the claim is received in the mailroom until the adjudication of the claim.

Similarly, an employer group and its agent/broker may be unaware of claimants, especially claimants that are covered dependents of employees, if the employee has not lost significant work time.

Other factors might be due to the size of the organization (employer group) with many locations so timing of information exchange within the organization may be delayed.

Stop loss insurance underwriters try to mitigate this through more current disclosure statements, i.e., obtaining signoff from the employer group and its vendor partners (TPA and broker) as close to the renewal effective date as possible. For example, if a group has a 1/1 effective date, then underwriters are targeting disclosure dates for after 11/15 or 12/1, which would be 30-45 days prior to the case effective date. 30-45 days is a benchmark in the industry, but it is not necessarily applied consistently among all the stop loss insurance underwriters.

What organizations have adopted the form? Over the past few years, the industry has moved toward a more standardized disclosure form. Approximately 20 companies representing approximately 75

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percent of the stop loss market (assuming a self-funded market of $4 billion in premium) have adopted this form. (Source: MyHealthGuide.com).

Organizations to Know

For individuals interested in trends and updates in the self-funded stop loss market, visit the following Web sites:

- Self-Insurance Institute of America *(www.SIIA.org)*
- Society of Professional Benefit Administrators (*www.SPBATPA.org*)
- MyHealthGuide LLC (*www.myhealthguide.com*)

The first two are professional organizations servicing the insurance industry with specific focus on self-funded employers. The third is a company, MyHealthGuide LLC, which keeps regular updates on the self-funded medical insurance market. Updates include a free weekly newsletter, which can be signed up for online, plus you can obtain a copy of the standard stop loss disclosure form online. The Web site also has a white paper on disclosure statements for individuals interested in learning more about the impact of the new standard disclosure form.

For additional background pertaining to stop loss insurance, I suggest reviewing the previously released newsletter in October 2007, in particular, an article written by Mark Troutman of Summit Reinsurance Services. It covers important considerations in the self-funded stop loss insurance market. ✺

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REFOCUS 2008 RECAP

by Richard Jennings

The 2nd annual ReFocus: See The Future First conference was held at the Ritz Carlton, Lake Las Vegas, Nevada from March 2-4, 2008.

The conference was designed to appeal to senior life insurance and reinsurance executives and attracted more than 290 delegates from across the United States, Canada and Europe. Governor Frank Keating, president of the American Council of Life Insurers (ACLI), opened the conference with an overview of some of the dark clouds on the industry's horizon. Uncertainty has been a theme in the United States with respect to the pending presidential election, and the economic downturn as a result of the sub-prime meltdown. "Change is inevitible," said Keating "which will effect change in our industry, on a number of fronts."

Keating went on to comment on topical issues such as tax reform, which could affect the structural advantages of life insurance like the tax-free build-up and tax-free benefits at death. High profile court cases involving senior reinsurance executives, and concerns regarding Stranger-Owned or Invester-Owned Insurance (STOLI/IOLI) also come at an inopportune time for the industry. "The ACLI is working hard on these issues at various levels of government," said Keating.

A. Greig Woodring, president & CEO RGA Re moderated Monday's keynote session that featured business leaders from three of the top european global reinsurance giants: Swiss Re, Munich Re and Hannover Re.

Wolfgang Strassl, member of the Board of Management and head of the life and health division of Munich Re, spoke at length about the opportunities for life reinsurance between the mature markets of North America and Europe, and the emerging markets in Asia and Eastern Europe. Christian Mumenthaler, head of life and health reinsurance for Swiss Re, commented on how a variety of risks are being moved to the capital markets, as with embedded value and 'XXX' securitizations. On the mortality/longevity side, the market is still in the process of developing indices for these risks, and on the whole the industry has underestimated the size and price of longevity risk. Wolf Becke, CEO Hannover Re, discussed how reinsurers can help the middle market, which is generally agreed to be underserved. In continental Europe, bancassurance is increasingly used to serve the middle market. Originally developed in France, this concept has been successfully copied in additional european markets including Italy, Greece, Portugal, Spain and Germany. Direct marketing efforts have been successful in Australia and South Africa, and are increasingly being adopted in Europe to sell to the younger and middle markets. In this manner, life reinsurers can help direct companies open new markets or launch new products, through their experience learned in other markets around the world.

STOLI/IOLI continues to be a popular topic in the industry, and a select panel of CEOs from AIG, Ohio National and Mass Mutual offered insight into how their companies are dealing with this phenomenon. All stressed the importance of distinguishing between legitimate premium financing cases and those cases where the policy is intended to be sold into the life settlement market.

Another hot topic at industry meetings continues to be discussion of longevity risk. Jesse Schwartz, consulting actuary with Watson Wyatt, and Bob

Howe, managing director, head of Life & Health Risk Management for Swiss Re Life & Health (London), gave their perspectives on the longevity markets in the United States and the United Kindgom respectively. Bob Howe, who is chief risk officer for Swiss Re's life and health business worldwide, described how the private sector in the United Kingdom is waking up to the impact of mortality improvement rates of 3 to 4 percent per year, and the resulting impact on provisions for pension schemes.

Bob Diefenbacher, senior vice president, Life & Structured Reinsurance, Manulife Re, led a provocative discussion designed around a number of case studies highlighting some of the current issues in underwriting and treaties, entitled "My Treaty Says What?"

ReFocus also served as a good opportunity for direct writers and life reinsurance executives to meet with clients, and network with industry peers.

The 2008 ReFocus Conference was co-chaired by Craig Baldwin of Transamerica Reinsurance and Mel Young of RGA Re, who led astrong organizing and program commitee and produced a superb conference.

Copies of the conference's various presentations can be found on the ReFocus Web site at: *www.refocusconference.com.*

The 3rd annual ReFocus meeting will be held at the Four Seasons Hotel at the Mandalay Bay Resort, Las Vegas, on March 1-3, 2009. See The Future First and join us at ReFocus '09. ✹

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INDUSTRY LEGENDS HONORED AT REFOCUS

Five industry leaders who have made significant contributions to the life insurance and life reinsurance industry were honored with the Insurance Legends award at ReFocus 2008, the premier conference for reinsurance industry professionals.

The 2008 honorees are James C.H. Anderson, former president of Tillinghast; Charles (Chuck) M. Beardsley, retired chairman of Booke and Company; David R. Carpenter, retired chairman and CEO of TransAmerica Life Companies; Ian M. Rolland, retired chairman, Lincoln National Corporation; and Sy Sternberg, chairman of the board & CEO, New York Life Insurance Co.

"This elite group of individuals have left an indelible mark on the life insurance and reinsurance industries," said American Council of Life Insurers (ACLI) president and CEO Frank Keating, who presented the awards at the ReFocus conference. "This award is in gratitude for their service and a tribute to their leadership, intellect and significant contributions to our industry."

The ReFocus conference, which is sponsored by ACLI and the Society of Actuaries, brings together top executives from the life insurance and life reinsurance industries. The 2008 meeting, which attracted over 300 attendees, featured CEOs from prominent global companies who addressed key domestic and international issues affecting life insurers and life reinsurers. Concurrent sessions and discussion groups explored vital industry topics including longevity, capital management, securitization, distribution oversight, life settlements, underwriting and medical breakthroughs. ✹

REINSURANCE EXECS PREDICT CAPITAL CHANNELS WILL BLUR

by Jim Connolly

Editor's Note: *This article appears with express permission of The National Underwriter (c) 2008, The National Underwriter Company.*

Looking at the future, a panel of executives from leading global reinsurers predicted a broader framework in which capital markets, reinsurers and direct writers would be able to provide ways to offer or free up capital.

Speaking at ReFocus 2008, Wolfgang Strassl, head of the divisional unit of the life and health division with Munich Re, Munich, Germany, said, "I wonder if it will be so definable who is the reinsurer and the direct writer?"

ReFocus is an annual life reinsurance conference co-sponsored by the American Council of Life Insurers, Washington, and the Society of Actuaries, Schaumburg, Ill.

Strassl also noted that this blurring has already happened in the U.S. health market. Legally, he said, there is a distinction, but practically, the two are not distinguishable.

That trend is global, the discussion revealed. Wolf Becke, head of the life reinsurance department with Hannover Re, Hannover, Germany, citing an example in South Africa where a reinsurer is underwriting on behalf of a client at the client's offices. Thus, he said, the reinsurer, through outsourcing, is both conceptually and physically taking on the job of the direct writer.

The blurring of more defined capital management functions is starting to be seen in other ways, according to Becke. In the event of a pandemic, he said, the "risk is simply too big to just take on ourselves. We will need the capital markets in order to manage this risk properly."

Additionally, Becke continued, life reinsurers are focusing on certain parts of the business now, and do not all look alike anymore.

Christian Mumenthaler, head of life and health reinsurance with Swiss Re, Zurich, Switzerland, recounted how Deutsche Bank competed and won a closed block of business last year as one example of how the businesses of reinsurers and capital market providers are starting to overlap.

Mumenthaler also said that Triple-X blocks of business are a challenge because in the current market environment there is a small spread and the costs are high. However, he noted that investment banks are extremely interested in this business.

As other capital providers become more involved in the insurance market, Mumenthaler said he anticipates seeing the development of indices to measure both longevity and mortality. At present, he continued, the capital markets are not willing to take that risk at current prices.

Another change that the panel discussed is the development of Solvency II standards in Europe. Mumenthaler said, "Solvency II" is like a tsunami. It is a very powerful force. The U.S. should be a leader rather than trying to avoid it. Europe is not going to stop.

"I'm a big fan of Solvency II. It brings the regulatory view much closer to the way that we manage business and see ourselves," Mumenthaler said.

One of the biggest risks, he explained, is on the asset side of the balance sheet and the Solvency II framework will enable this to be looked at in a better way. ✺

Jim Connolly is Senior Editor of National Underwriter's Life and Health/Financial Services edition with The National Underwriter in Hoboken, NJ. He can be reached at *jconnolly@nuco.com*.

STOLI POSES DANGER TO INDUSTRY, REINSURERS WARNED

by Jim Connolly

Editor's Note: *This article appears with the express permission of The National Underwriter (c) 2008, The National Underwriter Company.*

Stranger-Originated Life Insurance (STOLI) poses a danger to the insurance industry and to Congress' perception of life insurance, several speakers contended at an annual reinsurance conference held here earlier this month.

However, a number of speakers at ReFocus 2008, jointly presented by the American Council of Life Insurers, Washington, and the Society of Actuaries, Schaumburg, Ill., did say there is a place for properly regulated life settlements.

To understand the issue, it is necessary to start with basics focusing on protection, the original intent of life insurance, said Stuart Reese, chairman, president and CEO of MassMutual Life Insurance Company, Springfield, Mass., during a direct writer CEO panel.

However, he said that if a policy is purchased with protection in mind and is no longer needed after a period of time, then a contract holder does have property rights and "there is a legitimate life settlement business which is consistent with the purpose of insurance."

But, Reese continued, if there is no insurable interest, "that strikes me as a situation that is not what Congress had in mind when they gave us a tax advantage. It puts the insurance industry at risk, if Congress says, 'Wait a minute. This is speculation on life.' It is a huge risk for the industry."

In an environment in which Congress is going to be looking for ways to generate tax revenue, "this is something that we should all be worried about."

Mike Bell, executive vice president with Pacific Life Insurance Company, Newport Beach, Calif., said that while more insurance will be sold in the next decade, fewer professionals will be selling it, raising the concern that life insurance will become a commodity with little cash value that will be vulnerable to replacement and settlement. The industry needs to be careful about how it develops products because "there is no second chance," he said. "Today, if you underprice a product, Wall Street will kill you."

Bell says he supports a regulated life settlement industry. "The horse has left the barn," he noted, adding, however, that it is important not to take in any STOLI business. "We talk about how bad it is, but we don't do anything to stop it. We need to be first in line to say no and mean no."

Rather than delivering more money to seniors who settle rather than surrender a contract for the cash surrender value, Bell said that life settlements will actually cost seniors more because the cost of insurance built into contracts will increase, fewer products including no-lapse provisions will be available, capacity will be smaller and underwriting tougher.

During this panel, David O'Maley, chairman, president and CEO of Ohio National Life Insurance Company, Cincinnati, noted the importance of aligning the interests of the company and agent. Ohio National Life did this in 1994, he said, when it established an agent-owned reinsurance company to discourage practices such as table shaving which

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STOLI poses danger to Industry ... from page 39

leads to more liberal underwriting. "It gets the company and the agent on the same side of the table."

When stranger-originated life insurance first came on the market, National Financial Partners, New York, a distributor of financial services products to the high net worth market, met with carriers to discuss what they considered all right to sell and what was not, said Jessica Bibliowicz, chairman and CEO. NFP then decided what it did not want to participate in, she explained.

The most important thing, she noted, is that manufacturing and distribution come back together again.

Life settlements do make people feel more relaxed about their options, open up insurance markets and provide "an excellent hedge" for the life insurance industry, she said. For contract holders, it offers an additional option, Bibliowicz added. "It is not just a matter of surrender or die."

But she said there are rules in place at NFP regarding settlements: anonymity of the insured, because "investors don't need to know someone's name," and, disclosure of compensation.

Regarding the 5-year ban on settlement of contracts in the current Viatical Settlements Model Act of the National Association of Insurance Commissioners, Bibliowicz said that "personally, I am not a fan of the 5-year provision" or other "arbitrary requirements."

Such requirements can result in an industry that has a lot of loopholes, she noted.

Bibliowicz added that NFP has "worked very hard in the scrubbing of non-recourse financing" of contracts for settlement.

Both Bell and Bibliowicz said the real problem is that stranger-originated products are "stealth, very stealth" and that it is an ongoing battle.

Throughout the conference, speakers and attendees offered observations and possible solutions on the issue. One theme raised was developing new products that offer contract holders an incentive not to settle.

"If the client is 10 years into a contract and the underwriting changes, can we put money into the contract and help them get it tax free?" Bell asked.

Products need to be updated so that policyholders receive additional benefits that will make them want to hold on to their contracts, said Fred Jonske, president and CEO of M Group, Portland, Ore. He noted that in his company's case product reprises resulted in $40 million in additional policyholder benefits which totaled $200 million when the time value of money was considered.

During a discussion group, one participant noted that "it is incumbent on actuaries to build products that don't change the benefit but allow people to get money out without selling the policy."

Another participant noted that if there is better retention, then a lot of companies can increase income as well as their bottom lines.

Still other observations focused on the company-producer relationship. Another participant in the discussion group said there was a large increase in settlements in contracts owned by those in the 71+ age group that was traced back to one big producer. That producer was terminated, the participant recounted.

Another participant said he had heard anecdotal information that those investors initiating STOLI were structuring these contracts like 5-year term products to get around the 5-year ban being advocated as a solution to the increase in the number of STOLI contracts. ✺

Jim Connolly is Senior Editor of National Underwriter's Life and Health/Financial Services edition with The National Underwriter in Hoboken, NJ. He can be reached at *jconnolly@nuco.com*.

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MONICA HAINER RECOGNIZED BY ACLI'S FORUM 500

Monica Hainer, FSA, FCIA, MAAA, chief executive officer of London Life Reinsurance Company in Blue Bell, Penn., is the 2008 recipient of the ACLI Forum 500's Distinguished Service Award. She received the award at the Forum 500's Leadership Retreat in Washington, D.C. on May 14.

The award is presented to an individual whose work has greatly contributed to the life insurance industry, especially to small and medium-sized life insurance companies, which the Forum 500 represents.

Monica is a true leader. Her hard work and dedication has done much to advance the goals of ACLI and its members, and in particular small and mid-size companies.

"Monica is a true leader. Her hard work and dedication has done much to advance the goals of ACLI and its members, and in particular small and mid-size companies," said Frank Keating, ACLI president and CEO. "Well-liked and respected by her peers, her character epitomizes life insurers' dedication to helping Americans achieve financial and retirement security."

Ms. Hainer joined London Life Insurance Company in 1988 as vice president, Reinsurance. In 1995, she was chosen to lead the U.S. operation of the London Reinsurance Group via London Life Reinsurance Company. She is also senior vice president of Life Reinsurance for Canada Life, and managing director of London Life and General Reinsurance Co., Ltd., which are affiliated companies.

Ms. Hainer is a Fellow of the Society of Actuaries and the Canadian Institute of Actuaries as well as a member of the American Academy of Actuaries. She is on the Board of Governors of the ACLI Forum 500 and was the Board's chairwoman in 2006. She served on ACLI's Board of Directors from 2000 to 2002 and again from 2005-2007. She also serves on ACLI's Reinsurance Committee and was the committee's chair from 2001 to 2002.

Monica Hainer can be reached at *monica.hainer@lrgus.com.* ✹

SOCIETY OF ACTUARIES REINSURANCE SECTION EXPANDS MEMBERSHIP

by Michael L. Frank

The Society of Actuaries (SOA) Reinsurance Section is pleased to be expanding its membership to individuals outside of the actuarial profession. The Reinsurance Section Council has been in the forefront on the reinsurance industry with focus on basic and continuing education as well as communications, publications and research.

"We are excited about expanding membership beyond the actuarial community, and welcome the involvement and participation of all insurance/reinsurance professionals to further the progress and growth of the insurance and reinsurance industry," said Michael Frank of Aquarius Capital, and the Marketing and Membership Value Coordinator of the Reinsurance Section Council.

The benefits of Reinsurance Section membership include:

- Promoting & influencing the reinsurance industry.
- Networking.
- Speaking and publishing opportunities.
- Access to information (What's New).
- Basic education (Reinsurance 101).
- Research.
- Institutional archive.

In recent news, the SOA Reinsurance Section partnered with ACLI to offer the 2008 ReFocus conference, which addressed many of the major issues in the insurance and reinsurance industry. For information about this annual conference, visit *http://www.refocusconference.com*. Announcements for the 2009 meeting will be coming shortly.

How do you become a member of the Reinsurance Section? To join, please visit *www.soa.org/files/pdf/SOAMembershipForm.pdf* and follow the instructions.

The SOA's Reinsurance Section has approximately 2,300 members, and this section has served as a leading organization in the Reinsurance industry worldwide. For news on the Reinsurance Section, visit *www.soa.org/professional-interests/reinsurance/rein-reinsurance-section-detail.aspx*. ✺

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SESSION 4	Monday, October 20	7:00 – 8:15 a.m.

Reinsurance Section Hot Breakfast

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Please join us as Rich De Haan and Tom Crawford of Ernst and Young discuss the findings of the Reinsurance Section's most recent research project on longevity product risks. The purpose of the project is to identify and assess the techniques, processes and methods that direct writers and reinsurers are using to quantify and manage longevity risks in life insurance product lines. The researchers will present their findings in a global context, and cover a broad range of product concepts and risk mitigation techniques.

SESSION 14	Monday, October 20	10:30 a.m. – Noon

Future Threats to Mortality Improvement: Opposing Views

SPONSORED BY THE REINSURANCE SECTION

Will obesity lead to an unstoppable wave of life insurance claims as the obese and overweight develop diabetes and heart disease? Will a pandemic result in a disastrous spike in insured mortality? Or will human behaviors, medical technologies and life insurance underwriting evolve to counter threats? Listen and learn as medical directors debate the issues.

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