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REINSURANCE NEWS

NEWSLETTER OF THE REINSURANCE SECTION

Embedded Derivatives and Financial Reinsurance

by Larry Carson

Disclaimer

The following paper sets out the approach being used by Reinsurance Group of America (RGA) to apply SFAS 133 Implementation Issue B36 to coinsurance funds-withheld and modified coinsurance transactions that are classified as "financial reinsurance." The information in this paper is provided only for information purposes and is not intended and should not be construed as accounting, auditing, legal or tax advice with respect to any specific facts or circumstances, as the facts and circumstances at other companies may be different materially from those at RGA and may result in different conclusions. RGA makes no representation or warranty as to the accuracy or completeness of the information provided herein, and you may not rely for any purpose on any ideas, judgments, opinions or analyses provided in this paper. You are encouraged to consult with your accountants, auditors, legal and other professional advisors to determine the proper course of action for your company in connection with the matters discussed in this paper.

Abstract

Financial reinsurance transactions contain two embedded derivatives as defined under B36: one within the funds-withheld asset and the other within the experience refund provision. The net of these two embedded derivatives, which is what must be placed at market value on the GAAP balance sheet, is zero at all points in time at which the transaction continues to be considered financial reinsurance.

Background

This white paper sets out a proposed application of SFAS 133 Implementation Issue B36 to coinsurance funds-withheld and modified coinsurance transactions that are classified as "financial reinsurance."

B36 requires the identification, bifurcation and valu-

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Implications of a Consolidating Marketplace

A report from an ACLI Annual Conference Session

by Hank Ramsey

What will be left of the reinsurance marketplace when the consolidations are over? That question and others were addressed by a session featuring an S&P analyst, a pricing actuary and a reinsurance executive on October 14, 2003 in Miami when the American Council of Life Insurers held their annual conference. The consensus was that direct writers have become "hooked on reinsurance" in recent years, and are feeling some pain as reinsurers consolidate. The remaining reinsurers are not bidding as aggressively, particularly for business that is not as profitable as they would like it to be.

Rodney Clark, a director at S&P, led off with his assessment of the market. He showed how the market has become much more concentrated in the last six years. In 1997, 16 reinsurers wrote 90 percent of the market. Today, that number is down to 11 reinsurers, and he estimated that we may be down to six to eight reinsurers by the end of 2005. Mergers and acquisitions account for most of the decline in reinsurers. Mr. Clark recited a quick list of transactions, based on 1997 rankings:

- #1 ERC bought #8 Phoenix Re, and then #11 AUL Re
- #3 RGA Re bought #10 Allianz Re
- #5 Swiss Re bought #6 Life Re, and then #7 Lincoln Re
- #9 Guardian has put their reinsurance business in runoff
- #15 Munich Re bought #16 CNA Re

[Subsequent to the conference, ERC announced that it was selling the old Phoenix Re business and placing their remaining life reinsurance operations in run-off.]

Mr. Clark said there are many reasons for the consolidation. Some companies have exited reinsurance as a line of business; others have succumbed to financial distress, capital strain or lack of scale. With the attractive margins available in the current hard P&C reinsurance market, access to capital has been limited for life reinsurers that are part of multi-line reinsur-

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SOCIETY OF ACTUARIES

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Chairperson's Corner

by Melville J. Young

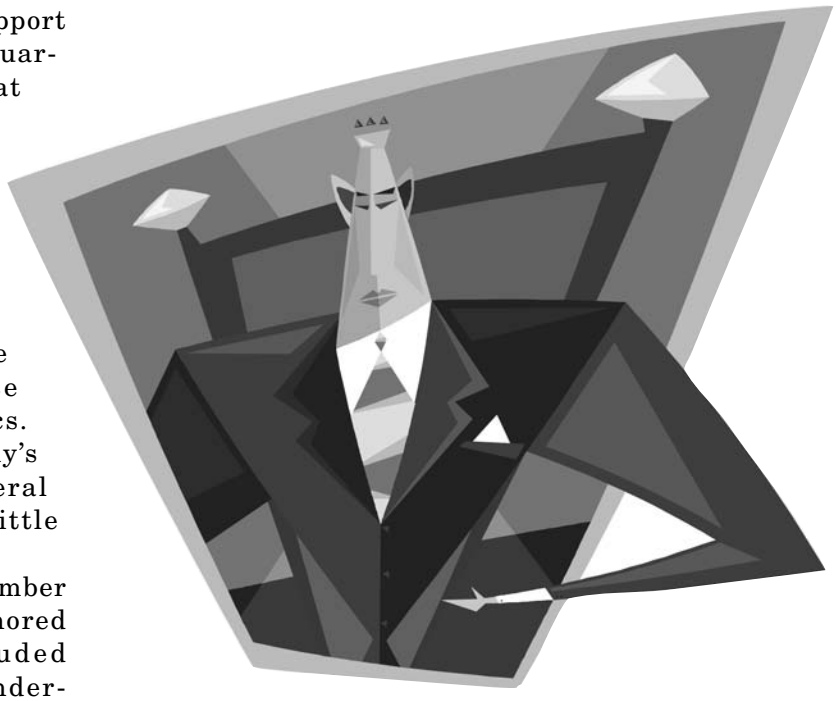
One of the founding principles of the Reinsurance Section was to support the educational process for actuaries in the area. It was recognized that in order to facilitate this process our literature needed to be periodically reviewed and enhanced.

The Reinsurance Section was founded in 1982. The Section's work informally began approximately two years earlier when the SOA formed a task force. The charge of the task force was to construct a series of white papers on various reinsurance topics. Until that time there was John Wooddy's white paper, which contained a general description of life reinsurance and little else.

During the ensuing two years a number of additional white papers were authored by the task force. These included Bill Tyler's paper on reinsurance underwriting; Tom Heaphy's paper on the reinsurance treaty; Lucie Cossette's and Denis LaPierre's reconstruction of the Wooddy article; MikeWinn's paper on reinsurance pricing and Court Smith's paper on reinsurance accounting. There were several other papers and the taskforce also included our resident Harvard grammarian, Denis Loring, who amongst other things policed our use of the split infinitive. Since the formation of the section, the life reinsurance world has been enriched by the written work of a number of individuals. Most notably the book written by Denise Fagerberg and John Tiller entitled *Life Reinsurance* and the book written by Dave Atkinson and Jim Dallas entitled *Pricing Life Reinsurance*.

Approximately a year ago the Reinsurance Section Council decided that this would be a good time for a fresh look at reinsurance literature since more than two decades had passed since the last overall effort. Mike Gabon has 'volunteered' to form a committee whose responsibility will be to assemble, review and then fill in the gaps. During the past year several of you have expressed an interest in participating in this important project. If you have an interest in participating please contact Mike at *mike.gabon@scottishre.com*.

P.S. As part of this effort we are trying to locate the white papers that were written by the earlier task force. My copies seem to be AWOL. If anyone has a copy I would appreciate hearing from you.



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ation in all coinsurance funds-withheld and modified coinsurance transactions of embedded derivatives contained within those agreements. While there is considerable disagreement as to what risks these embedded derivatives encompass, what is the "host contract" (in the parlance of SFAS 133) and other related issues, there is little doubt that B36 applies equally to all funds-withheld and modified coinsurance transactions, whether or not they are classified as "financial reinsurance."

Having said that, the application of B36 to financial reinsurance transactions is problematic at best. Taken literally, B36 requires the identification, bifurcation and valuation of an embedded derivative within the funds-withheld or modco asset, which, for a financial reinsurance transaction, does not even appear on the GAAP balance sheet! A blind application of B36 would not take into account the specialized nature of financial reinsurance transactions, which current GAAP accounting recognizes as having little to no economic impact outside of the reinsurance fees collected. It is doubtful whether this would create greater transparency on a company's GAAP financials or lead to greater understanding of the economic results of such transactions.

As we will argue below, however, a proper application of B36 to financial reinsurance transactions results in no net balance sheet or income statement impact, as there are two completely offsetting embedded derivatives to be found in such transactions.

Note that while the following analysis is from a reinsurer's perspective, we believe that a ceding company's perspective should follow a similar logic.

Introduction

For purposes of this discussion, "financial reinsurance" transactions are defined as reinsurance transactions (and related transactions) that fail to meet the SFAS 113 test to be accounted for as reinsurance under GAAP accounting[1]. In essence, financial reinsurance transactions are those where the likelihood of realizing a material, long-term economic loss is low.

We distinguish between two types of financial reinsurance transactions:

1. A "non-cash" financial reinsurance transaction is one in which the net cash flow to the ceding company either at treaty inception or upon new business being added is equal to zero. Under current GAAP accounting, there are no assets or liabilities on the GAAP balance sheet, and the GAAP income consists of the fees earned under the reinsurance transaction. If net cash other than the fees changes hands under such a transaction—typically, this would happen if a loss develops on the underlying reinsurance, such that a loss carryforward is established (a fairly rare occurrence)—then such cash is accounted for the same way as cash ceding commissions under a "cash" financial reinsurance transaction.

2. A "cash" financial reinsurance transaction is one in which the net cash flow to the ceding company either at treaty inception or upon new business being added is positive. The GAAP balance sheet shows an asset equal to the cash outstanding—and nothing else—while GAAP income consists of the interest and fees earned on the cash outstanding.

Non-Cash Financial Reinsurance Transactions

We will assume that we are working with a generic coinsurance funds-withheld financial reinsurance transaction (the treatment for a combination coinsurance-modified coinsurance transaction would be substantially the same).

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[1] This determination is made on an ongoing basis. If a financial reinsurance transaction experiences a significant change to its risk profile, then this discussion may no longer apply, i.e., SFAS 133 DIG B36 might need to be applied to such a transaction.

For an accounting period t, we define the following terms:

$PRG_t = P - B - E - \Delta V + r_t \bullet FW_{t-1}$

where PRG = preliminary reinsurance gain
P = premiums
B = benefits
E = commission and expense allowances
V = statutory reserve
r_t = funds-withheld interest rate applicable to period t
FW = funds-withheld balance.

Next, we define an experience refund for accounting period t as follows:

$ER_t = \max \{ 0, PRG_t - F_t - LCF_{t-1} \bullet (1 + i_t) \}$

where F = reinsurance fees
LCF = loss carryforward
i_t = loss carryforward interest rate applicable at time t
= 3-month $LIBOR_t$ + j
j = spread over LIBOR

with the further provision that ER may be set to 0 at the option of the reinsurer after a certain point in time and/or upon other specified conditions[2].

We also define the loss carryforward at time t as

$LCF_t = \max \{ 0, LCF_{t-1} \bullet (1 + i_t) + F_t - PRG_t \}$.

Then, at any given point in time, the reinsurance cash settlement is defined as:

$CS = PRG - ER$.

At the point in time that experience refunds are set to 0 by the reinsurer, the ceding company is allowed to recapture the treaty by repaying any current loss carryforward.

Application of B36

We are assuming, for purposes of this discussion, that this reinsurance transaction has been determined to be financial reinsurance, i.e., there is a low probability of realizing a material, long-term economic loss. Put another way, sensitivity testing has indicated that, with high likelihood, the ceding company will recapture this transaction at the appropriate time. Since recapture entails the repayment of any loss carryforward, which, by its very definition accumulates any fees that were previously not collected out of statutory profits, it follows that non-cash financial reinsurance transactions are those with a high degree of likelihood that the reinsurer will collect the reinsurance fees and nothing more. [3]

In other words, with a high degree of likelihood, the present value at treaty inception of the cash settlements (discounted at the short-term series of interest rates i_t) will be equal to the present value of the reinsurance fees, i.e., PV (CS) = PV (F). More broadly, under the assumption that we are testing the financial reinsurance transaction on an ongoing basis to ensure that it still qualifies as financial reinsurance, we may say that, at any given point in time t,

$PV_t (CS) = PV_t (F) + LCF_t$.

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[2] Actually, what we are calling the experience refund may be thought of as consisting of two pieces: a decrease in the relief balance and a true refund of "excess" profits. In other words, what we are calculating above as ER is the amount of profits available, and these may either (a) be used to amortize the relief (by increasing the funds-withheld balance); or (b) be returned to the ceding company. In either case, the impact on the current accounting period's cash settlement is the same, since both the increase in the funds-withheld balance and an experience refund are items that the reinsurer pays in cash to the ceding company. However, the division of this amount into these two components does impact the reinsurance settlement items in future accounting periods, as it determines the beginning-of-period funds-withheld balance for the next accounting period.

[3] Of course, while experience refunds are being paid, the reinsurer cannot collect any more income than the reinsurance fees.

Substituting terms, we see that, with a high degree of likelihood,

$$\begin{aligned} PV_t(F) + LCF_t &= PV_t(CS) \\ &= PV_t(PRG - ER) \\ &= PV_t(PRG) - PV_t(ER) \end{aligned}$$

or, rearranging terms,

$PV_t(ER) = PV_t(PRG) - PV_t(F) - LCF_t$.

To be more specific,

(1) $$PV_t(ER) = \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet ER_k = \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet PRG_k - \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet F_k - LCF_t$$, where

$$d_k = \prod_{m=1}^{k} (1+i_m)^{-1} = \prod_{m=1}^{k} (1+LIBOR_m+j)^{-1}$$

and w = time of recapture.[4]

Now, for any period t,

$$\begin{aligned} PRG_t &= P - B - E - \Delta V + r_t \bullet FW_{t-1} \\ &= P - B - E - \Delta V + h_t \bullet FW_{t-1} + (r_t - h_t) \bullet FW_{t-1} \\ &= L_t + H_t + ED_t \end{aligned}$$

where
- h_t = interest rate for period t on host contract
- L_t = liability cash flows for period t = $P - B - E - \Delta V$
- H_t = host contract interest for period t = $h_t \bullet FW_{t-1}$
- ED_t = embedded derivative cash flows for period t = $(r_t - h_t) \bullet FW_{t-1}$

Substituting into equation (1) above, we get equation (2):

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[4] One may question what is the proper set of discount rates to be used in computing present values. As the following analysis will show, using the discount rates LIBOR + j, where j is the spread over LIBOR used in calculating the treaty loss carryforward, leads to a value of 0 for the embedded derivative at treaty inception (indeed, at all times for as long as the treaty is still sufficiently profitable to be considered financial reinsurance). This is because, under most scenarios, the present value of future cash flows associated with the embedded derivative, discounting at LIBOR + j, will be 0. Since the embedded derivative needs to have a value of 0 at treaty inception, this implies that discounting at LIBOR + j is correct.

(2)
$$PV_t(ER) = \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k) - \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet F_k - LCF_t$$
$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - F_k) - LCF_t$$

Next, we note that

$ER_t = \max\{0, PRG_t - F_t - LCF_{t-1} \bullet (1+i_t)\}$
$= \max\{0, L_t + H_t + ED_t - F_t - LCF_{t-1} \bullet (1+i_t)\}.$

Given that any existing loss carryforward is paid at the time of recapture[5], we know that $LCF_w = 0$.

Thus,
$$LCF_t = LCF_{(t+1)-1} \bullet \frac{d_{(t+1)-1}}{d_t} - LCF_w \bullet \frac{d_w}{d_t}$$
$$= \sum_{k=t+1}^{w} \left(LCF_{k-1} \bullet \frac{d_{k-1}}{d_t} - LCF_k \bullet \frac{d_k}{d_t} \right)$$
$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (LCF_{k-1} \bullet (1+i_k) - LCF_k)$$

Substituting into equation (2) above, we get equation (3), for any point in time t:

(3)
$$PV_t(ER) = \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - F_k) - LCF_t$$
$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - F_k) - \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (LCF_{k-1} \bullet (1+i_k) - LCF_k)$$
$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - F_k - LCF_{k-1} \bullet (1+i_k) + LCF_k)$$

Finally, when considering the present value of future cash settlements at any point in time t, we arrive at equation (4):

(4)
$$PV_t(CS) = PV_t(PRG - ER)$$
$$= PV_t(PRG) - PV_t(ER)$$
$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k) - \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - F_k - LCF_{k-1} \bullet (1+i_k) + LCF_k)$$
$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (F_k - (LCF_k - LCF_{k-1} \bullet (1+i_k)))$$

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[5] Note that this analysis does not require the ceding company to recapture the reinsurance agreement at the time at which it is most advantageous to do so. It merely assumes that, with very high likelihood, the ceding company will recapture at some point in the future. In other words, even if the ceding company does not recapture the transaction at the point in time when economic analysis would suggest that it is in its best interest to do so, sensitivity testing would still show that, with very high likelihood, we expect them to do so in the future.

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In other words, with a high degree of likelihood, the only items that matter in terms of the cash settlements are the reinsurance fees, as well as the change in any loss carryforward balance, with interest.

What we then see, is:

1. There is an embedded derivative in both the liabilities (i.e., within the preliminary reinsurance gain) as well as in the experience refunds.
2. On a present value basis, these embedded derivative cash flows precisely cancel each other out, with a high degree of likelihood.

We therefore conclude that, taking into account both embedded derivatives, the market value of the single, net embedded derivative is 0 at any given point in time[6].

Cash Financial Reinsurance Transactions

For the purpose of this discussion, we will assume that we are working with a coinsurance funds-withheld financial reinsurance transaction (the treatment for a combination coinsurance-modified coinsurance transaction would be substantially the same).

For an accounting period t, we define the following terms:

$$PRG_t = P - B - E - \Delta V + r_t \bullet FW_{t-1}$$

where
- PRG = preliminary reinsurance gain
- P = premiums
- B = benefits
- E = expense allowances
- V = statutory reserve
- r_t = funds-withheld interest rate applicable to period t
- FW = funds-withheld balance.

Next, we define an experience refund for accounting period t as follows:

$$ER_t = \max \{0, PRG_t - EA_{t-1} \bullet (1+i_t)\}$$

where
- EA = cash experience account
- i_t = cash experience account interest rate applicable at time t = 3-month $LIBOR_{t+j}$
- j = spread over LIBOR (which includes both an interest component and a fee component)

with the further proviso that ER may be set to 0 at the option of the reinsurer after a certain point in time and/or upon other specified conditions[7].

We also define the cash experience account at time t as

$$EA_t = \max \{ 0, EA_{t-1} \bullet (1 + i_t) - PRG_t \} .$$

Then, at any given point in time, the reinsurance cash settlement is defined as:

$$CS = PRG - ER .$$

At the point in time that experience refunds are set to 0 by the reinsurer, the ceding company is allowed to recapture the treaty by repaying any unamortized cash experience account.

Application of B36

We are assuming, for purposes of this discussion, that this reinsurance transaction has been determined to be financial reinsurance, i.e., there is a low probability of realizing a material, long-term economic loss. Put another way, sensitivity testing has indicated that, with high

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[6]Note that, per SFAS 133 Implementation Issue B15, there can be only one embedded derivative per hybrid instrument. In other words, a reporting entity is required to net these two embedded derivatives against each other.

[7]Here, since cash is changing hands—which is being kept track of via the experience account—an experience refund would not be payable until the experience account had reached 0. This is what is commonly referred to as "full amortization," since all of the reinsurance gains are being used to amortize the experience account. Some transactions instead feature "scheduled amortization," where, assuming specified conditions are met, the amount of amortization of the experience account each accounting period is limited by some pre-defined formula, and any profits in excess of those being used to amortize the experience account are returned to the ceding company as an experience refund.

likelihood, the ceding company will recapture this transaction at the appropriate time. Since recapture entails the repayment of any cash experience account, which, by its very definition, accumulates any cash and fees on that cash relief that were previously not collected out of statutory profits, it follows that cash financial reinsurance transactions are those with a high degree of likelihood that the reinsurer will collect its cash investment, interest and reinsurance fees on that cash, and nothing more.

In other words, with a high degree of likelihood, the present value at treaty inception of the cash settlements (discounted at the short-term series of interest rates i_t) will be equal to the initial cash ceding commission. More broadly, under the assumption that we are testing the financial reinsurance transaction on an ongoing basis to ensure that it still qualifies as financial reinsurance, we may say that, at any given point in time *t*,

$PV_t\,(CS) = EA_t$.

In other words, at time *t*,

$EA_t = PV_t(CS) = PV_t(PRG - ER) = PV_t(PRG) - PV_t(ER)$

and thus

$PV_t\,(ER) = PV_t\,(PRG) - EA_t$. In other words, we arrive at equation (5):

$$PV_t(ER) = \sum_{k=t+1}^{w} \frac{d_k}{d_t} ER_k = \sum_{k=t+1}^{w} \frac{d_k}{d_t} PRG_k - EA_t \tag{5}$$

where d_k and *w* are defined as before.

As before, we break up PRG_k into its constituent parts: $PRG_k = L_k + H_k + ED_k$.

Substituting into equation (5), we arrive at equation (6):

$$PV_t(ER) = \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k) - EA_t \tag{6}$$

Then, $ER_k = \max\{0, PRG_k - EA_{k-1} \bullet (1+i_k)\}$
$= \max\{0, L_k + H_k + ED_k - EA_{k-1} \bullet (1+i_k)\}$

Given that any existing experience account is paid at the time of recapture, we know that $EA_w = 0$.

Thus,

$$EA_t = EA_{(t+1)-1} \bullet \frac{d_{(t+1)-1}}{dt} - EA_w \bullet \frac{d_w}{d_t}$$

$$= \sum_{k=t+1}^{w} \left(EA_{k-1} \bullet \frac{d_{k-1}}{d_t} - EA_k \bullet \frac{d_k}{d_t} \right)$$

$$= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (EA_{k-1} \bullet (1 + i_k) - EA_k)$$

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Substituting into equation (6) on the previous page, we get equation (7), for any point in time t:

$$\begin{aligned} PV_t(ER) &= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k) - EA_t \\ &= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k) - \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (EA_{k-1} \bullet (1 + i_k) - EA_k) \\ &= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - EA_{k-1} \bullet (1 + i_k) + EA_k) \end{aligned}$$

Finally, when considering the present value of future cash settlements at any point in time t, we arrive at equation (8):

$$\begin{aligned} PV_t(CS) &= PV_t(PRG - ER) \\ &= PV_t(PRG) - PV_t(ER) \\ &= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k) - \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (L_k + H_k + ED_k - EA_{k-1} \bullet (1 + i_k) + EA_k) \\ &= \sum_{k=t+1}^{w} \frac{d_k}{d_t} \bullet (EA_{k-1} \bullet (1 + i_k) - EA_k) \end{aligned}$$

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In other words, with a high degree of likelihood, the only items that matter in terms of the cash settlements is the change in the experience account balance, with interest and fees on that experience account.

What we then see is:

1. There is an embedded derivative in both the liabilities (i.e., within the preliminary reinsurance gain) as well as in the experience refunds.
2. On a present value basis, with a high degree of likelihood, these embedded derivative cash flows precisely cancel each other out.

We therefore conclude that, taking into account both embedded derivatives, the market value of the single, net embedded derivative is 0 at any given point in time for cash financial reinsurance transactions, as well.

Conclusion

Financial reinsurance transactions are structured such that, with a high degree of likelihood, the reinsurer will not experience a material, long-term economic loss. This leads to not one, but two embedded derivatives, one within the funds-withheld asset and the other within the experience refund provision. The high likelihood of no long-term economic loss necessarily implies that the net of these two embedded derivatives will be equal to zero at all times.

ance enterprises. Most top-tier companies have been downgraded by ratings agencies, many because of capital problems caused by other lines of business.

The result of all of this consolidation has been a change of direction in life reinsurance rates. Rates had consistently fallen for a decade, but new rates quoted have leveled off and in some cases have increased. With consolidation, finding a diversified pool is increasingly difficult, and capacity is limited. Rates for group insurance, LTC and accident and health have increased, and between consolidation and the impact of 9/11, the rates for catastrophe reinsurance coverage have skyrocketed.

The rate increases are particularly hard for today's direct writers to deal with. Over the last decade, ceding companies have become addicted to reinsurance. In 1993, only 15 percent of new life insurance was reinsured, but by 2000, the rate had reached 62 percent, and in 2002 it was 61 percent. Many of the direct writers have changed their strategy to focus more on accumulation products than protection products, leaving the reinsurers to manage the mortality risks and the big reserves. "Ceding companies are addicted, and there is no turning back," said Mr. Clark.

Hank Ramsey suggested several ways that the ceding companies will likely respond. Mr. Ramsey, a vice president and actuary at Prudential Financial, said that companies will likely retreat where they can from the hardening market. If XXX relief is only available from a few reinsurers, and the price is as much as 50 percent higher than last year, then companies will "lose ground" every time they renegotiate terms, and so will not re-bid as often. Companies may also consider retaining a larger percentage of each risk if the rates are not as attractive. As this higher retention leads to more earnings volatility, ceding companies may look more aggressively for stop-loss programs. The tightening market for reinsurance will also result in companies being less active and aggressive in the term life market.

In addition to the issue of rates, Mr.

Who Controls 90 Percent of the Reinsurance Market?

1997 Rankings	2002 Rankings	2004 Rankings ?
1. ERC	1. Swiss Re	1. Swiss Re
2. Security Life	2. ING (Security Life + Reliastar)	2. ING (Security Life + Reliastar)
3. RGA	3. RGA	3. RGA
4. Transamerica	4. Transamerica	4. Transamerica
5. Swiss Re	5. Munich Re	5. Munich Re
6. Life Re	6. BMA/Generali	6. BMA/Generali
7. Lincoln Re	7. ERC	
8. Phoenix Home	8. Annuity & Life Re	
9. Guardian	9. Allianz Re	
10. Allianz Re	10. Scottish Re	10. Scottish Re
11. American United Life	11. Canada Life	11. Canada Life
12. Cologne		
13. BMA		
14. Manulife		
15. Munich Re		
16. CAN		

Source: SOA survey conducted by Munich Re

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Ramsey suggested that ceding companies should also be worried about the results of consolidation on counterparty risk. A less diversified pool of reinsurers means more concentrated counterparty risk. On the other hand, reinsurers are using their newfound leverage to push back on recapture triggers. [In December, Swiss Re announced a new global corporate policy against ratings triggers in their reinsurance agreements.] Reinsurers are also obviously less comfortable with change of control provisions. Finally, ceding companies are also concerned that the reinsurers will offer less support for underwriting manuals and intercompany mortality studies as they continue to squeeze their expenses.

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Mr. Ramsey sees some hope for increased supply of reinsurance in the future. The increased capacity may come from traditional sources, as P&C reinsurers look to expand their operations, or it may come from unexpected sources. For example, investment bankers are aggressively seeking new securitization transactions, which could add significantly to the capital capacity of life reinsurers. However, securitization transactions to date have had some significant downsides. They are generally more expensive than the more traditional Letter of Credit approach, and they are only appropriate for very large transactions.

Paul Schuster, executive vice president at RGA Re, said that the market today is "all about profitability and capacity." The result of the price war in term reinsurance in recent years is that all of the profits have been "squeezed out." One response by reinsurers has been tighter contract terms. Another response is a hesitation to accept new kinds of risks. He views universal life policies with secondary guarantees as "flawed products." Ceding companies will either pay more to reinsure these products or will have to do business with second-tier reinsurers. Reinsurers are also requiring a higher standard of financial reporting. He suggested that for ceding companies fast and accurate reporting of reinsurance transactions may be a competitive advantage in the future.

Mr. Schuster sees the industry's need to fund XXX and AXXX reserves as the biggest challenge. He estimated that the need will be $100 billion in seven years, but the bank Letters of Credit total only about $25 billion today. He asked how we will meet the $75 million gap. He sees securitization transactions as the most likely factor to expand the market in the future. But Mr. Clark suggested that the growth in securitization transactions will be slow. "Investors don't like risks they don't understand," he said.

International Financial Reporting Standards and Insurance

by Sam Gutterman

Background

The Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) issued "The Norwalk Agreement" in October 2002, a memorandum of understanding that reaffirmed their commitment to develop a single set of high-quality accounting standards. At that meeting the two standard setters agreed to place a high priority on three steps toward achieving that goal:

1. Reduce, through a joint short-term project, (which is now mostly completed) the differences between U.S. GAAP and IASB standards in certain areas not already being addressed by major projects.

2. Remove other differences through the coordination of future work programs and continued progress on the joint projects already underway.

3. Encourage further coordination of the separate activities of their two interpretive bodies.

Of the projects being led by the IASB and monitored by the FASB, the most relevant to readers of this article is the development of a new international financial reporting standard (IFRS) for insurance contracts. This effort is the culmination of work by the Insurance Steering Committee of the IASB's predecessor, the International Accounting Standards Committee (IASC), which began its deliberations in 1997[1]. Extensive [1]discussions have been held with many industry stakeholders, including the actuarial profession (led by the International Actuarial Association, along with many national actuarial organizations such as the AAA and the CIA). You may recognize various aspects of this discussion held from various papers and presentations made on fair value accounting over the last couple of years.

The current set of IFRSs does not contain specific accounting guidance for insurance contracts. In fact, insurance contracts are explicitly scoped out of a number of them entirely. Meanwhile, current U.S. GAAP insurance standards have primarily been developed over the past several decades under a matching (revenue and costs) framework which tends to be income statement driven, although the specific approach taken varies by type of contract. This is inconsistent in several ways from that being pioneered by the IASB's revised accounting framework, which is moving more toward a balance sheet orientation.

Due to the complexity of the issues involved (principally whether "fair value" should be used to measure liabilities for insurance contracts, and if so how to measure such a value), the fact that the EU and Australia issued directives that IAS standards would apply for all listed companies by 2005, and the resulting lengthy timeline needed to agree on the standards needed for implementation, the project was divided into two parts:

• Phase I – to provide initial guidance and facilitate consistent compliance with IFRS for European and other countries adopting IFRS in 2005 and

• Phase II – to incorporate in a comprehensive manner the more difficult recognition and measurement concepts a couple of years later.

The IASB Exposure Draft 5 *Insurance Contracts* (ED 5) was issued in June 2003 as part of phase I and was available for public comment until October. The IASB received more than 130 comments on it. Then through January, the IASB Board discussed several important and controversial issues relating to it. The newly named International Financial Reporting Standard 4 (IFRS 4), expected to be made available in mid-March 2004 is the outcome of these discussions. It is intended to serve as a bridge to phase II that will allow insurers to continue most of their current accounting for insurance contract liabilities until the difficult issues in this area involved are more fully addressed. At the same time, it eliminates certain "low-hanging accounting fruit" that shouldn't require significant resources to change, such as European stabilization and Japanese catastrophe reserves that are inconsistent with the *IASB* framework, which contains the basic concept under which the IASB's standards are based, while at the same time attempting to minimize other significant deviations from the framework. The IASB Board is expected to begin discussion of phase II issues in June of 2004.

The objective of this article is to provide the reader a basic understanding of what has happened to date on phase I of this project, with a brief introduction to some of the key issues that will be addressed in phase II. Please note that because some of the rules are necessarily complex and this article was written prior to publication and implementation of these standards, the description provided may not be completely consistent with practice as will be applied. In addition, it does not cover actuarial standards that are currently being developed by the IAA.

IFRS 4

IFRS 4 (phase I) is the result of a series of compromises, adopted now primarily to satisfy the European Union (EU)'s requirement to move to IASB's standards in 2005, while at the same time not creating the need for expensive systems changes that might have to be

[1]IFRS is the name for International Financial Reporting Standards, issued by the IASB. Under its predecessor these were referred to as IAS, or International Accounting Standards.

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changed again when phase II is adopted. As a result, several issues addressed here will likely be revisited in the next year or year and a half until phase II is completed.

The following are some of the most significant issues addressed during the process of developing IFRS 4 and some of its key current requirements:

Insurance contract focus. The new insurance contract standard primarily addresses financial reporting for *insurance contracts* rather than for *insurance companies*, although it does incorporate certain requirements for company disclosures as well. In addition, phase I of the project also includes certain changes to other financial reporting standards, including IAS 32 and 39 (the two standards dealing with financial instruments as both assets and liabilities) and IAS 18 (the standard dealing with revenue, including those for service contracts).

Product classification. The insurance accounting approaches used in U.S. GAAP differ depending on what type of product is involved. These categories include short-duration FASB Statement No. 60 (FAS 60), long-duration FAS 60, limited pay FAS 97, universal life-type FAS 97, investment contract FAS 97 and mutual company FAS 120 contracts. Similarly, at least through IFRS 4, the product category in which a contract is classified will determine what measurement method should be used, although all are subject to a liability adequacy test (see below). These categories are:

1. Insurance contracts. These are primarily accounted for by local GAAP rules (that is, if U.S. GAAP is currently used, then it will be able to continue to be applied through the life of phase I), with some exceptions indicated below.

2. Investment contracts (i.e., financial liabilities measured according to IAS 32 / IAS 39). A company is given a choice between the use of an amortized cost or fair value method, although limited guidance is currently available regarding these methods.

3. Investment contracts with discretionary participation features. This is a new category consisting of various participating contracts. Local GAAP can be used, though they are subject to a minimum value which is based on the investment only (type 2) contract. These are not particularly common in the United States, but can constitute a significant percent of business inforce of insurers in countries such as France and Germany.

4. Service features. In accordance with IAS 18, if a class 2 or 3 contract has service features (e.g., variable or unit-linked products with respect to assets managed), then a deferred acquisition cost (DAC) asset can be established, but limited to incremental or marginal costs, then subject to amortization consistent with the revenue recognized.

If a contract is determined to be an insurance contract, insurers will apply their current accounting standards ...

The measurement methods used can be changed (although somewhat complex criteria must be met), but only if they represent an improvement, that is, a move toward a fair value-based system, e.g., a move from undiscounted to discounted liabilities.

Insurance definition. Due to potentially significant differences in values between the methods applicable to insurance contracts and investment type contracts, the definition of an insurance contract is quite important. The most important distinction is between a financial instrument (type 2 above) and an insurance contract (type 1 above). The IASB has attempted to categorize as many contracts as possible as insurance, in order to reduce the computational (systems) changes required in phase I.

IFRS 4 defines *an insurance contract* as a "contract under which one party (the insurer) accepts *significant insurance risk* from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder or other

beneficiary."

To qualify as insurance, at least one of the following uncertainties must be present: (1) whether an insured event will occur, (2) when it will occur or (3) how much will be paid. Insurance thus includes retroactive reinsurance, in which the insured event would be the insurance payment and not the original loss, but would not include most forms of financial reinsurance, even though the timing of payment is not certain. A key distinction is between insurance and financial risk, the former of which requires some adverse consequences to the insured. However, the key concept underlying this definition is whether a contract has significant insurance risk, in which an insured event could cause an insurer to pay significant additional benefits in any scenario, excluding any scenarios with no discernible effect on the economics of the transaction. Many annuities will contain such risk if they include a minimum guaranteed annuitization benefit, although they will be an investment contract during their accumulate phase if there is no guarantee of rates on annuitization and no significant minimum death benefit. If a contract is determined to be an insurance contract at issue, it will continue to be considered an insurance contract; conversely, if a contract is determined to not have sufficient insurance risk at issue, it can be reclassified as an insurance contract at a later time.

While this definition will most likely result in limited categorization differences from U.S. GAAP for U.S. products, some insurance company contracts will certainly not contain sufficiently "significant insurance risk" under the above definition (particularly many pension contracts and group contracts with a complete experience refund, as well as financial reinsurance), and will be subject to the IASB financial instrument / investment contract standards, IAS 32 and 39.

Like U.S. GAAP, no formula will be provided to measure "significant," but doubtless some ad hoc benchmark(s) may be developed in practice, although it is highly doubtful that it will be like the informal 10 percent chance of a 10 percent loss rule.

What to do with insurance contracts. If a contract is determined to be an insurance contract, insurers will apply their current accounting standards to insurance contracts until phase II is adopted. Some of the practices specifically allowed in IFRS 4 but expected to be eliminated in phase II that are currently followed by U.S. insurers are:

- Measuring insurance property/casualty loss reserves on an undiscounted basis. In phase II, it is likely that these liabilities will be discounted, with an as yet undefined adjustment for risk (often referred to as a "market value margin," reflecting the market's current appetite for risk)
- Reflecting future investments margins in the measurement of insurance liabilities by i) using the estimated return on assets expected to be held as a discount rate or ii) projecting the yield on those assets at an assumed rate of return, discounting the projected returns at a different rate and incorporating the result in the measurement of the liability. This primarily affects non-variable life insurance contracts with a savings element. The inability to reflect such margins, without other offsetting approaches, could lead in some cases to recognition of a loss at issue.

Liability adequacy test. Many of the temporary compromises were made by the IASB assuming that a rigorous liability adequacy test would be applied (this is a new term, but in concept it is similar to a loss recognition test). This test must consider current estimates of all future cash flows from a contract, including embedded options and guarantees. If it fails, then an additional liability is required with the resultant loss recognized as a loss on the income statement. If current accounting policies do not include a liability adequacy test that meets the requirements, then an IASB test, given in IAS 37, *Provisions, Contingent Liabilities and Contingent Assets,* has to be applied.

Unbundling. If a contract is classified as an insurance contract, unbundling could be required; that is, different accounting approaches could apply to its components if sufficiently different. If both an insurance and a deposit component is present and the deposit element can be measured separately and regu-

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lar accounting policies (in the United States, U.S. GAAP) do not require it to be recognized, unbundling should occur. An example is if a cedant receives compensation for losses from a reinsurer, but the contract obliges the cedant to repay that compensation in future years, the obligation would be deemed to have arisen from a deposit component. Also, if the accounting policies used permit compensation to be recognized as income without recognizing a liability, unbundling is required.

What to do with an investment contract. If an insurer's contract does not have significant insurance risk, it is then subject to the requirements of the recently revised IAS 32 and 39. Under these standards, such a contract will be carried at either its fair value or its amortized cost, as elected by the insurer prior to issue. Although a complete description of these standards is far beyond the scope of this article, the following briefly describes some of their key provisions.

• Amortized cost. The interest method is basically used, which solves for the interest rate needed to mature the contract.

• Fair value. What constitutes a fair value for these contracts is not yet clearly defined. Concepts such as deposit floor (the net liability cannot be valued for less than amount that the policyholders can demand), own credit standing (reduction in the liability to reflect the credit risk of the company), and treatment of possible future premiums in a flexible premium contract may require IAA guidance.

Measurement inconsistency. One of the most controversial issues in the run-up to IFRS 4 has been the potentially misleading financial information that can be generated by assets and liabilities measured on inconsistent bases. Consistency of measurement has been a long-standing principle of the IAA in the seven-year-long discussion regarding the development of international accounting standards. In addition, it was the topic of a recent joint research project between the IAA and the American Council of Life Insurance (ACLI), showing that income statements would be inconsistent with economic reality when inconsistent measurement is followed as interest rates vary.

Volatile results and results inconsistent with true underlying performance and economic reality will be reported for many life insurance companies that apply IFRS 4 in 2005, as they continue to follow what can be viewed as primarily an amortized cost approach (in other words, not being fully responsive to changes in the interest rate environment) in the measurement of their liabilities, combined with fair value for most of their assets in accordance with IAS 39 (in the "available for sale" (AFS) category in which changes in fair value are reflected as an equity adjustment; at the January IASB Board meeting, the IASB agreed to expose for comment the possibility of having changes in the fair value of certain AFS assets flow through the income statement, but this may prove to have limited value).

This mismatch in approach (i.e., particularly regarding the sensitivity to changes in the interest rate environment) currently occurs under U.S. GAAP due to the prevalence of the use of the AFS asset category, used to avoid the strict tainting rules associated with classifying these assets as "held-to-maturity," but the impact is reduced by having asset value changes go through other comprehensive income (OCI) and the effect of shadow DAC reported separately. IFRS does not provide for booking of fair value changes through OCI.

This concern arises particularly because of possible artificial losses that will be reported in an increasing interest rate environment that might occur over the next few years, where the value of liabilities will remain relatively stable with a corresponding decline in asset values. Several possible solutions have been raised in the course of the IASB discussions over the past few months, including the possibility of 1) relaxing the tainting rules in IAS 39 (which are generally consistent with FAS 115) to allow for easier classification of assets as "held-to-maturity" which then can be held at amortized cost, being potentially more consistent with changes in some U.S. GAAP net liability values, 2) permitting the use of a separate asset category, "assets backing insurance liabilities," that would permit assets to be held at amortized cost consistent with liability measurement, 3) allowing for the unlocking of

the discount rate used to calculate insurance liabilities by block of business, or 4) providing for some type of shadow accounting to reflect unrealized gains, similar to shadow accounting in U.S. GAAP.

In IFRS 4, the IASB will not permit any asset-based solution to this problem, although the possible changes in reporting for AFS assets in IAS 39 can be viewed as a solution as long as liability measurement is based on current interest rates. However, the IASB will permit a liability-based solution (no. 3 or no. 4 above). The problem with no. 3 is that in many cases, it would require a significantly revised valuation method which could be quite costly to implement. To accommodate this difficult interest-sensitive liability approach which few will utilize, the IASB Board may make the AFS change mentioned above. A few European insurers are exploring the shadow-accounting approach, but it is too early to tell how popular this method might become.

... some embedded derivatives should be separately valued from their host contract, with the effect of a change in fair values flowing through income.

Embedded derivatives. IAS 39 already requires that some embedded derivatives should be separately valued from their host contract, with the effect of a change in fair values flowing through income. IFRS 4 exempts both an embedded derivative that would be an insurance contract if offered separately and surrender options in investment contracts with discretionary features and insurance contracts. Nevertheless, expected cash flows from these embedded derivatives should be reflected in the liability adequacy tests.

Disclosure. An insurer will be required to provide information to understand the amounts in the financial statements that arise from insurance contracts and the amount, timing and uncertainty of their future cash flows. This will include information regarding the effect on profit and loss from sensitivity tests involving material risk variables, claim reserve development, major assumptions, risk management objectives, and on major risks and their concentration.

Reinsurance-specific items. In general, reinsurance accounting under ED5 applies U.S. GAAP FAS 113 concepts. The following specific rules are included:

- No netting permitted. Gross and net of ceded reinsurance values will have to be reported separately.
- Profit/loss at issue disclosure. Although earlier drafts would not have permitted a profit at issue, IFRS 4 allows a profit to be recorded at treaty issue, as long as this amount is disclosed in the financial statement footnotes. In addition, if the profit/loss is deferred, the amortization of this amount and outstanding balance are also to be disclosed.
- Reinsurance ceded haircut. Less than full recognition of a ceded reinsurance asset could be required, reflecting the credit standing of the reinsurer used. At the time that this article was written, it was unclear what approach would be taken to measure any such reduction in reinsurance credit.

This only touches the surface of a new system of financial reporting of insurance contracts. This article has not addressed many of what may be significant details that can affect a particular company's reserves. So, when IFRS 4 is published in mid-March, please look through the details. In addition, during the course of implementation, a number of issues will likely arise that were unanticipated when the standard was written.

The next stage

Many very difficult issues will be addressed over the next year and a half in the course of completion of phase II of this project. Because of the difficult conceptual issues involved, it is uncertain how long the development of phase II will take, although it will most likely not be adopted until at least late 2005, for possible

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implementation in 2008. A primary reason for the long timeframe is the IASB has found that changes in accounting approaches for insurance contracts can have serious impacts on many other fields of accounting as well. For example, changes made in IFRS 4 in the definition of DAC for service contracts to include all marginal acquisition expenses may have an unexpected effect on certain bank products.

A brief overview of some of the most important and controversial issues for phase II include:

Fair value. What is the fair value of an insurance contract? A key aspect of this question is whether a "pure" fair value definition or a variation will be used (of which there are many possible ones). For example, should fair value be the entry value, (the original price charged) or the current estimated exit or purely prospective value? If it's the latter, will a profit be allowed to be reported at issue? Many observers believe some form of fair value will be used in phase II, as the IASB is moving in that direction in many areas.

However, Tom Jones, vice-chairman of the IASB, indicated in September that a fair value approach was not a "fait accompli," and that the Board would keep an open mind in its upcoming discussions regarding the best approach to take. In fact, if entry values are used, there may be little difference between fair value and a FAS 60 amortized cost approach, possibly even with a DAC and fair value. This debate will continue over the remainder of this IASB project.

Asset / liability measurement mismatch. Although there was a significant effort over the last several months to arrive at a consensus solution, no resolution equally acceptable to all was reached in IFRS 4. Because it is unlikely that all assets will be valued on a fair value basis with changes affecting the income statement by the time phase II is implemented, the effect of measuring assets and liabilities on an inconsistent basis will likely remain an issue for phase II discussions.

Unbundling. Certainly unbundling or bifurcation will be a topic that will be addressed, even whether a traditional whole life contract should somehow be split into its savings and risk elements. Many observers believe that this is needed to provide comparable values with other financial services firms selling deposit or balance type financial products, and that premiums for the savings element should not be counted as revenue.

Embedded derivatives, options and guarantees. It is likely that more of these will be required to be valued through either stochastic methods or demonstrated equivalents. This may present a challenge to many actuaries who will have to be able to apply generally acceptable methodology for the measurement of the fair value of many of these benefits.

Loss reserves. Germane to P&C insurance, it seems that the use of discounted loss reserves is an almost foregone conclusion. However, probably more important is how the corresponding risk margins (generally referred to as market value margins = risk margins that reflect the market's perception of the risk) are determined for these liabilities.

Renewal premiums. Because renewal premiums are not under the control of the insurer (i.e., policyholders aren't obligated to pay them), they may not be acceptable to be reflected as an asset or anticipated before collected. A new approach may be required to avoid reflecting these in current measurement, although this might not provide a complete picture of the structure of many insurance contracts.

Future investment margins. When to reflect expected profits from future interest earnings will be addressed. Currently the IASB Board is opposed to reflecting these before the corresponding interest is earned. As a result, initial losses on contract sales may have to be recognized for several insurance products.

Minimum deposit floor. Many within the industry believe that it is inappropriate to incorporate a minimum floor (cash surrender value or zero if there is none) to a liability, particularly if a DAC asset is not allowed. This is currently a constraint on recognition of the otherwise determined liability requirement for investment contracts.

Discount rate. Many believe that the current risk-free rate should be used. However, difficulties can arise in certain cases, i.e., in countries in which there are no assets to match the liabilities involved. Alternatives

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SAFE Pool Provides New Catastrophic Coverage Alternative for Life Insurance Industry

by R. Dale Hall

One of the life insurance industry's residual impacts of the tragic events of September 11, 2001 was some marked changes in the market for catastrophic reinsurance coverages. Reinsurers began re-evaluating their risk profiles, and consequently, changes in the price and availability of this type of coverage were seen. The life insurance writers of the world also began picking up on new sets of insurance vocabulary: terms like "terrorism exclusion" and "federal backstop" became increasingly used in reinsurance discussions.

After 9/11, direct life insurance writers also began evaluating different approaches to catastrophic reinsurance coverages. Companies had choices to make as the cost of single company coverages increased and catastrophic pool arrangements were changing. In some cases, many companies found themselves in a position where maximum exposure limits in catastrophic pools rose to nearly four times their original levels prior to 9/11. At the same time, some companies found themselves in the unenviable position of being mixed in catastrophic pools with other insurers who may have much higher probabilities of having a catastrophic claim. This turn of events found many companies seeking alternative ways to obtain catastrophic reinsurance coverage, and even contemplating the idea of carrying no coverage at all.

One of the ideas to arise out of this evolving situation was the creation of a new catastrophic reinsurance pool arrangement for the life insurance industry. This new pool, the Shared Adverse Fluctuation Experience Pool Agreement (the "SAFE Pool"), was designed to create catastrophic reinsurance coverage for companies with a low concentration of life insurance risk in major metropolitan areas.

The SAFE Pool began operating on July 1, 2003 with American Farm Bureau Insurance Services serving as the pool administrator. Twelve life companies currently are pool members and are contributing approximately $70 billion of mortality risk. With the initial limit of liability set at $0.10 per $1,000 of in force, the initial term provided maximum recovery for each company and for the pool in total of $7 million. Catastrophic claims can be filed by a pool member if the member experiences any type of incident that results in at least four insured deaths. As with other catastrophic pools, no risk premiums are paid and all claims against the pool are funded through assessments against member companies. Claim payments are paid according to the percentage of in force each member contributes to the pool. Annual administrative service fees in 2003 ranged between $3,000 and $4,000 per member depending on the size of the member's in force. New entrants can be added at the beginning of any calendar quarter.

The pool leverages off the idea of "catastrophic underwriting" commonly seen in single company coverages to ensure the pool only accepts members with similar risk profiles. In-force listings by zip code are analyzed to determine the amount of risk concentrated in large urban areas, and questions regarding life insurance risk outside the United States and Canada are commonly asked. While the definition of a "preferred catastrophic risk" is hard to define, pool members are at least ensured that the companies in the SAFE Pool have similar risk characteristics.

At the SAFE Pool's annual Advisory Committee meeting in October, pool members discussed future changes that could further assist the catastrophic reinsurance needs of member companies. Pool members discussed raising the maximum recovery limit to $0.15 per $1,000 in the future and also purchasing a second layer of coverage to expand the total coverage to $20 million. The cost of the additional layer has been seen to be a more cost

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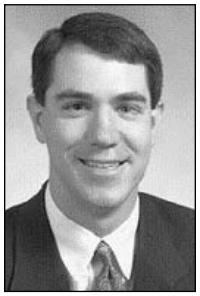

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effective approach due to the large diversification of risk of the member companies and the ability to share the cost of the coverage.

While everyone in the industry hopes the events of September 11, 2001 are a one-time occurrence, it's encouraging to see that new ways to deal with the risk of catastrophic events are evolving. The SAFE Pool appears to be among these new ideas that can help provide stability to the financial strength of its members even if future catastrophic events were to occur.

Capacity in the U.S. Life Insurance Market – A View from the Top of the Pyramid

by Michael DeKoning

For a variety of reasons, insurance companies significantly expanded their use of life reinsurance throughout the late '90s and early '00s. This has meant that volumes being ceded to the reinsurance market have continued to expand (after a brief respite in 2001) through quota share opportunities with direct insurers keeping only a portion of their published retention. The drive for growth and volume led the reinsurers to try to offer more per-life capacity to the market by looking for increasing automatic binding limits and jumbo limits from their retrocessionaires. Through the late '90s, most of the life retrocession outlets including the two full service, professional retrocessionaires (Manulife Reinsurance and Sun Life Reinsurance) were able to offer greater automatic binding limits and jumbo limits to service their life reinsurance clients who, in turn, offered higher limits to their direct writers. Direct writers had access to more than 25 life reinsurers active in the U.S. market and reinsurers and retrocessionaires typically also had access to European and Asian reinsurers not active in the U.S. market, who were willing to provide retrocession capacity on U.S. lives. So what has changed? I will try to give you the perspective of a company at the top of the capacity pyramid.

Clearly, the movement to quota-share reinsurance meant that direct writers were retaining less on a per-life capacity basis. Massive U.S. life reinsurer consolidation (Lincoln Re, AUL Re, Phoenix Re, CNA Re, Cigna Re, Allianz Re, Life Re, to name a few) has resulted in less choice for the Direct writers. It has also resulted in the loss of per-life capacity as the acquiring reinsurers have not, generally, increased their retentions sufficiently to make up for the loss of capacity owing to the acquisitions. This problem will only be further exacerbated by ERC's recent announcement of their withdrawal from accepting new business going forward.

At the same time, many of the retrocession outlets for U.S. lives, smaller European reinsurers with little or no active U.S. operations, have also been acquired by the larger multi-lined and multinational reinsurers who are already active in the U.S. market. Finally, some of same smaller reinsurers have been hurt by large early duration claims that aggregated from their various retrocession relationships to a level that they were uncomfortable with, forcing many of these remaining companies to either stop accepting retrocession on U.S. lives or severly reduce their offered capacity.

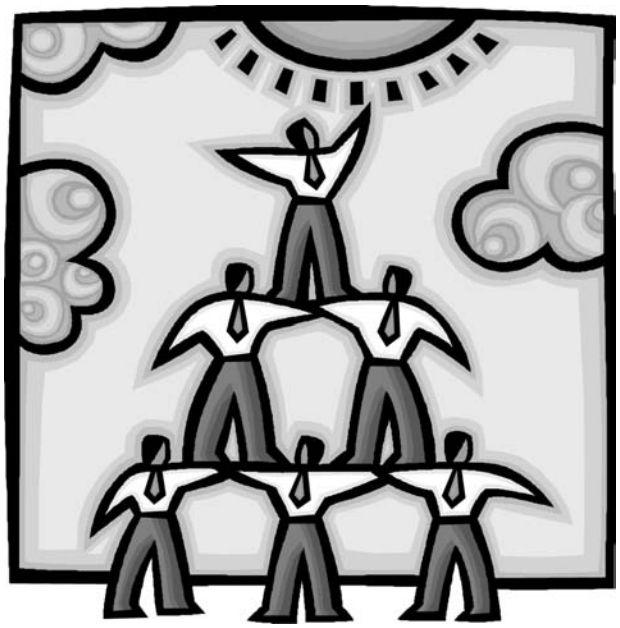
I estimate that all of the above factors have resulted in a reduction of per-life capacity in the United States by more than $100 million. Considering the market started with somewhere between $225 and $300 million of capacity, this is a material reduction that is

rippling through the market.

So how is this affecting the industry on a day-to-day basis?

Autobinding limits are under significant pressure. For retrocessionaires, being excess of both direct writers' and reinsurers' retentions means that typically only large policies see their way through to the retrocessionaire. The reduction in the number of reinsurers keeping a retention on the one side coupled with the reduction in the retrocessionaire's own retro pool capacity, has resulted in many retrocessionaires being forced to reduce the automatic binding limits they offer to the reinsurers. This, in turn, affects the amount of capacity offered by the reinsurers to the direct writers.

Increased pressure on jumbo limits. Jumbo limits, typically defined as the amount of insurance in force and to be placed on a given individual at application time, are tools used by reinsurers and retrocessionaires to control aggregation on very large policies. A policy on an applicant that is below the jumbo limit can typically be ceded automatically under a reinsurance treaty (assuming it meets the other automatic binding criteria based on age, underwriting rating, etc). Back in the early '90s, jumbo limits typically were in the $20-25 million range. In the mid to late '90s, jumbo limits exploded to $75 million and even, in limited circumstances, to unlimited amounts. For the retrocessionaires, the jumbo limit is probably the most important risk aggregation management tool there is. For any large policy, there could be mutiple direct writers and multiple reinsurers, but there are only a small number of retrocessionaires. As the risk takers at the top of the pyramid, retrocessionaires will invariably see the same life from multiple reinsurance arrangements. For a $75 million policy, for example, it is very likely that more than $55 million of this policy will end up in the retrocession market. The large retrocessionaires, like Manulife and Sun, could easily end up with $25-35 million of this one risk. As retrocession capacity dries up behind the active U.S. retrocessionaires, it is clear that controlling the amount of risk being ceded automatically on large policies is key to



controlling risk aggregation and retention management. While I do not see jumbo limits returning to their early '90s levels, I would expect that jumbo limits will reduce over the coming 12-24 months.

Data quality and lags. In addition to the aforementioned risk aggregation issues facing retrocessionaires, the other big issue is the lag in receiving accurate and detailed reporting for retrocessionaires to perform retention management. As the companies at the end of the reporting chain, the typical lag from the time a retrocessionaire is bound (which is concurrent with the policy issue date) to the time it actually received reporting is 18 months. This lag can be as long as 36 months due to late reporting, systems changes by either the insurer or reinsurer (or both!) or poor quality administration. The ability to effectively manage retention and over-retention situations as well as offer facultative capacity is severely limited due to the data problems in our business.

Higher retrocession costs. Due to all of the above risk and supply issues, the cost of retrocession in the life market has been under significant pressure. The cavern between inward premiums and the outward cost of ceding to non-U.S. retrocessionaires, still an important outlet for the U.S. reinsurers and retrocesionaires, has continued to

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widen. U.S. retrocession volumes have dropped over the last few years primarily due to the lower number of quota share opportunities offered to retrocessionaires. The amount of business assumed from high face amount policies, however, has only increased over the last number of years. Therefore, the proportion of business assumed by U.S. retrocessionaires that come from very large policies continues to increase. This means, however, that the higher retro costs have become increasingly burdensome to the U.S. retrocessionaire.

So, what can be done to stem this loss of per-life capacity? Be nice to your reinsurers and retrocessioniares.

A dramatic improvement in data flow is needed. We are all part of an industry that does not, at its core, have a closely followed data standard (there is a standard in place that is not well-adopted) nor does it have a common methodology for passing data between participants. Each insurer passes its data on to their reinsurers in their own unique format who in turn must translate that data, process it and then pass on the relevant information to their retrocessionaires. Can we not find a solution to this problem? The banks have done it, the investment firms have done it, what makes our business so different? There have been numerous attempts to standardize or even create a data hub for the passing of data from insurers to reinsurers and onto Retrocessionaires. I believe these types of initiatives need widespread industry support and can only improve data flow, cash flow and risk management. This will lead to greater capacity being available sooner to the market.

Current market market conditions could lead to insurers retaining more of their business. If market capacity continues to shrink, LOC costs increase and the often-rumored hardening of life reinsurance rates comes to pass, it is possible that some companies could turn their backs on first-dollar quota share reinsurance and return to retaining more business. This would increase the amount of total per-life capacity in the overall market.

Reduced collateralization requirements for U.S. business. While not a large impediment to non-U.S. companies, I believe that reducing the collateralization requirements for non-U.S. companies could increase the number of companies willing to accept U.S. risks.

Increased profitability of life reinsurers in isolation and relative to the P&C reinsurance market. Many U.S. life reinsurers are struggling to meet their shareholder return requirements. On a U.S. GAAP basis, very few if any, are making double-digit returns on their new business. It should come as no surprise, therefore, that there are few potential new entrants and/or few looking to expand in this market from their current position. This is especially true given the P&C reinsurance market is currently in the midst of a hard market, with potential returns often quoted in the 20 percent-plus range. I suggest you ask yourselves this one question: If you were going to invest in the insurance or reinsurance market today, would you invest in the life reinsurance market?

Increased use of facultative reinsurance due to lower automatic binding limits. Due to the aforementioned reduction in retrocessionaire and reinsurer automatic binding limits, the inevitable result will be greater amounts of facultative business. This, from a retention risk management point of view is a good thing, in that both reinsurers

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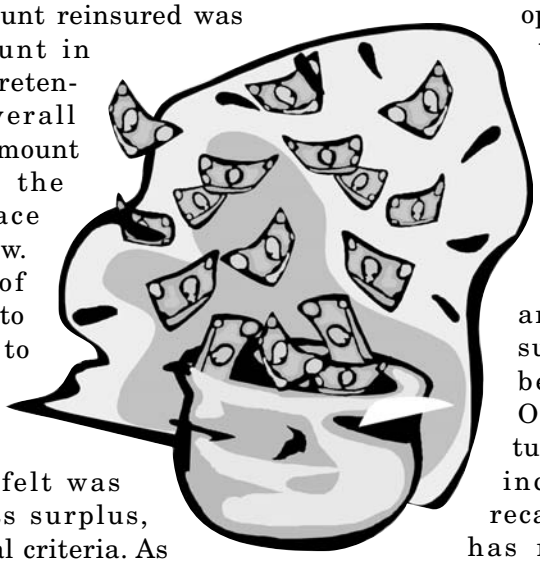
and retrocessionaires have the ability to better manage and control over-retention situations, thereby allowing them to offer more capacity without having to "hold any back." That said, this will only become a factor once the industry has been able to address its data issues and reduced the reporting lag to six to nine months.

I suspect the next few years are going to be very interesting in the mortality risk market. The dynamics are very fluid, with significant opportunities for both improvement in market efficiencies and risk management. That said, I believe the next 12-24 months will also see some interesting per-life capacity developments that could drastically change the insurer/reinsurer/retrocessionaire relationship. While I would not expect a return to the "strictly excess" and significantly limited automatic binding and jumbo limits that characterized the life reinsurance and retrocession markets up to the mid-'90s, I believe that the trend toward loosening these terms will reverse somewhat in the coming months.

THE RECAPTURE PROVISION
IS IT UP TO DATE?

by Larry Warren

The recapture provision is a standard reinsurance provision found in practically every reinsurance treaty. Historically, reinsurance was ceded on an excess basis (i.e. the amount reinsured was equal to the face amount in excess of the company's retention schedule). The overall ratio of the reinsurance amount ceded compared to the company's direct face amount was relatively low. The main purpose of "excess reinsurance" was to enable the direct writer to retain as much face amount as it could justify and merely cede the amounts which it felt was excessive relative to its surplus, earnings or other financial criteria. As experience unfolded, the direct writer was not especially concerned about the relationship between the mortality experience of the reinsured business and the reinsurance premium. (As we will soon discuss this is certainly not the case under the more recently utilized first dollar quota share reinsurance). The recapture provision was a logical, reasonable and benign provision that permitted the ceding company (i.e. gave it the option) to increase its retention limits on its in-force business (i.e. take back or recapture some of the reinsured business) if it increased its retention limits on new business.



If the increased retention limit exceeds the face amount of the policy reinsured, then that policy will be fully recaptured. Otherwise, it will be recaptured only to the extent of the increase in retention. The recapture provision typically has requirements such as a recapture (waiting) period (typically 10 years) as well as advanced notification of intent to recapture. Some recapture provisions require that the ceding company implement a recapture program within a

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limited period after the effective date of a retention scale increase (otherwise, they will forfeit the right to recapture). There are also administrative and other rules that have to be followed. The purpose of the recapture provision is to give the direct writer the opportunity to take back the reinsured risk that is no longer needed as a result of the increased retention that it is now able to accommodate. The recapture period must be long enough to give the reinsurer sufficient time to earn its profit.

In a first dollar quota share arrangement, the reinsurers assume a fixed percentage of the face amount of each policy. For example,

the direct writer may retain 20 percent of each risk and cede 80 percent to one or more reinsurers. First dollar quota share reinsurance (80-90 percent is common) has become quite prevalent in recent years and accounts for a very significant percentage of all reinsurance ceded. Many of these treaties have similar if not identical recapture provisions as the "excess reinsurance" treaties. While the language in these provisions was clear and appropriate for excess reinsurance, it is unclear and inappropriate for quota share reinsurance and poses a very real risk for disputes between the direct writer and reinsurer. There inevitably will be some direct writers that, by the time the recapture period is near completion, will recognize that the reinsurance premiums that they are paying are greatly in excess of mortality claims. As we will later show, it is the combination of a strong and even perhaps compelling desire of the direct writer to recapture, coupled with this inappropriate and unclear language, which will spark major disputes leading to arbitration and/or legal challenges.

In sharp contrast to excess reinsurance, first dollar quota share reinsurance is utilized for reasons basically unrelated to the direct writer's retention scale, such as predictable mortality costs (i.e. paying known reinsurance premiums instead of unknown future mortality claims), stability of earnings, ability to offer more competitive products etc.

As a result of the fact that reinsurers commonly build future mortality improvements into their pricing, coupled with the fact that projecting future mortality is an art as well as a science (i.e. determining which mortality table has the appropriate slope for the business being reinsured), it is not exceptional to find reinsurers who will offer a reinsurance premium rate scale lower than the ceding company's pricing mortality assumption. This lower premium would enable the direct writer to develop a more competitive product than it would be able to otherwise justify.

As mentioned earlier in our discussion of excess reinsurance, the "direct writer is not especially concerned about the relationship between the mortality experience of the reinsured business and the reinsurance premium." This is because the direct writer could not prudently have kept a risk greater than its maximum retention scale. It simply had no choice but to reinsure the business. Furthermore, the volume of business reinsured under excess reinsurance is typically low in relation to the total volume of direct business and is usually not of sufficient size to be statistically credible. As mentioned earlier in first dollar quota share arrangements, a very significant percentage of the face amount is typically reinsured (80-90 percent is not exceptional), giving rise to huge blocks of in-force business and often is of sufficient size to be statistically credible. In quota share arrangements, both the ceding

company and the reinsurer have a big interest in how the relationship between mortality claims and reinsurance premiums unfolds.

If mortality turns out to be significantly more favorable than the direct writer had contemplated, the direct writer will make every attempt to recapture the reinsured business. In fact, I believe that it will not be uncommon for there to be situations where the direct writers will find themselves paying reinsurance premiums greatly in excess of mortality costs. Let us look at the following examples below.

Example 1

The direct writer, having no credible mortality experience (e.g. for a new product with new risk classes or new underwriting guidelines/requirements), makes an educated guess (based on subjectivity and judgment) at what they think a reasonable mortality assumption is. The reinsurers also have no mortality experience on which to base their premiums. They similarly make an educated guess based on the direct writer's management team, distribution system, specific product, design, underwriting guidelines, market segment, average face amount, etc. The direct writer then reinsures on a 90 percent first dollar quota share basis with a reinsurer or reinsurers whose YRT premiums are lower than their mortality assumptions. They are initially quite pleased that they are locking in higher profit margins through reinsurance. After a few years elapse and credible statistical experience emerges, the reinsurance premiums turn out to be considerably higher than the mortality claims. The in-force business under this treaty (containing several years of new issues) is now huge. The direct writer will be thinking, "if we were only able to recapture this business we will save millions of dollars." That is, they will be highly motivated to recapture the business. What recourse do they have? Exactly what does the recapture provision permit them to do?

... reinsurance premiums begin to significantly exceed the mortality claims. This may be quite a surprise to the "astute" pricing actuary.

Example 2

The direct writer has a reasonably good idea of the mortality experience that they have had and their mortality assumption is based on "accurate" mortality studies recently performed by the company. These mortality studies may even be statistically credible and based on the last three years of experience, which is reflective of their current underwriting guidelines/requirements. Similar to Example 1, the direct writer after strenuous negotiations with several reinsurers, finally implements a first dollar quota share arrangement with one or more reinsurers, whose YRT premium rates are somewhat lower than their mortality assumptions. This sounds too good to be true as they would be locking in higher profit margins through reinsurance, and this is even after sharing the results of their mortality study with the various reinsurers' bidding. As was the case in Example 1, after a few years elapse it becomes quite apparent that the mortality claims are considerably lower than the reinsurance premiums. In this example, this result is from the fact that direct writers are not accustomed to building mortality improvements into pricing their products since various regulatory requirements such as self-support testing and policy illustrations usually prohibit it. Reinsurers, on the other hand, typically do factor mortality improvements into their premium scales. Needless to say, there will be a certain percentage of these quota-share arrangements where the annual mortality improvements will turn out to be significant, giving rise to a greater and greater disparity between reinsurance premiums and mortality claims. That is, the aggressively pricing reinsurers who won the bid guessed correctly. As in Example 1, this creates a situation where the reinsurance premiums eventually become considerably higher than mortality claims for

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a large in-force block of business and the direct writer will be highly motivated to recapture the business. What recourse do they have?

Example 3

In this case, the direct writer's pricing actuary is a little more astute than in Example 2 and takes pride in the mortality studies performed with his company's new sophisticated mortality system. He uses the more "modern" 1990-95 select/ultimate mortality table (as opposed to the 1975-80 select/ultimate mortality table) to develop his pricing mortality assumptions. He furthermore has the reinsurers base their premiums on this table. He is perceptive and does in fact realize that potential future mortality improvements are often recognized by the reinsurers and seeks out reinsurers with the most liberal pricing assumptions, including an implicit aggressive mortality improvement assumption. He therefore expects the reinsurance premiums to be perhaps a few percent lower (e.g. 2.5 percent) than his own pricing mortality assumption. This is even after allowing for the fact that the reinsurer needs to cover its expenses and profit margin.

In today's environment, the ceding company normally does due diligence in the selection of their reinsurers.

Once again, however, similar to the previous examples, the reinsurance premiums begin to significantly exceed the mortality claims. This may be quite a surprise to the "astute" pricing actuary. However, this can in fact happen when the reinsurance premiums are expressed in terms of the 1990-95 select/ultimate mortality table and yet the company's mortality experience follows the 1975-80 select/ultimate mortality table. This situation is shown in Exhibit 1 where Table 2 (2.5 percent lower than Table 1) represents the reduced reinsurance premium and Table 3 represents actual mortality claims. Recognize the fact that Table 1 and Table 3 (based on the 1990-95 and 1975-80 mortality tables respectively) were developed with scaling factors of 80 percent and 44.5 percent respectively, making them equivalent over a three-year mortality study period. This equivalence can be seen by observing that the sum of the first three years for Table 1 and Table 3 are each $2,320,000. Also in Exhibit 1, it is interesting to observe in the last column "Excess Reinsurance Premium" that in the early years (years two to four) the ceding company recognizes modest gains followed by ever-increasing annual losses in the range of $1-2.9 million over the years 11-20 which may have been subject to recapture depending upon the language in the treaty. The reinsurance premiums are increasing at a faster rate than the mortality claims, because the 1990-95 mortality table is steeper than the 1975-80 mortality table. As mentioned, the reinsurance premiums will begin to significantly exceed mortality claims. First dollar quota share arrangements started to rapidly gain in popularity in the mid to late '90s. Many of these treaties will soon be nearing the end of their "10-year" recapture period. As shown in the above examples, there will very likely be a strong motivation on the part of some of the direct writers to recapture their business.

In Example 1, due to the significant amount of judgment and subjectivity, the outcome could very likely have been reversed. That is, mortality claims could have greatly exceeded the reinsurance premiums as experience unfolded. In Example 2, had the mortality improvement not materialized, the situation also would very likely be reversed with the mortality claims exceeding the reinsurance premiums. In Example 3, there will in fact be cases where the mortality claims will follow the slope of the 1990-95 mortality table and the reinsurance premiums will

EXHIBIT 1
DEMONSTRATION OF THE DISPARITY WHICH MAY ARISE BETWEEN REINSURANCE PREMIUMS AND MORTALITY CLAIMS

Year	TABLE 1 * Reinsurance Premium	TABLE 2** Reduced Reinsurance Premium	TABLE 3 *** Claims	TABLE 4 Excess Reinsurance Premium (= Table 2 - Table 3)
1	$550,000	536,250	$520,000	$16,250
2	780,000	760,500	770,000	$(9,500)
3	990,000	965,250	1,030,000	$(64,750)
4	1,190,000	1,160,250	1,220,000	$(59,750)
5	1,440,000	1,404,000	1,390,000	$14,000
6	1,740,000	1,696,500	1,540,000	$156,500
7	2,120,000	2,067,000	1,690,000	$377,000
8	2,520,000	2,457,000	1,840,000	$617,000
9	2,900,000	2,827,500	2,030,000	$797,500
10	3,340,000	3,256,500	2,260,000	$996,500
11	3,740,000	3,646,500	2,580,000	$1,066,500
12	4,340,000	4,231,500	2,960,000	$1,271,500
13	5,020,000	4,894,500	3,440,000	$1,454,500
14	5,470,000	5,333,250	3,940,000	$1,393,250
15	6,010,000	5,859,750	4,460,000	$1,399,750
16	6,940,000	6,766,500	5,290,000	$1,476,500
17	7,860,000	7,663,500	5,860,000	$1,803,500
18	8,860,000	8,638,500	6,480,000	$2,158,500
19	9,980,000	9,730,500	7,150,000	$2,580,500
20	11,050,000	10,773,750	7,880,000	$2,893,750

* Represents 80% of the 1990-95 select/ultimate table based on mortality experience of the first 3 policy years

** Table 2 is 97.5% of table 1

*** Represents 44.5% of the 1975-80 select/ultimate table based on mortality experience of the first 3 policy years

note: The mortality experience underlying these values was arbitrarily chosen to equal 80% of the 1990-95 select/ultimate table which is equivalent to 44.5% of the 1975-80 select/ultimate table.

For simplicity this exhibit is based on a single year of issue ($1 billion face amount) male issue age 45 with zero lapses.

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The Recapture Provision • from page 27

have been based on the 1975-80 mortality table. In these situations, the mortality claims will increase at a faster rate than the reinsurance premiums and will begin to significantly exceed them.

In all three newly defined "alternate" examples above, in order to avoid significant losses the reinsurers will desperately (due to the large in-force block of quota share business) attempt to raise their rates especially when the premium guarantee provision in the treaty is unclear or ambiguous (as is sometimes the case in YRT reinsurance).

It should now be apparent that both the reinsurer and the direct writer are taking big risks with first dollar quota share reinsurance. Depending upon the outcome, either the direct writer or the reinsurer will have strong motivation to take extreme measures to improve their situation. From the direct writer's perspective, as alluded to earlier, every attempt will be made to recapture their business. From the reinsurers' perspective, every attempt will be made to raise premium rates (on YRT reinsurance).

Reinsurers are nearly unanimous in their opinion that no business under first dollar quota share arrangements be eligible for recapture. They properly recognize that there would simply be too much selection against the reinsurer if recapture were permitted (i.e. if claims are very high, the direct writer will obviously preserve the reinsurance arrangement indefinitely, alternatively if claims are very low, the direct writer will want to recapture). As previously mentioned, the recapture provision in most reinsurance treaties are unclear or ambiguous for first dollar quota share arrangements.

For example, some treaties have no limitation at all regarding the business eligible for recapture. They merely allude to a recapture period (often shown on a separate schedule page). Other treaties refer to the fact that facultative and reduced cessions are not eligible for recapture, but never clearly identify or define quota share arrangements as reduced retention. Rather than define quota share as reduced retention and then let the ceding company deduce that it is not subject to recapture, the treaty language should clearly state that the business ceded under this first dollar quota share treaty is not eligible for recapture. Treaty provisions are often silent as to whether an increase in the ceding company's quota share retention from 10 percent to 100 percent represents a true increase in retention scale or not. (Of course, the ceding company would assert that it is, to strengthen its attempt to justify recapture).

Since it is typically the reinsurers' intent that quota share business not be subject to recapture, the treaty provision language must clearly and unambiguously state this fact.

Until such time that the reinsurers revise and clarify the recapture provisions in their existing treaties, we will find direct writers falling into situations arising from the various examples previously discussed, who will be compelled to focus on any ambiguous, unclear or vague treaty language. This focus will enable them to justify recapturing their business in order to avoid significant losses.

In today's environment, the ceding company normally does due diligence in the selection of their reinsurers. This includes reviewing the reinsurers' rating agency ratings, risk-based capital ratios, financial

statements, etc. In order for the ceding company to protect itself in some future time period when the reinsurer's financial condition may have seriously eroded, it is customary to have a treaty provision (often referred to as the "insolvency provision") containing various triggering events for which the ceding company would have the right to recapture. It is not uncommon to find triggering events such as:

(a) The reinsurer becomes insolvent, impaired or unable to pay debts
(b) The reinsurer is about to be liquidated or dissolved
(c) The reinsurer experiences a significant rating downgrade from two or more rating agencies
(d) A significant reduction (50 percent or more) in the reinsurer's surplus or risk based capital ratio
(e) etc.

As was the case in our previous examples, where the direct writer will make every attempt to find loopholes or ambiguities in the recapture provision in order to prevent significant losses, the direct writer will also attempt to find loopholes or ambiguities in this "insolvency provision." For example, the term "impaired" in (a) is not clearly defined or the "rating downgrade" in (c), which a reinsurer may experience could be for benign reasons but the ceding company will jump on their opportunity to recapture.

It should now be apparent that judgment and subjectivity in the process of projecting future claims or reinsurance premiums play a large role for both the direct writer and the reinsurer. This uncertainty inevitably leads to winners and losers in this guessing game of future mortality rates versus appropriate reinsurance premiums. The huge volume of business associated with an in-force block of first dollar quota share reinsurance greatly magnifies the loss to either party, compelling the direct writer to attempt to recapture (or alternatively compelling the reinsurer under YRT reinsurance to raise rates). It should be noted that due to the 10-year recapture provisions common in automatic first dollar quota share pools, and given that the use of quota share reinsurance began escalating in 1995, we will begin to see attempted recapture become more of a reality beginning in 2005.

The concepts addressed in this article should provide a wake-up call to both the direct writer and the reinsurer to very carefully scrutinize the recapture provisions (also the insolvency provision and the premium guarantee provision) in their treaties and assure that it is clear, precise and up to date.

Larry Warren FSA, MAAA is executive vice president and chief actuary of National Benefit Life (NBL) and is responsible for NBL/Primerica Life Reinsurance. He can be reached at larry.warren@primerica.com.

Volunteers Wanted!

Would you like to have an impact on the future direction of the Reinsurance Section? Submit your name for consideration for the 2004 Reinsurance Section Council slate. The Council serves section members by sponsoring continuing education and providing information to assist members in their work in the reinsurance area. Any SOA Reinsurance member who would like to be considered as a candidate for the section council should contact Mel Young at *myoung@rgare.com* as soon as possible.

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SPRING MEETING REINSURANCE SESSIONS

by John Nigh

The Reinsurance Section is pleased to be sponsoring three sessions at both upcoming spring meetings. The Pension and Health Specialty track meeting is on May 19-21, 2004 at the Anaheim Hilton in Anaheim, California and the Life Specialty track meeting is on June 14-15, 2004 at the San Antonio Marriott River Center in San Antonio, Texas.

The sessions we will be sponsoring and their dates are as follows:

Anaheim Meeting (Wednesday, May 19 to Friday, May 21)

Long-Term Care Reinsurance
5/19, 10:30 am – 12:00 pm (Panel Discussion)
What to assume? Long-term care insurance is a very new product. The emerging experience forces direct writers and reinsurers to constantly reassess assumptions, particularly persistency.

This session covers:
- How reinsurers and direct writers respond to emerging experience
- How they work together to modify contract terms or to take other actions to represent and protect each party's interest

This session is designed for attendees who have moderate experience with the subject.

Terminal Funding, The Longevity Risk
5/19, 4:00 pm – 5:30 pm (Open Forum)
In the past three years, stock market declines wreaked havoc on pension plan assets. As a result, many plans have terminated. The contracts covering the terminated vested pension obligations have a significant risk that the pensioners will outlive the underlying mortality table.
This session addresses approaches to develop assumptions for reinsurance covering the underlying longevity risk.

This session is designed for attendees who have moderate experience with the subject.

HMO Reinsurance
5/20, 8:30 am – 10:00 am (Open Forum)
Where's the capital? HMOs suffer from a shortage of capital more than the insurance industry in general. State regulators and rating agencies are focused on these capital issues. This session covers how reinsurers provide capital solutions to HMO's through both traditional and non-traditional reinsurance.

This session is designed for attendees who have moderate experience with the subject.

San Antonio Meeting (Monday, June 14 – Tuesday, June 15)

How Creditworthy Is Your Reinsurer?
6/14, 10:30 am – 12:00 pm (Panel Discussion)
Significant consolidation of reinsurers, as well as direct writers, has occurred over the last decade. Reinsurers have capital demands not unlike those of direct writers. Reserve credits and reinsurance amounts owed represent a significant asset on direct writers' balance sheets.

This session discusses:
• Means to ensure collectability when claims occur
• What can be done when reinsurers encounter financial problems

This panel addresses these and other issues. This session is designed for attendees who have moderate experience with the subject.

Where Is Your Reinsurance When You Need It?
6/14, 2:00 pm – 3:30 pm (Debate)
Denials of reinsurance coverage are increasing, resulting in increased arbitrations between direct writers and reinsurers. A variety of reasons exists for the increase in frequency of denials, including contract termination and exclusion of specified claims.

Join this lively debate as the point of view regarding the rights to deny claims is presented by a representative of both a direct writer and a reinsurer.

Attendees learn:
• The factors that have led to this increased level of arbitration
• What can be done or should have been done to avoid conflicts

This session is designed for attendees who have moderate experience with the subject.

Pool Reinsurance
6/15, 8:30 am – 10:00 am (Open Forum)
Pooling of risk is Actuarial Science 101. Insurance and reinsurance companies have sought to pool their risks with others as a means of sharing risk as well reducing volatility. Unfortunately, participating in a pool oftentimes results in surprises and exposure to liabilities never anticipated. This session will discuss why many of these surprises have occurred, review some actual case studies and discuss what companies and reinsurers are doing to reduce and/or eliminate any mistakes of this nature going forward.

This session is designed for attendees who have moderate experience with the subject.

The Reinsurance Section Council members look forward to seeing other members at the upcoming meetings. Should you have any questions about the sessions or if you have an interest in participating, please feel free to contact John Nigh, the coordinator for all sessions, at (212) 309-3958 or at *john.nigh@tillinghast.com*.

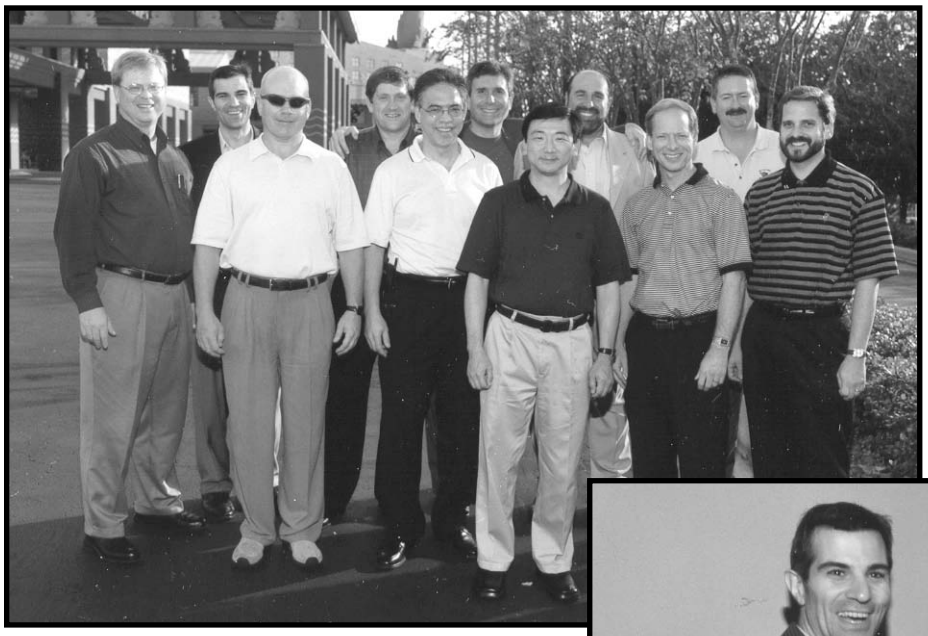
In addition to being the Reinsurance Section Council's spring meeting coordinator, John Nigh is a principal at Tillinghast-Towers Perrin in New York City.

SOCIETY OF ACTUARIES

475 N. Martingale Road, Suite 600 • Schaumburg, IL 60173

Reinsurance Section in Orlando

Taking a break from planning the 2004 activities of the Reinsurance Section, members of the section council enjoy the Orlando sun.



Left to right: Jim Dallas (outgoing section chairperson), Mike Gabon, John Nigh, Leigh Harrington, Tim Tongson, Ronnie Klein, Richard Lau, Larry Warren, Jay Biehl, Hank Ramsey, Dean Abbott (newsletter editor)

Missing: Mel Young (incoming section chairperson)

Mike Gabon, section vice-chairperson, (left) presenting Jim Dallas, outgoing section chairperson, with a gift of appreciation for a job well done

If you are someone with good vision and enjoy the Internet, this may be the opportunity on which to set your sights.

The Reinsurance Section is looking to improve our section's Web site so that it provides a greater benefit to our members. To do this, we are looking for someone to become the Reinsurance Section Web Liaison. The Web Liaison will be responsible for content only—you do not have to be proficient in Web development! The Society of Actuaries' Web Department takes care of the design, the development of the site, and any other technical aspects. As Web Liason, you will interact with the Reinsurance Section Council and the SOA staff to explore how we can best use our Web site to provide a greater benefit to the membership and then oversee the implementation of the ideas.

If you are interested, please respond to Dean Abbott at *dean.abbott@ing-re.com* or 612-342-3815.