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EV for mortality rates as high as 2 percent more than the pricing mortality assumption is higher than coinsurance allowances that leverage the return up to more than 11 percent. If I'm able to secure reinsurance rates at or below my pricing mortality assumption, the EV is better than coinsurance allowances that leverage as high as 12 percent.

This example illustrates that by using EV analysis, consideration of both coinsurance and YRT reinsurance programs could prove insightful. However, you will notice, by comparing the 8 percent RDR columns, a different RDR rate will lead to different conclusions. Your company's final results will depend on your company's RDR rate.

It is also useful to analyze the effects of variations in results from that expected. For example, the effect of mortality fluctuations will be different for the coinsurance and YRT scenarios. You'll see that the YRT scenario creates more leverage on the EV results than does the coinsurance program, with EV being increased more when mortality is less than expected, and the opposite effect when mortality is greater than expected.

Conclusions

Despite the fact that coinsurance programs remove much of the strain and reserves, an analysis using embedded value could shed some light on the sensitivity of results under various combinations of YRT and coinsurance programs. Using YRT rather than coinsurance, may give you the ability to maximize your embedded value, while at the same time giving you the opportunity to leverage off your life reinsurers' expertise regarding mortality expectations. ☐

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AAA—Illustrations Work Group

by Michael S. Taht

Recently, the Life Products Committee of the American Academy of Actuaries "the Academy" formed a new work group. The Illustration Work Group "IWG" has been created to research and review issues with respect to life insurance illustrations. Based on the particular issue, the IWG will provide feedback to constituents such as the Academy's Life Products Committee, NAIC, LHATF and the Academy's general membership. The first issue that the IWG will explore is whether mortality improvement is implicitly being utilized in certain late duration mortality assumptions supporting some illustrations.

The explicit use of mortality improvement in the preparation of Illustration Actuarial Certifications is prohibited by the Model Illustration Regulation. However, there appears to be great divergence in the level of late duration cost of insurance rates on universal life and variable universal life products. While this may be the result of significantly different opinions on late duration mortality, the IWG is researching whether this is also the result of mortality improvement being implicitly assumed by some actuaries in setting mortality assumptions. The existence of significant differences in late duration mortality assumptions could also be due to the lack of late duration mortality experience on business issued in today's underwriting and mortality environment. No matter what the cause for the difference in late duration mortality is, if late duration mortality turns out to be significantly higher than assumed, there is a concern expressed by some actuaries that life insurance illustrations will not be supportable in the future.

The Life Insurance Illustrations Model Regulation's goal was, in part, to ensure that life insurance illustrations do not mislead purchasers of life insurance. Consistent with this goal, the IWG is researching and identifying situations where divergent opinions exist regarding late duration mortality and then providing further guidance (above and beyond the current ASOP and practice notes) to actuaries, in setting mortality assumptions at late durations.

For more information regarding the IWG, please contact its chairperson, Tracey Polsgrove at *tracey.polsgrove@hartfordlife.com.* ☐

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