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Life Valuation and Nonforfeiture Maximum Rates May Drop in 2006!

by Bradley D. Leonard

Editor's Note: This article was written in late March. By the time you read this, it will be late June 2005 and the 2006 valuation and nonforfeiture rates should be known for certain, since they are based on Moody's rates through the end of June.

Background

The maximum rates permitted for valuation and nonforfeiture have remained steady for life insurance since 1995. For long-term guarantees, it is routine to value life contracts at 4.5 percent and establish cash values for non-interest-sensitive contracts or other traditional guarantees at 5.75 percent. Your entire portfolio of traditional life products is probably based on this assumption. Although annuities are not covered in this article, the approach is similar but varies among the different classifications of annuities.

2006 Problem

With falling interest rates, it is extremely likely that starting January 2006, you will need to value

life products at 4.0 percent (instead of 4.5 percent) and, after a one year grace period, will be required to refile all life policies to reflect guaranteed cash values at 5.0 percent (instead of 5.75 percent). This may be required by formulae contained in the valuation and nonforfeiture laws, computed using reference rates ending June of the year prior to being effective. So, the rate is determined by June 2005 for an effective date of January 2006. Shown below (Table 1) are current and alternative rates required as of the end of February 2005.

See details of the calculation later in this article. You can follow the monthly Moody's trend by checking out the last two months rates at www.naic.org.

The Impact

If these maximum rates reduce, all new business in 2006 will require higher statutory reserves based on 4.0 percent. Higher cash values are not required until January 2007 to give time for re-filing. In the meantime, if rates go back up in 2007, higher cash value may not be required. Thus, at a minimum, valuation systems will have to recognize lower rates and profitability will need to be tested on all affected plans, with possible necessary product changes. This will definitely impact profitability, sometimes dramatically. If cash values increase, policy forms will need to be refilled and further profit analysis may require other changes. This, in turn, may require new plan codes, marketing material, agent compensation forms, applications, illustration changes, etc.

Strategies if Valuation Rate Drops to 4.0 percent.

The most obvious strategy is to consider all this in conjunction with your 2001 CSO strategies, both for profit offsets in many cases, as well as the administrative advantage of revising plans for both needs simultaneously. However, given that cash value increases are deferred until 2007 (and may be reversed), it might be prudent to either ignore higher cash value for 2006 issues or file two versions in order to be prepared either way in 2007. This all depends on other reasons for filings now and later.

If rates do stay lower, profitability testing and some design or other tweaks may be in order. Simple changes, not involving filing, include interest-credited rates, commissions, tighter underwriting (if otherwise justified), dividend formula and adjustment of other non-guaranteed elements. Premium changes only require minimal filing.

Perhaps there might be a way to design products that utilize guarantee durations of 20 years or less, such as a rider to a base life product. This would lower reserve requirements for situations where reducing face amount is acceptable. A limited term rider could even have an option of a monthly income benefit to better address both immediate and income needs at death, with pricing advantages over traditional term policies that renew beyond 20 years.

Whether due to 2001 CSO changes or accommodating 4 percent valuation rates, this may be an opportunity to fix or address any changes that

Table 1

| Guarantee Duration | 2004 maximum valuation rate | Moody's 12 mo average must exceed – to avoid drop | Moody's– July 2004 thru February 2005 | Moody's– March thru June 2005 needed to avoid drop | 2005 valuation rate based on Moody's = 5.89% | 2007 max non-forfeiture rate if 2006 drops |
|--------------------------------|-----------------------------|---|---------------------------------------|--|--|--|
| More than 20 years | 4.5% | 6.22% | 5.89% | 6.2892% | 4.00% | 5.00% |
| More than 10, less than 20 yrs | 4.75% | 6.06% | 5.89% | 6.41% | 4.25% | 5.25% |
| More than 20 years | 5.00% | 6.26% | 5.89% | 7.01% | 4.50% | 5.75% |

could work to your advantage. Do you have a product that is outdated, either from a marketing or pricing perspective? Perhaps you might even have a traditional life product on the shelf that has been uncompetitive and has enough margins to absorb the lower valuation rate, changing its competitive position in a post-2005 world. Maybe you could reduce or expand your product offerings, expand or contract distributions systems, switch emphasis to other lines of business, etc.

Determination of Maximum Valuation Rates

The maximum statutory valuation rate varies by the guarantee duration, defined as follows:

For life insurance, the guarantee duration is the maximum number of years the life insurance can remain in force on a basis guaranteed in the policy or under options to convert to plans of life insurance with premium rates or nonforfeiture values or both which are guaranteed in the original policy (Standard Valuation of Law)

The basic formula below produces a value of I which is rounded to the nearer 0.25 percent. If this resulting rate is at least 0.50 percent more or less than the prior year's rate, then it becomes the new rate; otherwise, the rate remains unchanged. If the calculation of I is exactly between two rounded rates, rounding is taken to the lower 0.25 percent.

There is one basic formula, which produces different results by guarantee duration due to the "weighting factors" contained in the formula.

$$I = .03 + W (R1 - .03) + W/2 (R2 - .09),$$

where R is the reference interest rate, defined as the lesser of the 12-month or 36-month average for the period ending on June 30, 2005, of Moodys Corporate Bond Yield Average—*Monthly Average Corporates*, as published by Moody's Investors Service, Inc. There is an exception permitted to have the period end on Dec. 31, with approval of the Director.

R1 is the lesser of R and .09.

R2 is the greater of R and .09.

W varies by guarantee duration as follows:

| Guarantee Duration | Weighting Factor (W) |
|------------------------------|----------------------|
| 10 years or less | .50 |
| More than 10 and not over 20 | .45 |
| More than 20 years | .35 |

The maximum nonforfeiture interest rate equals 125 percent of the calendar year statutory valuation interest rate as defined in the Standard Valuation Law, rounded to the nearest 0.25 percent. If falling exactly between two such percents, the rate is rounded to the higher 0.25 percent. At the option of the insurer, the rate used can be as high as the maximum rate in the immediately preceding calendar year. ●



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Letter to the Editor:

I enjoyed reading David Smith's article, "Gross Premium Reserve Mechanics." I'd like to bolster his presentation with two additional perspectives.

The first has to do with federal income tax. Historically, an application of the GPV concept usually has excluded the FIT from consideration. Since there are no "definition" police, the actuary needs to know when to include and exclude FIT. For a GAAP application, such as loss recognition, FIT is excluded. When a GPV is used to satisfy statutory regulatory asset adequacy testing, the FIT needs to be considered in drawing the final conclusion.

The second item has to do with assumptions. Generally, they should be the actuary's best estimate. A GPV done simultaneously for statutory and GAAP purposes should be done using the same set of assumptions.

Tom Herget, FSA