



SOCIETY OF ACTUARIES

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## Chairperson's Corner Where Do Great New Product Ideas Come From?

by Mark A. Milton

Occasionally, a great new product idea will come from "out of the blue." When this happens, you should not ignore it but neither should you rely on it to generate all the new product ideas for your company. This is like finding a dollar bill in the street. You're glad it's there, and you certainly can use it, but you wouldn't leave your house hoping to find one to pay for the groceries that day.

Good product developers typically have a very deliberate process that they use to generate new ideas. They use a balance of reactive and proactive approaches. Reactive approaches include listening to customers, agents, media, and management. They also proactively conduct market research and in-depth competitive analysis.

Good innovators also know where to look for new product ideas and they constantly monitor nine specific areas for changes that can be converted into new opportunities.

1. **Regulation and Tax Change.** A new nonforfeiture law would have a

*continued on page 5, column 1*

## Prescribed Statutory Interest Rates for the Valuation of Life Insurance and Annuity Products—Statutory Calculations

by David G. Whitemore

### Maximum Statutory Valuation Interest Rates

Moody's Investors Service has released its June 1998 Average Corporate Bond Yield Index. This index affects maximum interest rates under the 1980 Amendments to the Standard Valuation and Nonforfeiture Laws. This article reports the maximum statutory valuation and nonforfeiture interest rates for 1999 issues of selected life insurance products and the maximum statutory valuation

interest rates for 1998 issues of selected annuity products.

The maximum statutory valuation interest rates for some typical insurance products are shown in Table 1.

The 1999 maximum statutory valuation interest rates for life insurance products with guarantee durations of over 20 years are the same as 1998. The rates dropped 50 basis points for products with guarantee durations of 20 years or less.

*continued on page 4, column 1*

TABLE 1  
Maximum Statutory Valuation Interest Rates

Year of Issue	Whole Life Insurance	Typical Single-Premium Deferred Annuity	Single-Premium Immediate Annuity
1992	5.50%	6.25%	7.75%
1993	5.00	5.75	7.00
1994	5.00	5.50	6.50
1995	4.50	6.00	7.25
1996	4.50	5.50	6.75
1997	4.50	5.50	6.75
1998	4.50	5.25	6.25
1999	4.50	N/A	N/A

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**Statutory Calculations**  
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The maximum statutory valuation interest rates for 1998 issues of annuities are all lower than those for 1997 issues. The reductions range from 25 to 50 basis points.

**Explanation of Interest Rate Calculations**

The maximum statutory valuation interest rates are dependent upon the values of "reference interest rates." Reference interest rates vary by product type and guarantee durations. Some reference interest rates for annuity products are calculated using the 12-month arithmetic mean of monthly corporate bond yield indices published by Moody's Investors Service for the period ending June 1998. Reference interest rates for all life insurance products and the other annuity products are calculated using the lesser of the 12-month and 36-month arithmetic means of those same corporate bond yield indices.

The 36 monthly indices used to calculate the reference interest rates are shown in Table 2.

These rates generate a 12-month mean of 7.11% and a 36-month mean of 7.47% for the period ending June 1998.

The reference interest rate is used in specified formulas for calculating the valuation interest rates for the various product types and the resulting value is rounded to the near 0.25%. For annuity products, this rounded value becomes the new maximum statutory valuation interest rate. For life insurance products, if the rounded value is not at least 0.50% different than the prior year's value, the maximum statutory valuation interest rate remains at the prior year's level.

Maximum nonforfeiture interest rates for life insurance products are calculated by multiplying the maximum statutory valuation interest rate by 125% and rounding to the near 0.25%. There is a one-year grace period for nonforfeiture interest rate changes—a new interest rate is optional for the following year but mandatory for the succeeding year.

**TABLE 2**  
**36-Monthly Indices**

July 1995	7.66%	January 1997	7.71%
August 1995	7.81	February 1997	7.59
September 1995	7.56	March 1997	7.83
October 1995	7.39	April 1997	7.99
November 1995	7.30	May 1997	7.86
December 1995	7.11	June 1997	7.68
January 1996	7.10	July 1997	7.42
February 1996	7.27	August 1997	7.48
March 1996	7.65	September 1997	7.40
April 1996	7.80	October 1997	7.26
May 1996	7.91	November 1997	7.13
June 1996	8.00	December 1997	7.03
July 1996	7.95	January 1998	6.89
August 1996	7.76	February 1998	6.95
September 1996	7.95	March 1998	7.00
October 1996	7.68	April 1998	6.99
November 1996	7.41	May 1998	6.98
December 1996	7.50	June 1998	6.83

**Maximum Statutory Valuation Interest Rates for Future Years' Issues**

The formulas used to determine maximum statutory valuation interest rates for life insurance products generally require large swings in yield indices before a change in the maximum valuation rate will occur. As stated before, the maximum statutory valuation interest rate for 1999 issues of whole life insurance products will be 4.50%. For the whole life maximum statutory valuation interest rate to change for 2000 issues, one of the following scenarios in Table 3 must occur.

**TABLE 3**

Target Maximum Statutory Valuation Interest Rate	Required 12-Month Mean for July 1998–June 1999
4.00%	6.21%
5.00%	10.22%

Recently, Moody's average corporate bond yields have been in the area of 7.00%. If the mean yield over the next 12-month period drops to 6.21%, a 4.00% maximum statutory valuation interest rate for 2000 issues of whole life insurance policies would be the result.

Annuity maximum statutory valuation interest rates are more volatile than those for life insurance. If the Moody's indices remain at current levels or drop slightly, an additional 25 basis point reduction in the maximum statutory valuation interest rates can be expected for 1999 issues of many annuities. If the Moody's indices increase, on average, by 25 basis points, maximum statutory valuation interest rates will increase for some annuities in 1999.

A complete listing of maximum statutory valuation interest rates for all life and annuity classifications is available from the editor of *Product Development News*.

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