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ection 7702 imposes two requirements that a contract must satisfy in order to be treated as a life insurance contract under the Internal Revenue Code (the "Code"). First, the contract must be a life insurance contract under the "applicable law." Second, the contract must meet at least one of two alternative actuarial tests, either the cash value accumulation test (CVAT) or the guideline premium limitation and cash value corridor test. As will be discussed in this article, the interaction of the section 7702 CVAT and state nonforfeiture laws (SNFLs) create a dual limitation on traditional life insurance contracts, with the CVAT limiting the maximum permissible cash value and the SNFL requiring a minimum cash surrender value. In effect, the nonforfeiture standards act as a "floor," while the section 7702 limitations serve to create a "ceiling" on permissible cash surrender values. In cases where the "floor" is above the "ceiling," a policy design cannot simultaneously satisfy both the state law nonforfeiture requirements and federal tax requirements for life insurance tax treatment. This dual limitation effectively eliminated from the market some of the plans that were sold before the effective date of section 7702 in 1984. Historically this generally resulted from limiting the permissible endowment periods or death benefit patterns (i.e., non-increasing) under the section 7702(e) computational rules, and not from the assumed interest rate. Thus, to date at least, section 7702 has typically not limited the sale of traditional "mainstream" permanent life insurance products. This article discusses the interaction of the section 7702 and nonforfeiture interest rates, and examines the possibility that traditional life insurance policies will, at some point in time, fail to qualify under the CVAT.

#### CVAT REQUIREMENTS AND THE NONFORFEI-TURE LAW

In order to meet the requirements of the CVAT, by the terms of the contract, the cash surrender value under the contract can at no time exceed the net single premium (NSP) required to fund the future insurance benefits to be provided under the contract.<sup>1</sup> A key element of the CVAT is that compliance must be by the *terms of the contract*. The actuarial limitations under section 7702 interact with the minimum nonforfeiture requirements of state law.<sup>2</sup> When the limitations were enacted in 1984, they were intended, in part, to accommodate many then-existing

THE INTERACTION OF SECTION 7702 AND THE NONFORFEITURE LAW: TROUBLE AHEAD FOR TRADITIONAL LIFE INSURANCE?

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life insurance products (and to deny life insurance treatment for others). As a consequence, this interaction is quite natural and, in fact, necessary. By creating a limitation that mirrors the nonforfeiture law, the actuarial standards in section 7702 codified many, but not all, policy designs that existed at the time section 7702 was enacted.

Standards limiting the mortality and interest assumptions permitted in computation of the allowable values, along with the future benefits to be taken into account, are used to give the limitations full meaning. By explicitly limiting the actuarial assumptions and the pattern of benefits to be used in the calculation, Congress prohibited the use of certain assumptions, such as very low interest rates, highly substandard mortality on standard cases, short endowment periods, and increasing death benefits that would increase the cash value relative to the death benefit and thereby undermine the purpose of the tests.

Minimum cash value requirements under the SNFL are computed using:

- 1. The pattern of guaranteed future benefits under the contract.
- 2. The contract nonforfeiture rate subject to statutory maximum interest rates.
- 3. Nonforfeiture mortality assumptions.

In contrast, the section 7702 definitional limitations are based on:

- 1. Generally non-increasing future benefits.
- 2. The contract nonforfeiture interest rate subject to a statutory minimum assumption (4 percent in the case of the CVAT).
- 3. "Reasonable" mortality assumptions.<sup>3</sup>

Although the section 7702 requirements are in some ways a "mirror image" of the nonforfeiture laws, one way in which they differ is the determination of the applicable interest rate. First, there is a tension between the tax law minimum and the nonforfeiture maximum with respect to the interest rate for traditional life insurance plans, as a lower interest rate increases the net premiums and cash values, while a higher rate converse-ly reduces net premiums and cash values. Thus, section 7702

seeks to set a minimum interest rate to limit permissible cash values, while the nonforfeiture law looks toward a maximum permissible rate to require minimum cash values. Second, the respective rates are set in a different way. While nonforfeiture interest is tied to the valuation rate, which in turn is based on Moody's Corporate Average, the section 7702 rates are fixed by statute at not less than 4 percent under the CVAT. In the current interest environment, if the maximum nonforfeiture interest rate falls below 4 percent, a traditional life insurance policy would not simultaneously meet the dual limitation.

## DETERMINATION OF THE NONFORFEITURE INTEREST RATES

Maximum nonforfeiture rates under the SNFL are equal to 125 percent of a contract's valuation rate (rounded to the nearest  $\frac{1}{4}$  percent). The valuation rates (I) are in turn based on a contract's calendar year of issue, using a formula based on Moody's Corporate Average:

$$I = 3\% + W x (R1 - 3\%) + (W/2) x (R2 - 9\%)$$

Where: W is a weighting factor based on the guaranteed duration of the contract (*i.e.*, the maximum number of years a

#### 8.00 7.00 6.00 Nonforfeiture Rate 5.00 4.00 3.00 2.00 1.00 0.00 922-06 925-06 928-06 931-06 934-06 937-06 940-06 943-06 949-06 952-06 955-06 958-06 961-06 964-06 967-06 970-06 973-06 982-06 988-06 991-06 946-06 976-06 979-06 985-06

EXHIBIT 1 Formula (Unrounded) Nonforfeiture Interest Rates contract can remain in force under its guarantees). It is equal to 35 percent for life insurance plans with guaranteed durations of 20 years or more.

R is the reference interest rate, equal to the lesser of the 36-month or 12-month average of the Moody's Corporate Average ending on June 30 of the year preceding the contract's issue year; R1 is the lesser of R and 9 percent, while R2 is the greater of R and 9 percent.

Thus, if R is equal to 6%, I equals  $3\% + 35\% \times (6\% - 3\%) = 4.05\%$ , which is 4.00% when rounded to the nearest <sup>1</sup>/<sub>4</sub> of 1 percent. However, no change is made to the valuation rate unless it represents a <sup>1</sup>/<sub>2</sub> percent change from the prior calendar year's rate. Currently, the maximum valuation rate (through 2012) for guaranteed durations of more than 20 years is 4 percent, while the corresponding nonforfeiture rate is 5 percent.

### HISTORICAL APPLICATION OF THE NONFOR-FEITURE INTEREST FORMULA

To provide a long-term view of the operation of the formulaic nonforfeiture interest rates, historical interest rate data was used to compute the rates which would have resulted had the

CONTINUED ON PAGE 18

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Christian DesRochers, FSA, MAAA, is an executive director, Insurance and Actuarial Advisory Services, with Ernst & Young LLP and may be reached at Chris. DesRochers@ ey.com. formula been applied for years prior to the adoption of the dynamic valuation and nonforfeiture rates through the 1980 Amendments to the Standard Valuation and Nonforfeiture Laws, as well as the years since.<sup>4</sup>

As Exhibit 1 indicates, the (unrounded) formula rates have been declining since early 1983 where the formula rates peaked at 7.5 percent. Note that it was during this period that the statutory rates under section 7702 were enacted. This provided a "spread" between the section 7702 CVAT rate and the nonforfeiture rate that has largely disappeared. At present, the formula nonforfeiture rate is slightly less than 5 percent. However, the formula rate would have been below 4 percent from 1941 to 1957. Using the historical rates as the base, it is clear that a long period of low interest rates is necessary to produce formulaic nonforfeiture rates less than 4 percent.

Another interesting item to consider is the interaction of rounding to the nearest <sup>1</sup>/<sub>4</sub> of a percent and the <sup>1</sup>/<sub>2</sub> percent change threshold, which is illustrated in Exhibit 2. If we apply both conditions and use June as the determination month consistent with the SNFL requirements (see the dashed line in Exhibit 2), the (rounded) formula nonforfeiture rate does not dip below 4 percent. However, if we use December as the determination month (see the solid line in Exhibit 2), the nonforfeiture rate is 3.75 percent from 1943 to 1959.

#### CONCLUSION

Given the historical precedent, it is certainly possible for a conflict to occur between the CVAT minimum interest rate and the nonforfeiture maximum interest rate, thus eliminating traditional life insurance from meeting the definition of life insurance under the Code. However, there is also an answer to the potential problem. With the development of the valuation manual for principle-based reserves (PBR), a change in the SNFL has been proposed by the NAIC to set a contract's nonforfeiture rate through the valuation manual, thus de-linking the valuation and nonforfeiture rates.5 The change would be effective "on or after the operative date of the valuation manual." Thus, although enacted for a different reason, a solution to the potential problem may be as simple as flooring the maximum formulaic nonforfeiture rate for life insurance policies to 4 percent through the operation of the valuation manual, which would eliminate the possibility of a conflict with the CVAT rates, and unlike a change to section 7702, appears to be already incorporated in the proposal for setting the valuation



#### EXHIBIT 2 Formula (Rounded) Nonforfeiture Interest Rates

interest rates as a part of changes needed to accommodate PBR. Working through the states to change the SNFL, rather than trying to enact a change in section 7702, seems a simple and safer approach to the problem, given the difficulty of enacting any tax legislation in the current political environment.

The views expressed herein are those of the authors and do not necessarily reflect the views of Ernst & Young LLP.

#### END NOTES

- 1 See IRC § 7702(b)(1).
- <sup>2</sup> See S. Rpt. No. 98-169, at 573-74 (1984) (stating that, for purposes of section 7702, "rate or rates guaranteed on the issuance of the contract" means "the interest rate or rates reflected in the contract's nonforfeiture values assuming the use of the method in the Standard Nonforfeiture Law.").

- <sup>4</sup> For the analysis, the Moody's Corporate Average was approximated as the average of the Moody's Aaa and Baa rates, as reported on FRED, the website of the Federal Reserve Bank of St. Louis. The rates shown were not rounded, and are reported as monthly values.
- <sup>5</sup> Revisions to Model 808, NAIC Draft, 8/2/11.

<sup>&</sup>lt;sup>3</sup> Reasonable mortality for any given contract is, by statute, generally prohibited from exceeding mortality determined using the section 807(d) "prevailing commissioners" standard tables" (CSO) for mortality and morbidity as of the time of the contract's issuance, unless Treasury Regulations prescribe otherwise. The prevailing tables are the most recent tables prescribed by the NAIC and allowed to be used for valuation purposes in at least 26 states.