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Comments from the Chair

by Deanne L. Osgood

I would like to congratulate Larry Stern on a successful term as Chairman of the Product Development Section Council! The Council made great strides in communicating with the membership and engaging members in Section activities. Under Larry's leadership, the Council developed a Section Web site, conveniently accessed through the Society of Actuaries site. Also, we successfully utilized the "blast fax" technology to obtain input from our members on various topics and to recruit speakers and other volunteers. *Thirty-five* individuals expressed interest in running for election to the Council for the 2001 term. This is a record for us! We hope that the interest and participation in Section activities continues.

Although Larry has remained active in the Section as a "Friend of the Council," his three-year term expired with the Annual Meeting in 2000. Additional retiring members include: Boris Brizeli and Kathy Anderson, Council Secretary. Also, we had an unusual year where we lost two valuable members, Barry Jacobson and Lilia Sham, during the second year of their three-year terms.

In addition to her duties as Secretary, Kathy represented the Council on the Life Practice Committee of the Society of Actuaries. Barry, Lilia, and Larry, in addition to existing Council member Ken McCullum, were instrumental in designing and executing the successful Distribution Economics

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New Flexibility for VUL Product Design in New York State
Surrender Charge Limits Revisited

by Robert A. Hafner

Background

In the course of preparing a non-forfeiture compliance demonstration memorandum for a client, we developed an interpretation of the surrender charge limitations specified in New York's Regulation 77, which increases the maximum allowable surrender charges for renewal years. The amount by which renewal year surrender charges may be increased under this interpretation depends on the product design and, in particular, the amount and timing of "deferred acquisition and other charges" as defined by 11 NYCRR 54.7(b)(1)(xiii). This interpretation was presented to a representative of the New York State Insurance Department who accepted the interpretation after consulting with his superiors and departmental attorneys.

Foundation

Variable universal life non-forfeiture standards are specified in 11 NYCRR 54.7(b) by limiting policy surrender charges. The maximum initial surrender charges allowed are specified by one of two alternative limitations as found in subparagraphs (b)(2)(i) and (b)(2)(ii). The maximum renewal year surrender charges allowed are specified in paragraph (b)(3) as reductions to the maximum initial surrender charge established in paragraph (b)(2).

11 NYCRR 54.7(b)(3) reads as follows: "Any surrender charge in paragraph (2) of this subdivision must be such that *at the end of any policy year* it does not exceed the maximum initial surrender charge that would be allowed multiplied by the ratio of" [temporary life annuities immediate, i.e., $a_{x+t:15-t}$ /$a_{x:15}$] "based on the mortality table and interest rate used in calculating the net level whole life annual premiums. *Furthermore, any such surrender charge* may not exceed the maximum initial surrender charge less the sum of all deferred acquisition and other charges *made to date* against the policy value. For these annuity values, x is the age at which the surrender charge is created and t is the duration of the surrender charge." [emphasis mine]

Symbolically, these constraints may be expressed as follows:

I) $SC_t <= SC_0 * a_{x+t:15-t} / a_{x:15}$ for t = {1, 2, …, 14} and,

II) $SC_t <= SC_0 - \sum_{s=1}^{f(t)} DefAcq_{s+1}$ for t = {1, 2, …, 14}

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where

x = Policy issue age.

t = Policy duration at the end of policy year t.

SC_0 = Maximum allowable initial surrender charge as per 11 NYCRR 54.7(b)(2).

SC_t = Maximum allowable renewal surrender charges applicable to policy year t+1 as per 11 NYCRR 54.7(b)(3).

$a_{x+t:\overline{15-t}}$ = Temporary life annuity immediate for age x+t for 15 − t years.

$DefAcq_{s+1}$ = Deferred acquisition and other charges in policy year s+1.

Interpretation

This interpretation affects when "deferred acquisition and other charges" ($DefAcq_{s+1}$), if any, are recognized in the second condition of (b)(3) as represented by equation II above. In particular, this interpretation affects how the upper limit of the summation, denoted by f(t) in equation II, is defined. The commonly used definition is f(t) = t. However, we will show that the regulatory definition is actually f(t) = t−1, which delays the deduction of deferred acquisition and other costs by one year more than usually understood. The delayed deduction effectively increases the maximum renewal year surrender charges allowed in each year.

Rationale

This interpretation is arrived at by carefully tracing the logic of 11 NYCRR 54.7 as follows:

The opening clause of paragraph (3), "Any surrender charge in paragraph (2)," refers to the maximum initial surrender charge allowed (SC0) as specified by 11 NYCRR 54.7(b)(2). The first sentence of paragraph (3) goes on to specify that renewal year surrender charges are not allowed to exceed the initial surrender charge as amortized by the ratio of temporary life annuity immediate factors as expressed by equation I above. The "at the end of any policy year" clause of paragraph (3) together with the notation for the temporary life annuities unambiguously establishes the calculation timing for SCt as being determined at the end of policy years t = {1, 2, …, 14}. The surrender charge limits, SCt, so determined apply prospectively to policy years t+1. For example, SC1 is determined at the end of policy year one but applies to policy year two which is the first renewal year.

The second limit, as specified in the second sentence of paragraph (3), is the initial surrender charge, SC0, reduced by "the sum of deferred acquisition and other charges *made to date*…" as expressed by equation II. The opening clause, "Furthermore, any such surrender charge," indicates that the limitations which follow modify the antecedent surrender charge limits specified by the preceding sentence. In other words, the renewal year surrender charge limits specified in the first sentence are being modified, or further limited, by the conditions of the second sentence. Consequently, the timing specified by the *"made to date"* clause depends on and must be the same as the timing established for the calculation of SCt in the first sentence of paragraph (3), which occurs *"at the end of any policy year"* for policy years 1-14.

The consequence of the timing being controlled by the antecedent limitation becomes evident when the definition of "deferred acquisition and other charges" given in 11 NYCRR 54.7(b)(1)(xiii) is noted, which reads as follows: "Deferred acquisition and other charges are acquisition and other charges deducted from the policy value *after the first policy year*." So, by definition, deferred acquisition and other charges do not exist until the commencement of the second policy year. Since SC1 is determined at the end of policy year one, which is before the commencement of the second policy year, it follows that there are no deferred acquisition and other charges to deduct when determining SC1. This final piece then ties the interpretation together and shows that the limit of summation in equation II must be defined as f(t) = t-1. Thus, when t=1 and f(t) = t−1 = 0 equation II degenerates to SC1 <= SC0 (because the upper limit of summation, f(t)=0, is less than the lower limit s=1.) Only beginning with the determination of SC2, the surrender charge limitation for the second renewal year (i.e., policy year three), will the surrender charge limit be reduced by deferred acquisition and other charges *"made to date"* in the second policy year.

Effect

Clearly, this interpretation will only be beneficial when your policy design contains deferred acquisition and other charges. In this case, the full effect will likely be somewhat dampened by the amortization constraint, expressed by equation I, which does not depend on optional policy cost structures and eliminates surrender charges beyond policy year 15. Because policy design nuances are usually driven more by market forces than by profit objectives per se the greatest value of this interpretation may be the additional design flexibility provided. The degree of flexibility introduced is indicated by policy designs we reviewed where this interpretation increased the renewal year surrender charges allowed by more than 15%.

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