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A Logical Hole in AG33 for Annuity Statutory Reserve Calculations

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A series of commercials asks people whether they want more cash. Apparently, everyone does except for an amazingly literate baby who doesn't. It might be surprising to actuaries that Actuarial Guideline 33 (AG33) as currently written actually doesn't assume for statutory reserve calculation purposes that the contract owner will want the highest present value (PV) in a meaningful situation.

AG33 requires each benefit available under an annuity contract to be individually categorized as a non-elective benefit or an elective benefit. While these categories are defined in AG33, here is a practical view: 1) For non-elective benefits, someone is pushing the contract owner through a door because they have died or some other incident occurred to them that is beyond their control; 2) For elective benefits, the perfectly informed contract owner is always calculating the PV and waiting for the optimal moment to use the benefit. Non-elective benefits are assumed to always be taken after the appropriate incidence has occurred and are assumed to never be compared to elective benefits; therefore, the PV of a non-elective benefit may be greater than, equal to, or less than the elective benefit that has the maximum PV.

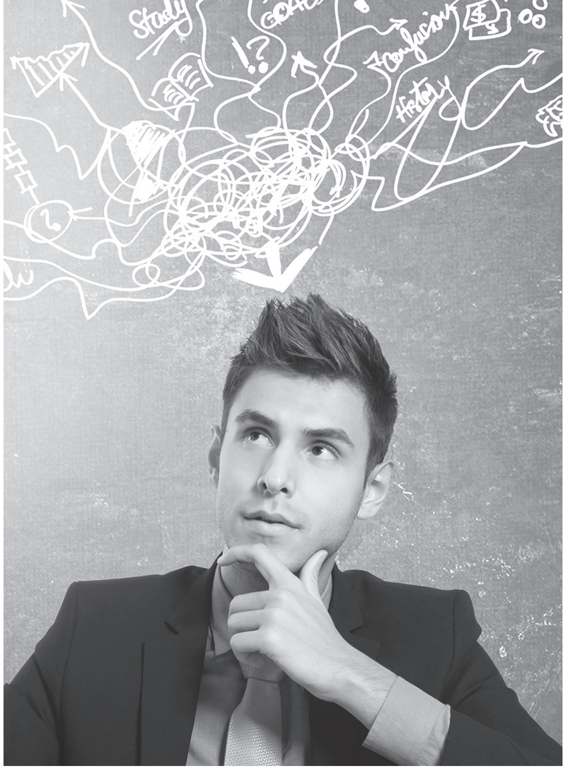
The reserve calculation worked well prior to annuity contracts that include guaranteed death benefits in excess of account values or guaranteed living benefits applying proceeds in excess of account values. AG33 was edited in 2009 to specify the valuation plan type to use after a guaranteed lifetime income benefit (GLIB) is elected both before and after the account value is depleted. However, no edit was made at that time as to whether it is still appropriate to continue to use all the non-elective benefit incidence rates in the reserve calculation after the account value is depleted.

After the account value is zero and the contract is still in force, it is not likely that the contract owner will make any kind of waiver of surrender charge claim (called "non-elective, non-mortality waiver benefits"), whether for nursing home confinement, terminal illness, unemployment, or anything else where the incidence does not automatically end the guaranteed living or death benefits. Why? The contract owner would be turning off future available guaranteed living or death benefits in exchange for nothing. It is difficult to imagine anyone will do this. What actually turns off any guaranteed living or death benefits is whatever is specified in the rider as terminating them. Usually, for a single life contract, it is death of the annuitant; and for a joint life contract, it is death of the second annuitant. Those deaths have to be reported or it is fraud; however, other non-elective incidences may not always be reported.

A contract owner might also stop making non-elective, non-mortality waiver benefit claims well before the account value is zero. For example, if an account value is $18,000 and annual life-contingent payments are $5,000, the contract owner will carefully consider whether collecting $18,000 now instead of later (assuming account value is also paid on death) is worth giving up $5,000 annual payments that continue for life, even after a non-elective incidence has occurred and mortality has significantly increased. Yet current AG33 assumes the contract owner will always take the account value even when GLIB annual payments that continue for life may have a substantially higher PV. A similar concept applies with any guaranteed death benefits in excess of account value.

Several alternative approaches could be used to correct this problem:

A. On a non-elective incidence basis, compare the non-elective, non-mortality waiver benefit to the elective benefit with the highest PV and use the higher PV of the two choices; otherwise ignore the incidence (ignoring the non-elective, non-mortality waiver benefit can only increase the reserve).
B. Ignore non-elective, non-mortality waiver benefit incidence rates entirely (position for companies electing to not use non-elective, non-mortality waiver benefit incidence rates



knowing their use decreases reserves in aggregate).

C. Turn off non-elective, non-mortality waiver benefit incidence rates when the initial surrender charge period ends (the "cutoff" method).
D. Use another reasonable approach to turn off non-elective, non-mortality waiver benefit incidence rates at a duration when the contract still has significant account value remaining.
E. Turn off non-elective, non-mortality waiver benefit incidence rates when the account value is zero.

There are arguments for each of these positions. It is clear the actuary should not use non-elective, non-mortality waiver benefit incidence rates after the account value is zero. It is best operationally if there is one set of rules that applies whether or not guaranteed death benefits or guaranteed living benefits are present. Approach A is the only one involving picking the highest overall PV, while approaches B, C, D and E each turn off non-mortality, waiver non-elective benefit incidence rates in the reserve calculation at a point varying by the chosen approach when account value is greater than or equal to zero.

Approach C is closest to the traditional view of non-elective, non-mortality waiver incidence rates. Several published sample calculations have used the "cutoff" method, though not describing it precisely in that fashion. "Initial surrender charge period" means the surrender charge period in effect when the contract is originally issued, even if the contract has rolling surrender charges based on premium duration instead of contract duration or renews with an additional surrender charge schedule after some number of contract durations.

There are also Actuarial Guideline 43 (AG43) implications. Contract owners would not be expected to voluntarily lapse after the account value is zero even if the standard scenario as currently written allows a 2 percent lapse. A revision process for AG43 is ongoing that appears likely to, at a minimum, set lapse rates to 0 percent when the account value is depleted. In stochastic models, it should be assumed that, after the account value is depleted, contract owners will not make non-elective, non-mortality waiver benefit claims.

There may be implications for policy form filings. Specifying a benefit expiration point removes any potential inconsistency as to when to use non-elective incidence rates even without any AG33 edits; however, expiry may appear to be less consumer-friendly from a marketing perspective.

For AG33 itself, the industry may want to consider a revision specifying much more closely when non-elective benefit incidence rates are allowed. Emerging principle-based reserve standards will also need to appropriately consider this situation. In the meantime, actuaries may want to review their annuity statutory reserve calculation implementations, and carefully consider whether any contract owner would ever voluntarily call an insurance company to stop sending them contractually guaranteed payments in exchange for nothing.

The views expressed herein are those of the author and do not necessarily reflect the views of Security Benefit. ■