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Treatment of YRT reinsurance in Stochastic Exclusion Ratio Test

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Stochastic Exclusion Ratio Test (SERT)

$$SERT = \frac{b - a}{c} < 0.06$$

a = the adjusted deterministic reserve using the baseline economic scenario

b = the largest adjusted deterministic reserve under any of the other 15 economic scenarios

c = an amount calculated from the baseline economic scenario that represents the present value of benefits for the policies, *adjusted for reinsurance by subtracting ceded benefits* [emphasis added]

Consequently, YRT reinsurance will shrink c but may have only modest effect on b , a , and $b-a$, likely causing SERT to increase and possibly fail.



Proposed approach

“If SERT is less than 6.0% pre-YRT reinsurance, but is greater than 6.0% post- YRT reinsurance, the group of policies will still pass the Stochastic Exclusion Test if the company can demonstrate that the sensitivity of the adjusted deterministic reserve to economic scenarios is comparable pre- and post- YRT reinsurance.” (APF, new 6.A.2.c)

An “example of an acceptable demonstration” is offered (6.A.2.c.i)

$$\frac{\left(\frac{b-a}{a}\right)_{net}}{\left(\frac{b-a}{a}\right)_{gross}} \text{ times } \underbrace{\left(\frac{b-a}{c}\right)_{gross}}_{\text{this is SERT}_{gross}} < 0.06$$

And the possibility of other demonstrations is left open (6.A.2.c.ii).



Rationale for the proposed approach

- Avoids proposing a different denominator for the SERT (for example, a), because the Academy and regulators concluded that c was the most desirable denominator for the direct case, and have used that definition of c to benchmark the threshold value for the SERT of 0.06.
- Avoids creating different formulas for the SERT in the presence of coinsurance, YRT reinsurance, or other types of reinsurance, because such formulas would depend on a “named” reinsurance type behaving in a predictable, standard way.
- Executes the SERT gross and net, without just assuming that gross predicts net, or vice versa.
- Introduces a second-level demonstration—used when SERT passes gross, but fails net—that looks to the observed % increase in reserve for worst scenario versus baseline, which seems a fundamental regulatory concern.



A further observation

- As discussed, YRT reinsurance ceded on a block of business can inflate the SERT calculated for the block.
- Somewhat similarly, if YRT reinsurance is assumed by a company and then, for purposes of SERT calculation, electively aggregated with other non-YRT business written or assumed by the company, that aggregation may *deflate* the calculated SERT. This could possibly cause the segment to pass SERT, and avoid stochastic reserve calculation, when it otherwise would not.
- In our amendment cover, we state:
"We feel such aggregation is already addressed and would be impermissible under subparagraph A.2.b.i.3(c) of Section 6, which states that the company "[m]ay not group together contract types with significantly different risk profiles for purposes of calculating this ratio."



Questions?

