



AMERICAN ACADEMY of ACTUARIES

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February 9, 2022

Ben Slutsker, Chair
Valuation Manual (VM)-22 (A) Subgroup
National Association of Insurance Commissioners (NAIC)

Dear Mr. Slutsker,

The American Academy of Actuaries¹ Annuity Reserves and Capital Work Group (ARCWG) has recommended a reinvestment credit quality assumption consistent with the current VM-22 mix. The work group is recommending the VM-22 mix rather than the VM-20/VM-21 reinvestment mix because the VM-22 credit quality distribution is more representative of the actual investment practices of companies. Summarized below are the two different credit quality distributions:

- VM-20/VM-21: 50% AA, 50% A
- VM-22: 5% Treasury, 15% AA, 40% A, 40% BBB (Note: weights are spread out over the three rating notches for non-Treasuries)

The work group thought it might be useful in regulator deliberations to provide an analysis of the difference in the credit spreads net of conditional tail expectation 70 (CTE70) default costs between the VM-20/VM-21 and VM-22 reinvestment mix credit quality assumptions. To this end, the work group created the accompanying spreadsheet showing the credit spreads net of CTE70 defaults for the two reinvestment assumptions for securities with weighted average lives (WALs) of two years, five years, 10 years, and 30 years. The analysis was performed at two points in time: March 31, 2020 (spreads were above the long-term average) and March 31, 2021 (spreads were below the long-term average). Recall that the work group has recommended consistency in methodology with VM-20 and VM-21, so the net spreads grade to the long-term assumptions by year four in both cases. Table A is a summary of the difference between net spreads of the VM-22 mix less net spreads of the VM-20/VM-21 mix:

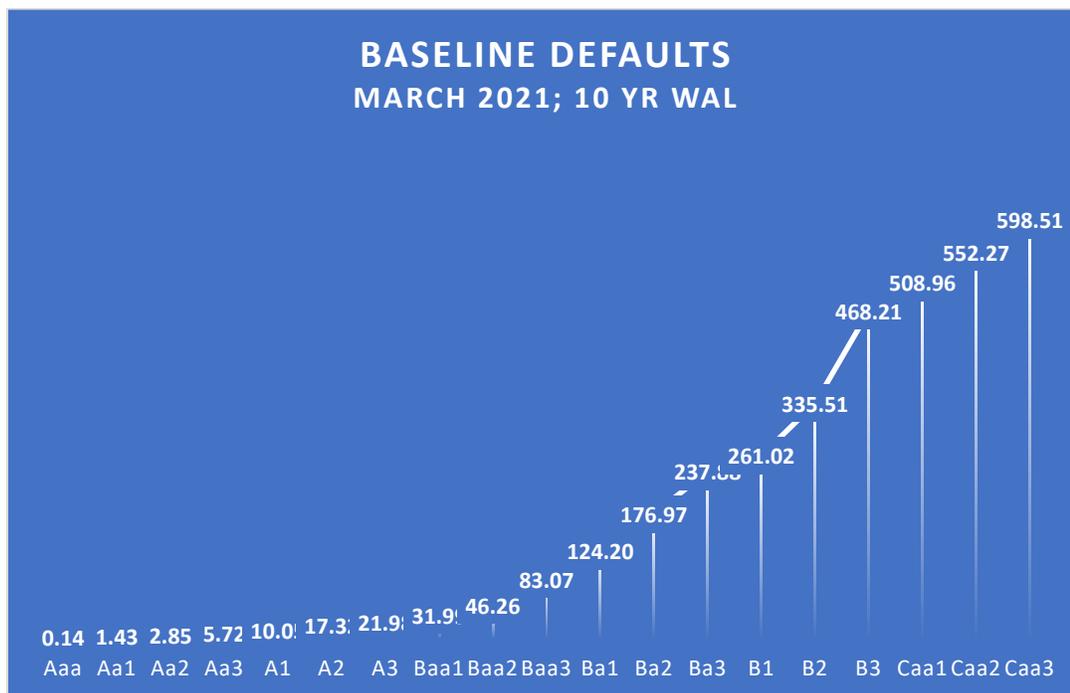
¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

Table A

Net Spread Differences for Reinvested Assets by Projection Year									
3/1/2021 ("Low" Spread Environment)					3/1/2020 ("High" Spread Environment)				
(VM-22) - (VM-20/VM-21 Spreads) Net of CTE70 Defaults in bps					(VM-22) - (VM-20/VM-21 Spreads) Net of CTE70 Defaults in bps				
Projection Year	2Y	5Y	10Y	30Y	Projection Year	2Y	5Y	10Y	30Y
1	21.8	16.3	11.8	6.7	1	36.5	47.3	41.1	34.2
2	21.3	16.9	12.7	8.3	2	30.6	37.1	31.7	26.3
3	20.9	17.6	13.6	10.0	3	24.7	26.9	22.2	18.3
4+	20.5	18.3	14.5	11.6	4+	18.8	16.7	12.8	10.4

Also note that the CTE70 default costs rise exponentially as credit quality decreases, significantly blunting the increase in net spreads (as Table A shows). This relationship is displayed in Table B for a 10-year WAL security.

Table B



That being said, fixed annuities rely on yields in the general account to a greater degree than many other products—e.g., variable annuities—meaning a small change in net spread can have a material impact on the reserve. Taking this into account, and due to the VM-22 distribution better reflecting actual industry investment practices of companies, the work group is recommending a reinvestment credit quality assumption consistent with the current VM-22 mix. We also note that this mix still has significant elements of conservatism, as it omits consideration of private placements, commercial mortgages, structured securities, and below-investment-grade bonds.

Please let us know if you have any follow-up inquiries in response to this analysis. Again, we appreciate the opportunity to present the fixed annuity framework and all of the efforts made by the NAIC VM-22 Subgroup to focus on this topic.

Sincerely,

Chris Conrad
Chairperson, Annuity Reserves and Capital Work Group
American Academy of Actuaries

CC: Reggie Mazyck, NAIC