Projected Life Insurance Valuation Interest Rates Based on Data Through March 2021

Historical Rates

Calendar	Guarantee Duration (Years)			
Year	≤ 10	$>10 \text{ and } \le 20$	> 20	
2010	4.50%	4.25%	4.00%	
2011	4.50%	4.25%	4.00%	
2012	4.50%	4.25%	4.00%	
2013	3.75%	3.75%	3.50%	
2014	3.75%	3.75%	3.50%	
2015	3.75%	3.75%	3.50%	
2016	3.75%	3.75%	3.50%	
2017	3.75%	3.75%	3.50%	
2018	3.75%	3.75%	3.50%	
2019	3.75%	3.75%	3.50%	
2020	3.75%	3.75%	3.50%	
2021	3.25%	3.25%	3.00%	

Projected Rates Assuming the Average Monthly Bond Yield is Equal to the March 2021 Rate (3.38%) for the Remaining Measurement Period

Calendar	Guarantee Duration (Years)			
Year	≤ 10	$>10 \text{ and } \le 20$	> 20	
2022	3.25%	3.25%	3.00%	
2023	3.25%	3.25%	3.00%	
2024	3.25%	3.25%	3.00%	
2025	3.25%	3.25%	3.00%	

The final valuation rates for 2022 will not be known until July 2021 when the average bond yield for June is published by Moody's Investors Service. The measurement period is nearly complete, so the projected valuation rates for 2022 are nearly certain at this point. The monthly average bond yield would have to increase by over 600 bp to trigger an increase in the 2022 valuation rates. A substantial decrease (over 400 bp) resulting in negative bond yields would be required to trigger a decrease in the valuation rate for long duration life insurance liabilities. A decrease of approximately 102 and 113 bp would trigger a reduction in the valuation rates for short and medium duration life insurance liabilities, respectively.

Looking forward to 2023, the monthly average bond yield would have to increase approximately 200 bp to trigger an increase in the valuation rates. Rates would have to decrease nearly 150 bp to trigger a reduction in the long duration valuation rate, but a decrease of over 60 bp would trigger a reduction in the short and medium duration valuation rates.



April 5, 2021 Actuarial Solutions Page 1

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Breakpoints for an Increase in Valuation Interest Rates

		Guarantee Duration (Years)		
		≤ 10	$>10 \text{ and } \le 20$	> 20
2022	Bond Yield	11.73%	13.40%	9.59%
	Change	8.35%	10.02%	6.21%
	Valuation Rate	3.75%	3.75%	3.50%
2023	Bond Yield	5.80%	6.14%	5.37%
	Change	2.42%	2.76%	1.99%
	Valuation Rate	3.75%	3.75%	3.50%
2024	Bond Yield	4.71%	4.90%	4.47%
	Change	1.33%	1.52%	1.09%
	Valuation Rate	3.75%	3.75%	3.50%
2025	Bond Yield	4.25%	4.39%	4.08%
	Change	0.87%	1.01%	0.70%
	Valuation Rate	3.75%	3.75%	3.50%

Breakpoints for a Decrease in Valuation Interest Rates

		Guarantee Duration (Years)		
		<u>≤ 10</u>	>10 and ≤ 20	> 20
2022	Bond Yield	2.36%	2.25%	-0.92%
	Change	-1.02%	-1.13%	-4.30%
	Valuation Rate	2.75%	2.75%	2.50%
2023	Bond Yield	2.74%	2.72%	1.92%
	Change	-0.64%	-0.66%	-1.46%
	Valuation Rate	2.75%	2.75%	2.50%
2024	Bond Yield	2.74%	2.72%	1.92%
	Change	-0.64%	-0.66%	-1.46%
	Valuation Rate	2.75%	2.75%	2.50%
2025	Bond Yield	2.75%	2.72%	1.92%
	Change	-0.63%	-0.66%	-1.46%
	Valuation Rate	2.75%	2.75%	2.50%

Breakpoints are based on an immediate change in the monthly average bond yield.



April 5, 2021 Actuarial Solutions Page 2