



Report Date: 12/10/2022

Policy Number: [REDACTED]  
 Policy Owner: [REDACTED]  
 Insured: Male  
 Carrier: [REDACTED]

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Illustrated Option Comparisons			
Illustration Description	-Pay Premium of \$4k per month until age 60. -DB Option stays Level, DB reduction in year 21. -Disbursements of \$140k per year starting at age 65	-Pay Premium of \$338 per month until year 59. -DB Option stays Level. -No disbursements.	-No Premiums. -DB Option stays Level, DB reduction in year 10. -No disbursements.
Policy Years in which Withdrawals / Loans taken	25 to 39	-	-
Level Withdrawal / Loan Amount	\$140,797	\$0	\$0
Policy Years in which premiums are paid	10 to 20	10 to 59	-
Premiums Paid	\$4,060 per month	\$338 per month	\$0
Specified Death Benefit	\$3,000,000	\$3,000,000	\$3,000,000
Death Benefit Schedule	1) Policy Year 9 to Maturity: Option 1 (Level) 2) Policy Year 21: DB reduced by \$1,190,000	1) Policy Year 9 to Maturity: Option 1 (Level)	1) Policy Year 9 to Maturity: Option 1 (Level) 2) Policy Year 10: DB reduced by \$401,900

CSV and DB IRR Summary			
Illustration Description	-Pay Premium of \$4k per month until age 60. -DB Option stays Level, DB reduction in year 21. -Disbursements of \$140k per year starting at age 65	-Pay Premium of \$338 per month until year 59. -DB Option stays Level. -No disbursements.	-No Premiums. -DB Option stays Level, DB reduction in year 10. -No disbursements.
Policy Year	Age of Insured at End of Year	Tax-free CSV IRR at policy year 40	
40	81	4.44%	2.03%
			2.16%
Policy Year	Age of Insured at End of Year	Tax-free DB IRR assuming death at end of policy year 40	
40	81	4.59%	6.13%
			7.39%



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**Detailed CSV and DB IRR Comparisons by Year**

Illustration Description	-Pay Premium of \$4k per month until age 60. -DB Option stays Level, DB reduction in year 21. -Disbursements of \$140k per year starting at age 65	-Pay Premium of \$338 per month until year 59. -DB Option stays Level. -No disbursements.	-No Premiums. -DB Option stays Level, DB reduction in year 10. -No disbursements.
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Policy Year	Age of Insured at End of Year	Tax-free CSV IRR		
9	50	1.12%	1.18%	1.18%
10	51	1.35%	1.47%	1.47%
11	52	1.60%	1.72%	1.72%
12	53	1.74%	1.86%	1.86%
13	54	1.84%	1.94%	1.94%
15	56	1.98%	2.04%	2.00%
20	61	2.19%	2.15%	2.04%
25	66	2.46%	2.20%	2.15%
30	71	2.67%	2.24%	2.20%
35	76	3.83%	2.16%	2.24%
40	81	4.44%	2.03%	2.16%
45	86	4.43%	1.81%	2.03%
50	91	4.41%	1.45%	1.81%
55	96	4.41%	0.65%	1.45%
60	101	4.41%	-100.00%	0.65%

Policy Year	Age of Insured at End of Year	Tax-free DB IRR assuming death at end of given policy year		
9	50	690.29%	667.70%	667.70%
10	51	174.78%	176.55%	176.55%
11	52	92.90%	96.75%	96.75%
12	53	61.60%	65.95%	65.95%
13	54	45.31%	49.83%	49.83%
15	56	28.74%	33.32%	39.96%
20	61	13.60%	18.05%	33.32%
25	66	5.58%	12.28%	18.05%
30	71	4.85%	9.26%	12.28%
35	76	4.61%	7.39%	9.26%
40	81	4.59%	6.13%	7.39%
45	86	4.56%	5.22%	6.13%
50	91	4.51%	4.53%	5.22%
55	96	4.41%	4.00%	4.53%
60	101	4.41%	3.57%	4.00%



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**Comparison of Policy Charges with Industry Values**

Age of Insured at End of Year	Current Policy Per 1000 Total Charge at Given Age	Industry Policy per 1000 Total Charge at Given Age	Current Policy Per 1000 Charges as % of Industry Average
50	1.38643	1.480356	93.66%
51	1.38272	1.504348	91.92%
52	1.37901	1.509530	91.35%
53	1.49632	1.599376	93.56%
54	1.62888	1.695037	96.10%
55	1.78337	1.795656	99.32%
60	3.07560	3.032688	101.41%
65	4.48704	5.250063	85.47%
70	6.76823	8.518301	79.46%
75	14.24694	14.269315	99.84%
80	23.31734	24.613590	94.73%
85	37.14848	49.432807	75.15%
90	57.79934	85.859166	67.32%
95	84.73969	134.725264	62.90%
100	118.76106	187.534389	63.33%



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**Actuarial Review**

We have reviewed the [REDACTED] policy provided to us by [REDACTED]. We have done analysis on 3 different illustrations to show how the policy can be structured in various ways to meet desired investment goals:

**Illustration 1:** Pay current premium schedule of \$4,130 per month until the client is 60. Keep death benefit option 1 until age 60 and then decrease it. Start taking the maximum withdrawal of \$140,797/year when the client is age 65. Assume 4.83% Net Return. This illustration focuses on maximum the after-tax value of the distributions.

**Illustration 2:** Pay no premiums for the life of the policy. Reduce the death benefit at age 50. Assume 4.83% Net Return. This illustration focuses on minimizing future premiums by reducing the death benefit.

**Illustration 3:** Pay premium schedule of \$338 per month for the life of the policy. No reduction in death benefit.. Assume 4.83% Net Return. This illustration focuses on minimizing future premiums without having to reduce the death benefit.

As the analysis shows, illustration 1 allows for the policy owner to take the highest tax-free amount from the policy. This is done such that the policy does not MEC. If the goal is to maximize after-tax retirement income, this design is what should be implemented.

Illustrations 2 and 3 focus on minimizing future premium payments. If the goal is to minimize future premium payments on the policy so that the client's money can be invested in other higher earning after-tax investments, then one of these designs should be implemented.

We looked at the costs to maintain the policy relative to other policies in the market place, and the current VUL policy has significantly lower expenses than other policies in the market.. That being said, like most VUL policies, the costs in the later years of the policy (age 95+) increase, so the client will want to make sure that the policy is max-funded by that point (in order to reduce the Cost of Insurance charges).

In terms of crediting strategy, it is important to take into consideration the gross expense fees of the allocation strategies relative to the gross returns of the strategy. For some of the client options, it appears that the gross expense fees will be excessive relative to the underlying strategy.

For example, the policy owner appears to have a 30% allocation to the PIMCO VIT All Asset Portfolio which has 85% of its portfolio allocated to bonds and is benchmarked against the Bloomberg Barclay's U.S. Treasury Inflated 1-10 Year note. The current yield-to-maturity on this benchmark is 0.66%. The gross expense fee of the PIMCO VIT All Asset Allocation appears to be 1.57% which means that the expense fee is nearly 3 times that of the underlying yield on the portfolio.

Investing in heavy bond allocations within the VUL policy is therefore a poor allocation choice due to the low-yield/high expense ratio of the underlying funds in addition to the insurance charges the client will be paying for the policy.

The ideal allocation for a VUL policy are assets that are high earning and which the policy owner would pay a high tax-rate on the gains if these assets were invested outside of the policy.

**Links:**

- 1. [https://www.tiaa.org/public/pdf/fact\\_sheets/iva-vul/ilvulpimcoaa.pdf](https://www.tiaa.org/public/pdf/fact_sheets/iva-vul/ilvulpimcoaa.pdf)
- 2. <https://www.bloomberg.com/quote/TIPS:LN>