

# Taming a Bear Market in Retirement

## How Life Insurance May Help



**Prepared For**  
Valued Client

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Many of the figures used in the following presentation are based upon both assumptions and data provided by you, including assumed growth rates on your existing assets. A summary of those assumptions can be found at the end of the presentation. Your furnishing of accurate data will help enhance the value of the analysis contained in this presentation.

**The decision to purchase life insurance should be based on long-term financial goals and the need for a death benefit. Life insurance is not an appropriate vehicle for short-term savings or short-term investment strategies. While the policy allows for loans, you should know that there may be little to no cash value available for loans in the policy's early years.**

This supplemental life insurance illustration summary is not valid unless accompanied by or preceded by a **MassMutual Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements and other important information.**

## **Basic Illustration #1**

## **Basic Illustration #2**

## Taming a Bear Market in Retirement

### How Life Insurance May Help

If you are saving for retirement, you are probably used to seeing the value of your accounts go up and down with the financial markets. However, once you retire, this may become of greater concern.

The order of returns may not matter when accumulating savings. But at retirement, when distributions are taken, the sequence of returns really matters. Take a look at a hypothetical \$1,000,000 investment over 25 years. The hypothetical returns in these two scenarios are exactly the same. The only difference is that they are in reverse direction.

Scenario 1: Order 1			Scenario 2: Reverse of Order 1		
	Hypothetical Annual Return*	Investment		Hypothetical Annual Return*	Investment
		\$1,000,000			\$1,000,000
1	10.0%	\$1,100,000	25	-7.0%	\$930,000
2	9.0%	\$1,199,000	24	-12.0%	\$818,400
3	-6.0%	\$1,127,060	23	5.0%	\$859,320
4	12.0%	\$1,262,307	22	-2.0%	\$842,134
5	25.0%	\$1,577,884	21	5.0%	\$884,240
6	7.0%	\$1,688,336	20	12.0%	\$990,349
7	-3.0%	\$1,637,686	19	9.0%	\$1,079,481
8	9.0%	\$1,785,078	18	17.0%	\$1,262,992
9	10.0%	\$1,963,585	17	12.0%	\$1,414,551
10	-7.0%	\$1,826,134	16	9.0%	\$1,541,861
11	6.0%	\$1,935,702	15	-5.0%	\$1,464,768
12	23.0%	\$2,380,914	14	7.0%	\$1,567,302
13	12.0%	\$2,666,624	13	12.0%	\$1,755,378
14	7.0%	\$2,853,287	12	23.0%	\$2,159,115
15	-5.0%	\$2,710,623	11	6.0%	\$2,288,662
16	9.0%	\$2,954,579	10	-7.0%	\$2,128,455
17	12.0%	\$3,309,128	9	10.0%	\$2,341,301
18	17.0%	\$3,871,680	8	9.0%	\$2,552,018
19	9.0%	\$4,220,131	7	-3.0%	\$2,475,457
20	12.0%	\$4,726,547	6	7.0%	\$2,648,739
21	5.0%	\$4,962,875	5	25.0%	\$3,310,924
22	-2.0%	\$4,863,617	4	12.0%	\$3,708,235
23	5.0%	\$5,106,798	3	-6.0%	\$3,485,741
24	-12.0%	\$4,493,982	2	9.0%	\$3,799,458
25	-7.0%	\$4,179,403	1	10.0%	\$4,179,403
Average Annual Return			Average Annual Return		
6.28%			6.28%		

This return pattern from years 1 to 25 was selected to illustrate the long-term impact that negative returns can have on a retirement account.

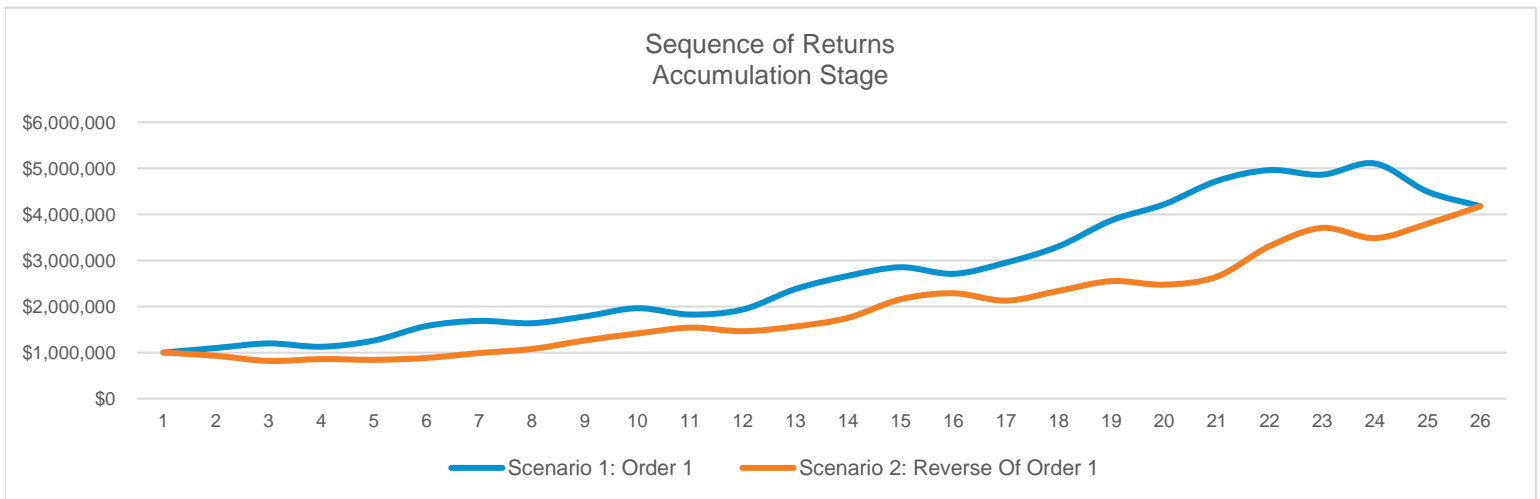
**Accumulation Stage:** The total market return at any given point in time while accumulating funds does not affect the average return, or how long retirement funds will last.

**Taking withdrawals does.**

**Decumulation Stage:** As you can see on the following page, it is primarily the timing of withdrawals during the **decumulation stage** that determines how long retirement funds last.

Taking withdrawals from your retirement accounts during market downturns can significantly reduce their value over the long term. This may ultimately impact the amount of income you will have available during retirement, as well as the amount remaining for your spouse or family.

\* The charts on this page and the next represent a hypothetical portfolio balance assuming hypothetical gross annual rates of returns. The returns and account values are hypothetical and do not reflect the fees and charges associated with an actual investment.



## Taming a Bear Market in Retirement

### How Life Insurance May Help

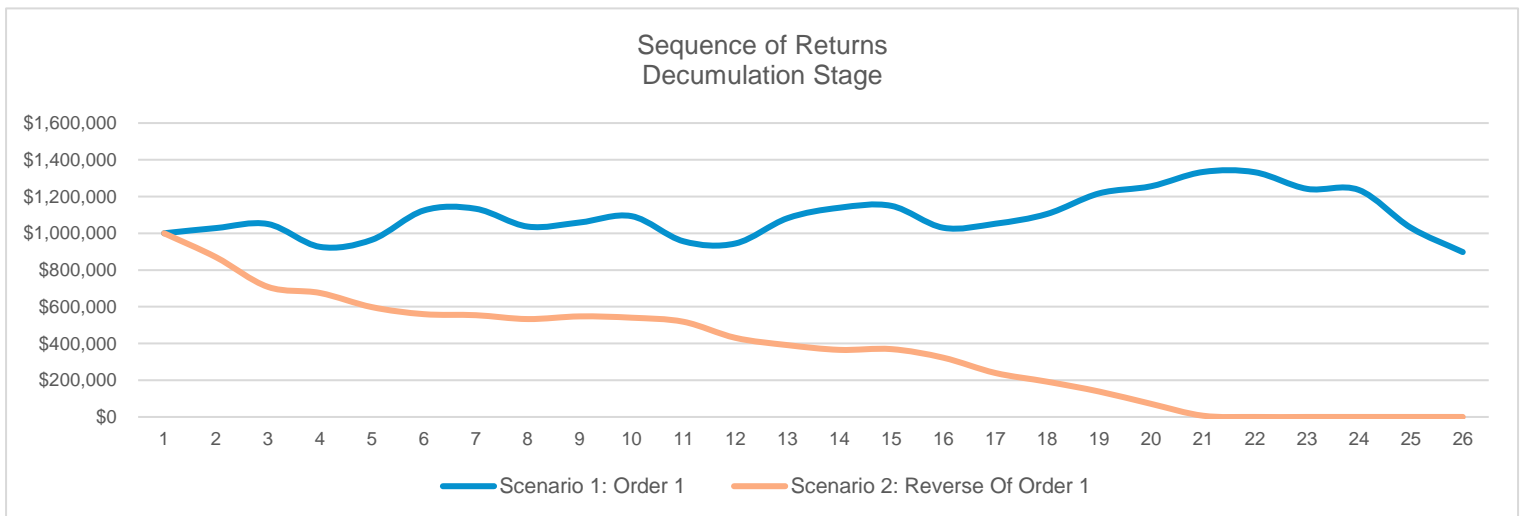
Take a look at a hypothetical \$1,000,000 investment over 25 years with annual withdrawals of \$65,000 in each scenario:

DECUMULATION STAGE - INCOME TAKEN						
Scenario 1: Order 1			Scenario 2: Reverse of Order 1			
	Hypothetical Annual Return	Investment	Income		Hypothetical Annual Return	Investment
		\$1,000,000				\$1,000,000
1	10.0%	\$1,028,500	\$65,000	25	-7.0%	\$869,550
2	9.0%	\$1,050,215	\$65,000	24	-12.0%	\$708,004
3	-6.0%	\$926,102	\$65,000	23	5.0%	\$675,154
4	12.0%	\$964,434	\$65,000	22	-2.0%	\$597,951
5	25.0%	\$1,124,293	\$65,000	21	5.0%	\$559,599
6	7.0%	\$1,133,443	\$65,000	20	12.0%	\$553,951
7	-3.0%	\$1,036,390	\$65,000	19	9.0%	\$532,956
8	9.0%	\$1,058,815	\$65,000	18	17.0%	\$547,509
9	10.0%	\$1,093,197	\$65,000	17	12.0%	\$540,410
10	-7.0%	\$956,223	\$65,000	16	9.0%	\$518,196
11	6.0%	\$944,696	\$65,000	15	-5.0%	\$430,537
12	23.0%	\$1,082,027	\$65,000	14	7.0%	\$391,124
13	12.0%	\$1,139,070	\$65,000	13	12.0%	\$365,259
14	7.0%	\$1,149,255	\$65,000	12	23.0%	\$369,319
15	-5.0%	\$1,030,042	\$65,000	11	6.0%	\$322,578
16	9.0%	\$1,051,896	\$65,000	10	-7.0%	\$239,547
17	12.0%	\$1,105,323	\$65,000	9	10.0%	\$192,002
18	17.0%	\$1,217,178	\$65,000	8	9.0%	\$138,432
19	9.0%	\$1,255,874	\$65,000	7	-3.0%	\$71,229
20	12.0%	\$1,333,779	\$65,000	6	7.0%	\$6,665
21	5.0%	\$1,332,218	\$65,000	5	25.0%	\$0
22	-2.0%	\$1,241,874	\$65,000	4	12.0%	\$0
23	5.0%	\$1,235,717	\$65,000	3	-6.0%	\$0
24	-12.0%	\$1,030,231	\$65,000	2	9.0%	\$0
25	-7.0%	\$897,665	\$65,000	1	10.0%	\$0

In scenario 2, money runs out because the *sequence* of returns matters when taking withdrawals.

In a market downturn, instead of taking distributions from a retirement account that has been affected by a “hit” in value, you may consider taking tax-preferred distributions from your existing life insurance policy that is not tied directly to the market--giving the investment account time to recover.

Accessing the cash value of a life insurance policy can be structured so that tax-advantaged distributions are taken, up to the cost basis in the policy, after which tax-advantaged loans are taken.<sup>1</sup>



<sup>1</sup>Distributions under the policy (including cash dividends and partial/full surrenders) are not subject to taxation up to the amount paid into the policy (cost basis). If the policy is a Modified Endowment Contract, policy loans and/or distributions are taxable to the extent of gain and are subject to a 10 percent tax penalty if the policyowner is under age 59½.

Access to cash values through borrowing or partial surrenders will reduce the policy's cash value and death benefit, increase the chance the policy will lapse, and may result in a tax liability if the policy terminates before the death of the insured.

## Taming a Bear Market in Retirement

### How Life Insurance May Help

#### You Can't Predict, You Can Prepare

Although you cannot predict the ups and downs of the market, or how long they will last, you can better prepare to weather changing economic conditions by having alternate sources of retirement income that are not directly impacted by market conditions. This may give you the ability to more effectively manage your retirement assets over the long term.

#### Adding a Conservative Element to Your Accumulation Strategy

A whole life insurance policy that you purchase to help protect your family today can also add a conservative element to your overall accumulation strategy. In addition to the death benefit protection it provides, a whole life policy builds cash value over time that increases each year and never declines in value due to market conditions. The cash value accumulates on a tax-deferred basis and may offer a dependable source of tax-favored supplemental retirement income that can help you better prepare for economic downturns during your retirement.<sup>1</sup> The following pages illustrate how a whole life insurance policy can be brought into retirement to help supplement retirement income in the years when the market is down, giving the portfolio time to recover.<sup>2</sup>

The decision to purchase life insurance should be based on long-term financial goals and the need for death benefit coverage. Life insurance is not an appropriate vehicle for short-term savings or short-term investment strategies. While the policy allows for loans, you should know that there may be little to no cash value available for loans in the policy's early years.

The following pages represent a hypothetical retirement account assuming the investment results of this account mirror the S&P 500 Index from 2002 to 2021. The returns and account values are hypothetical and do not reflect the fees and charges associated with an actual investment. The S&P 500 price index is a measure of common stock market performance in the U.S. and is an unmanaged index. Individuals cannot invest directly in an index.

<sup>1</sup> Distributions under the policy (including cash dividends and partial/full surrenders) are not subject to taxation up to the amount paid into the policy (cost basis). If the policy is a Modified Endowment Contract, policy loans and/or distributions are taxable to the extent of gain and are subject to a 10 percent tax penalty if the policyowner is under age 59½.

Access to cash values through borrowing or partial surrenders will reduce the policy's cash value and death benefit, increase the chance the policy will lapse, and may result in a tax liability if the policy terminates before the death of the insured.

<sup>2</sup> The portfolio returns and account values on the following pages are hypothetical and do not reflect the fees and charges associated with an actual investment.

## Taming a Bear Market in Retirement

How Life Insurance May Help

### Summary of Results at End of Distribution Period (Age 84)

<b>Hypothetical Retirement Portfolio</b>	\$5,000,000	(Non-Qualified Plan Account)
Retirement Age	65	
Targeted Retirement Income	\$250,000 / year	
Income Years	20	

#### DECUMULATION STAGE - INCOME TAKEN – ORDER 1

	WITHOUT LIFE INSURANCE	WITH INSURANCE
Total Retirement Income Needed	\$5,000,000	\$5,000,000
Income from Portfolio	\$5,000,000	\$4,000,000
Income from Insurance <sup>1</sup>	N/A	\$1,000,000
Total Income Taken	\$5,000,000	\$5,000,000
Portfolio Value at End of Distribution Period (Age 84)	\$4,637,534	\$7,510,998
<b>Amount of Portfolio Protection from Insurance<sup>2</sup></b>		<b>\$2,873,464</b>

#### DECUMULATION STAGE - INCOME TAKEN – REVERSE ORDER 1

	WITHOUT LIFE INSURANCE	WITH INSURANCE
Total Retirement Income Needed	\$5,000,000	\$5,000,000
Income from Portfolio	\$5,000,000	\$4,000,000
Income from Insurance <sup>1</sup>	N/A	\$1,000,000
Total Income Taken	\$5,000,000	\$5,000,000
Portfolio Value at End of Distribution Period (Age 84)	\$12,388,242	\$13,767,247
<b>Amount of Portfolio Protection from Insurance<sup>2</sup></b>		<b>\$1,379,004</b>

<sup>1</sup> Distributions under the policy (including cash dividends and partial/full surrenders) are not subject to taxation up to the amount paid into the policy (cost basis). If the policy is a Modified Endowment Contract, policy loans and/or distributions are taxable to the extent of gain and are subject to a 10 percent tax penalty if the policyowner is under age 59½.

Access to cash values through borrowing or partial surrenders will reduce the policy's cash value and death benefit, increase the chance the policy will lapse, and may result in a tax liability if the policy terminates before the death of the insured.

<sup>2</sup> This represents the difference in the portfolio value when income is taken from the whole life policy during years when the market is down instead of from the portfolio.

\*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

**Taming a Bear Market in Retirement**  
Decumulation Stage - Income Taken - **Order 1**

**Valued Client, Male 45, Ultra Preferred Non-Tobacco**  
Whole Life 10 Pay  
**Initial Death Benefit:** \$2,801,121    **Premium:** \$200,000  
**Dividend:** Current    **Dividend Option:** Paid Up Additions  
**Riders:** ABR, TIR

Yr	Age	Year	S&P 500	WITHOUT LIFE INSURANCE			WITH WHOLE LIFE INSURANCE						
				Portfolio Value Begin Year	Assumed Retirement Income Begin Year	Portfolio Value End of Year	Retirement Portfolio			Non-Guaranteed Life Insurance Values **			Amount of Portfolio Protection from Insurance <sup>4</sup>
				Portfolio Value	Assumed Retirement Income	Portfolio Value	Portfolio Value	Assumed Retirement Income	Portfolio Value	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	Net Death Benefit End Year	
20	65			-	-	5,000,000	-	-	5,000,000	-	3,611,258	5,200,918	-
21	66	2002	-23.37%	5,000,000	250,000	3,639,925	5,000,000	-	3,831,500	250,000	3,544,073	5,136,079	191,575
22	67	2003	26.38%	3,639,925	250,000	4,284,187	3,831,500	250,000	4,526,300	-	3,735,769	5,328,078	242,112
23	68	2004	8.99%	4,284,187	250,000	4,396,861	4,526,300	250,000	4,660,739	-	3,936,837	5,527,048	263,878
24	69	2005	3.00%	4,396,861	250,000	4,271,266	4,660,739	250,000	4,543,061	-	4,147,611	5,733,193	271,795
25	70	2006	13.62%	4,271,266	250,000	4,568,963	4,543,061	250,000	4,877,776	-	4,368,556	5,946,887	308,813
26	71	2007	3.53%	4,568,963	250,000	4,471,422	4,877,776	250,000	4,791,137	-	4,599,910	6,168,452	319,714
27	72	2008	-38.49%	4,471,422	250,000	2,596,597	4,791,137	-	2,947,028	250,000	4,581,817	6,138,200	350,431
28	73	2009	23.45%	2,596,597	250,000	2,896,874	2,947,028	250,000	3,329,481	-	4,824,771	6,366,700	432,607
29	74	2010	12.78%	2,896,874	250,000	2,985,144	3,329,481	250,000	3,473,039	-	5,078,977	6,604,389	487,895
30	75	2011	0.00%	2,985,144	250,000	2,735,144	3,473,039	250,000	3,223,039	-	5,344,716	6,851,569	487,895
31	76	2012	13.41%	2,735,144	250,000	2,818,402	3,223,039	250,000	3,371,723	-	5,622,398	7,108,437	553,321
32	77	2013	29.60%	2,818,402	250,000	3,328,649	3,371,723	250,000	4,045,754	-	5,912,249	7,375,149	717,104
33	78	2014	11.39%	3,328,649	250,000	3,429,307	4,045,754	250,000	4,228,090	-	6,214,828	7,651,976	798,783
34	79	2015	-0.73%	3,429,307	250,000	3,156,098	4,228,090	-	4,197,225	250,000	6,269,851	7,678,366	1,041,126
35	80	2016	9.54%	3,156,098	250,000	3,183,340	4,197,225	250,000	4,323,790	-	6,587,670	7,964,603	1,140,450
36	81	2017	19.42%	3,183,340	250,000	3,502,995	4,323,790	250,000	4,864,920	-	6,918,274	8,260,920	1,361,925
37	82	2018	-6.24%	3,502,995	250,000	3,050,008	4,864,920	-	4,561,349	250,000	7,001,445	8,307,119	1,511,341
38	83	2019	28.88%	3,050,008	250,000	3,608,650	4,561,349	250,000	5,556,467	-	7,347,349	8,613,248	1,947,817
39	84	2020	16.26%	3,608,650	250,000	3,904,767	5,556,467	250,000	6,169,298	-	7,706,062	8,930,596	2,264,531
40	85	2021	26.89%	3,904,767	250,000	4,637,534	6,169,298	250,000	7,510,998	-	8,077,614	9,259,580	2,873,464
<b>Totals:</b>					5,000,000			4,000,000		1,000,000			

<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. <sup>4</sup> This column represents the difference in the portfolio value when income is taken from the whole life policy instead of from the portfolio. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

**Taming a Bear Market in Retirement**  
Decumulation Stage - Income Taken - **Reverse Order 1**

**Valued Client, Male 45, Ultra Preferred Non-Tobacco**  
Whole Life 10 Pay  
**Initial Death Benefit:** \$2,801,121    **Premium:** \$200,000  
**Dividend:** Current    **Dividend Option:** Paid Up Additions  
**Riders:** ABR, TIR

Yr	Age	Year	S&P 500	WITHOUT LIFE INSURANCE			WITH WHOLE LIFE INSURANCE						
				Portfolio Value Begin Year	Assumed Retirement Income Begin Year	Portfolio Value End of Year	Retirement Portfolio			Non-Guaranteed Life Insurance Values **			Amount of Portfolio Protection from Insurance <sup>4</sup>
				Portfolio Value Begin Year	Assumed Retirement Income Begin Year	Portfolio Value End of Year	Portfolio Value Begin Year	Assumed Retirement Income	Portfolio Value End Year	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	Net Death Benefit End Year	
20	65			-	-	5,000,000	-	-	5,000,000	-	3,611,258	5,200,918	-
21	66	2021	26.89%	5,000,000	250,000	6,027,275	5,000,000	250,000	6,027,275	-	3,804,623	5,396,629	-
22	67	2020	16.26%	6,027,275	250,000	6,716,660	6,027,275	250,000	6,716,660	-	4,007,315	5,599,624	-
23	68	2019	28.88%	6,716,660	250,000	8,334,231	6,716,660	250,000	8,334,231	-	4,219,841	5,810,053	-
24	69	2018	-6.24%	8,334,231	250,000	7,579,775	8,334,231	-	7,814,175	250,000	4,182,008	5,767,590	234,400
25	70	2017	19.42%	7,579,775	250,000	8,753,218	7,814,175	250,000	9,033,138	-	4,404,405	5,982,735	279,920
26	71	2016	9.54%	8,753,218	250,000	9,314,425	9,033,138	250,000	9,621,049	-	4,637,272	6,205,814	306,625
27	72	2015	-0.73%	9,314,425	250,000	8,998,254	9,621,049	-	9,550,816	250,000	4,620,755	6,177,139	552,562
28	73	2014	11.39%	8,998,254	250,000	9,744,680	9,550,816	250,000	10,360,179	-	4,865,353	6,407,282	615,498
29	74	2013	29.60%	9,744,680	250,000	12,305,106	10,360,179	250,000	13,102,792	-	5,121,271	6,646,683	797,686
30	75	2012	13.41%	12,305,106	250,000	13,671,696	13,102,792	250,000	14,576,351	-	5,388,795	6,895,648	904,655
31	76	2011	0.00%	13,671,696	250,000	13,421,696	14,576,351	250,000	14,326,351	-	5,668,337	7,154,376	904,655
32	77	2010	12.78%	13,421,696	250,000	14,855,038	14,326,351	250,000	15,875,309	-	5,960,127	7,423,026	1,020,270
33	78	2009	23.45%	14,855,038	250,000	18,029,920	15,875,309	250,000	19,289,444	-	6,264,725	7,701,874	1,259,524
34	79	2008	-38.49%	18,029,920	250,000	10,936,429	19,289,444	-	11,864,937	250,000	6,321,855	7,730,370	928,508
35	80	2007	3.53%	10,936,429	250,000	11,063,660	11,864,937	250,000	12,024,944	-	6,641,868	8,018,802	961,284
36	81	2006	13.62%	11,063,660	250,000	12,286,480	12,024,944	250,000	13,378,691	-	6,974,759	8,317,406	1,092,211
37	82	2005	3.00%	12,286,480	250,000	12,397,574	13,378,691	250,000	13,522,552	-	7,320,865	8,626,538	1,124,978
38	83	2004	8.99%	12,397,574	250,000	13,239,641	13,522,552	250,000	14,465,755	-	7,680,247	8,946,146	1,226,113
39	84	2003	26.38%	13,239,641	250,000	16,416,309	14,465,755	250,000	17,965,871	-	8,053,009	9,277,543	1,549,562
40	85	2002	-23.37%	16,416,309	250,000	12,388,242	17,965,871	-	13,767,247	250,000	8,178,652	9,360,618	1,379,004
<b>Totals:</b>					5,000,000			4,000,000		1,000,000			

<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. <sup>4</sup> This column represents the difference in the portfolio value when income is taken from the whole life policy instead of from the portfolio. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**



## Taming a Bear Market in Retirement

### Decumulation Stage - Income Taken - Order 1

For: Valued, Age 45, Male, Ultra Preferred Non-Tobacco  
MassMutual's Whole Life 10 Pay with Initial Death Benefit of \$2,801,121 & Initial Premium of \$200,000

Yr	Age	Year	S&P 500 Index	Retirement Portfolio			Non-Guaranteed Life Insurance Values **					
				Portfolio Value Begin Year	Assumed Retirement Income	Portfolio Value End Year	Annual Premium	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	IRR On Net Cash Value End Year <sup>2</sup>	Net Death Benefit End Year	
1	46			-	-	-	200,000	-	74,426	(62.79%)	2,819,437	
2	47			-	-	-	200,000	-	205,899	(36.89%)	2,852,977	
3	48			-	-	-	200,000	-	402,610	(18.66%)	2,902,140	
4	49			-	-	-	200,000	-	612,337	(10.41%)	2,967,123	
5	50			-	-	-	<b>200,000</b>	-	<b>835,962</b>	<b>(5.91%)</b>	<b>3,048,439</b>	
6	51			-	-	-	200,000	-	1,070,269	(3.26%)	3,139,394	
7	52			-	-	-	200,000	-	1,315,811	(1.55%)	3,240,269	
8	53			-	-	-	200,000	-	1,573,219	(0.38%)	3,351,459	
9	54			-	-	-	200,000	-	1,843,111	0.47%	3,473,183	
10	55			-	-	-	<b>200,000</b>	-	<b>2,126,293</b>	<b>1.11%</b>	<b>3,605,964</b>	
11	56			-	-	-	-	-	2,243,479	1.76%	3,740,440	
12	57			-	-	-	-	-	2,366,784	2.24%	3,879,783	
13	58			-	-	-	-	-	2,496,527	2.61%	4,024,255	
14	59			-	-	-	-	-	2,633,004	2.90%	4,174,070	
15	60			-	-	-	-	-	<b>2,776,504</b>	<b>3.13%</b>	<b>4,329,493</b>	
16	61			-	-	-	-	-	2,927,348	3.33%	4,490,762	
17	62			-	-	-	-	-	3,085,722	3.49%	4,658,045	
18	63			-	-	-	-	-	3,252,259	3.63%	4,831,905	
19	64			-	-	-	-	-	3,427,339	3.74%	5,012,781	
20	65			-	-	5,000,000	-	-	<b>3,611,258</b>	<b>3.85%</b>	<b>5,200,918</b>	
21	66	2002	-23.37%	5,000,000	-	3,831,500	-	250,000	3,544,073	3.93%	5,136,079	
22	67	2003	26.38%	3,831,500	250,000	4,526,300	-	-	3,735,769	4.01%	5,328,078	
23	68	2004	8.99%	4,526,300	250,000	4,660,739	-	-	3,936,837	4.08%	5,527,048	
24	69	2005	3.00%	4,660,739	250,000	4,543,061	-	-	4,147,611	4.14%	5,733,193	
25	70	2006	13.62%	<b>4,543,061</b>	<b>250,000</b>	<b>4,877,776</b>	-	-	<b>4,368,556</b>	<b>4.19%</b>	<b>5,946,887</b>	
26	71	2007	3.53%	4,877,776	250,000	4,791,137	-	-	4,599,910	4.24%	6,168,452	
27	72	2008	-38.49%	4,791,137	-	2,947,028	-	250,000	4,581,817	4.28%	6,138,200	
28	73	2009	23.45%	2,947,028	250,000	3,329,481	-	-	4,824,771	4.32%	6,366,700	
29	74	2010	12.78%	3,329,481	250,000	3,473,039	-	-	5,078,977	4.36%	6,604,389	
30	75	2011	0.00%	<b>3,473,039</b>	<b>250,000</b>	<b>3,223,039</b>	-	-	<b>5,344,716</b>	<b>4.39%</b>	<b>6,851,569</b>	
31	76	2012	13.41%	3,223,039	250,000	3,371,723	-	-	5,622,398	4.42%	7,108,437	
32	77	2013	29.60%	3,371,723	250,000	4,045,754	-	-	5,912,249	4.44%	7,375,149	
33	78	2014	11.39%	4,045,754	250,000	4,228,090	-	-	6,214,828	4.46%	7,651,976	
34	79	2015	-0.73%	4,228,090	-	4,197,225	-	250,000	6,269,851	4.48%	7,678,366	
35	80	2016	9.54%	<b>4,197,225</b>	<b>250,000</b>	<b>4,323,790</b>	-	-	<b>6,587,670</b>	<b>4.50%</b>	<b>7,964,603</b>	
<b>Totals</b>					<b>3,000,000</b>		<b>2,000,000</b>	<b>750,000</b>				

<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. <sup>5</sup> The Internal Rates of Return are a measure that can be used to evaluate performance and is based on the current dividend schedule. They are an amount at which outlays (out-of-pocket costs) up to that year must be compounded each year to generate the Net Cash Value. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

## Taming a Bear Market in Retirement

### Decumulation Stage - Income Taken - Order 1

For: Valued, Age 45, Male, Ultra Preferred Non-Tobacco  
MassMutual's Whole Life 10 Pay with Initial Death Benefit of \$2,801,121 & Initial Premium of \$200,000

Yr	Age	Year	S&P 500 Index	Retirement Portfolio			Non-Guaranteed Life Insurance Values **				
				Portfolio Value Begin Year	Assumed Retirement Income	Portfolio Value End Year	Annual Premium	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	IRR On Net Cash Value End Year <sup>5</sup>	Net Death Benefit End Year
36	81	2017	19.42%	4,323,790	250,000	4,864,920	-	-	6,918,274	4.51%	8,260,920
37	82	2018	-6.24%	4,864,920	-	4,561,349	-	250,000	7,001,445	4.53%	8,307,119
38	83	2019	28.88%	4,561,349	250,000	5,556,467	-	-	7,347,349	4.54%	8,613,248
39	84	2020	16.26%	5,556,467	250,000	6,169,298	-	-	7,706,062	4.55%	8,930,596
40	85	2021	26.89%	6,169,298	250,000	7,510,998	-	-	8,077,614	4.55%	9,259,580
41	86			-	-	-	-	-	8,461,106	4.56%	9,599,903
42	87			-	-	-	-	-	8,856,670	4.56%	9,952,666
43	88			-	-	-	-	-	9,263,779	4.56%	10,317,830
44	89			-	-	-	-	-	9,682,073	4.56%	10,695,759
45	90			-	-	-	-	-	10,111,253	4.56%	11,086,413
46	91			-	-	-	-	-	10,551,760	4.55%	11,489,844
47	92			-	-	-	-	-	11,004,540	4.55%	11,906,260
48	93			-	-	-	-	-	11,471,635	4.54%	12,335,494
49	94			-	-	-	-	-	11,955,097	4.53%	12,777,203
50	95			-	-	-	-	-	12,459,095	4.53%	13,230,437
51	96			-	-	-	-	-	12,990,726	4.52%	13,694,206
52	97			-	-	-	-	-	13,554,768	4.52%	14,167,515
53	98			-	-	-	-	-	14,163,188	4.52%	14,648,566
54	99			-	-	-	-	-	14,837,652	4.52%	15,134,004
55	100			-	-	-	-	-	15,617,237	4.54%	15,617,237
56	101			-	-	-	-	-	16,499,328	4.56%	16,499,328

Totals	4,000,000	2,000,000	1,000,000
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<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. <sup>5</sup> The Internal Rates of Return are a measure that can be used to evaluate performance and is based on the current dividend schedule. They are an amount at which outlays (out-of-pocket costs) up to that year must be compounded each year to generate the Net Cash Value. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

## Taming a Bear Market in Retirement

### Decumulation Stage - Income Taken - Reverse Order 1

For: Valued, Age 45, Male, Ultra Preferred Non-Tobacco  
MassMutual's Whole Life 10 Pay with Initial Death Benefit of \$2,801,121 & Initial Premium of \$200,000

Yr	Age	Year	S&P 500 Index	Retirement Portfolio			Non-Guaranteed Life Insurance Values **					
				Portfolio Value Begin Year	Assumed Retirement Income	Portfolio Value End Year	Annual Premium	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	IRR On Net Cash Value End Year <sup>5</sup>	Net Death Benefit End Year	
1	46			-	-	-	200,000	-	74,426	(62.79%)	2,819,437	
2	47			-	-	-	200,000	-	205,899	(36.89%)	2,852,977	
3	48			-	-	-	200,000	-	402,610	(18.66%)	2,902,140	
4	49			-	-	-	200,000	-	612,337	(10.41%)	2,967,123	
5	50			-	-	-	<b>200,000</b>	-	<b>835,962</b>	<b>(5.91%)</b>	<b>3,048,439</b>	
6	51			-	-	-	200,000	-	1,070,269	(3.26%)	3,139,394	
7	52			-	-	-	200,000	-	1,315,811	(1.55%)	3,240,269	
8	53			-	-	-	200,000	-	1,573,219	(0.38%)	3,351,459	
9	54			-	-	-	200,000	-	1,843,111	0.47%	3,473,183	
10	55			-	-	-	<b>200,000</b>	-	<b>2,126,293</b>	<b>1.11%</b>	<b>3,605,964</b>	
11	56			-	-	-	-	-	2,243,479	1.76%	3,740,440	
12	57			-	-	-	-	-	2,366,784	2.24%	3,879,783	
13	58			-	-	-	-	-	2,496,527	2.61%	4,024,255	
14	59			-	-	-	-	-	2,633,004	2.90%	4,174,070	
15	60			-	-	-	-	-	<b>2,776,504</b>	<b>3.13%</b>	<b>4,329,493</b>	
16	61			-	-	-	-	-	2,927,348	3.33%	4,490,762	
17	62			-	-	-	-	-	3,085,722	3.49%	4,658,045	
18	63			-	-	-	-	-	3,252,259	3.63%	4,831,905	
19	64			-	-	-	-	-	3,427,339	3.74%	5,012,781	
20	65			-	-	5,000,000	-	-	<b>3,611,258</b>	<b>3.85%</b>	<b>5,200,918</b>	
21	66	2021	26.89%	5,000,000	250,000	6,027,275	-	-	3,804,623	3.94%	5,396,629	
22	67	2020	16.26%	6,027,275	250,000	6,716,660	-	-	4,007,315	4.01%	5,599,624	
23	68	2019	28.88%	6,716,660	250,000	8,334,231	-	-	4,219,841	4.08%	5,810,053	
24	69	2018	-6.24%	8,334,231	-	7,814,175	-	250,000	4,182,008	4.14%	5,767,590	
25	70	2017	19.42%	<b>7,814,175</b>	<b>250,000</b>	<b>9,033,138</b>	-	-	<b>4,404,405</b>	<b>4.19%</b>	<b>5,982,735</b>	
26	71	2016	9.54%	9,033,138	250,000	9,621,049	-	-	4,637,272	4.24%	6,205,814	
27	72	2015	-0.73%	9,621,049	-	9,550,816	-	250,000	4,620,755	4.28%	6,177,139	
28	73	2014	11.39%	9,550,816	250,000	10,360,179	-	-	4,865,353	4.32%	6,407,282	
29	74	2013	29.60%	10,360,179	250,000	13,102,792	-	-	5,121,271	4.36%	6,646,683	
30	75	2012	13.41%	<b>13,102,792</b>	<b>250,000</b>	<b>14,576,351</b>	-	-	<b>5,388,795</b>	<b>4.39%</b>	<b>6,895,648</b>	
31	76	2011	0.00%	14,576,351	250,000	14,326,351	-	-	5,668,337	4.41%	7,154,376	
32	77	2010	12.78%	14,326,351	250,000	15,875,309	-	-	5,960,127	4.44%	7,423,026	
33	78	2009	23.45%	15,875,309	250,000	19,289,444	-	-	6,264,725	4.46%	7,701,874	
34	79	2008	-38.49%	19,289,444	-	11,864,937	-	250,000	6,321,855	4.48%	7,730,370	
35	80	2007	3.53%	<b>11,864,937</b>	<b>250,000</b>	<b>12,024,944</b>	-	-	<b>6,641,868</b>	<b>4.50%</b>	<b>8,018,802</b>	
<b>Totals</b>					<b>3,000,000</b>		<b>2,000,000</b>	<b>750,000</b>				

<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. <sup>5</sup> The Internal Rates of Return are a measure that can be used to evaluate performance and is based on the current dividend schedule. They are an amount at which outlays (out-of-pocket costs) up to that year must be compounded each year to generate the Net Cash Value. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

## Taming a Bear Market in Retirement

### Decumulation Stage - Income Taken - Reverse Order 1

For: Valued, Age 45, Male, Ultra Preferred Non-Tobacco  
MassMutual's Whole Life 10 Pay with Initial Death Benefit of \$2,801,121 & Initial Premium of \$200,000

Yr	Age	Year	S&P 500 Index	Retirement Portfolio			Non-Guaranteed Life Insurance Values **				
				Portfolio Value Begin Year	Assumed Retirement Income	Portfolio Value End Year	Annual Premium	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	IRR On Net Cash Value End Year <sup>5</sup>	Net Death Benefit End Year
36	81	2006	13.62%	12,024,944	250,000	13,378,691	-	-	6,974,759	4.51%	8,317,406
37	82	2005	3.00%	13,378,691	250,000	13,522,552	-	-	7,320,865	4.52%	8,626,538
38	83	2004	8.99%	13,522,552	250,000	14,465,755	-	-	7,680,247	4.53%	8,946,146
39	84	2003	26.38%	14,465,755	250,000	17,965,871	-	-	8,053,009	4.54%	9,277,543
40	85	2002	-23.37%	17,965,871	-	13,767,247	-	250,000	8,178,652	4.55%	9,360,618
41	86			-	-	-	-	-	8,566,408	4.55%	9,705,205
42	87			-	-	-	-	-	8,966,416	4.56%	10,062,411
43	88			-	-	-	-	-	9,378,156	4.56%	10,432,206
44	89			-	-	-	-	-	9,801,276	4.56%	10,814,962
45	90			-	-	-	-	-	10,235,487	4.55%	11,210,647
46	91			-	-	-	-	-	10,681,237	4.55%	11,619,321
47	92			-	-	-	-	-	11,139,480	4.54%	12,041,200
48	93			-	-	-	-	-	11,612,270	4.54%	12,476,129
49	94			-	-	-	-	-	12,101,666	4.53%	12,923,773
50	95			-	-	-	-	-	12,611,850	4.52%	13,383,192
51	96			-	-	-	-	-	13,149,927	4.52%	13,853,407
52	97			-	-	-	-	-	13,720,687	4.52%	14,333,434
53	98			-	-	-	-	-	14,336,110	4.52%	14,821,488
54	99			-	-	-	-	-	15,017,871	4.52%	15,314,223
55	100			-	-	-	-	-	15,805,061	4.53%	15,805,061
56	101			-	-	-	-	-	16,695,078	4.55%	16,695,078

Totals	4,000,000	2,000,000	1,000,000
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<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. <sup>5</sup> The Internal Rates of Return are a measure that can be used to evaluate performance and is based on the current dividend schedule. They are an amount at which outlays (out-of-pocket costs) up to that year must be compounded each year to generate the Net Cash Value. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

**Taming a Bear Market in Retirement**  
Decumulation Stage - Income Taken - **Order 1**  
**A Combined Example**

**Valued Client, Male 45, Ultra Preferred Non-Tobacco**  
Whole Life 10 Pay  
**Initial Death Benefit:** \$2,801,121    **Premium:** \$200,000  
**Dividend:** Current    **Dividend Option:** Paid Up Additions  
**Riders:** ABR, TIR

Yr	Age	Year	S&P 500	WITHOUT LIFE INSURANCE			WITH WHOLE LIFE INSURANCE							
				Portfolio Value Begin Year	Assumed Retirement Income Begin Year	Portfolio Value End of Year	Retirement Portfolio			Non-Guaranteed Life Insurance Values **			Combined	
							Portfolio Value	Assumed Retirement Income	Portfolio Value	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	Net Death Benefit End Year	Retirement Portfolio + Net Cash Value End Year	Retirement Portfolio + Net Death Benefit End Year
20	65			-	-	5,000,000	-	-	5,000,000	-	3,611,258	5,200,918	8,611,258	10,200,918
21	66	2002	-23.37%	5,000,000	250,000	3,639,925	5,000,000	-	3,831,500	250,000	3,544,073	5,136,079	7,375,573	8,967,579
22	67	2003	26.38%	3,639,925	250,000	4,284,187	3,831,500	250,000	4,526,300	-	3,735,769	5,328,078	8,262,069	9,854,378
23	68	2004	8.99%	4,284,187	250,000	4,396,861	4,526,300	250,000	4,660,739	-	3,936,837	5,527,048	8,597,576	10,187,787
24	69	2005	3.00%	4,396,861	250,000	4,271,266	4,660,739	250,000	4,543,061	-	4,147,611	5,733,193	8,690,672	10,276,254
25	70	2006	13.62%	4,271,266	250,000	4,568,963	4,543,061	250,000	4,877,776	-	4,368,556	5,946,887	9,246,332	10,824,663
26	71	2007	3.53%	4,568,963	250,000	4,471,422	4,877,776	250,000	4,791,137	-	4,599,910	6,168,452	9,391,047	10,959,589
27	72	2008	-38.49%	4,471,422	250,000	2,596,597	4,791,137	-	2,947,028	250,000	4,581,817	6,138,200	7,528,845	9,085,229
28	73	2009	23.45%	2,596,597	250,000	2,896,874	2,947,028	250,000	3,329,481	-	4,824,771	6,366,700	8,154,253	9,696,182
29	74	2010	12.78%	2,896,874	250,000	2,985,144	3,329,481	250,000	3,473,039	-	5,078,977	6,604,389	8,552,016	10,077,428
30	75	2011	0.00%	2,985,144	250,000	2,735,144	3,473,039	250,000	3,223,039	-	5,344,716	6,851,569	8,567,755	10,074,608
31	76	2012	13.41%	2,735,144	250,000	2,818,402	3,223,039	250,000	3,371,723	-	5,622,398	7,108,437	8,994,122	10,480,160
32	77	2013	29.60%	2,818,402	250,000	3,328,649	3,371,723	250,000	4,045,754	-	5,912,249	7,375,149	9,958,003	11,420,902
33	78	2014	11.39%	3,328,649	250,000	3,429,307	4,045,754	250,000	4,228,090	-	6,214,828	7,651,976	10,442,917	11,880,066
34	79	2015	-0.73%	3,429,307	250,000	3,156,098	4,228,090	-	4,197,225	250,000	6,269,851	7,678,366	10,467,076	11,875,591
35	80	2016	9.54%	3,156,098	250,000	3,183,340	4,197,225	250,000	4,323,790	-	6,587,670	7,964,603	10,911,460	12,288,394
36	81	2017	19.42%	3,183,340	250,000	3,502,995	4,323,790	250,000	4,864,920	-	6,918,274	8,260,920	11,783,194	13,125,841
37	82	2018	-6.24%	3,502,995	250,000	3,050,008	4,864,920	-	4,561,349	250,000	7,001,445	8,307,119	11,562,795	12,868,469
38	83	2019	28.88%	3,050,008	250,000	3,608,650	4,561,349	250,000	5,556,467	-	7,347,349	8,613,248	12,903,816	14,169,715
39	84	2020	16.26%	3,608,650	250,000	3,904,767	5,556,467	250,000	6,169,298	-	7,706,062	8,930,596	13,875,361	15,099,895
40	85	2021	26.89%	3,904,767	250,000	4,637,534	6,169,298	250,000	7,510,998	-	8,077,614	9,259,580	15,588,612	16,770,578
<b>Totals:</b>					5,000,000			4,000,000		1,000,000				

<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

## Taming a Bear Market in Retirement

Decumulation Stage - Income Taken - **Reverse Order 1**  
**A Combined Example**

**Valued Client, Male 45, Ultra Preferred Non-Tobacco**

Whole Life 10 Pay

**Initial Death Benefit:** \$2,801,121      **Premium:** \$200,000

**Dividend:** Current      **Dividend Option:** Paid Up Additions

**Riders:** ABR, TIR

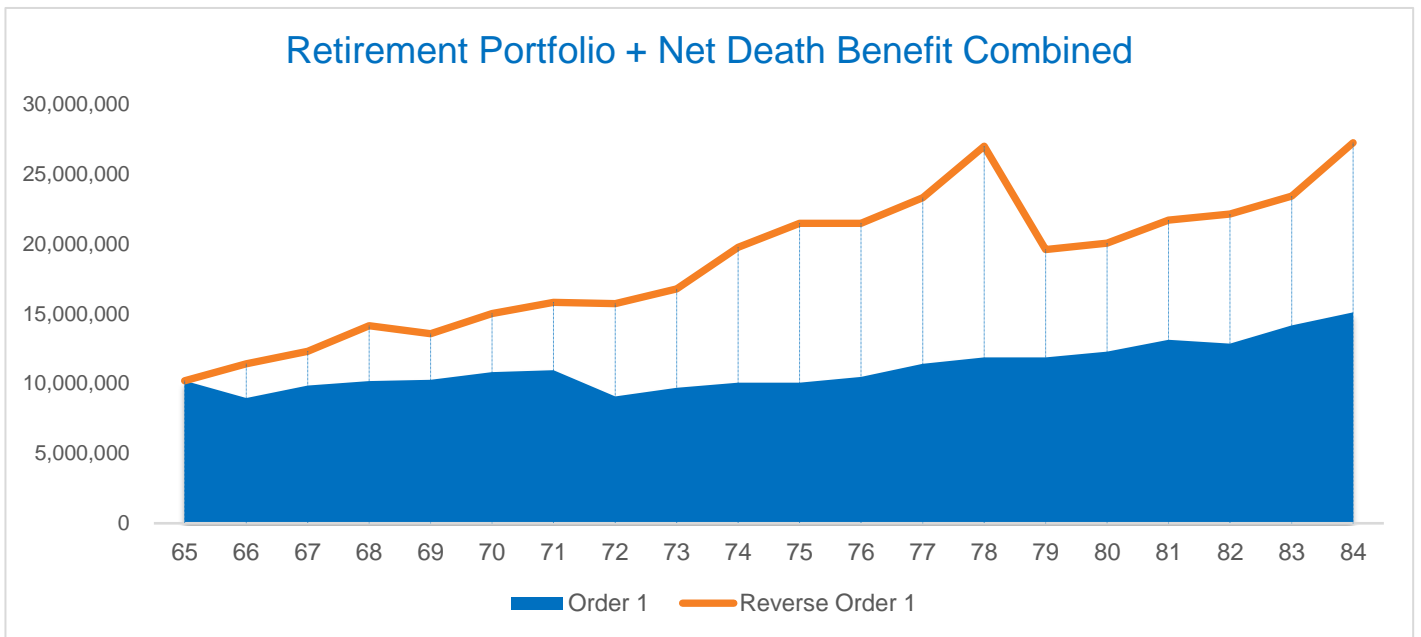
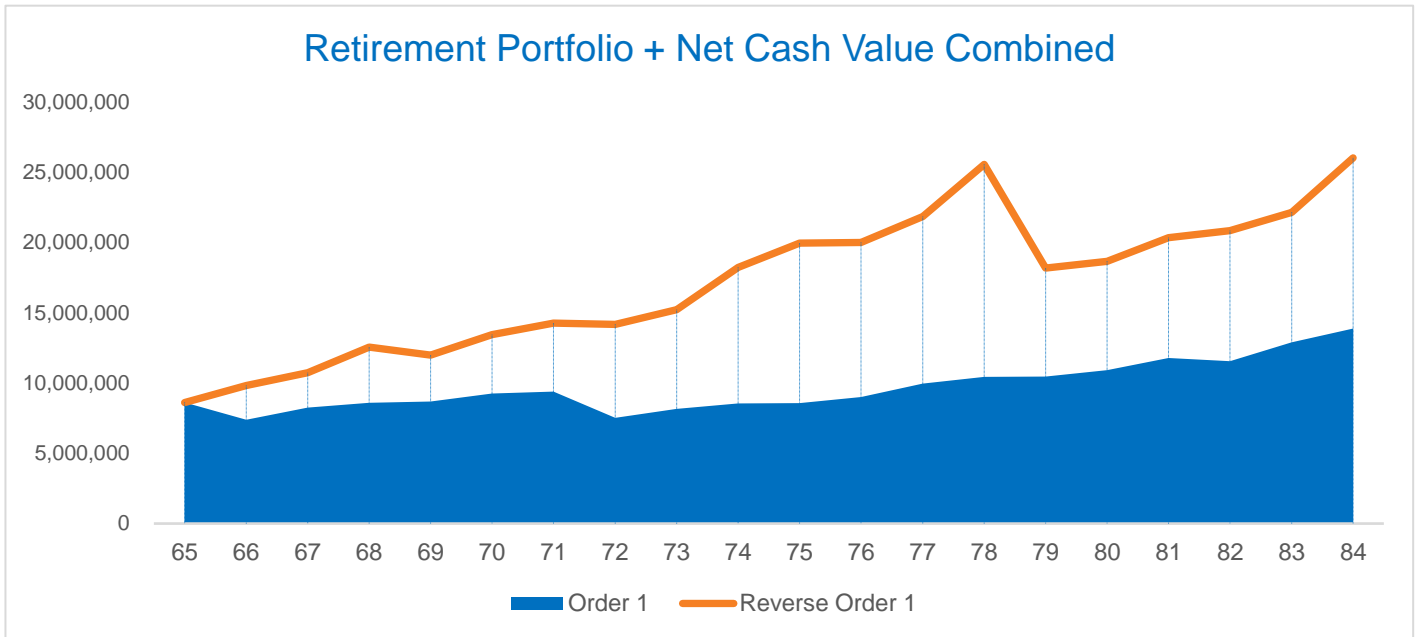
Yr	Age	Year	S&P 500	WITHOUT LIFE INSURANCE			WITH WHOLE LIFE INSURANCE							
				Portfolio Value Begin Year	Assumed Retirement Income Begin Year	Portfolio Value End of Year	Retirement Portfolio			Non-Guaranteed Life Insurance Values **			Combined	
							Portfolio Value	Assumed Retirement Income	Portfolio Value	Annual Policy Income <sup>3</sup>	Net Cash Value End Year	Net Death Benefit End Year	Retirement Portfolio + Net Cash Value End Year	Retirement Portfolio + Net Death Benefit End Year
20	65			-	-	5,000,000	-	-	5,000,000	-	3,611,258	5,200,918	8,611,258	10,200,918
21	66	2021	26.89%	5,000,000	250,000	6,027,275	5,000,000	250,000	6,027,275	-	3,804,623	5,396,629	9,831,898	11,423,904
22	67	2020	16.26%	6,027,275	250,000	6,716,660	6,027,275	250,000	6,716,660	-	4,007,315	5,599,624	10,723,975	12,316,284
23	68	2019	28.88%	6,716,660	250,000	8,334,231	6,716,660	250,000	8,334,231	-	4,219,841	5,810,053	12,554,073	14,144,284
24	69	2018	-6.24%	8,334,231	250,000	7,579,775	8,334,231	-	7,814,175	250,000	4,182,008	5,767,590	11,996,184	13,581,765
25	70	2017	19.42%	7,579,775	250,000	8,753,218	7,814,175	250,000	9,033,138	-	4,404,405	5,982,735	13,437,543	15,015,873
26	71	2016	9.54%	8,753,218	250,000	9,314,425	9,033,138	250,000	9,621,049	-	4,637,272	6,205,814	14,258,321	15,826,863
27	72	2015	-0.73%	9,314,425	250,000	8,998,254	9,621,049	-	9,550,816	250,000	4,620,755	6,177,139	14,171,571	15,727,954
28	73	2014	11.39%	8,998,254	250,000	9,744,680	9,550,816	250,000	10,360,179	-	4,865,353	6,407,282	15,225,532	16,767,460
29	74	2013	29.60%	9,744,680	250,000	12,305,106	10,360,179	250,000	13,102,792	-	5,121,271	6,646,683	18,224,063	19,749,474
30	75	2012	13.41%	12,305,106	250,000	13,671,696	13,102,792	250,000	14,576,351	-	5,388,795	6,895,648	19,965,146	21,471,999
31	76	2011	0.00%	13,671,696	250,000	13,421,696	14,576,351	250,000	14,326,351	-	5,668,337	7,154,376	19,994,688	21,480,727
32	77	2010	12.78%	13,421,696	250,000	14,855,038	14,326,351	250,000	15,875,309	-	5,960,127	7,423,026	21,835,436	23,298,335
33	78	2009	23.45%	14,855,038	250,000	18,029,920	15,875,309	250,000	19,289,444	-	6,264,725	7,701,874	25,554,169	26,991,317
34	79	2008	-38.49%	18,029,920	250,000	10,936,429	19,289,444	-	11,864,937	250,000	6,321,855	7,730,370	18,186,792	19,595,306
35	80	2007	3.53%	10,936,429	250,000	11,063,660	11,864,937	250,000	12,024,944	-	6,641,868	8,018,802	18,666,812	20,043,746
36	81	2006	13.62%	11,063,660	250,000	12,286,480	12,024,944	250,000	13,378,691	-	6,974,759	8,317,406	20,353,451	21,696,097
37	82	2005	3.00%	12,286,480	250,000	12,397,574	13,378,691	250,000	13,522,552	-	7,320,865	8,626,538	20,843,417	22,149,090
38	83	2004	8.99%	12,397,574	250,000	13,239,641	13,522,552	250,000	14,465,755	-	7,680,247	8,946,146	22,146,002	23,411,901
39	84	2003	26.38%	13,239,641	250,000	16,416,309	14,465,755	250,000	17,965,871	-	8,053,009	9,277,543	26,018,880	27,243,414
40	85	2002	-23.37%	16,416,309	250,000	12,388,242	17,965,871	-	13,767,247	250,000	8,178,652	9,360,618	21,945,899	23,127,865
<b>Totals:</b>					5,000,000			4,000,000		1,000,000				

<sup>3</sup> Annual Policy Income is the annual partial surrenders and/or loans taken from the life insurance policy. \*\* These illustrated amounts are not guaranteed. They include dividends, which are neither estimates nor guarantees, but are based on the 2022 dividend schedule. Dividends in future years may be lower or higher, depending on the company's actual experience. Due to this fact, we strongly recommend you look at a lower schedule illustration. **This illustration is not valid unless accompanied by or preceded by a Massachusetts Mutual Life Insurance Company Whole Life 10 Pay Basic Illustration dated July 26, 2022. Refer to the Basic Illustration for guaranteed elements, assumptions, explanations, and other important information.**

**Taming a Bear Market in Retirement**  
How Life Insurance May Help

**Summary of Results at End of Distribution Period (Age 84)**

<b>Hypothetical Retirement Portfolio</b>	\$5,000,000	(Non-Qualified Plan Account)
Retirement Age	65	
Targeted Retirement Income	\$250,000 / year	
Income Years	20	



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