

The Impact of the Sequence of Investment Returns

Most people would jump at the chance to earn a 10 percent average annual return in retirement. But averages can be misleading, especially for retirement portfolios used to generate income. As the following example shows, it's often the sequence of returns that will result in investment success or failure in retirement. Let's look at the assumptions used for this example.

Two hypothetical retirement portfolios:

- **Initial Value:** \$500,000
- **Portfolio A Performance:** S&P 500 index¹ calendar-year returns from 1969 to 1994
- **Portfolio B Performance:** Reverses the order of the same S&P 500 returns
- **Annual Withdrawals:** \$30,000 beginning in Year 1
- **Inflation Adjustments:** Three percent annually

¹ The S&P 500 index is a list of securities frequently used as a measure of U.S. stock market performance. Indexes are unmanaged and do not represent the performance of any MassMutual product or specific underlying fund. Indexes are not available for direct investment. Past performance is not indicative of future results. Source: S&P Micropal.

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TWO HYPOTHETICAL RETIREMENT PORTFOLIOS:

Year	Portfolio A			Portfolio B		
	Investment Return	Withdrawal	Account Balance	Investment Return	Withdrawal	Account Balance
1	-8.4%	\$30,000	\$427,900	1.3%	\$30,000	\$476,600
2	4.0%	\$30,900	\$414,030	10.1%	\$30,900	\$493,646
3	14.3%	\$31,827	\$441,410	7.6%	\$31,827	\$499,385
4	19.0%	\$32,782	\$492,275	30.4%	\$32,782	\$618,417
5	-14.8%	\$33,765	\$385,752	-3.1%	\$33,765	\$565,419
6	-26.5%	\$34,778	\$248,942	31.5%	\$34,778	\$708,917
7	37.3%	\$35,822	\$305,976	16.8%	\$35,822	\$792,335
8	23.7%	\$36,896	\$341,596	5.2%	\$36,896	\$796,799
9	-7.3%	\$38,003	\$278,793	18.6%	\$38,003	\$906,602
10	6.6%	\$39,143	\$257,966	32.0%	\$39,143	\$1,157,844
11	18.6%	\$40,317	\$265,631	6.1%	\$40,317	\$1,188,270
12	32.1%	\$41,527	\$309,451	22.4%	\$41,527	\$1,412,559
13	-4.9%	\$42,773	\$251,484	21.1%	\$42,773	\$1,667,978
14	21.1%	\$44,056	\$260,516	-4.9%	\$44,056	\$1,542,024
15	22.4%	\$45,378	\$273,416	32.1%	\$45,378	\$1,992,099
16	6.1%	\$46,739	\$243,383	18.6%	\$46,739	\$2,315,890
17	32.0%	\$48,141	\$273,197	6.6%	\$48,141	\$2,419,903
18	18.6%	\$49,585	\$274,290	-7.3%	\$49,585	\$2,194,633
19	5.2%	\$51,073	\$237,535	23.7%	\$51,073	\$2,663,688
20	16.8%	\$52,605	\$224,883	37.3%	\$52,605	\$3,604,638
21	31.5%	\$54,183	\$241,605	-26.5%	\$54,183	\$2,597,028
22	-3.1%	\$55,809	\$178,282	-14.8%	\$55,809	\$2,157,378
23	30.4%	\$57,483	\$174,997	19.0%	\$57,483	\$2,508,718
24	7.6%	\$59,208	\$129,107	14.3%	\$59,208	\$2,808,257
25	10.1%	\$60,984	\$81,111	4.0%	\$60,984	\$2,859,042
26	1.3%	\$62,813	\$19,369	-8.4%	\$62,813	\$2,555,498

This hypothetical example is for illustrative purposes only, and is not representative of any MassMutual product. Past performance is no guarantee of future results.

Analysis

We can see that investment losses early in retirement may jeopardize the ability to sustain a portfolio and generate meaningful income that will last a lifetime.

Portfolio A: Just when the owner retires and begins taking systematic income withdrawals, the market delivers negative returns. Although performance improves, Portfolio A is unable to recover from its initial losses. By year 26, it is nearly depleted with only \$19,369 in assets remaining.

Portfolio B: Market performance is positive when systematic income withdrawals begin. Negative performance in later years has less of an impact. By year 26, Portfolio B has a projected available balance of more than \$2 million.

These results are dramatic and have implications for both you and your heirs.

A period of market losses that occurs when you are transitioning into retirement can have a devastating impact on the income-generating potential of your portfolio. To help safeguard retirement income, it's important to have multiple strategies in place that will generate income for as long as you need it.

Planning for income you can't outlive

There are only three types of income that are guaranteed for life: Social Security retirement benefits, defined benefit pension plan payments, and the lifetime income options offered by some annuities.² For this reason, annuities can be a compelling addition to a systematic withdrawal strategy.

² Guarantees are based on the claims-paying ability of the issuing insurer.

Different annuities for different needs

Annuities can help you save for long-term goals like retirement. They can also provide a stream of income for life or for a period of time you choose. Different types of annuities are designed to address specific needs and risk tolerances. Depending on your choice, an annuity may help you:

- Mitigate the risk of outliving your assets.
- Generate a guaranteed income for life or for a specific period of time.
- Provide steady income with fixed payments.
- Offer income growth potential with variable payments.

It's essential for you to get the facts about any annuity before you decide to purchase one. The following are some questions to ask yourself:

- Would I prefer a fixed, predictable income stream or the growth potential associated with variable annuities?
- Do I need my income to begin immediately, or at some time in the future?
- Is liquidity important to me?
- What about death benefit protection?

Your financial professional can help you clarify your objectives and evaluate the options available to you.

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