

Sequence of Returns and Why they Matter

Description

There are, depending on one's definition, two or three phases in a person's financial plan. These are:

1. accumulation
2. preservation
3. decumulation

For most of us, we make money, we put it somewhere to grow, and then we use it when we stop working.

Markets fluctuate and investments go up and down but, in the end, they increase on average. And it is often these best guess averages that people use when planning their futures. And while this math is fine for the accumulation phase (presuming there is adequate financial certainty that it won't be interrupted), it can be a disaster when you are withdrawing money from your savings.

During the accumulation phase

Consider the following two portfolios, each starting with a \$100,000 and averaging a 6% annual return over 10 years. The first portfolio has high returns in the early years and low returns in the later years. And the second portfolio has low returns in the early years and high returns in the latter years.

Year	Rate of Return (Starts High)	Annual Gain or Loss	Value at end of the year	Rate of Return (Starts Low)	Annual Gain or Loss	Value at end of the year
1	30%	\$30,000.00	\$130,000.00	-30%	-\$30,000.00	\$70,000.00
2	20%	\$26,000.00	\$156,000.00	-20%	-\$14,000.00	\$56,000.00
3	10%	\$15,600.00	\$171,600.00	10%	\$5,600.00	\$61,600.00
4	10%	\$17,160.00	\$188,760.00	10%	\$6,160.00	\$67,760.00
5	10%	\$18,876.00	\$207,636.00	10%	\$6,776.00	\$74,536.00
6	10%	\$20,763.60	\$228,399.60	10%	\$7,453.60	\$81,989.60
7	10%	\$22,839.96	\$251,239.56	10%	\$8,198.96	\$90,188.56
8	10%	\$25,123.96	\$276,363.52	10%	\$9,018.86	\$99,207.42
9	-20%	-\$55,272.70	\$221,090.81	20%	\$19,841.48	\$119,048.90
10	-30%	-\$66,327.24	\$154,763.57	30%	\$35,714.67	\$154,763.57

As you can see, the sequence of returns here makes no difference.

Decumulation phase

Now let's consider two similar \$100,000 portfolios, each averaging a 6% return over 10 years. Only this time, we will also withdraw \$6,000 a year as income.

<u>High return in early years</u>					<u>Low Return in Early Years</u>				
Year	Rate of Return	Value at beginning of year	Annual Gain or Loss	Value at end of the year	Year	Rate of Return	Value at beginning of year	Annual Gain or Loss	Value at end of the year
1	30%	\$100,000.00	\$30,000.00	\$124,000.00	1	-30%	\$100,000.00	-\$30,000.00	\$64,000.00
2	20%	\$124,000.00	\$24,800.00	\$142,800.00	2	-20%	\$64,000.00	-\$12,800.00	\$45,200.00
3	10%	\$142,800.00	\$14,280.00	\$151,080.00	3	10%	\$45,200.00	\$4,520.00	\$43,720.00
4	10%	\$151,080.00	\$15,108.00	\$160,188.00	4	10%	\$43,720.00	\$4,372.00	\$42,092.00
5	10%	\$160,188.00	\$16,018.80	\$170,206.80	5	10%	\$42,092.00	\$4,209.20	\$40,300.00
6	10%	\$170,206.80	\$17,020.68	\$181,227.48	6	10%	\$40,301.20	\$4,030.12	\$38,331.32
7	10%	\$181,227.48	\$18,122.75	\$193,350.23	7	10%	\$38,331.32	\$3,833.13	\$36,164.45
8	10%	\$193,350.23	\$19,335.02	\$206,685.25	8	10%	\$36,164.45	\$3,616.45	\$33,780.90
9	-20%	\$206,685.25	-\$41,337.05	\$159,348.20	9	20%	\$33,780.90	\$6,756.18	\$34,537.08
10	-30%	\$159,348.20	-\$47,804.46	\$105,543.74	10	30%	\$34,537.08	\$10,361.12	\$38,898.20

Here one portfolio ends up with a gain of \$59,348 while the other has a loss in excess of \$65,000. This tells us that when withdrawing money from one's portfolio there is a cost to being in a volatile or fluctuating market.

By extension there is also a cost to being in a volatile or fluctuating market when one risks being unable to sustain the fluctuations, as a single withdrawal at the wrong time can destroy a lifetimes effort.

Structure your affairs so that you are financially unbreakable.

CATEGORY

1. Financial Planning
2. Wealth Creation & Economic Confidence

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