Sequence-Of-Returns Risk

Let's take a look at the two hypothetical investments below. The investment on the left begins with a bull market and ends in a bear market. The investment on the right begins with a bear market that leads into a bull market. Notice that both investments began with $1,000,000 and that no withdrawals were made. Each experienced the same average annual return with the only difference being that the rates of return occurred in reverse order. The sequence of returns affected the path of each investment but ultimately had no impact on the results as both arrived at an end value of $1,771,620.

Accumulation Phase

Bull then Bear

Beginning Value: $1,000,000

Year	Return	Withdrawal	End Value
1	*30%*	$0	$1,300,000
2	*25%*	$0	$1,625,000
3	*20%*	$0	$1,950,000
4	*15%*	$0	$2,242,500
5	*10%*	$0	$2,466,750
6	*5%*	$0	$2,590,088
7	*0%*	$0	$2,590,088
8	*-5%*	$0	$2,460,583
9	*-10%*	$0	$2,214,525
10	*-20%*	$0	$1,771,620

Bear then Bull

Beginning Value: $1,000,000

Year	Return	Withdrawal	End Value
1	*-20%*	$0	$800,000
2	*-10%*	$0	$720,000
3	*-5%*	$0	$684,000
4	*0%*	$0	$684,000
5	*5%*	$0	$718,200
6	*10%*	$0	$790,020
7	*15%*	$0	$908,523
8	*20%*	$0	$1,090,228
9	*25%*	$0	$1,362,785
10	*30%*	$0	$1,771,620

Distribution Phase

Now, let's take a look at the two hypothetical investments below. Notice that both investments begin with $1,000,000 and that $50,000 was withdrawn at the end of each year. As with our prior examples, the key difference is that the rates of return are inverted. During the distribution phase, the sequence of returns can have a significant impact on the end results of an investment. The investment that began in a bull market, achieves an ending balance more than 33% greater than when distributions began. The investment that began with a bear market, results with an ending balance more than 25% less than when distributions began. Because withdrawals during a bear market are more costly than withdrawals in a bull market, it is important to manage sequence-of-returns risk as investors enter into the distribution phase.

Bull then Bear

Beginning Value: $1,000,000

Year	Return	Withdrawal	End Value
1	*30%*	$50,000	$1,250,000
2	*25%*	$50,000	$1,512,500
3	*20%*	$50,000	$1,765,000
4	*15%*	$50,000	$1,979,750
5	*10%*	$50,000	$2,127,725
6	*5%*	$50,000	$2,184,111
7	*0%*	$50,000	$2,134,111
8	*-5%*	$50,000	$1,977,406
9	*-10%*	$50,000	$1,729,665
10	*-20%*	$50,000	$1,333,732

Bear then Bull

Beginning Value: $1,000,000

Year	Return	Withdrawal	End Value
1	*-20%*	$50,000	$750,000
2	*-10%*	$50,000	$625,000
3	*-5%*	$50,000	$543,750
4	*0%*	$50,000	$493,750
5	*5%*	$50,000	$468,438
6	*10%*	$50,000	$465,281
7	*15%*	$50,000	$485,073
8	*20%*	$50,000	$532,088
9	*25%*	$50,000	$615,110
10	*30%*	$50,000	$749,643

At Wellesley Asset Management, we have found that investing in convertible bonds issued by companies with high-quality balance sheets, purchased near their par value, and with a properly structured maturity schedule, may assist in managing sequence-of-return risk. To learn more, click here or contact Wellesley Asset Management: (781) 416-4000