

# How sequence of returns can make or break a portfolio

When you begin taking income from a portfolio, the subsequent sequence of returns can have a critical impact on its value over time. While early positive returns can help grow a portfolio to a point where it could withstand a downturn, early negative returns can cause a portfolio to lose value at a faster rate – jeopardizing your retirement income plan.

## Sequence of returns comparison

Say you invest \$500,000 in the stocks that make up the S&P 500® and decide to take an initial withdrawal of \$25,000 during your first year of retirement. In each of the following years, you increase that amount by 2% to account for inflation. The two scenarios below show how a poor sequence of returns early on in retirement can impact your portfolio over the years.

### Scenario One: Early Negative Returns

Shows chronological S&P 500® (SPX) returns from 2001-2015. In this scenario, the first three years yielded negative returns.

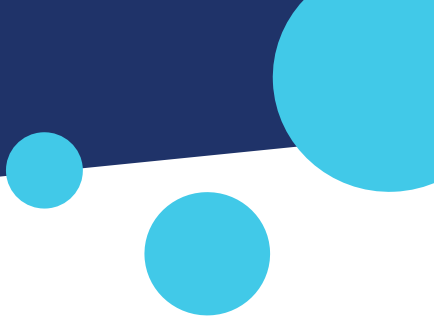
Year	Withdrawal	Index Return	Account Value
2000	-	-	\$500,000
2001	\$25,000	-10.13%	\$424,350
2002	\$25,500	-13.04%	\$343,515
2003	\$26,010	-23.36%	\$237,260
2004	\$26,530	26.38%	\$273,319
2005	\$27,061	8.99%	\$270,829
2006	\$27,602	3.00%	\$251,352
2007	\$28,154	13.61%	\$257,407
2008	\$28,717	3.52%	\$237,751
2009	\$29,291	-38.48%	\$116,971
2010	\$29,877	23.45%	\$114,525
2011	\$30,475	12.78%	\$98,687
2012	\$31,084	0.00%	\$67,603
2013	\$31,706	13.40%	\$44,955
2014	\$32,340	29.60%	\$25,922
2015	\$28,874	11.39%	\$0
Average Return:		4.07%	\$0

### Scenario Two: Early Positive Returns

Shows the same S&P 500® (SPX) returns, but reverses the first three years and last three years. In this scenario, the three consecutive years of negative returns occur at the end of the 15-year period.

Year	Withdrawal	Index Return	Account Value
2000	-	-	\$500,000
2013	\$25,000	13.40%	\$542,000
2014	\$25,500	29.60%	\$676,932
2015	\$26,010	11.39%	\$728,025
2004	\$26,530	26.38%	\$893,547
2005	\$27,061	8.99%	\$946,816
2006	\$27,602	3.00%	\$947,619
2007	\$28,154	13.61%	\$1,048,436
2008	\$28,717	3.52%	\$1,056,623
2009	\$29,291	-38.48%	\$620,743
2010	\$29,877	23.45%	\$736,430
2011	\$30,475	12.78%	\$800,071
2012	\$31,084	0.00%	\$768,987
2001	\$31,706	-10.13%	\$659,382
2002	\$32,340	-13.04%	\$541,059
2003	\$32,987	-23.36%	\$381,680
Average Return:		4.07%	\$381,680

In both scenarios, the average return is the same. However, early negative returns caused the portfolio to deplete to \$0 over fifteen years, where early positive returns left a portfolio balance of over \$381,000.



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