

# THE SEQUENCE OF RETURNS



Retirement creates many changes. In financial planning, the transition from the retirement accumulation phase during the working years, to the retirement distribution phase creates a clarifying and critical change. In the retirement accumulation phase, the focus is on the average of investment returns. As individuals move to the retirement distribution phase, the sequence of the investment returns becomes the focus and is critical to the overall success of the financial plan. Experiencing negative returns early in retirement distribution can have a potentially devastating impact on account balances. In retirement, the difference between success and failure often comes down to the timing of returns.

## CASE STUDY

Mr. & Mrs. Smith have \$100,000 saved for retirement and plan to withdraw \$6,000 per year increasing at 3.5% inflation. The tables below show portfolio performance under two different return sequences, both based on a 15-year return period. Sequence #1 uses hypothetical returns of a diversified 60/40 portfolio from 2001-2015. Sequence #2 uses the same returns from 2015-2001, using the same sequence, but illustrated in reverse. The two sequences illustrate that even though the average annualized returns are the same for both, the ending account balances differ by more than 50%.

SEQUENCE #1 (2001–2015)						SEQUENCE #2 (2015–2001)					
YEAR	EQUITY 60% <sup>1</sup>	BOND 40% <sup>2</sup>	RETURN	BALANCE	WITHDRAWAL	YEAR	EQUITY 60% <sup>1</sup>	BOND 40% <sup>2</sup>	RETURN	BALANCE	WITHDRAWAL
2001	-11.89%	8.40%	-3.77%	\$90,452.44	\$6,000.00	2015	1.36%	0.55%	1.04%	\$94,973.84	\$6,000.00
2002	-22.10%	10.30%	-9.14%	\$76,542.68	\$6,210.00	2014	13.70%	5.97%	10.61%	\$98,179.91	\$6,210.00
2003	28.68%	4.10%	18.85%	\$83,330.67	\$6,427.35	2013	32.90%	-2.02%	18.93%	\$109,123.15	\$6,427.35
2004	10.88%	4.30%	8.25%	\$83,002.79	\$6,652.31	2012	15.89%	4.22%	11.22%	\$113,970.12	\$6,652.31
2005	4.91%	2.40%	3.91%	\$79,090.81	\$6,885.14	2011	2.10%	7.84%	4.40%	\$111,792.44	\$6,885.14
2006	15.79%	4.30%	11.19%	\$80,020.42	\$7,126.12	2010	15.10%	6.54%	11.68%	\$116,887.16	\$7,126.12
2007	5.49%	7.00%	6.09%	\$77,071.87	\$7,375.53	2009	26.50%	5.90%	18.26%	\$129,508.46	\$7,375.53
2008	-37.00%	5.20%	-20.12%	\$55,467.23	\$7,633.68	2008	-37.00%	5.20%	-20.12%	\$97,353.57	\$7,633.68
2009	26.50%	5.90%	18.26%	\$56,251.99	\$7,900.85	2007	5.49%	7.00%	6.09%	\$94,903.97	\$7,900.85
2010	15.10%	6.54%	11.68%	\$53,687.80	\$8,177.38	2006	15.79%	4.30%	11.19%	\$96,434.76	\$8,177.38
2011	2.10%	7.84%	4.40%	\$47,212.26	\$8,463.59	2005	4.91%	2.40%	3.91%	\$91,407.32	\$8,463.59
2012	15.89%	4.22%	11.22%	\$42,767.58	\$8,759.82	2004	10.88%	4.30%	8.25%	\$89,464.27	\$8,759.82
2013	32.90%	-2.02%	18.93%	\$40,081.47	\$9,066.41	2003	28.68%	4.10%	18.85%	\$95,551.24	\$9,066.41
2014	13.70%	5.97%	10.61%	\$33,954.15	\$9,383.74	2002	-22.10%	10.30%	-9.14%	\$78,291.80	\$9,383.74
2015	1.36%	0.55%	1.04%	<b>\$24,493.13</b>	\$9,712.17	2001	-11.89%	8.40%	-3.77%	<b>\$65,991.43</b>	\$9,712.17

<sup>1</sup>S&P 500 Index

<sup>2</sup>Barclays Aggregate Bond Index

	SEQUENCE #1	SEQUENCE #2
15 Year Average Return	6.09%	6.09%
Income from Portfolio	\$115,774	\$115,774
Ending Portfolio Value	<b>\$24,493</b>	<b>\$65,991</b>

Performance figures represent past performance and does not guarantee future results. | The S&P 500 Index is a capitalization-weighted benchmark that tracks broad-based changes in the U.S stock market, and the Barclays Aggregate Bond Index is a broad base index, maintained by Barclays Capital and used to represent investment grade bonds being traded in United States. Performance of an index is not illustrative of any particular investment. It is not possible to invest directly in an index.