



ADDRESSING RETIREMENT R.I.S.K. • 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 1996-2010. Sequence #2 uses the same returns from 2010-1996, 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 (1996-2010)						SEQUENCE # 2 (2010-1996)					
	Equity 60% ¹	Bond 40% ²	Return	Balance	Withdrawal		Equity 60% ¹	Bond 40% ²	Return	Balance	Withdrawal
1996	22.96%	3.60%	15.22%	\$108,303	\$6,000	2010	15.10%	6.54%	11.68%	\$104,975	\$6,000
1997	33.36%	9.70%	23.90%	\$126,489	\$6,210	2009	26.50%	5.90%	18.26%	\$116,800	\$6,210
1998	28.58%	8.70%	20.63%	\$144,828	\$6,427	2008	-37.00%	5.20%	-20.12%	\$88,167	\$6,427
1999	21.04%	-0.80%	12.30%	\$155,177	\$6,652	2007	5.49%	7.00%	6.10%	\$86,484	\$6,652
2000	-9.10%	11.60%	-0.82%	\$147,076	\$6,885	2006	15.79%	4.30%	11.20%	\$88,511	\$6,885
2001	-11.89%	8.40%	-3.77%	\$134,668	\$7,126	2005	4.91%	2.40%	3.91%	\$84,565	\$7,126
2002	-22.10%	10.30%	-9.14%	\$115,658	\$7,376	2004	10.88%	4.30%	8.25%	\$83,557	\$7,376
2003	28.68%	4.10%	18.85%	\$128,385	\$7,634	2003	28.68%	4.10%	18.85%	\$90,236	\$7,634
2004	10.88%	4.30%	8.25%	\$130,421	\$7,901	2002	-22.10%	10.30%	-9.14%	\$74,809	\$7,901
2005	4.91%	2.40%	3.91%	\$127,019	\$8,177	2001	-11.89%	8.40%	-3.77%	\$64,119	\$8,177
2006	15.79%	4.30%	11.20%	\$131,826	\$8,464	2000	-9.10%	11.60%	-0.82%	\$55,197	\$8,464
2007	5.49%	7.00%	6.10%	\$130,566	\$8,760	1999	21.04%	-0.80%	12.30%	\$52,152	\$8,760
2008	-37.00%	5.20%	-20.12%	\$97,054	\$9,066	1998	28.58%	8.70%	20.63%	\$51,973	\$9,066
2009	26.50%	5.90%	18.26%	\$103,679	\$9,384	1997	33.36%	9.70%	23.90%	\$52,767	\$9,384
2010	15.10%	6.54%	11.68%	\$104,938	\$9,712	1996	22.96%	3.60%	15.22%	\$49,606	\$9,712

15-YEAR AVERAGE RETURN
INCOME FROM PORTFOLIO
ENDING PORTFOLIO VALUE

SEQUENCE #1
7.76%
\$115,774
\$104,938

SEQUENCE #2
7.76%
\$115,774
\$49,606

¹ S&P 500 Index
² Barclays Aggregate Bond Index

