HATFIELDS AND McCOYS

The luck of the draw

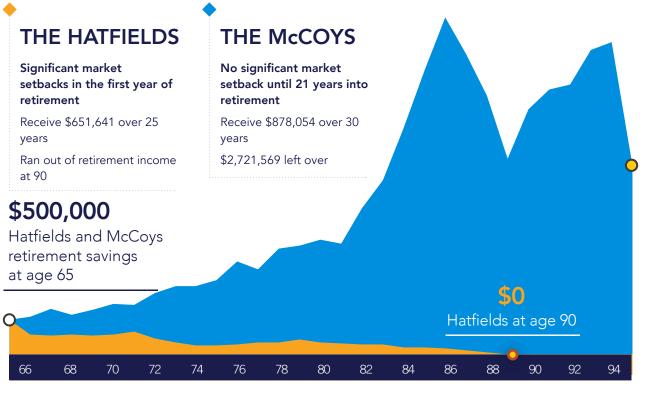
By retirement at age 65, both the Hatfields and McCoys have worked hard enough to put away \$500,000 for their future. As they settle into their new life after work, they leave their retirement funds in the stock market. Both couples are prudent. Factoring for inflation using a 2.5% rise in their annual income to accommodate it, they take only 4% of their stock market portfolio out every year.

The chart below represents hypothetical market returns over a period of 30 years. For this example the McCoys experience S&P 500[®] returns from 1978 to 2008, while the Hatfields experience these same returns – in the opposite chronological order. Both families experience a 9% average annual return over these 30 year periods, but the Hatfields' early negative returns had a profound effect on their retirement nest egg.

SEQUENCE OF RETURNS MATTERS

The order in which you experience losses and gains can be more important than the losses and gains themselves.

> **\$2,721,569** McCoys at age 95



AVERAGE ANNUAL NET RETURN 9%

This is a hypothetical example used for illustrative purposes only, assuming an initial portfolio value of \$500,000. Chart assumes a 4% rate of withdrawal beginning in year 1, with a 2.5% annual increase of the net withdrawal amount to account for inflation. This is based off of Social Security Cost of Living Adjustments' average increase from 1990 to 2018. Cost-of-Living Adjustment (COLA) Information, https://www.ssa.gov/cola/. Actual S&P 500® historical data from 12/29/1978 to 12/31/2008 has been used in this graph. The hypothetical illustration does not consider the impact of taxes, which would reduce all values. Time period selected because of the extreme volatility during the 2000s, to better illustrate the impact of significant losses early in retirement. Using the current time period would demonstrate less dramatic results. Returns are based upon the Standard & Poor's® 500 Index (S&P 500® Index returns for the Hatfields are in reverse chronological order. The S&P 500® Index is an unmanaged group of large company stocks. It is not possible to invest directly in an index. Past performance does not guarantee future results.

The chart below demonstrates how, in spite of an average 9% net rate of return for the period, the Hatfields' early negative returns profoundly impacted their retirement nest egg.

THE HATFIELDS (EARLY LOSS)

THE MCCOYS (EARLY GAIN)

Hypothetical Net Return		Withdrawal	Balance	Age	Hypothetical Net Return	Withdrawal	Balance
			500,000	65			500,000
$\left(\right)$	-38.49%	20,000	287,550	66	12.31%	20,000	541,550
	3.53%	20,500	277,201	67	25.77%	20,500	660,607
	13.62%	21,013	293,943	68	-9.73%	21,013	575,318
	3.00%	21,538	281,223	69	14.76%	21,538	638,697
	8.99%	22,076	284,429	70	17.27%	22,076	726,924
_	26.38%	22,628	336,833	71	1.40%	22,628	714,472
	-23.37%	23,194	234,921	72	26.33%	23,194	879,399
$\left(\right)$	-13.04%	23,774	180,514	73	14.62%	23,774	984,194
$\left(\right)$	-10.14%	24,368	137,842	74	2.03%	24,368	979,805
	19.53%	24,977	139,785	75	12.40%	24,977	1,076,323
	26.67%	25,602	151,464	76	27.25%	25,602	1,344,019
	31.01%	26,242	172,191	(77)	-6.56%	26,242	1,229,610
	20.26%	26,898	180,179	78	26.31%	26,898	1,526,223
_	34.11%	27,570	214,068	79	4.46%	27,570	1,566,722
(-1.54%	28,259	182,512	80	7.06%	28,259	1,649,073
	7.06%	28,966	166,431	81	-1.54%	28,966	1,594,711
	4.46%	29,690	144,164	82	34.11%	29,690	2,108,977
_	26.31%	30,432	151,661	83	20.26%	30,432	2,505,824
	-6.56%	31,193	110,519	84	31.01%	31,193	3,251,687
	27.25%	31,973	108,663	85	26.67%	31,973	4,086,938
	12.40%	32,772	89,365	86	19.53%	32,772	4,852,345
	2.03%	33,592	57,587	87	-10.14%	33,592	4,326,726
	14.62%	34,431	31,575	88	-13.04%	34,431	3,728,089
	26.33%	35,292	4,596	89	-23.37%	35,292	2,821,543
	1.40%	4,661	0	90	26.38%	36,175	3,529,691
	17.27%			91	8.99%	37,079	3,809,931
	14.76%			92	3.00%	38,006	3,886,224
	-9.73%			93	13.62%	38,956	4,376,571
	25.77%			94	3.53%	39,930	4,491,134
	12.31%			95	-38.49%	40,928	2,721,569
AVERAGE ANNUAL NET RETURN 9%							

FACING THE FACTS

The largest annual stock market decline was in 1931, when the S&P 500® fell by 43.84%.³ Depending on when you start your retirement, market returns could have a significant negative impact on your savings.

This is a hypothetical example used for illustrative purposes only, assuming an initial portfolio value of \$500,000 invested fully in the S&P 500®. The hypothetical illustration does not consider the impact of taxes, which would reduce all values.

Table assumes a 4% rate of withdrawal beginning in year 1, with a 2.5% annual increase of the net withdrawal amount to account for inflation. This is based off of Social Security Cost of Living Adjustments' average increase from 1990 to 2018. Cost-of-Living Adjustment (COLA) Information, https://www.ssa.gov/cola/. Actual S&P 500[®] historical data from 12/29/1978 to 12/31/2008 has been used in this graph. These returns were modeled using quotes from ticker symbol (^GSPC). All data used was from Yahoo! Finance. The S&P 500[®] Index is an unmanaged group of large company stocks. It is not possible to invest directly in an index. Past performance does not guarantee future results. Circled years in this table indicate years of negative returns.

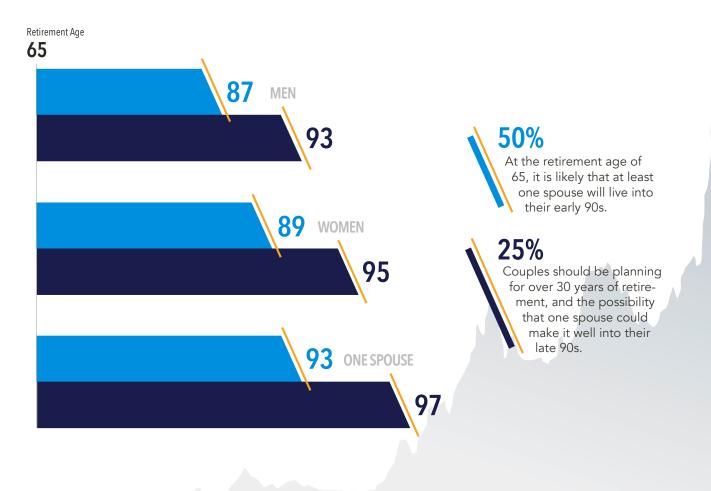
Stock market decline is based on the S&P 500[®] Index. NYU Stern School of Business, Annual Returns on Stock, T. Bonds and T. Bills: 1928

 Current http://bit.ly/1rr5h3v (Jan. 2020)

YOU MAY LIVE LONGER THAN YOU THINK

Your retirement savings must last as long as you

By age 65, many of Americans have joined the Hatfields and McCoys in retirement. For married couples, there is a 50% chance that one spouse will live to 93, and a 25% chance that a spouse will make it to age 97.⁴ As seen in the prior hypothetical illustration, the Hatfields' early, large market downturns meant they ran out of money at age 89. Further complicating the situation, there is a 50% chance that one of them will live into their early 90s, and long outlive their savings.



4. Society of Actuaries Mortality Improvement Scale, MP-2017 https://www.soa.org/experience-studies/2017/mortalityimprovement-scale-mp-2017/ (Jun. 2018)

PLANNING AND PROTECTING YOUR RETIREMENT

As you approach retirement, it's important to keep the sequence of returns in mind. A sequence of returns that begins with early losses could require you to cut back on your retirement lifestyle, or remain in the workforce longer than you had planned.

Market performance in the years leading up to your retirement can have a profound effect on your retirement savings. Significant gains early in retirement could increase your retirement income over the long term. However, large market downturns could reduce your retirement income. You may feel the need to delay your retirement to allow for time to rebuild your assets.

Market performance can have an even greater impact after you retire and begin to take withdrawals. Your average rate of return may not be as important as when—and how big—any market downturns you experience are. You could end up depleting your savings if your withdrawals are greater than your gains for a year.

As you enter into the years leading to retirement, sequence of returns risk is magnified, as you will have less recovery time in the event of a market downturn. As part of a long-term retirement strategy, it may be worth considering moving savings into solutions that protect from market downturns while still taking advantage of positive markets. Always be sure to discuss your retirement plans with your financial professional to help align your goals with your retirement needs.