Hope for the best …
but plan for the worst.

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# How sequence of returns risk can affect your retirement nest egg.

If you're planning to rely on stock market investments for retirement income, you're hoping for the best. That's because a simple run of bad luck early in retirement can turn your financial life upside down.

To see how, let's look at two hypothetical investors, Bob and Ted. Both are retired and have $500,000 invested in a stock market index fund for 20 years. The beginning and ending values of the index are the same. But the order of annual returns is flipped. In other words, the return Bob receives in year one is what Ted receives in year 20.

If no withdrawals are taken, Bob and Ted realize the same gain on their investment. The sequence of returns in individual years has no effect on the final result.

**Bob**

| Year | Return | Index Value | Account Value |
|---|---|---|---|
| 0 | | **1463** | **$500,000** |
| 1 | **29%** | 1886 | $644,390 |
| 2 | **-6%** | 1768 | $604,198 |
| 3 | **19%** | 2112 | $721,533 |
| 4 | 10% | 2313 | $790,331 |
| 5 | -1% | 2296 | $784,589 |
| 6 | 11% | 2558 | $873,959 |
| 7 | 30% | 3315 | $1,132,661 |
| 8 | 13% | 3760 | $1,284,502 |
| 9 | 0% | 3760 | $1,284,461 |
| 10 | 13% | 4240 | $1,448,650 |
| 11 | 23% | 5235 | $1,788,420 |
| 12 | -38% | 3220 | $1,100,132 |
| 13 | 4% | 3334 | $1,138,962 |
| 14 | 14% | 3788 | $1,294,082 |
| 15 | 3% | 3901 | $1,332,918 |
| 16 | 9% | 4252 | $1,452,793 |
| 17 | 26% | 5374 | $1,836,046 |
| 18 | -23% | 4118 | $1,407,036 |
| 19 | -13% | 3581 | $1,223,521 |
| 20 | -10% | **3231** | **$1,103,816** |
| | | **20-Year Return** | **121%** |

**Ted**

| Year | Return | Index Value | Account Value |
|---|---|---|---|
| 0 | | **1463** | **$500,000** |
| 1 | -10% | 1320 | $451,082 |
| 2 | -13% | 1148 | $392,249 |
| 3 | -23% | 880 | $300,596 |
| 4 | 26% | 1112 | $379,894 |
| 5 | 9% | 1212 | $414,060 |
| 6 | 3% | 1248 | $426,486 |
| 7 | 14% | 1418 | $484,571 |
| 8 | 4% | 1468 | $501,674 |
| 9 | -38% | 903 | $308,601 |
| 10 | 23% | 1115 | $380,981 |
| 11 | 13% | 1258 | $429,680 |
| 12 | 0% | 1258 | $429,667 |
| 13 | 13% | 1426 | $487,266 |
| 14 | 30% | 1848 | $631,503 |
| 15 | 11% | 2059 | $703,436 |
| 16 | -1% | 2044 | $698,325 |
| 17 | 10% | 2239 | $764,910 |
| 18 | **19%** | 2674 | $913,455 |
| 19 | **-6%** | 2507 | $856,481 |
| 20 | **29%** | **3231** | **$1,103,816** |
| | | **20-Year Return** | **121%** |

**But Bob and Ted are using their investment for retirement income.
So let's see what happens when they withdraw money each year.**

# The luck of the draw.

## When you retire can make all the difference.

Now, let's assume Bob and Ted each withdraw $25,000 per year for retirement income.

For Bob, the index value increases 44% in the first three years. Twenty years later, his portfolio is still worth over $550,000 and he's sitting pretty.

But Ted doesn't fare so well. He retires, starts withdrawing money, and the market sheds 40% in years 1-3. Even though it rebounds, Ted runs out of money in year 19.

**Bob**

| Year | Withdrawal | Return | Index Value | Account Value |
|---|---|---|---|---|
| 0 | | | 1463 | $500,000 |
| 1 | $25,000 | **29%** | 1886 | $612,171 |
| 2 | $25,000 | **-6%** | 1768 | $550,547 |
| 3 | $25,000 | **19%** | 2112 | **$627,609** |
| 4 | $25,000 | 10% | 2313 | $660,067 |
| 5 | $25,000 | -1% | 2296 | $630,453 |
| 6 | $25,000 | 11% | 2558 | $674,418 |
| 7 | $25,000 | 30% | 3315 | $841,654 |
| 8 | $25,000 | 13% | 3760 | $926,132 |
| 9 | $25,000 | 0% | 3760 | $901,103 |
| 10 | $25,000 | 13% | 4240 | $988,093 |
| 11 | $25,000 | 23% | 5235 | $1,188,979 |
| 12 | $25,000 | -38% | 3220 | $716,012 |
| 13 | $25,000 | 4% | 3334 | $715,402 |
| 14 | $25,000 | 14% | 3788 | $784,431 |
| 15 | $25,000 | 3% | 3901 | $782,222 |
| 16 | $25,000 | 9% | 4252 | $825,322 |
| 17 | $25,000 | 26% | 5374 | $1,011,450 |
| 18 | $25,000 | -23% | 4118 | $755,956 |
| 19 | $25,000 | -13% | 3581 | $635,620 |
| 20 | $25,000 | -10% | 3231 | **$550,879** |
| | | | **Years 1-3 Return** | **44%** |
| | | | **20-Year Return** | **121%** |

**Ted**

| Year | Withdrawal | Return | Index Value | Account Value |
|---|---|---|---|---|
| 0 | | | 1463 | $500,000 |
| 1 | $25,000 | **-10%** | 1320 | $428,528 |
| 2 | $25,000 | **-13%** | 1148 | $350,897 |
| 3 | $25,000 | **-23%** | 880 | **$249,748** |
| 4 | $25,000 | 26% | 1112 | $284,037 |
| 5 | $25,000 | 9% | 1212 | $282,334 |
| 6 | $25,000 | 3% | 1248 | $265,056 |
| 7 | $25,000 | 14% | 1418 | $272,751 |
| 8 | $25,000 | 4% | 1468 | $256,495 |
| 9 | $25,000 | -38% | 903 | $142,402 |
| 10 | $25,000 | 23% | 1115 | $144,938 |
| 11 | $25,000 | 13% | 1258 | $135,269 |
| 12 | $25,000 | 0% | 1258 | $110,266 |
| 13 | $25,000 | 13% | 1426 | $96,696 |
| 14 | $25,000 | 30% | 1848 | $92,919 |
| 15 | $25,000 | 11% | 2059 | $75,656 |
| 16 | $25,000 | -1% | 2044 | $50,288 |
| 17 | $25,000 | 10% | 2239 | $27,699 |
| 18 | $25,000 | 19% | 2674 | $3,223 |
| 19 | $3,223 | -6% | 2507 | $0 |
| 20 | $0 | 29% | 3231 | **$0** |
| | | | **Years 1-3 Return** | **-40%** |
| | | | **20-Year Return** | **121%** |

When you take regular withdrawals from a stock market investment, you're exposed to what's known as ***sequence of returns risk***. You might call it "the luck of the draw." Poor market performance in the early years of retirement can dramatically reduce the value of your nest egg over time, leaving you with less than you hoped for.

**Because you can't predict what the market will do, it's important to plan for the worst. Talk to your financial professional about how you can guard against "the luck of the draw" by diversifying your retirement portfolio and including sources of guaranteed income, like annuities.**