

## RETURNS

## Don't leave your retirement date to chance!

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$\qquad$

# SEQUENCE OF REIURNS 

Don't leave your retirement date to chance!

If you have the majority of your nest egg in the market, the date you choose as your Retirement Date could have a devastating impact on your "golden years" depending on the date you select. Research has shown that it is imperative to the longevity of your retirement plan not to incur losses during the initial phase of retirement, also known as the "Critical Phase."

The following report illustrates the alarming effects and the importance of "Sequence Of Returns," the order in which losses/gains are sustained in an investment portfolio.

Consult with a retirement income specialist for strategies to avoid these and other retirement pitfalls.

## SEQUENCE OF RETURNS RISK

Distribution Phase: \$1,000,000 Beginning Balance

|  | Investor A |  | Investor B |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Age | Annual <br> Return $^{1}$ | Portfolio Year-End <br> Value | Withdrawals | Annual <br> Return | Portrolio Year-End <br> Value $^{3}$ |
| 65 | $-9.03 \%$ | $\$ 844,700.00$ | $(\$ 65,000.00)$ | $13.48 \%$ | $\$ 1,069,800.00$ |
| 66 | $-11.85 \%$ | $\$ 679,603.05$ | $(\$ 65,000.00)$ | $31.15 \%$ | $\$ 1,338,042.70$ |
| 67 | $-21.97 \%$ | $\$ 465,294.26$ | $(\$ 65,000.00)$ | $15.89 \%$ | $\$ 1,485,657.69$ |
| 68 | $28.36 \%$ | $\$ 532,251.71$ | $(\$ 65,000.00)$ | $2.10 \%$ | $\$ 1,451,856.50$ |
| 69 | $10.74 \%$ | $\$ 524,415.55$ | $(\$ 65,000.00)$ | $14.82 \%$ | $\$ 1,602,021.63$ |
| 70 | $4.83 \%$ | $\$ 484,744.82$ | $(\$ 65,000.00)$ | $25.94 \%$ | $\$ 1,952,586.04$ |
| 71 | $15.61 \%$ | $\$ 495,413.48$ | $(\$ 65,000.00)$ | $-36.55 \%$ | $\$ 1,173,915.84$ |
| 72 | $5.48 \%$ | $\$ 457,562.14$ | $(\$ 65,000.00)$ | $5.48 \%$ | $\$ 1,173,246.43$ |
| 73 | $-36.55 \%$ | $\$ 225,323.18$ | $(\$ 65,000.00)$ | $15.61 \%$ | $\$ 1,291,390.20$ |
| 74 | $25.94 \%$ | $\$ 218,772.01$ | $(\$ 65,000.00)$ | $4.83 \%$ | $\$ 1,288,764.34$ |
| 75 | $14.82 \%$ | $\$ 186,194.02$ | $(\$ 65,000.00)$ | $10.74 \%$ | $\$ 1,362,177.64$ |
| 76 | $2.10 \%$ | $\$ 125,104.10$ | $(\$ 65,000.00)$ | $28.36 \%$ | $\$ 1,683,491.21$ |
| 77 | $15.89 \%$ | $\$ 79,983.14$ | $(\$ 65,000.00)$ | $-21.97 \%$ | $\$ 1,248,628.19$ |
| 78 | $31.15 \%$ | $\$ 39,897.89$ | $(\$ 65,000.00)$ | $-11.85 \%$ | $\$ 1,035,665.75$ |
| 79 | $13.48 \%$ | $-\$ 19,723.88$ | $(\$ 65,000.00)$ | $-9.03 \%$ | $\$ 877,145.13$ |


| $5.93 \%$ | Arithmetic Average $^{4}$ | $5.93 \%$ |
| ---: | :---: | ---: |
| $\mathbf{4 . 1 4 \%}$ | Geometric Average $^{5}$ | $\mathbf{4 . 1 4 \%}$ |

${ }^{1}$ S\&P 500 dividend reinvested returns from 2000 to 2014 (DOES NOT include deductions for investment fees) obtained from the Federal Reserve database in St. Louis (FRED) and reported by New York University - Source: http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/histretSP.html
${ }^{2}$ S\&P 500 dividend reinvested returns from 2014 to 2000 (in reverse of ${ }^{1}$ )
${ }^{3}$ Year-end account value after gains/losses and withdrawals
${ }^{4}$ Arithmetic Average: The sum of a series of numbers divided by the count of that series of numbers. (Investopedia) This method is used frequently by portfolio mangers to advertise fund performance because it produces a higher reported return than Geometric Average but it is the incorrect method for evaluating investment returns because it does not account for actual changes in account values.
${ }^{5}$ Geometric Average: The average of a set of products, the calculation of which is commonly used to determine the performance results of an investment or portfolio. The geometric mean must be used when working with percentages (which are derived from values), whereas the standard arithmetic mean will work with the values themselves. (Investopedia) This is the correct method to use when calculating investment performance.

Disclosure: This illustration does not represent investing, tax, or legal advice.

