Monte Carlo Analysis

A More Thorough Approach to Planning for Your Retirement

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EVERYONE KNOWS they need to put money away for their retirement years, and the best way to get started is with a financial plan. The traditional approach to retirement planning is to determine how much you'll need to live the lifestyle you want through those years, then determine how much you need to contribute to your financial plan to generate that amount.

This so-called "straight-line analysis" sounds simple, and it is. Maybe too simple. Let's say you and your financial advisor have determined you'll need to have a retirement account of $1.5 million at a retirement age of 62. That plus your social security benefits will see you through based on a long-term expected return on your investments of eight percent annually. The problem is that volatility and sequence can easily upset your plans. A wide range of differing returns on your investments, how and when they change, could leave you short of your savings goal. Straight-line forecasting assumes consistent year-to-year returns, but the reality is that returns are not typically consistent.

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At HBKS® Wealth Advisors we forecast the probability that your plan will be successful through our financial planning software. We found that Monte Carlo analysis, a system that involves a thousand computer-generated simulations, gives our clients more confidence that they can weather difference market cycles. A Monte Carlo analysis allows you to see a spectrum of possible outcomes, taking into account a large number of variables and multiple potential values for each variable — different rates of return, various levels of inflation — and the historical performance of your investments. It takes into consideration your financial data — income, savings, your portfolio, time frames, financial goals, what you are spending now and will continue to spend in retirement.

A Monte Carlo simulation produces a "confidence level" that allows us to illustrate how your future finances could look based on your assumptions. The projections are characterized by a much higher degree of probability than a straight-line analysis of your chances of reaching your financial goals. Typically if a confidence level is below 75 percent, changes need to be made to the financial plan. We like to see a minimum 80 percent confidence level. If you get to 90 percent, you might plan to spend more in retirement, say, take an extra trip each year.

A Monte Carlo simulation can reveal how changes in your plan, such as how many additional years you'll have to work to achieve the retirement savings you'll need based on your spending habits, could affect your odds of achieving your goals. Combined with periodic progress reviews and plan updates, the forecasts help you and your financial advisor make better-informed investment decisions, to learn what you need to do to accommodate the lifestyle you want to live in retirement.

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While no analysis can give you one hundred percent certainty in predicting whether your will meet your financial and retirement goals, a Monte Carlo analysis can help provide a better view of what is likely. Contact your HBKS® financial advisor to ensure your financial plan is doing all it can to move you along your way to a financially secure retirement.

Your HBKS® Wealth Advisor along with our tax partners at HBK CPAs & Consultants are ready to help you navigate these uniquely challenging times. Contact us at (814) 836-5776, or email me at zallegretti@hbkswealth.com.

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Zach Allegretti is a financial advisor in the Erie, Pennsylvania, office of HBKS® Wealth Advisors. Zach comes to HBKS® with experience in both the insurance and financial advisory fields, having been employed with Nationwide and AXA Financial.

An honors graduate of The Behrend College of Penn State University, Zach earned his Bachelor of Science degree in finance prior to accepting his current position with HBKS®.