4 Percent Withdrawal Rate May Be Too High for Today's Retirees

by Steve Vernon: Sunday October 2, 2011

A recent paper has called into question the generally accepted rule that four percent is the amount you can safely withdraw from IRAs, 401(k) accounts, and retirement savings to generate reliable, lifetime retirement income. While analysts and financial planners have long advocated the four percent rule, or some variation of it, it may no longer make sense in today's environment.

Before we dig into the conclusions of this paper, let's briefly review the four percent rule, which goes like this:

- Invest in a portfolio balanced between stocks and bonds
- Withdraw four percent of your account in the year you retire
- Give yourself raises for inflation each year thereafter.

By using this method of generating retirement income, the theory goes, the odds are very low that you'll outlive your retirement savings for periods of retirement that are up to 30 years long.

One common analytical argument for the four percent rule goes like this:

• Look at every possible 30-year retirement period in the past, for as many years for which reliable, historical investment data is available.

•Assume you invested in a specific asset allocation between stocks and bonds and earned historical rates of return.

•Calculate the safe withdrawal rate for each of these periods, given the specific asset allocation.

The analyses then spell out, for all of these possible retirement periods, how often a specific withdrawal rate failed (meaning you would have outlived your money). Past results have always shown that a four percent withdrawal rate has had low failure rates across all the time periods studied for portfolios that were balanced between stocks and bonds.

Another common analytical argument for the four percent rule constructs a probabilistic model that prepares 500 to 1,000 projections of investment returns over 30 years based on historical returns and potential deviations from these returns. The probability of failure (i.e., outliving your retirement savings) is then estimated under various withdrawal rates and specific asset allocations. These models deem a withdrawal rate to be safe if the estimated failure rate is below certain thresholds, such as one out of 20 (5 percent) or one out of 10 (10 percent).

Both types of analyses can be used to analyze periods of retirement different from 30 years, and as you'd expect, shorter retirement periods can generate higher safe withdrawal amounts, and longer periods lower safe withdrawal amounts.

With this background in mind, let's now look at the paper that calls into question the safety of a four percent withdrawal rate in today's economy.



The August 2011 issue of the Journal of Financial Planning included the paper, Can We Predict the Sustainable Withdrawal Rate for New Retirees, by Wade D. Pfau, Ph.D. This paper looked at the range of minimum withdrawal rates that were safe for various time periods, and it found significant variations.

For example, the paper shows that for a portfolio that was invested 60 percent in stocks, the safe withdrawal rate for a 30-year retirement that started in 1966 was 3.53 percent. The safe withdrawal rate remained below four percent for retirements beginning from 1964 to 1969. On the other hand, the safe withdrawal rate was over 10 percent for 30-year retirements that started in 1921 or 1922.

The paper goes on to predict safe withdrawal amounts for retirements beginning after 1980 (we won't know the safe withdrawal rate for 30-year retirements until the 30 years are up). The model described in this paper predicts safe withdrawal rates of 2.7 percent for retirements beginning in 2000, 1.5 percent for retirements beginning in 2000, 1.5 percent for retirements beginning in 2010.

The paper then examined the periods for which low safe withdrawal rates were required, and found some patterns. The lowest safe withdrawal rates occurred for retirements beginning when interest rates on bonds were at historical lows, when dividend yields on stocks were below average, and price/earnings ratios on stocks were at or above historical averages. These three situations describe the current economic circumstances.

When you think about it, this only makes sense. Your retirement savings can generate only three types of retirement income: interest and dividends, appreciation in your retirement investments, and withdrawals of principal. If current economic conditions are such that the first two items are expected to be below historical averages, it only follows that your total retirement income will be below historical averages.

The four percent rule is also questionable if you incur significant investment management expenses, or if your investments underperform historical indices due to active management.

Now don't get me wrong: I prefer the four percent rule over another common method of generating retirement income from savings — that is, withdrawing whatever amounts you think you need to cover your living expenses and then hoping you don't outlive your money. The four percent rule, or a variation of it, gives you discipline for your withdrawal and investment strategies, and it's simple to understand and implement.

However, the results discussed in this post point to problems with blindly following a fixed withdrawal strategy over many years without taking into account the current economic circumstances, and without adjusting for your investment experience as it unfolds over your retirement. The four percent rule should serve simply as a starting point.

When it comes to generating retirement income from IRAs, 401(k) accounts, and retirement savings, we're in uncharted territory, given the current environment and the large numbers of Baby Boomers retiring without traditional pension plans. All of these elements point to a need for holistic retirement planning, taking into account all sources of retirement income, including Social Security and continued work.

It may take time and effort to determine your initial withdrawal and investment strategies, and then monitor them as your retirement unfolds. But you'll thank yourself when you reach your 80s and 90s with retirement savings that continue chugging along, generating the retirement income you need.