Rx for Retirement: A Low Dose of Equities

By Kerry Pechter *Mon, Jan 23, 2017*

'For retirement investors attempting to minimize downside risk while sustaining future withdrawals, appropriate equity allocations range between five and 25%,' write Keith C. Brown (inset) and W. V. Harlow in a award-winning research paper.

When we talk about the risks of retirement, we often look at longevity risk, market risk, sequence risk and over-spending risk in isolation. But what if we integrated them into one multivariable risk? How would that affect our opinions about, for instance, the right equity allocation in retirement?

A research paper on that topic by Keith C. Brown of the University of Texas and W.V. Harlow of Empower Retirement has just won a Special Distinction Award from the *Journal of Investment Management*. The award will be presented at the Spring JOIM Conference in San Diego March 12-14. (For an earlier, public version of the article, click **here.**)

Brown and Harlow recommend lower equity allocations than the 60% that is assumed by the so-called 4% safe withdrawal strategy. Here's what they say: "For retirement investors attempting to minimize downside risk while sustaining future withdrawals, appropriate equity allocations range between five and 25%."

Even when you plug in different capital market assumptions, the recommendations hardly vary, they write. They also claim that investors with substantial bequest motives should "still be relatively conservative with their stock allocations, adding that bigger equity allocations create substantial risk to "the sustainability of retirement savings and incomes."

To reach these conclusions, they used a model they call Retirement Present Value. A retirement plan's RPV is equal to the "net present value of assets minus liabilities weighted by the probability of the investor's survival throughout his or her post- retirement life." A Monte Carlo simulation generates a range of positive and negative RPVs.

In other words, they look at spending rates, life expectancies, investment returns and expenses to find out which equity levels generate enough upside to produce positive portfolio values for the longest period, without adding a counter-productive level of volatility.

Their model, they admit, isn't novel. "The calculation of RPV is straightforward and merely an adaptation of the familiar method of determining the discounted present value of a series of future cash flows," they write. But their conclusions fly in the face of conventional wisdom, which calls for at least 50% equities in retirement.

For 65-year-olds to 85-year-olds seeking the minimum risk of running out of money, Brown and Harlow recommend only five to 10% equities in a portfolio that includes lots of cash. They observe that, while a typical TDF today might have a 48% stock allocation, and use cash or cash equivalents to buffer the volatility, such a portfolio should need no more than 25% equities, assuming that bonds replaced the cash allocation.

"The stock allocation increases in the absence of cash, [but] on a percentage basis the bond allocation increases by even more. Relatively speaking, bonds become the more attractive alternative to cash and the stock allocation still remains well below conventionally recommended levels," Brown wrote to *RIJ* in an email. Even people who are more concerned about providing a large bequest than running out of money should hold only 35% to 45% equities.

"Taken as a whole, the findings in this study should give any investor a considerable amount to ponder before setting his or her asset allocation path in retirement," Harlow and Brown write.

"If mitigating the risk of outliving one's retirement resources is the cornerstone of the asset allocation decision, it is critical to limit equity exposure and recognize the impact that investment volatility and mortality risk can have on the sustainability of the retirement plan."

With equity prices as well as bond prices close to record highs, such a strategy might suit the times we live in. If asset prices (despite our hopes) have nowhere to go but down, then the safe bet for those entering retirement may be to relinquish the pursuit, embrace "secular stagnation," and to focus on preserving what they've got.

But current valuations don't appear to be what drives Brown and Harlow's results. Rather, they identify the primary cause of retirement shortfall as sequence risk—the risk that a market crash will force a retiree to sell depressed assets in order to produce income for living expenses. Other practitioners might believe that there are alternate ways to deal with sequence risk than by maintaining a low-equity portfolio.