Four Drawdown Methods Compared

By Editor Test *Wed, Jan 5, 2011*

In his new book on the decline of defined benefit pensions, George "Sandy" Mackenzie also compares four non-insured retirement income strategies and chooses the best of a flawed lot.

In *The Decline of the Traditional Pension*, George “Sandy” Mackenzie of AARP compares and contrasts four non-insured, do-it-yourself systematic withdrawal plans. Most RIJ readers will be familiar to some extent with these four techniques, which Mackenzie describes as:

1. Constant real withdrawals until assets are exhausted.
2. Withdrawals set to equal a predetermined share of the account value.
3. Withdrawals determined by remaining life expectancy.
4. A version of Method 2 that allows for increases or reductions in the withdrawal rates when markets go up or down, respectively.

Spoiler alert: Mackenzie, like the Vanguard CFPs whose work was cited recently in RIJ (See “A Turbit Drawdown Strategy,” December 29), likes the fourth method, because it offers the best balance of flexibility and protection against longevity risk.

To evaluate the four methods, Mackenzie proposes a hypothetical 65-year-old retiree with $500,000, half in large cap equities (assumed 9% average real return, 20.1% standard deviation) and half in long-term bonds (assumed 2.8% average real return, 10.3% standard deviation). His initial withdrawal rate is 5%, his marginal and average tax rate is 20% and he pays one percent per year in fees.

Mackenzie applies each of the four withdrawal methods to the hypothetical and uses Monte Carlo simulations to assess their abilities to provide steady lifetime income. The trade-offs quickly become apparent: Method 1 provides the most stable income but the highest risk (25%) of running out of money. Method 2 is indefinitely sustainable but carries a high variability of income.

Method 3 is sustainable but income may drop off dramatically in later years if the investor outlives his life expectancy. That leaves Method 4, which is a less rigid form of Method 2—and is probably the kind of method that common sense would dictate (at least in the absence of the sort of unexpected financial shocks that often interrupt retirement).

“None of the four do-it-yourself phased-withdrawal strategies can consistently generate both a steady or guaranteed minimum income and a predictable final balance, which could be greater than zero if the retiree wanted to leave a bequest,” Mackenzie writes.

“If income is to be kept steady or a minimum level is guaranteed, the final balance will vary hugely,” he observes. “Rule 4 is, however, more successful than the others in avoiding the extremes of a high final balance and plummeting standard of living in later years.”

As an alternative to the four methods, Mackenzie considers the possibility that the retiree might build a ladder of zero-coupon inflation-indexed risk-free bonds that lasts 25 years and produces an annual income of about $22,700—but at the cost of a low return.

None of these methods fully solves the longevity risk problem for Mackenzie, whose book clearly favors at least partial annuitization of assets before, at, or during retirement.

“Longevity risk poses an intractable problem for a phased withdrawal strategy,” he writes. “Apart from annuities, there is no instrument that retirees or financial planners can use to hedge it, and there is no phased withdrawal strategy that can substitute for annuitization in the provision of longevity insurance.”

Without an annuity, a retiree or advisor may have to assume, as a practical matter, either that the retiree will live to the average life expectancy or to 95. The first of those assumptions can lead to a shortage of money at the very end of life, and the second can result in unnecessary hoarding.