The New York Times | http://nyti.ms/1bDXedp

YOUR MONEY

New Math for Retirees and the 4% Withdrawal Rule

MAY 8, 2015

Retiring

By TARA SIEGEL BERNARD

More than two decades ago, Bill Bengen, then a financial planner in Southern California, said he had several anxious clients with the same question: How much can I spend in retirement without running out of money?

Being relatively new to the profession, he dived back into his finance textbooks for answers, but said he couldn't find any guidelines rooted in facts. "I decided to get down to business with my computer," said Mr. Bengen, 67, who retired in 2013 and now lives with his wife in La Quinta, a resort town in California's Coachella Valley.

What he and his computer produced, in 1994, became part of the financial vernacular and is still the most widely referenced rule of thumb. Known as the 4 percent rule, it found that retirees who withdrew 4 percent of their initial retirement portfolio balance, and then adjusted that dollar amount for inflation each year thereafter, would have created a paycheck that lasted for 30 years.

The concept has been both celebrated and criticized, and it has recently

come under scrutiny yet again, particularly as the current crop of retirees are entering retirement during a period of historically low interest rates. But the question of how much they can safely spend each year may be more important than ever: Roughly 11,000 people, on average, are expected to turn 65 every day for the next 15 years, according to the Social Security Administration.

"I always warned people that the 4 percent rule is not a law of nature like Newton's laws of motion," said Mr. Bengen, who graduated from the Massachusetts Institute of Technology with a bachelor's in aeronautics and astronautics in 1969. "It is entirely possible that at some time in the future there could be a worse case."

Mr. Bengen's original analysis assumed the retirees' portfolio was evenly split between stocks and bonds, and he tested whether the paycheck could persevere through every 30-year period dating from 1926. It succeeded.

The big question now — difficult even for an aerospace engineer to answer — is whether a new worst case is beginning to play out, given the painfully low interest rate environment, which yields little for safer bond investments, where retirees often hold a big portion of their money.

"Because interest rates are so low now, while stock markets are also very highly valued, we are in uncharted waters in terms of the conditions at the start of retirement and knowing whether the 4 percent rule can work in those cases," said Wade Pfau, a professor of retirement income at the American College of Financial Services and another researcher within the financial planning community.

Since Mr. Bengen's original paper was published, the 4 percent concept has been replicated, expanded, criticized and even refined by Mr. Bengen himself. (By using a more diversified portfolio, he later raised the rate to 4.5 percent.)

Critics of the rule point out that it is based on conditions in the United

States during a very specific time in history; it also doesn't take into account items like investments costs, taxes, different time horizons or the reality that most retirees don't spend their money in a linear fashion. Some people may want to spend more early in retirement and may be willing, even comfortable, making cuts when the market plunges once again. And if retirees want to leave money to their children, they may need to trim their spending further.

Sorting all of this out, particularly without a cushy pension to fall back on, is a complicated task, even for a numbers-savvy retiree. Still, the original 4 percent rule persists as a starting point, and some retirement experts are still comfortable suggesting similar withdrawal rates, with some caveats and new twists of their own.

In a recent analysis, Mr. Pfau compared several withdrawal strategies in an attempt to illustrate how spending patterns might change to guarantee that a portfolio will last for 30 years, even if low rates persist or retires face some other awful combination of events.

He found that people who spend a constant amount adjusted for inflation — similar to the 4 percent rule — would have to reduce that rate to 2.85 to 3 percent if they wanted assurance that their spending would never have to dip below 1.5 percent of their initial portfolio (in inflation-adjusted terms).

So a retiree with $1 million could securely spend nearly $30,000 annually for 30 years, in the best and worst of market conditions. The big drawback, though, is that if economic conditions are generally average, retirees would be left with $794,000 in unspent money. If they were unlucky and experienced terrible market conditions, they would be left with $17,900.

That's the trouble with this strategy. "Most of the time, you underspend," said Mr. Pfau, who is also a principal at McLean Asset Management. "Yet you still run the risk of running out."

Other retirement experts, including Michael Kitces, director of research at

the Pinnacle Advisory Group, are still comfortable recommending early withdrawal rates of about 4 percent. He has likened the current environment — low interest rates and high stock market valuations — to walking along a cliff. Today's retirees are walking along the edge, which, he said in his blog, required more caution and continuous monitoring. But that doesn't mean they're going to fall off.

"The 4 percent rule was built around some rather horrific bear markets of the past already," he said. "Do we necessarily know or expect that the next one will be so much worse than any of the other terrible historical bear markets we've seen?"

Mr. Pfau isn't so sure. So his recent study looked at different strategies beyond the 4 percent rule, some of which allow people to spend a bit more early on, but also provided assurances that spending wouldn't dip below a certain level for 30 years. At least one approach that he analyzed, using a portfolio evenly split between stocks and bonds, was initially created by Jonathan Guyton, a financial planner with Cornerstone Wealth Advisors in Edina, Minn., and allows an initial withdrawal rate that approaches 5 percent.

To start that high, however, you need to follow a complicated set of rules: Normally, annual withdrawal amounts can increase by last year's rate of inflation. And in good years, retirees can generally increase withdrawals by 10 percent.

But no increase is permitted in years when the portfolio loses money. In fact, a small spending cut might be necessary in that case: When balances drop below certain levels — causing your withdrawal rate to rise more than 20 percent above the initial rate, say to 6.4 percent from 5.3 percent — the next year's withdrawal must be cut by 10 percent.

Tricky rules of that sort are likely to leave retirees scratching their heads. It's hard envisioning even the sharpest of aging retirees, much less the most vulnerable, following this sort of discipline on their own.

So perhaps it's not all that surprising that Mr. Bengen said he had hired not one, but two financial advisers — both good friends — to handle his retirement money. Though his advisers rely on financial software, he said they were proponents of the 4 percent rule.

"And my actual numbers probably come close to that," said Mr. Bengen, who spends his days honing his creative writing, playing the guitar, setting up bridge and boating clubs and taking time to visit his 20-month-old grandson. "I have followed my own advice."

But if he had advice to offer others, it is this: "Go to a qualified adviser and sit down and pay for that," he said. "You are planning for a long period of time. If you make an error early in the process, you may not recover. "

Make the most of your money. Every Monday get articles about retirement, saving for college, investing, new online financial services and much more. Sign up for the Your Money newsletter here.

A version of this article appears in print on May 9, 2015, on page B1 of the New York edition with the headline: New Math for Retirees and the 4% Rule.

© 2015 The New York Times Company