## Time to Put Benjamins Back in the Sock Drawer?

By Kerry Pechter Thu, Oct 31, 2019

At the LIMRA annual conference in Boston earlier this week, MIT economist James Poterba described how low interest rates make saving for retirement more of a challenge.


Last Monday, two days before Federal Reserve chair Jerome H. Powell would announce this year's third quarter-point reduction in the fed funds rate, MIT economist James Poterba was delivering a presentation in the Sheraton Boston on the headwinds that low rates create for middle-class retirement savers.

Poterba was one of the first speakers on the first day of the annual conference of LIMRA, the organization that conducts research for its member life insurance companies. He prefaced his remarks with a spoiler-alert that no one in the room-after a decade of historically low rates-especially needed.


James Poterba
"We're in a much tougher environment for the provision of savings for retirement today, both in terms of the capacity to save and the capacity to turn savings into retirement income," said Poterba, who is also president of the National Bureau of Economic Research. "What I have to say will be a little depressing."

The audience was duly attentive. Life insurance companies earn their money by investing their customers' premiums-trillions of dollars, collectively-mainly in bonds and other fixed
income securities. When the Fed pushes down 10-year Treasury rates, as it did from 2009 to 2015, it squeezes their earnings and reduces the benefits they can pay.

More recently, the Fed has whipsawed insurers. Starting in December 2015, it raised the fed funds rate (the rate at which banks lend reserves to each other at the Fed) in nine quarter-point increments, to between $2.25 \%$ and $2.50 \%$. But this year, after President Trump criticized the tightening policy for hurting the economy and the stock market (and his reelection chances), the Fed reversed course and reduced rates in three quarter-point increments, to between $1.5 \%$ and $1.75 \%$. So Poterba's presentation, if not uplifting, was timely.

## How low are rates?

Since 2010, U.S. savers have been better off hiding Benjamins in the sock drawer than buying 10-year Treasuries. In 1990, the nominal rate was $8.48 \%$ and real after-tax yield was between $1.25 \%$ and $1.66 \%$, depending on your tax bracket. By 2010, the real after-tax yield dropped to between -10 and -20 basis points. Prior to this week's reduction, it was about -40 basis points.
"Over the many years I've taught intermediate macroeconomics, the real interest rate has always been positive," Poterba said. "[But with rates falling so low], at what point do savers decide that currency dominates other financial instruments. Apple may decide to create a secure facility where their money will yield zero but will be safe. One of the reasons for going to a cashless society is that cash becomes a problem if the government wants to run a negative interest rate."

Yet U.S. benchmark yields are higher than in many European countries. The yield on inflation-indexed government bonds in mid-October was 55 basis points in Canada and 28 basis points in the U.S. It was -200 basis points in Sweden and -231 basis points in the United Kingdom.

Low rates hurt mass-affluent households the most, Poterba said. "For the 20\% to $40 \%$ of the population without much savings, and for the $20 \%$ with the most savings"-more than enough to retire on-"[low rates] won't matter much," he said. "It will mainly affect the middle group who used to depend on a combination of defined benefit pensions and private savings. They rely most on the rate of return to fund their retirements."

All else being equal, low real rates require people to save more for a longer period to create a nest egg that will generate enough income in retirement to replace an adequate share of
their final salary and allow them to maintain their standard of living after they stop working.
For instance, if you assume that a person save a real $1 \%$ of their salary per year and their salary increases by a real $1 \%$ per year, it will take considerably longer to replace one's final salary at low risk when the real risk-free rate is $3 \%$ than when it is $1 \%$ or zero. The table below indicates that it would take about 20 years to replace about a quarter of one's final salary by saving at $3 \%$, but about 30 years to replace that amount with a $0 \%$ return.

Retirement Wealth/Final Earnings
Per 1\% of Salary Saved Per Year

| Accumulation <br> Period | $\mathbf{r}=0.03$ | $\mathbf{r}=0.01$ | $\mathbf{r}=0$ |
| :--- | ---: | ---: | ---: |
| 20 Years | 0.24 | 0.20 | 0.18 |
| 30 Years | 0.40 | 0.30 | 0.26 |
| 40 Years | 0.60 | 0.40 | 0.33 |

Calculations assume annual real wage growth of $1 \%$ per year. $r$ denotes the real interest rate.

Falling interest rates hurt younger people, who have yet to buy assets like homes and bonds, Poterba said, and help older people whose assets increase in value when rates go down.
"The long Treasury market has been the best asset for performance this year," Poterba said. "If you already owned bonds and got the big capital gains, you did wonderfully. You're much richer than you were last year. But younger people who buy new bonds will get a tiny rate of return" and not much chance of capital gains in the future because rates can't drop much farther.

But low rates also impact older people who might otherwise buy annuities. Low rates depress the payout rates offered by single-premium income annuities, which makes them less attractive. In 1987, when AAA-rated corporate bonds paid between $9 \%$ and $10 \%$, an annuity for a 65 -year-old man paid out about $\$ 1,000$ a month. At today's rates, the payouts are less than $\$ 550$ a month.

## What to do about it?

To offset the impact of low yields on savings, Americans will have to save more, work longer, take more risk with their investments, inherit money from their parents, or live with their children in their old age, Poterba said. Working longer is the most reliable solution, he noted, because it can both increase savings and reduce the number of years spent in retirement.

As for investing in stocks instead of bonds, Poterba didn't list that as one of his recommended remedies for low rates. The conventional wisdom is that low rates encourage investors to buy stocks or stay in stocks; but Poterba said that, unless you think the equity premium (the historical return advantage of stocks over bonds) will grow, then lower interest rates harbinger lower stock returns in the future.
"The expected real rate of return for stocks over the next ten years has fallen from 6.5\% in 1996 to between $3.0 \%$ and $3.5 \%$ today," he said. "So the expected returns on stocks have drifted down along with the interest rate, assuming that the risk premium stays constant."
© 2019 RIJ Publishing LLC. All rights reserved.

