

---

## Behavioral Economics and Retirement Investing

---

By Editor Test     Sat, Jul 31, 2010

---

*PIMCO and its Allianz affiliates recently sponsored a new study, "Behavioral Finance and the Post-Retirement Crisis." PIMCO Retirement Product Manager Tom Streiff explains how the study's findings can foster the development of successful retirement income products.*

---

*PIMCO and its affiliates in the Allianz Family recently sponsored "Behavioral Finance and the Post-Retirement Crisis," a landmark study of behavioral economics as it applies to retirement decision-making. It was published in April in response to the U.S. Treasury and Labor Departments' Request for Information Regarding Lifetime Income Options for Participants and Beneficiaries in Retirement Income Plans.*

*Allianz and PIMCO tapped leaders in the field of behavioral finance, led by Shlomo Benartzi, Ph.D., of UCLA, to conduct the study. Below, PIMCO Retirement Product Manager Tom Streiff explains how the study's findings can foster the development of successful retirement income products.*

**Q: One major issue for retirees is the risk that they take with their investments. What did the behavioral finance study reveal about risk-taking and risk aversion among older adults?**

**Streiff:** As part of the behavioral finance study, Columbia University professor Eric Johnson built on earlier studies of loss aversion and found that retirees as a group display "hyper loss-aversion."

It's not surprising that retirees are more concerned about loss than younger folks. But what was surprising in the study was the magnitude of their concern. For instance, retirees wouldn't accept a "coin flip" equivalent bet unless they could expect to win \$100 on heads for every \$10 lost on tails. Earlier studies have shown that the average investor needs to expect to win \$20 for every \$10 lost in order to feel, on an emotional level, that he or she will "break even."

It was also interesting that retirees generally respond *unfavorably* to financial products that offer substantial protection and guarantees. Johnson concluded that retirees view the purchase of certain insured investments as a form of sacrificing control of their money, and perceive it a loss.

This is where "hyper loss-aversion" can inhibit their ability to make what we believe would be more sensible financial decisions. For instance, even if a product offers a future stream of income or can cushion retirees against a large drop in the stock market, they may not buy it if they can't withdraw their money whenever they want.

**Q: How can providers of income-oriented investment products break through this "hyper loss-aversion" mindset and reach retirees? Is it a matter of product design, outreach to advisors and investors, or both?**

**Streiff:** The research highlights the challenges that investment firms face in designing new products and in positioning them as tools for *increasing* control.

Take inflation, for example. It is the “silent killer” of retirement savings. Over time, inflation can inflict more damage on a portfolio than bear markets or financial crises. Investment firms and planners need to build products and solutions that defuse this inflation threat. They also need to communicate the value of directly hedging inflation and preserving purchasing-power over time. If retirees believe that they are reducing the threats to their wealth, their hyper risk-aversion can be channeled into better decisions.

Eliminating or reducing the chance of default in the portion of a retiree’s assets that provides their basic living expenses can also alleviate loss-aversion. Once retirees’ essential spending needs are taken care of, they may feel better about pursuing higher returns with the rest of their savings.

**Q: Why is it so hard for people to perceive the threat of inflation?**

**Streiff:** Most people—especially older people—think in nominal dollars, and overlook the corrosive effect of inflation. Consider that an annual inflation rate of 3% compounded over 20 years can erode purchasing power by nearly 50%. People find it hard to comprehend that they could lose almost half of their savings in real (inflation-adjusted) dollars without losing a single penny in nominal dollars.

In our behavioral study, Eldar Shafir of Princeton University looked at the psychological basis of the “money illusion,” which refers to the dominance of nominal dollars in decision-making. When the future value of savings was stated in nominal dollars, a non-indexed contract was preferred. But when the future value of saving was stated in real dollars, reflecting the loss of purchasing power, they tended to favor an inflation-indexed contract. Moreover, when contract information was presented in a neutral way, preferences were similar to those when nominal dollars were presented.

While the findings confirm that most people think about risk in terms of nominal dollars, they also show that a clear demonstration of the risk of inflation can help minimize the “money illusion.”

**Q: What does this result tell us about how to market inflation hedging to individuals?**

**Streiff:** Shafir’s study highlights the critical gap that still exists between the actual threat that inflation poses for retirees and their perception of the threat. More starkly, it shows that their failure to recognize the impact of inflation could harm the sustainability of their finances and cause a material erosion of their purchasing power and standard-of-living.

However, the results also suggest that proper education and presentation, including the use of real dollars instead of nominal dollars to describe future account values or future income streams, can correct this major financial misperception. Not only should financial firms offer products that hedge inflation risk, but they should also present financial information in a way that overcomes the all-too-common intuitive dismissal of inflation threats.

**Q: The report also found that products characterized as “income solutions” are more attractive than those positioned as investments. Does this imply that all retirement investment discussions be presented in terms of income?**

**Streiff:** Several key behavioral studies have established that “framing” decisions can have a huge impact on transactions. Consider the difference between advising a person to spend about 70% of their current income in retirement or to plan on eliminating 30% of their current expenditures during retirement. Even though these two proposals are mathematically equivalent, most people find the 30% rule unpalatable and the 70% rule appealing.

As part of the behavioral finance study, Professor Jeffrey Brown of the University of Illinois applied this logic to retirement income, asking more than 1300 individuals over the age of 50 whether they’d choose a life annuity paying \$650 each month until death or a savings account of \$100,000 bearing 4% interest. Half of the respondents were presented the annuity choice in a “consumption” frame—a monthly income of \$650 for life—and half were presented in an “investment” frame—a monthly return of \$650 for life.

That simple change caused a major difference in the response to the savings accounts versus the life annuity question. Seventy percent of the respondents chose the annuity when it was presented in the consumption frame (as monthly income) while only 21% of the respondents chose the annuity when it was presented in the investments frame (as monthly return).

**Q: How can the results of the “framing” study be built into marketing and product design strategy for income products?**

**Streiff:** The study tells us that the respondents have a far more favorable perception of an annuity when it is presented as a consumption plan that guarantees lifetime income. When an annuity is presented as an investment plan, the owner perceives a greater risk of dying early and relinquishing the wealth to the insurer.

Most of life’s routine expenses—mortgage payments, electric bills, etc.—must be paid monthly, and guaranteed income can cover those expenses. Investment returns, on the other hand, are typically irregular and feel more abstract with regard to expenses.

Clearly, the most useful result of this study is that retirement income products will get far more traction if they are marketed on the basis of the monthly income they can provide for the retiree than on the basis of their “returns.”

All investments contain risk and may lose value. PIMCO does not offer insurance products, including guaranteed income products, or products that offer investments containing both securities and insurance features. This material contains the current opinions of the author but not necessarily those of PIMCO and such opinions are subject to change without notice. Statements concerning financial market trends are based on current market conditions, which will fluctuate. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission. Pacific Investment Management Company LLC, 840 Newport Center Drive, Newport Beach, CA 92660, 800-387-4626. © 2010, PIMCO.