The Fuzzy Math of Social Security

These stories—based on findings from a study performed by money manager United Income—claim that only 4 percent of retirees are making the financially optimal decision to wait until age 70 to begin receiving benefits. And, while delaying until 70 seems like a stretch, most would benefit by waiting at least until age 65.

As a result of their choices, “they will miss out on a collective $3.4 trillion in benefits before they die,” according to a *Bloomberg* article on the topic.

That’s a lot of money being left on the table. So much that you must ask yourself: Why is this happening?

As you would expect, that question has many potential answers—some practical and some more esoteric.

Practical Explanations

Practically speaking, there are many partial answers. For example, some of these retirees may not have had access to good software, tools, or advice to help them make this important decision, so they made the only one that made sense to them.

According to Federal Reserve data, the median and most common retirement age in the United States is 62. You know what else it is? It’s also the minimum age at which you can start collecting Social Security benefits.

Arguably, the reduced benefit available at the early eligibility age of 62 is a financial incentive to file. In other words, getting something today—even at a reduced rate—is better than what I could have received yesterday.

This urgency has been fueled by Social Security staffers who have inappropriately told people who make benefit inquiries to "Take your benefits because you could die tomorrow," says Laurence Kotlikoff, professor of economics at Boston University and author of *Get What's Yours: The Secrets to Maxing Out Your Social Security*.

And, of course, with the negative press we periodically see about benefit cuts or the solvency of the Social Security trust fund, it is understandable that some fraction of filers may want to tap into their benefits early to make sure they get out what they put in—even if they aren't optimizing.

No doubt there is a kernel of truth in these explanations, but that doesn't explain the overwhelming miscalculation that Social Security filers repeatedly make.

The fact is: There are several aspects of the Social Security filing decision that simply confound the human brain. These *behavioral biases*, as they are known, can render humans unable to make optimal—or sometimes even OK—decisions about their financial lives. Arguably, there could be numerous biases negatively influencing the Social Security filing decision, but let's focus on two.

Immediate Gratification

The first of these biases is called *present bias*. Present bias is the idea that an individual will place greater value on something received in the present moment, rather than waiting to receive it in the future. It suggests that, given the choice between a payoff today and a payoff in the future, we tend to choose the payoff now—otherwise known as *immediate gratification*. This is true even for decisions that our future selves may regret.

In a nutshell, we see the future self we are delaying gratification for as a separate person from our current self, making the decision in question a choice between doing something for ourselves today or doing something for a stranger tomorrow.

In the case of Social Security, present bias causes millions of Americans to value—and therefore file to receive—benefits today versus benefits later, despite the significantly higher payouts they'd receive if they waited. Of course, present bias is not limited to the Social Security decision. It is—pardon the expression—ever present in our lives.

Present bias is why we splurge on a big vacation or a lavish purchase today and fail to start saving. It's why we claim we'll save more later, after we get a raise or bonus, but don't. It's why we eagerly commit to dieting or a new exercise regime—so long as we get to start it tomorrow.

We see the certain and immediate costs to these choices and weigh them against murky benefits in the distant future. Immediate gratification wins almost every time.

Fuzzy Math

The other behavioral bias worth mentioning is called *exponential-growth bias*. Exponential-growth bias is the tendency to undervalue the effects of compound interest, leading to the underestimation of future values. Because we are very bad at these calculations, our underestimation can be massive.

Victor Stango and Jonathan Zinman from Dartmouth College wrote about exponential-growth bias in their 2007 paper, “Fuzzy Math in Household Finance: A Practical Guide.” They point out that exponential-growth bias is relevant to household finances in two ways. Unchecked, exponential-growth bias means that people will get the future value of savings or investments wrong, especially “when the opportunities are relatively long-term and/or high-yielding,” say Stango and Zinman. “They underestimate returns because they underestimate how quickly interest compounds.”

Exponential-growth bias also leads to underestimation of interest costs on borrowing. “This problem is the mirror image of understanding compound interest,” say Stango and Zinman. The net result is that households with a strong exponential-growth bias tend to save less and borrow more—a double-edged sword of bad financial behaviors.

Back to Social Security. Exponential-growth bias is part of why filers are more likely to file for benefits before full retirement age. It causes them to undervalue the benefits of waiting. Further, because many people are cash poor, “they can’t wait until age 70 to collect their retirement benefit when they’d be roughly 70 percent higher, after inflation, than if they started claiming at age 62,” says Social Security expert Laurence Kotlikoff. They can’t grasp the real value of waiting.

The fuzzy math challenge of Social Security is further complicated by the fact that Social Security pays an inflation-adjusted income until you die—and most filers are not capable of valuing the longevity insurance and inflation protection that’s built into benefits. But that’s a story for another day.

Of course, all is not lost. You can, in fact, overcome the challenges of our flawed human wiring when it comes to maximizing Social Security benefits. What can you do?

Here are a few suggestions:

- **Estimate your benefits.** Through the Social Security Administration’s website at ssa.gov, you can get a personal benefit statement that takes into account your earnings over the years. From there you can model the impact of taking benefits before and after your full retirement age—and clearly see the value of waiting.
- **Plan to maximize benefits**. Not everyone can afford to delay taking benefits until age 70. A comprehensive retirement plan that looks at your expected retirement spending and potential sources of income can help you understand if it’s possible to delay or when you’ll need to start taking Social Security benefits.
- **Shock test your plan.** As the saying goes, “No plan survives contact with the enemy.” Make

sure your plan includes extreme scenarios, including living to 100 (or older!), a significant market sell-off the year you retire, a Social Security benefit cut, and a sustained increase in spending—whatever you need to test to make sure you're going to sleep at night.

- **Reserve the right to reassess.** Retirement is not a set-it-and-forget-it endeavor. It's an iterative process. Update your plan periodically—every three to five years or whenever you've experienced a significant change—and be prepared to adapt. Sustained good or bad markets, a sudden change of health status, or sale of property are all excellent reasons to loop back and reassess your plan.

If you're reading this, chances are good you have already taken at least one big step and hired a financial advisor. A financial advisor will take the time to understand your individual situation and create a retirement plan and investment strategy tailored to your specific needs, goals, and risk tolerance. As importantly, an advisor can help you keep your emotions and biases in check so that you stay on course.