



The (not so) Almighty Dollar

April 22, 2011

**CORRECTION: With Early Social Security
You CAN'T Have Your Cake and Eat It Too By Eric Bruskin**

Executive Summary: the “Annuity Strategy” described in last week’s Newsletter is not better than delaying Social Security benefits until age 70. The calculation omitted one specific type of inflation adjustment that increases the amount of the age-70 benefit even more than the 132% multiple that most discussions focus on.

In last week’s newsletter, I pointed out that because Social Security benefits continue for the rest of your life and are adjusted annually for inflation, their highest and best use is as “longevity insurance” – protection against running out of money if you live a very long time. If you take this view, the optimal strategy is to postpone the starting date in order to maximize the subsequent lifelong cash flow. This is how retail longevity policies work.

Social Security incorporates a similar tradeoff. There is a “base benefit” (the technical term is “primary insurance amount” or PIA) based on your salary history and a complex set of rules. According to essentially all published descriptions, the PIA is what you receive if you start taking benefits at your “full retirement age”, which is 66 for those born between 1943 and 1954. (Note: Actually, it’s not exactly what you would receive at age 66! See the table below.)

You can begin taking benefits as early as 62, but then you receive just 75% of the “base benefit”. This is adjusted for inflation in each subsequent year, but it will always be only 75% of what you would have received had you waited until age 66.

On the other hand, you can increase your benefit to as much as 132% of the “base benefit” if you wait until age 70.

Most discussions of the benefits of delaying Social Security focus on that 132% factor when explaining how large your starting benefit can be. So did I. However, if you begin taking benefits at any age after 62, the “base benefit” itself is adjusted for inflation during the time between age 62 and the age at which you begin taking benefits.

In last week’s article, I assumed a 3% rate of inflation. The resulting inflation adjustment of the “base benefit” from age 62 to 70 is thus 1.27 (1.03 raised to the eighth power). As a result, if you wait until age 70 and inflation is 3% per year, your initial benefit would be the “base benefit” multiplied by 1.27 and further multiplied by the 1.32 “delayed gratification” factor.

For example, if the “base benefit” is \$20,000 per year, here is the initial benefit calculation for each starting year from 62 to 70:

Starting Age	Base Benefit	Inflation Adjustment of the “Base Benefit”*	Early/Late Adjustment	Initial Benefit
62	\$20,000	N/A	× 0.75	\$15,000
63	\$20,000	× 1.03	× 0.80	\$16,480
64	\$20,000	× 1.03 × 1.03	× 0.87**	\$18,389
65	\$20,000	× 1.03 × 1.03 × 1.03	× 0.93**	\$20,398
66	\$20,000	× 1.03 × 1.03 × 1.03 × 1.03	× 1.00	\$22,510
67	\$20,000	× 1.03 × 1.03 × 1.03 × 1.03 × 1.03	× 1.08	\$25,040
68	\$20,000	× 1.03 × 1.03 × 1.03 × 1.03 × 1.03 × 1.03	× 1.16	\$27,702
69	\$20,000	× 1.03 × 1.03 × 1.03 × 1.03 × 1.03 × 1.03 × 1.03	× 1.24	\$30,501
70	\$20,000	× 1.03 × 1.03 × 1.03 × 1.03 × 1.03 × 1.03 × 1.03 × 1.03	× 1.32	\$33,443

Assumptions: Born between 1943 and 1954. Inflation is 3% per year.
* This is the step I inadvertently omitted from the calculation.
** Rounded

The combined effect of the inflation adjustment and the “delayed gratification” adjustment is that at age 70 the initial benefit is more than twice as large as it is at age 62. And every year thereafter, the benefit is further increased by cost-of-living adjustments for as long as you live. (These adjustments were included in the earlier calculation.)

The annuity strategy cannot overcome this large of an annual difference. Recall that the annuity strategy was as follows: rather than waiting until age 70, start taking the reduced benefit at age 62 but don’t spend it – instead, accumulate it until age 70, and then buy a separate inflation-adjusted annuity to supplement the reduced Social Security benefit. (The motivation for this strategy was discussed in the original article.)

In the previous (incorrect) calculation, the annuity strategy outperformed the delayed benefit by an amount between 4% and 14% depending on the federal tax bracket. Unfortunately, the corrected calculation shows that the annuity strategy underperforms the delayed benefit by something between 16% and 23%, again depending on the federal tax bracket.

You might ask, what if there is zero inflation between ages 62 and 70? Then the “base benefit” will be the same. Isn’t that what we did in the earlier calculation?

Alas, no. Although I omitted inflation adjustments of the “base benefit” prior to the starting year, I did include inflation adjustments for benefits after the starting year. As a result, the annual benefits for the age-62 case were increased for inflation but the “base benefit” for the age-70 case was not. This resulted in a larger accumulated amount with which to purchase the annuity. This difference was enough to throw the calculation. The revised chart tells the whole story.

Postscript: Jeff reminds me that I didn’t assume any reinvestment as the early payments are accumulated. I did that to be conservative. However, an after-tax rate of 10%-11% between ages 62-70 would increase the annuity sufficiently to make the two strategies equivalent. (Good luck!)

Further Thoughts (Extra Credit)

Typically, in financial matters you don’t get something for nothing. You can often analyze complicated alternatives like these in terms of trade-offs. Here we can ask: since both strategies involve a benefit that begins to accrue at age 62, but isn’t actually consumed until age 70, why is one so much better than the other?

To make the comparison more directly: If you delay your Social Security benefits until age 70, you are in effect telling the government to keep the amount they’d otherwise pay you between ages 62 and 70, annuitize it starting at age 70 (annuity #1), and add it to the benefit you’d otherwise receive, which is in effect another annuity starting at age 70 (annuity #2).

In last week’s proposed “annuity strategy”, the difference was that we would collect the age 62-to-70 benefit ourselves and purchase our own commercially available annuity for annuity #1.

Why is the all-Social Security version so much more generous?

I presume that the public policy goal of Social Security is not to be more generous than commercial insurance. I also point out that Social Security funds are essentially invested in Treasury Bonds, which historically have lower returns than the investment portfolios of the commercial insurers, although the net effect of this difference is hard to assess because (as we know) Social Security as currently designed will soon begin to pay out more than it has earned, whereas commercial insurers don’t have that option.

I think that the answer might have something to do with the “breakeven age” that I mentioned in last week’s discussion. In the corrected calculation, assuming 3% inflation, the age at which you are supposedly indifferent between taking benefits at age 62 and at age 70 is just under 78. In other words, if you die anytime before you reach age 78 (almost), you will have collected more from Social Security if you had begun taking benefits at 62 than if you had waited until age 70. If you die just before your 78th birthday, it’s a wash. If you live longer than that, you would have done better to start taking the larger benefit at age 70.

So in some sense, Social Security’s payment “supplement” if you wait until age 70 seems designed to “break even” at about age 78. However, the commercial annuity purchased at age 70 is designed to “break even” at about age 86, which is the average life expectancy of someone who has made it to age 70. Thus, the commercial annuity’s value is spread out over 16 years, whereas the equivalent “supplemental” quantity in the Social Security program is spread out over only about 8 years. This will make the Social Security payment larger than those of the annuity-based equivalent.

This is still speculation on my part. But it is important (at least for planners) to fully understand how Social Security is structured, so that we can help design alternative strategies when that becomes necessary.