Social Security: A Financial Analysis of When to Begin Receiving Benefits

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Abstract

The question of when to begin receiving social security benefits is a serious question for anyone who is approaching his/her 62nd birthday. It is also an issue about which each person must make a decision every year between the 62nd and 70th birthdays. Even if the person is between 62 and 70 and is already receiving social security benefits, a decision must be made each and every year. If the person is over 70, the only thing to do is to make sure not to die.

There is a monthly publication distributed to seniors in Utah called *Utah's Senior Review*. In it is an advertisement for a free seminar being offered to seniors in Utah. The advertisement for the seminar says, "Over 70% of Seniors Do Not Maximize Their Social Security Benefits." Looking at the ad, one of these authors thought "It is probably more like 100%." The only ones who do maximize their benefits are those who take it as early as possible and then die shortly thereafter or those who delay taking their benefits and then live to a ripe old age. One of these authors attended that seminar in March, 2012. It was beneficial but our conclusions that will be presented here do not agree with the conclusions that the speaker presented there.

Basically there is a break-even point where if you take it as early as you can and then do not live beyond, you will have maximized your benefits. Likewise there is a break-even point beyond which you must live where if you delay receiving your benefits you will have maximized your benefits. If we all knew exactly how long we were going to live and how long our spouse was going to live and the interest rate for the rest of our lives, we all would be able to maximize our total Social Security benefits. Both life expectancies are necessary because at the death of one spouse, the surviving spouse continues to receive those benefits. If both spouses are receiving benefits, the surviving spouse will continue to receive the larger of the two amounts. Unfortunately (at least to maximize our Social Security benefits) none of us know the answer to any of those three questions. Therefore, the ones who actually do maximize their social security benefits are the ones who guess correctly how long they are going to live and collect their benefits based on that estimate. This might just be done by accident.

How Your Social Security Benefit is Computed?

Your monthly benefit is computed by first computing your average monthly income subject to social security tax during your working years. The maximum amount of income subject to social security tax has increased over the history of the program. Because the maximum income subject to social security tax has changed over the years, the computation is not just a simple monthly average of those years of income. There is a factor applied to each year's earnings to account for changes in average wages since the year the earnings were received. Then the top 35 years are added together and divided by 420, the number of months in 35 years. The actual computation is beyond the scope of this presentation. After computing that amount, the first $791 is multiplied by 90%, the next $3,977 is multiplied by 32% and any amount over $4,768 is multiplied by 15%. Thus the lower your average monthly income, the larger percentage of your income you will receive in a monthly social security benefit. Thus even though the maximum taxable social security wages is now $113,700, the benefit received for earnings over $4,768 ($791 + $3,977), is somewhat minimal. The benefit at $4,768 is $1,984 per month. That can increase to $2,551 or $567 or up to 29% more. According to an announcement made on October 16, 2012 the benefit will increased by 1.7% for 2013. The average maximum social security wages going back 35 years from 2012 is $64,565.71.

What are the Consequences of Taking it Early or Late?

Individuals may begin to receive social security benefits as early at age 62. There are two consequences that may arise for anyone who begins receiving benefits at this age. First of all the monthly benefit will be reduced and second, if that individual continues to earn income, some or all of the benefits received might have to be paid back. Any income earned over $15,120 would trigger a repayment of benefits received. For every $2 earned over $15,120, $1 of benefits would need to be repaid. The reduction in benefit of taking Social Security at age 62 versus age 66 is a 25% reduction. At age 63, the reduction is 20%, at age 64 it is 13.33% and at age 65 it is 6.67%.

Once a person reaches "full retirement age" there is no pay back requirement. Full retirement age for anyone born between 1943 and 1954 is age 66. A person could delay receiving benefits beyond "full retirement age." For each year collection is delayed, the benefit increases 8% through age 70. Beyond age 70, the benefit does not increase. Thus the benefit could increase to 132% of the amount that would be computed in the previous section. It is not compounded.

Can I Cancel my Option if I Decide I Started Too Early?

Except for the consequences listed above, there was no irreversible consequence to taking retirement benefits prior to full retirement age or even later. An individual had the option of returning all monies received to the Social Security Administration and could at that point opt to receive a higher benefit based on the new age. The funds did not even have to be returned with interest accrued. This could actually have been an interest free loan from the government. The law was changed recently so the option to return the funds is only available for 12 months from the time social security benefits are received. After 12 months, the decision is not reversible.

Maximizing Spousal Benefits

Special rules apply to a working spouse who has reached full retirement age. The spouse may claim a spousal retirement benefit of 50% of the retired spouse and continue working without the repayment requirement. Work credits (called delayed retirement credits) continue to accrue and then at a later date, up to age 70, the spouse can claim benefits based on his/her own work credits which would likely be greater than the 50% benefits being received based on the spouse's retirement benefit. This special provision is not available if the person has not yet reached full retirement age.

What if I Continue to Work after Receiving my Benefits?

If an individual continues to work after beginning receiving benefits that could affect the monthly benefit. If the person has not yet reached "full retirement age," then the pay back provisions above might become effective. However, if the person is over "full retirement age," then there could still be an effect and it is a positive effect. Recall that the benefit is based on the average of the highest 35 years of income. If the current year's earnings is greater than one of those 35 years used previously, the current income would replace the lowest of those years and the benefit would be recalculated. If this occurs, the Social Security Administration would make a one-time make-up payment in December and future checks would be based on the newly computed benefit.

When Will Your Check Arrive

Your check will arrive on Wednesday. Everyone's check arrives on Wednesday. It is just a different Wednesday depending on the date of your birthday. Checks will arrive the 2nd Wednesday of the month for those whose birthdays are the first to tenth of the month. It will arrive on the 3rd Wednesday for those whose birthdays are the 11th to 20th of the month. All others will receive their checks on the 4th Wednesday of the month.

What is that Important Break-Even Point?

This is the important information and the real contribution of this article. What is called "full retirement age" for anyone born between 1943 and 1954 is age 66. Even though a person has reached "full retirement age," he/she may still delay receiving benefits. If he/she does so, the monthly benefit will increase by 8% per year. Delaying receiving benefits would take 12.5 years from the time you begin receiving benefits to catch up at 0% interest. In other words, if one delayed receiving benefits to age 67 rather than receiving them at age 66 would take to age 79.5 to break-even. Delaying to age 68 would take to age 80.5 to catch up. Thus if a person does not live beyond the break-even point, receiving benefits early is beneficial.

If the person lives beyond the break-even point, then receiving benefits later would be beneficial. Delaying receiving benefits to age 68 would take 14.5 years after age 66 to catch up. Age 69 would take 15.5 years and age 70 would take 16.5 years.

Delaying receiving benefits beyond age 70 would not increase the monthly benefit. Therefore, there is no financially logical reason to delay receiving benefits beyond age 70. This relationship is shown in the following table and is based on an assumption of a $1,000 per month benefit. Regardless of the amount of the benefit, the relationship still holds and the break-even point will not change.

The following table shows the future value of receiving $1,000 beginning at age 66 verses receiving $1,080 at age 67 or $1,160 at age 68 or $1,240 at age 69 and $1,320 at age 70. These amounts are then shown graphically. Graphically and from the table it is apparent that the break-even point is 12.5 years beyond the later day of beginning receipt of benefits.

Because of the payback provision of receiving benefits prior to the full retirement age, we have not computed a break-even point for that scenario. People who retire and discontinue working at prior to age 66 probably need the money so that decision is not based on maximization of total benefits. If one will continue to work until age 66, there would probably be no logical reason to take benefits early because received benefits would likely have to be paid back in full.

Beginning benefit can be altered.

This table uses monthly interest and 8% annual increase for delayed retirement

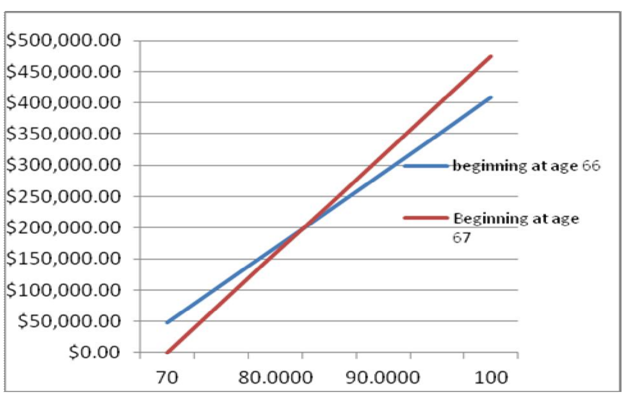
	age	age	age	age	age
	66	67	68	69	70
payment	$1,000.00	$1,080.00	$1,160.00	$1,240.00	$1,320.00

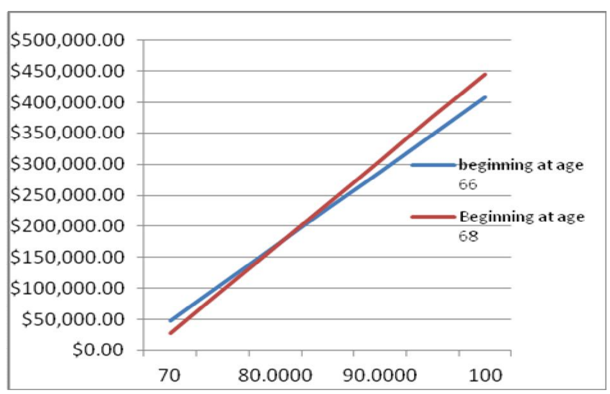
to break even	begin @ 67	begin @ 68	begin @ 69	begin @ 70
months	108	168	228	288
Years	9.0000	14.0000	19.0000	24.0000
To age	75.0000	80.0000	85.0000	90.0000

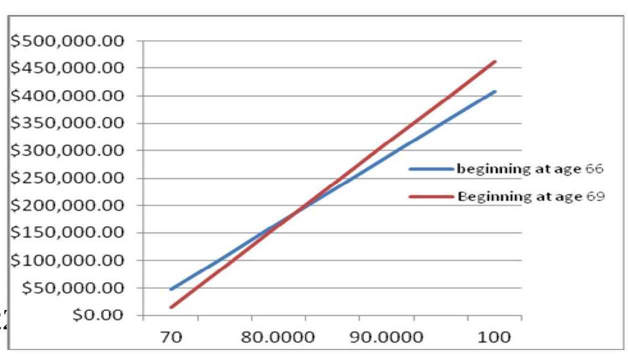
Variable inputs	
annual interest	**0.00%**
beginning benefit	**$1,000**

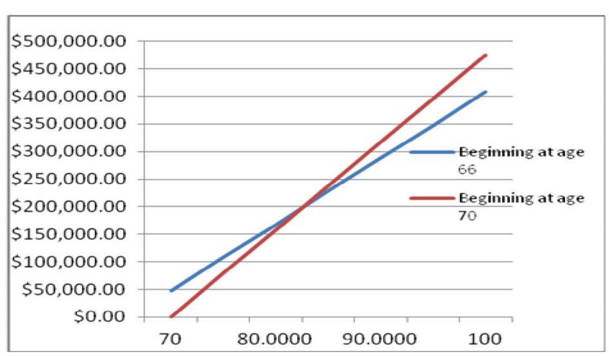
Net advantage of delaying receiving benefits at ages

70	75.0000	80.0000	85.0000	90.0000	95	100	
-$9,120.00	-$4,320.00	$480.00	$5,280.00	$10,080.00	$14,880.00	$19,680.00	Difference in Compounded dollars
$48,000.00	$108,000.00	$168,000.00	$228,000.00	$288,000.00	$348,000.00	$408,000.00	Future value of beginning at age 66
$38,880.00	$103,680.00	$168,480.00	$233,280.00	$298,080.00	$362,880.00	$427,680.00	Future value of beginning at age 67
-$20,160.00	-$10,560.00	-$960.00	$8,640.00	$18,240.00	$27,840.00	$37,440.00	Difference in Compounded dollars
$48,000.00	$108,000.00	$168,000.00	$228,000.00	$288,000.00	$348,000.00	$408,000.00	Future value of beginning at age 66
$27,840.00	$97,440.00	$167,040.00	$236,640.00	$306,240.00	$375,840.00	$445,440.00	Future value of beginning at age 68
-$33,120.00	-$18,720.00	-$4,320.00	$10,080.00	$24,480.00	$38,880.00	$53,280.00	Difference in Compounded dollars
$48,000.00	$108,000.00	$168,000.00	$228,000.00	$288,000.00	$348,000.00	$408,000.00	Future value of beginning at age 66
$14,880.00	$89,280.00	$163,680.00	$238,080.00	$312,480.00	$386,880.00	$461,280.00	Future value of beginning at age 69
-$48,000.00	-$28,800.00	-$9,600.00	$9,600.00	$28,800.00	$48,000.00	$67,200.00	Difference in Compounded dollars
$48,000.00	$108,000.00	$168,000.00	$228,000.00	$288,000.00	$348,000.00	$408,000.00	Future value of beginning at age 66
$0.00	$79,200.00	$158,400.00	$237,600.00	$316,800.00	$396,000.00	$475,200.00	Future value of beginning at age 70









What about imputing interest?

This is where the authors differ from Michael Littledike who gave that seminar for seniors that was mentioned earlier. Mr. Littledike never did impute an interest rate in his decisions. Below is a table wherein these authors have computed the break-even point given interest rates varying from 0% to 6% per year. Clearly it can be seen that the higher the imputed interest rate the longer it will take to break-even. Notice at 6%, if you delay receiving your benefits until age 70, you will have to live to past age 101 to break-even rather than just to age 82.5 as was the case at 0% interest.

Break even years for social security

Begin Age	0%	1%	2%	3%	4%	5%	6%
67 rather than 66							
Months	162	173.0929	186.6010	203.5821	225.9136	257.3888	307.5191
Years	13.5	14.4244	15.5501	16.9652	18.8261	21.4491	25.6266
To age	79.5	80.4244	81.5501	82.9654	84.8261	87.4491	91.6266
68 rather than 66							
Months	174	185.9592	200.6495	219.3359	244.3344	280.5589	341.4950
Years	14.5	15.4966	16.7208	18.2780	20.3612	23.3799	28.4579
To age	80.5	81.4966	82.7208	84.2780	86.3612	89.3799	94.4579
69 rather than 66							
Months	186	198.8319	214.7327	235.2023	263.0756	304.6830	379.2626
Years	15.5	16.5693	17.8944	19.6002	21.9230	25.3903	31.6052
To age	81.5	82.5693	83.8944	85.6002	87.9230	91.3903	97.6052
70 rather than 66							
Months	198	211.7112	228.8514	251.1863	282.1616	329.9004	422.1582
Years	16.5	17.6426	19.0710	20.9322	23.5135	27.4917	35.1798
To age	82.5	83.6426	85.0710	86.9322	89.5135	93.4917	101.1798

What is the future of Social Security?

None of us know the answer to this question. However, we should probably all realize that it cannot continue indefinitely unless some modifications are made. We do not profess to know what those modifications can or should be. The August/September, 2012 issue of the AARP magazine had an interesting little quiz or game or something that might give some idea about what some of the possible solutions might be. We have looked at that but we do not have any opinions ourselves as to what the correct solution or solutions might be.

Other Important Issues to Consider

We would never profess that maximization of the dollars received is the only consideration that should be used to decide when to begin to receive social security benefits. We understand the saying, “A bird in the hand is worth two in the bush.” Some might want to insure that they receive some social security benefits even though that might result in a lesser amount of total benefits. This is not a trivial desire. Thus that person might want to receive benefits as soon as they become available even though they expect to live a long time after retirement.

Some people might simply be in need or money now and thus would need to begin receiving benefits even though they have a family history of living lengthy lives.

Others might just not need the money now and thus are willing to delay receipt of benefits until later with the guarantee of receiving the higher monthly benefit. This might even be true if the family history is not one of great longevity. On the other hand, some people who don’t need the money may want to insure that they have some money to leave to heirs or children. Thus they might want to begin receiving benefits as early as possible to insure the ability to do that.