Social Security in the New Retirement

Financial Engines' Social Security methodology

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Overview

Americans retiring today face a new and increasingly complex retirement landscape. The mid to late 20th century model of the three-legged stool of Social Security, pensions, and individual savings no longer applies to many retirees. With the incidence of traditional defined benefit pensions declining, Social Security provides on average about two-thirds of total income for individuals age 65 and over who are receiving benefits.[1] Given the important role that Social Security plays for many retirees, it is essential to ensure that they are making the most of this resource.

Despite Social Security providing the lion's share of retirement income for many, the rules surrounding Social Security claiming are poorly understood by the average retiree. There are literally thousands of rules that govern the calculation of Social Security benefits for retirees and their spouses. Interpreting and internalizing all of these complex rules strains the ability of even experienced financial advisors.[2] Accordingly, most retirees have only the most basic understanding of how Social Security works. For instance, many retirees have little awareness of how benefits increase by starting them at later ages. Since the benefit increases from delaying are poorly understood, impatience tends to win in deciding when to claim. Based on the findings of Shoven and Slavov (2012), 43 percent of Social Security claimants take benefits within two months of the earliest possible claiming age of 62, and 60 percent take them within two months of the later of age 62 or the date of retirement. Given the large benefit increases available by delaying the start date of Social Security, most retirees would benefit from waiting till full retirement age and a significant portion of them would gain from waiting until age 70. But an optimal claiming decision for Social Security is not merely a matter of evaluating the benefits for an individual. The potential gains for married couples, though attractive, are bound by rules that are even more complex than for single retirees and there is little conventional wisdom about the right way to optimize a married couple's benefit claiming decisions.

Financial Engines seeks to help individuals and married couples create a successful retirement. How retirees choose to claim Social Security may be the single most important financial decision they will make with respect to their retirement. Relative to the early claiming decisions that most retirees make, the gains in expected lifetime income from an optimal claiming decision can be dramatic. For individuals, our analysis indicates that the gains can exceed \$100,000 in expected higher lifetime income, while for married couples the gains can exceed \$200,000. Since the typical near-retiree has less than \$70,000 in their 401(k) plan[3], it is easy to see why getting the most from Social Security is critical to the retirement success for many households. It is difficult to identify many 401(k) decisions that can have as much impact on lifetime retirement income as getting Social Security right.

In this paper, we will describe the key components of effective Social Security claiming strategies. We will also illustrate how Financial Engines helps retirees understand the key tradeoffs and opportunities within the Social Security benefit rules. Financial Engines' services also address the behavioral challenges in getting near-retirees to properly assess the benefits of optimizing their Social Security claiming strategy, in particular by providing a holistic portrait of all of the household's sources of retirement

[1] See Table 9.A1 in Social Security Administration, "Income of the Population 55 and Over, 2010," published 2012.

[2] Greenwald et al. (2011) report that 22% of surveyed financial advisors felt "very knowledgeable" about how the Social Security system works, and the advisors believe clients should claim benefits at a median age of 66.

[3] The median balance in Vanguard defined contribution plans for those age 55-64 was \$67,239 in 2012 (Vanguard 2013).

income: Social Security; pensions; part-time work; and well-timed withdrawals from retirement savings accounts.

The Basics of Delaying Social Security

Social Security provides a lifetime income stream that is inflation adjusted and is backed by the full faith and credit of the federal government—that is, Social Security is a real annuity paid by the U.S. government. Social Security benefits are typically described as providing a "full" benefit amount starting at a person's "full retirement age." For Baby Boomers, born between 1943 and 1954, that full retirement age is 66. Early claiming results in reduced benefits, such that claiming at 62 yields 75 percent of the full benefit amount. The reduced benefit is permanent in that it continues at that reduced level for the rest of the individual's life. Delaying claiming results in permanently increased benefits, up to 132 percent of the full benefit amount for claiming at age 70.[4] These delayed retirement credits (more correctly thought of as credits for delayed *claiming*) were created in order to make an actuarial adjustment: if benefits are claimed later, benefits will be paid out for a shorter period, justifying a larger monthly benefit.

Until recently, it was commonly asserted that the delayed retirement credits were actuarially fair, in the sense that the average individual would get the same expected present value of lifetime benefits regardless of what age they claimed their benefits. If this were true, then delaying benefits would only make sense for those who expect to live longer than average. However, the delay credits today are actually more generous than actuarial fairness would dictate. First, average longevity has increased since the delay credits were last changed in 1983. If the 1983 adjustments were actuarially fair, then improved longevity since 1983 means the current adjustments assume "too short" an average longevity and hence are too large a reward for delaying. Second, actuarial adjustments to maintain a constant present value assume some set of interest rates. The period since 1983 has been marked by a consistent decline in U.S. interest rates. Since Social Security represents an inflation-protected promise by the U.S. government, these benefits should be discounted by real, not nominal Treasury interest rates. The real interest rate available to purchasers of inflation-indexed "I bonds" from the Treasury has hovered at or near 0.0% since 2009 (as of 12/31/2015).[5] In today's low interest rate environment, the advantages of delaying Social Security benefits are even more substantial than a simple consideration of longevity increases would dictate. There is a third, less recognized reason why delaying Social Security benefits is often desirable in the context of 401(k) participants. And that is the population of 401(k) participants is on average better educated and has a higher income, and thus likely to live longer than the population of Social Security beneficiaries that is used by the Social Security Administration to calculate the mortality distribution. There is a high correlation between better health and higher levels of income and education across individuals. This is particularly relevant for companies that employ large proportions of highly educated and higher income workers.

[4] These differences may seem small, but they can be reframed in a way to better understand the reward for delaying. The annual benefit if claimed at age 70 is *76 percent higher* than the benefit if claimed at age 62.

[5] During 2015, the real yield on 10-year Treasury Inflation Protected Securities (TIPS) ranged between -0.02% and 0.84%. Retrieved Jan 14, 2016 from http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=realyield.

Recognizing Behavioral Challenges

We've explained why the economic benefits to smarter Social Security claiming decisions are often large. Unfortunately, the vast majority of retirees are foregoing significant future retirement income by claiming benefits as soon as they retire. It is almost certain that most couples filing for early benefits do not realize how much money they are leaving on the table. Correcting their mistakes will require not just informing them, but also overcoming some of the behavioral biases behind their impatience.

Many retirees may approach the Social Security decision within a narrow frame of reference. For a single person, the decision boils down to taking a smaller monthly amount sooner versus taking a larger monthly amount starting later. Many will be familiar with the idea of a breakeven point. As we show in the examples below, the breakeven age is typically before the age of 80. What may make this decision difficult for many retirees will be the uncertainty about how long they may live. While they may understand that life expectancy is in the mid-80s, the possibility that they may not live to that age might loom large in their evaluation of the decision. However, for married couples the situation is more complex. It is not only individual life expectancy that matters. Delaying the primary earned benefit is beneficial even if either of the spouse lives to an older age. That is, it is important to evaluate the chance that *at least one* of the members of the household makes it to an advanced age, a probability that is much higher than for an individual. For example, for a husband and wife who are currently both 60 years old, there is a 25 percent chance that at least one of them will reach age 97.

Health status may also play a role in the decision to take Social Security benefits early. As mentioned above, the average 401(k) participant is likely healthier than the overall Social Security population, and thus is more likely to benefit from delaying the start of benefits. However, not everyone is average. If a primary earner has information that their lifespan is likely to be much shorter than average, then it may not make sense to plan to delay benefits for very long.[6] Correspondingly, if a participant has reason to believe that they might live longer than average (e.g., their parents lived into their nineties), then delaying benefits will be even more important to maximize lifetime benefits. However, the decision to delay benefits is not necessarily irreversible if an unexpected health crisis should arise.

While the outcome statistics we illustrate show that informed claiming strategies can result in large increases in overall lifetime benefits, many retirees may be averse to delaying benefits because they may not have other sources of income to fund their early years of retirement.

These "gap" years can be funded in a number of ways:

- Working longer
- Taking a part-time job (part-time jobs may be sufficient to fill gaps in years where only one person is taking a spousal benefit)
- Accelerated withdrawals from 401(k) savings, with the portfolio appropriately allocated to generate the required cash flows. The Income+ framework in the Financial Engines Professional Management program can provide such cash flows.
- Lump-sum withdrawal from a defined benefit pension

[6] The household would want to recognize that, while the primary earner might not receive benefits long enough to make the delay "break even" in terms of his/her own benefits, the surviving spouse would benefit from higher survivor benefits if the primary earner were to delay taking benefits.

Improving Strategy Palatability

In our research with near-retirees during the development of the Financial Engines Social Security service, we have spent considerable time understanding user preferences when it comes to selecting a deferral strategy. In general, households prefer strategies that involve less up-front "investment" in order to achieve higher lifetime expected benefits. This is not an irrational or unreasonable preference, as there are uncertainties in the decision process that put additional value on near-term cash flows in the years following retirement. For instance, while the probability is not high, there is a chance that both spouses could die early in retirement, rendering a Social Security deferral strategy a bad decision. This implies that a fear of regret may drive some households to take benefits earlier. In addition, near-retirees generally express reluctance to spend their retirement resources early in retirement as there is uncertainty about future needs that may require drawing down those resources more quickly than expected (e.g., a health shock). Given these behavioral realities and risks, Social Security strategies that involve less spending of personal savings to achieve the same expected increase in lifetime benefits will be preferable.

To accommodate these preferences, Financial Engines has developed enhancements to the optimization process that recognize how households are likely to rank strategies that provide similar levels of expected lifetime benefits. In particular, we identify a strategy that has nearly identical expected lifetime benefits to the maximum possible value, but also provides more benefits (cash flows) early in retirement.[7] In all of the examples shown below, this strategy is labeled as "Optimal Claiming". It turns out that there are a number of strategies that yield expected lifetime benefits that are very close to the theoretical maximum, but vary significantly in their cash flow timing.

Examples of Social Security Claiming Strategies for Singles

To demonstrate the economic incentive to delay Social Security benefits, consider the example of John, a 60-year-old male who is considering taking benefits at three different ages. John's earned benefit available at his full retirement age of 66 is $30,000 per year.[8] If he were to take benefits at the earliest possible claiming age of 62, he would receive a reduced benefit of $22,500 per year, or 75 percent of his full retirement age benefit. However, delaying his benefit start until age 70 would increase his annual benefit to $39,600, or 132 percent of his full retirement benefit. Since John is single, the main uncertainty that impacts this decision is how long he might live. Some retirees and their advisors might use a simple, deterministic approach of adding up benefits received until life expectancy is reached to determine which start date would be optimal. Given current longevity data, John has approximately a 50

[7] Given some degree of uncertainty in mortality tables and variation in the real interest rate through time, there are in practice several strategies that provide equivalent expected lifetime benefits for many households. Within that set of strategies with equivalent value, we apply a heuristic to favor those strategies that provide higher benefits before the age of 70, in order to mitigate the practical difficulties of smoothing out various sources of retirement cash flows. This approach makes our proposed strategies easier to adopt and thus helps more households realize more value from their Social Security benefits.

[8] A benefit amount of $30,000 is not for a high-income individual. This benefit amount would be projected for a 60-year-old male who currently earns $100,000 per year and had career earnings growth equivalent to the Social Security population.

percent chance of living until the age of 87.[9] As the third column of Table 1 shows, starting at age 70 would yield the highest cumulative benefits of $673,200 through age 86. Although there are fewer years of benefits, the higher annual benefit amount more than compensates for the delay.

Table 1

Delaying Social Security for a Single Retiree

		(Deterministic Mortality Approach)	(Probabilistic Mortality Approach)		
Age of Claiming	**Annual Benefit**	**Cumulative Benefits through Age 84**	**Expected Lifetime Benefits for Male**	**Expected Lifetime Benefits for Male with Lower Life Expectancy**	**Expected Lifetime Benefits for Female**
62	$22,500	$562,500	$548,800	$435,300	$593,200
66	$30,000	$630,000	$615,500	$466,200	$673,800
70	$39,600	$673,200	$664,100	$474,500	$738,700
Gain from Delaying from 62 to 70		*$110,700 (+20%)*	*$115,300 (+21%)*	*$39,200 (+9%)*	*$144,800 (+24%)*

The simple deterministic calculation examines only one out of many possibilities for how long John might live. As a result, it is a rough approximation of a more complete, probabilistic approach that analyzes all of the possible longevity scenarios. For example, there is a 25 percent chance that John will die before the age of 78. Under that scenario, starting benefits at age 66 would yield higher cumulative benefits than starting at either 62 or 70. There is, on the other hand, a 25 percent chance that he will live until the age of 93. Living that long would make delaying until age 70 even more attractive than suggested by the deterministic life expectancy calculation. By using the full set of survival probabilities at different possible ages (up through age 120), and analyzing the cumulative lifetime benefits under every possible longevity scenario, we calculate the average or expected total lifetime benefits shown in the fourth column of Table 1. Using this method, we calculate a gain of $115,300 for delaying from age 62 to 70. In this example, the deterministic approach produced estimates that were a reasonable

[9] Throughout this paper and in Financial Engines' Social Security guidance, we use mortality tables published by the Society of Actuaries. These tables reflect group annuitants, which are a better reflection of the better-than-average longevity of 401(k) plan participants than population average mortality tables. See Society of Actuaries (2014).

approximation of the more accurate probabilistic calculation.[10] However, when we turn to analyzing married couples, there will be larger differences.[11]

The reward to delaying Social Security is not limited to those with average or better than average longevity prospects. As an example, if we make John's probability of dying in each year 80 percent higher than the Society of Actuaries' tables imply, delaying from 62 to 70 results in a relatively large $39,200 increase in expected lifetime benefits as shown in the fifth column of Table 1. There will of course be special cases where an unmarried retiree has a known health condition that dramatically reduces their survival prospects, making delaying benefits financially unattractive. However, these cases are relatively uncommon among large plan 401(k) participants.

As a final note on the incentive to delay for single retirees, it is worth mentioning that women will generally have a larger gain from delaying. The simple reason for this is that the delay credits are gender-neutral, but women's longer life expectancies make them more likely to live to older ages that make delaying Social Security benefits attractive. Assuming the same earned benefits as what John is entitled to, a typical single woman could improve her expected lifetime benefits by $144,800, or 24 percent, by delaying from 62 to 70 as shown in the last column of Table 1.

Examples of Social Security Claiming Strategies for Married Couples

Married couples face a much more complex decision, because there are many more ways to claim benefits. To understand these possibilities, we first need to introduce a couple of important concepts.[12]

Incorporated into the Social Security law is the concept of *spousal benefits*. Spousal benefits are benefits to which a spouse (or ex-spouse) is entitled, generally equal to half of the full earned benefit of their partner. This part of the law is designed to protect the interests of a spouse who may choose not to work in order to raise a family, or who earns substantially less than the primary earner in the household. As we will see, spousal benefits can play an important role in maximizing the lifetime income of a married couple.

Another important concept under the Social Security law is *survivor benefits*. Survivor benefits are the benefits that go to the second-to-die spouse in a married couple. Social Security is structured such that the surviving spouse receives the higher of the benefits being paid to each member of the household. For example, if the primary earner's earned benefit was $20,000 per year, and the spouse was receiving $10,000 per year, the surviving spouse would receive $20,000 per year after the primary earner's death. Survivor benefits are very important, as the average length of time that one spouse will be expected to

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[10] For benefit amounts different from the $30,000 amount assumed for this example, the dollar amounts could be scaled up or down accordingly, while the percentage gain of 21 percent shown in the bottom row would still apply.

[11] The expected lifetime benefits calculated here are also net present value calculations, given real interest rates of zero percent. Thus, maximizing expected lifetime benefits is the appropriate way to choose among different Social Security benefit streams that start at different ages. Under positive interest rates, the deterministic approach becomes a worse approximation for the correct, probabilistic approach.

[12] Prior to a legislative change in November of 2015, married couples could employ more complex strategies that involved one of the spouses filing and suspending their earned benefit, and the other spouse filing an application to receive only spousal benefits. These strategies were eliminated for most households going forward. Our Social Security planner may still provide recommendations to use these strategies for households who qualify and in cases where using these strategies can improve total expected lifetime benefits. For the sake of simplicity, this paper describes strategies available to all married couples, even after the legislative change.

outlive the other is approximately 10-12 years for most couples of similar age.[13] This is in contrast to most people's intuition that the number would be equal to the gap in average life expectancy between males and females of two to four years. In reality, the chance of one spouse substantially outliving the other is quite significant.

As a general rule, when maximizing lifetime benefits for a married couple, the higher earner within a couple will have an incentive to delay taking their earned benefit. This action will increase the size of the higher earner's annual earned benefit.

In addition to spousal benefits generally equal to one half of the primary earner's full benefit amount, the secondary earner is also entitled to the *higher* of his/her own earned benefit and an increased survivor benefit, if the primary earner delays benefits. The fact that survivor benefits also increase makes the delay credits an even better deal for the household.

This is an especially significant boost, because the expected length of widowhood or widowerhood is approximately 11 years.[14]

Consider an example to help illustrate the benefits of delaying for a married couple. Suppose Bob and Jane are married and both are the same age, and that Bob is entitled to a full benefit amount of $30,000 per year if he were to claim it at the full retirement age of 66. If he were to take it at the earliest age of 62, he would receive a reduced benefit of $22,500. Suppose Jane had minimal work history during her career, so her spousal benefit is greater than her own earned benefit. If Jane were to wait to receive her spousal benefits until the full retirement age of 66, she would receive $15,000, which is half of Bob's full earned benefit. If Jane files for her spousal benefit at the same time as Bob, at age 62, she would get a reduced benefit of $10,500[15]. This approach is shown under the "Early Claiming" heading in Table 2a.

[13] We calculated these estimates based on the same mortality tables used throughout this paper.
[14] The boost to survivor benefits can be understood in a different way, for those familiar with annuities. For a single person, benefits represent a single-life annuity. If the delay credits were actuarially fair, then delaying benefits would simply be exchanging one single-life annuity for another that starts later, but both would have the same value. For a married couple, Social Security provides a joint annuity with a free 100 percent survivor benefit. Delay credits increase the joint annuity, as well as the free 100 percent survivor benefit.
[15] The reduction for early claiming of spousal benefits is larger than for earned benefits, up to 30 percent for 48 months of early claiming.

Table 2a
Delaying Social Security for a Married Couple (Single Earner)

	Early Claiming		*Claiming At Full Retirement Age*		*Optimal Claiming*	
Age	**Bob**	**Jane**	**Bob**	**Jane**	**Bob**	**Jane**
62	$22,500	$10,500				
63	$22,500	$10,500				
64	$22,500	$10,500				
65	$22,500	$10,500				
66	$22,500	$10,500	$30,000	$15,000		
67	$22,500	$10,500	$30,000	$15,000		
68	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
69	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
70	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
71	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
72	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
73	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
74	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
75	$22,500	$10,500	$30,000	$15,000	$34,800	$15,000
…	…	…	…	…	…	…

Under the “Optimal Claiming” heading in Table 2a, we present the approach that yields the highest expected lifetime value of benefits. Bob files for his earned benefits at age 68 and Jane can collect her spousal benefits at the same time. The cumulative benefits calculations in Table 2b show that if both Bob and Jane live until age 80, the “Optimal Claiming” approach has surpassed the “Early Claiming” approach. This breakeven calculation is only part of the picture, however, because it ignores what happens if either of them lives past 80. Bob’s delaying the start of benefits also increases the survivor benefit that Jane would receive after Bob dies, by an extra $12,300 ($34,800 - $22,500) per year. When we account for the various possibilities for how long they each may live, the expected lifetime benefits are more than $162,600 (or 18 percent) higher under the “Optimal Claiming” approach.

It is interesting to note that the optimal strategy does not require Bob to wait till age 70 to start claiming. There are two forces at work here; Delaying till 70 would increase Bob's benefit amount to $36,900 per year for the rest of his life. It will also increase the survivor benefit for the household which means that if Bob predeceases Jane, her benefit will increase to $36,900 for the rest of her life. However, the couple will not receive any benefit from Social Security until Bob turns 70. By following the "Optimal Claiming" strategy, the couple can claim $99,600 before Bob turns 70 and lose only around 1% of the potential expected lifetime benefits that they could have received had they delayed claiming benefits until Bob turned 70. This reinforces just how important it is for a household to be able to trade off the ability to receive benefits early with the valuable strategy of delaying.

Table 2b

Benefits of Delaying Social Security for a Married Couple (Single Earner)

Cumulative benefits assuming both alive (ignores survivor benefits):

	Early Claiming	***Claiming at Full Retirement Age***	***Optimal Claiming***
70	$297,000	$225,000	$149,400
75	$462,000	$450,000	$398,400
80	$627,000	$675,000	$647,400
85	$792,000	$900,000	$896,400
Survivor Benefit	$22,500	$30,000	$34,800
Expected Lifetime Benefits	$925,100	$1,053,900 (+14%)	$1,087,700 (+18%)

Next consider an example for a couple where both husband and wife have significant earned benefits. Suppose Bob can take a full earned benefit of $30,000 at age 66, while Jane is entitled to her own full earned benefit of $18,000 at age 66. If they were to both take benefits at the earliest age of 62, they would get reduced benefits of $22,500 and $13,500, respectively. Those benefits are shown in Table 3a.

Table 3a
Delaying Social Security for a Married Couple (Two Earners with Small Income Differential)

Age	Early Claiming		Claiming at Full Retirement Age		Optimal Claiming	
	Bob	Jane	Bob	Jane	Bob	Jane
62	$22,500	$13,500				
63	$22,500	$13,500				
64	$22,500	$13,500				
65	$22,500	$13,500				
66	$22,500	$13,500	$30,000	$18,000		
67	$22,500	$13,500	$30,000	$18,000		$19,400
68	$22,500	$13,500	$30,000	$18,000		$19,400
69	$22,500	$13,500	$30,000	$18,000		$19,400
70	$22,500	$13,500	$30,000	$18,000	$39,600	$19,400
71	$22,500	$13,500	$30,000	$18,000	$39,600	$19,400
72	$22,500	$13,500	$30,000	$18,000	$39,600	$19,400
73	$22,500	$13,500	$30,000	$18,000	$39,600	$19,400
74	$22,500	$13,500	$30,000	$18,000	$39,600	$19,400
75	$22,500	$13,500	$30,000	$18,000	$39,600	$19,400
…	…	…	…	…	…	…

The "Optimal Claiming" approach involves both Bob and Jane delaying their earned benefits. Jane starts her earned benefits of $19,400 when she turns 67 and John starts his earned benefits of $39,600 when he turns 70. Table 3b summarizes the cumulative benefits received, assuming both partners are alive. Before the age of 80, the "Optimal Claiming" approach has surpassed the "breakeven point" versus the "Early Claiming" approach. Taking into account all the possibilities for how long they might live, the expected lifetime benefits increase by $224,300, or 23 percent.

We can see that in the "Optimal Claiming" approach Jane does not have to wait until 70 to claim her benefits. With this strategy, the couple can claim $58,200 before they turn 70 while retaining almost all of the potential expected lifetime benefits that they could have received had they delayed claiming benefits till they turned 70. Once again the family has to trade off the advantage of an earlier cash stream with that of delay credits and there are no rules of thumb to help with this decision.

Table 3b

Benefits of Delaying Social Security for a Married Couple (Two Earners with Small Income Differential)

Cumulative benefits assuming both alive (ignores survivor benefits):

	Early Claiming	***Claiming at Full Retirement Age***	***Optimal Claiming***
70	$324,000	$240,000	$117,200
75	$504,000	$480,000	$412,200
80	$684,000	$720,000	$707,200
85	$864,000	$960,000	$1,002,200
Survivor Benefit	$22,500	$30,000	$39,600
Expected Lifetime Benefits	$984,700	$1,104,600 (+12%)	$1,209,000 (+23%)

Finally, consider an example for a couple where both husband and wife have earned benefits but the wife's spousal benefit is greater than her earned benefit. Suppose Bob can take a full earned benefit of $30,000 at age 66, while Jane is entitled to her own full earned benefit of $12,000 or spousal benefit of $15,000 at age 66. If they were both to take benefits at the earliest age of 62, they would get reduced benefits of $22,500 and $10,500, respectively. Those benefits are shown in Table 4a.

Table 4a
Delaying Social Security for a Married Couple (Two Earners with Large Income Differential)

Age	Early Claiming		Claiming at Full Retirement Age		Optimal Claiming	
	Bob	Jane	Bob	Jane	Bob	Jane
62	$22,500	$10,500				
63	$22,500	$10,500				
64	$22,500	$10,500				
65	$22,500	$10,500				
66	$22,500	$10,500	$30,000	$15,000		$12,000
67	$22,500	$10,500	$30,000	$15,000		$12,000
68	$22,500	$10,500	$30,000	$15,000		$12,000
69	$22,500	$10,500	$30,000	$15,000		$12,000
70	$22,500	$10,500	$30,000	$15,000	$39,600	$15,000
71	$22,500	$10,500	$30,000	$15,000	$39,600	$15,000
72	$22,500	$10,500	$30,000	$15,000	$39,600	$15,000
73	$22,500	$10,500	$30,000	$15,000	$39,600	$15,000
74	$22,500	$10,500	$30,000	$15,000	$39,600	$15,000
75	$22,500	$10,500	$30,000	$15,000	$39,600	$15,000
…	…	…	…	…	…	…

The "Optimal Claiming" approach involves both Bob and Jane delaying their own earned benefits. Jane starts her earned benefits of $12,000 when she turns 66. John starts his earned benefit of $39,600 when he turns 70 and Jane switches to the higher spousal benefit of $15,000 automatically at this point due to "deemed filing". Table 4b summarizes the cumulative benefits received assuming both spouses are alive. Before the age of 80, the "Optimal Claiming" approach has reached the "breakeven point" versus the "Early Claiming" approach. Taking into account all the possibilities for how long they might live, the expected lifetime benefits increase by $220,800 or 24 percent.

Once again we can see that in the "Optimal Claiming" approach Jane is not required to wait until age 70 to claim her benefits. By following the "Optimal Claiming" strategy, the couple not only claim $48,000 before they turn 70 but also have a 3% higher potential lifetime benefit than the $1,104,600 that they could have received had they delayed claiming benefits until they turned 70. In fact, waiting until 70 turns out to be suboptimal in this case.

Thus, smart filing strategies can mean a significantly larger improvement for couples than for singles, due to opportunities for increasing spousal and survivor benefits.[16]

Table 4b

Benefits of Delaying Social Security for a Married Couple (Two Earners with Large Income Differential)

Cumulative benefits assuming both alive (ignores survivor benefits):

	Early Claiming	*Claiming at Full Retirement Age*	*Optimal Claiming*
70	$297,000	$225,000	$102,600
75	$462,000	$450,000	$375,600
80	$627,000	$675,000	$648,600
85	$792,000	$900,000	$921,600
Survivor Benefit	$22,500	$30,000	$39,600
Expected Lifetime Benefits	$925,100	$1,053,900 (+14%)	$1,145,900 (+24%)

If the palatable approach still does not provide enough benefits in early retirement for the household, Financial Engines can provide another alternative: a personalized filing strategy that starts some benefits at an earlier age, with the age being chosen by the plan participant. In effect, a participant can ask for a filing strategy that tries to maximize expected lifetime Social Security benefits, but subject to a constraint that benefits not be delayed beyond a certain age. This allows households to customize their strategy to incorporate specific needs for income at certain ages, while still getting the benefit of optimizing across a range of possible strategies.

As an example of a personalized claiming strategy, we can again use the example of Bob and Jane from Table 3a. Suppose the couple decide to start Jane's earned benefits at age 62. It turns out that this decision doesn't sacrifice much of the gains from the "Optimal Claiming" strategy. As shown in Table 5a, Bob would delay claiming till age 70. Table 5b shows that the total expected lifetime benefits still increase by over $199,400, or 20 percent. The strategy that optimizes expected lifetime benefits increased benefits by only a slightly higher $224,300 or 23 percent, but the cumulative benefits received

[16] Higher-income households will generally have larger earned benefits, and thus their improvements in expected lifetime benefits will be larger in absolute dollar terms.

through age 70 are now over thirty five percent more ($161,100 in Table 5b versus $117,200 in Table 3b). This personalized strategy may be a further improvement in the eyes of some households that have added constraints in choosing the benefit start ages.

Table 5a

Delaying Social Security for a Married Couple (Personalized Strategy)

Age	Early Claiming		Claiming at Full Retirement Age		Personalized Claiming	
	Bob	Jane	Bob	Jane	Bob	Jane
62	$22,500	$13,500				$13,500
63	$22,500	$13,500				$13,500
64	$22,500	$13,500				$13,500
65	$22,500	$13,500				$13,500
66	$22,500	$13,500	$30,000	$18,000		$13,500
67	$22,500	$13,500	$30,000	$18,000		$13,500
68	$22,500	$13,500	$30,000	$18,000		$13,500
69	$22,500	$13,500	$30,000	$18,000		$13,500
70	$22,500	$13,500	$30,000	$18,000	$39,600	$13,500
71	$22,500	$13,500	$30,000	$18,000	$39,600	$13,500
72	$22,500	$13,500	$30,000	$18,000	$39,600	$13,500
73	$22,500	$13,500	$30,000	$18,000	$39,600	$13,500
74	$22,500	$13,500	$30,000	$18,000	$39,600	$13,500
75	$22,500	$13,500	$30,000	$18,000	$39,600	$13,500
…	…	…	…	…	…	…

Table 5b

Benefits of Delaying Social Security for a Married Couple (Personalized Strategy)

Cumulative benefits assuming both alive (ignores survivor benefits):

	Early Claiming	*Claiming at Full Retirement Age*	*Personalized Strategy*
70	$324,000	240,000	$161,100
75	$504,000	480,000	$426,600
80	$684,000	720,000	$692,100
85	$864,000	960,000	$957,600
Survivor Benefit	$22,500	30,000	$39,600
Expected Lifetime Benefits	$986,000	$1,104,600 (+12%)	$1,185,400 (+20%)

Social Security and Income Planning with Financial Engines

Financial Engines now provides near-retirees a rich set of tools that provide guidance on how best to claim Social Security, and how to combine various sources of income into a multi-year retirement income strategy.

Social Security guidance can be accessed in two ways:

- Participants can independently access Social Security guidance online; or
- Participants can talk to an investment advisor representative, who can guide them through how Social Security works and what makes an effective claiming strategy.

Participants can use a projected Social Security estimate calculated by Financial Engines based on their current salary, or provide a better estimate accessed from the Social Security Administration. From that point, Financial Engines will apply our methodology to calculate the benefits of delaying earned and/or spousal benefits, evaluate hundreds of different possibilities for how long each household member might live, and suggest a strategy that increases the expected lifetime benefits. Financial Engines can also help the participant develop a more personalized strategy that may include taking some benefits earlier to better match their specific preferences. With any strategy, the effect on total lifetime benefits as well as survivor benefits are clearly identified, so that participants understand how much their personalized choices impact their income in retirement.

Once a Social Security claiming approach is selected, the income streams associated with that strategy (earned and spousal benefits) are incorporated into an "Income Plan," which is a comprehensive portrait of the household's annual retirement income. The plan includes income from various sources such as withdrawals from investment accounts, pensions, jobs in retirement, rental income, etc. Since many suggested claiming strategies may create gap years where the combined income from jobs and Social Security may not meet household needs, Financial Engines will smooth out income in retirement by calculating accelerated withdrawals from investment accounts in those gap years. This fuller picture of retirement income with income smoothing makes it easier for retirees to act on improved Social Security claiming strategies. Thus, the availability of *personalized* income strategies, in addition to Social Security guidance, means that the economic benefits of improved filing strategies can be achieved, at least in part, by almost everyone.[17]

Summary

Retirees who claim Social Security benefits right after retirement or close to age 62 may be sacrificing a large part of the implicit retirement wealth available to them. Financial Engines' services can suggest potentially better strategies to help realize the full potential of retirees' Social Security benefits. These strategies have recently begun to attract notice in the financial press (see Bernard [2013] and Franklin [2013]). However, what participants need in addition to generalized guidance is a way to develop overall retirement income strategies that reflect their specific circumstances: their specific benefit entitlements; the ages of household members; other income sources available in retirement; retirement accounts

[17] There may still be some retirees who have no choice but to start benefits at age 62 and have no other resources to afford delaying even by a few months.

available to fund delaying benefits; the willingness to draw from retirement accounts; and the desire for a “reserve” amount to provide for emergencies.

Financial Engines’ approach places the Social Security decision in a complete retirement income context. Effective timing of Social Security benefits may require timing of other income streams, in particular withdrawals from retirement accounts. This broader context gives retirees and near-retirees the confidence to take actions that may increase their lifetime retirement income by hundreds of thousands of dollars.

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Frequently Asked Questions

What if my spouse or I have already started taking benefits?

You might still be able to get some increased benefits. Depending on when you started, you might have two options. The first is to *withdraw* your claim. This can be done if you became entitled to benefits in the last 12 months, but it requires that you repay the benefits you have received (and even including spousal benefits based on your work record). Down the road, you can claim your benefits as if you'd never received anything in the past, taking advantage of any delayed retirement credits that might apply. The second option is to *suspend* your benefits, which you can do if you've reached full retirement age. Once your benefits are suspended, your earned benefit will start accumulating credits for delayed retirement, up to age 70.

If I take benefits later and have to draw on my retirement savings earlier, I'm giving up on the potential growth of those accounts. Why isn't that factored into your analysis?

Your retirement account *might* grow by more than the delay credits, but there's also a risk that it'll decrease in value. When it comes to evaluating whether to delay Social Security, it's important to factor in that it's a guaranteed, inflation-indexed benefit provided by the government, so its risk is likely much lower than the risk of your retirement account investments. A reasonable discount rate to apply to the Social Security decision, that has similar risk, is the after-inflation rate of return on inflation-protected Treasury bonds, which is close to zero. Your retirement account would need to exceed this *plus* the implied return embedded in the delayed retirement credits (factoring in how those delay credits impact your benefit as well as your spouse's/survivor's benefits). This might be achievable with some portfolios *in an average sense*, but that is because the financial markets are providing higher expected returns to compensate you for taking more investment risk in some types of assets. By investing in higher risk assets (e.g., stocks), you might actually lose money over the period.

How do these proposed filing strategies affect my taxes?

Taxes can be very complicated and you should consult a tax advisor to fully understand your tax situation. There are two things to watch out for. First, if you take Social Security benefits and work at the same time before full retirement age, your benefits will typically be reduced. (Benefits after you stop working will typically be increased later if this happens.) Second, if you take Social Security benefits and also have 401(k) withdrawals in the same year, you might have to pay income taxes on a portion of your Social Security benefits. Most of the filing strategies we propose will create more separation between the years you receive Social Security income and the years you receive other forms of income, so they are likely to be somewhat more tax efficient. For example, if you delay benefits until age 70 and take more 401(k) withdrawals from retirement until age 70, those withdrawals will not trigger any taxation of Social Security benefits. (Withdrawals after age 70 might make your benefits taxable, but your total retirement balances will be lower by that point, meaning less of your benefits will be subject to tax.) In addition, converting pre-tax balances into Roth balances can help reduce the taxability of Social Security benefits.

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