

# ANOTHER LOOK AT A SPECIAL SOCIAL SECURITY TIMING DECISION

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## ABSTRACT

This paper presents a conceptual model for determining when an individual should begin taking Social Security benefits. Benefits can be taken as early as age 62, postponed until full retirement age (FRA), or postponed even further up to age 70. If taken before FRA, benefits paid are reduced from what would be paid at FRA, and if postponed beyond FRA, benefits are increased. However, factors not commonly found in other analyses are included in the conceptual model presented here, indicating that many people who might otherwise begin Social Security benefits at age 62 or at FRA might be better off postponing the age at which they take their benefits.

**Keywords:** Social Security, Retirement, Social Security Taxes, Social Security Benefits

## INTRODUCTION

In this paper, we present a cost/benefit analysis of the decision to defer taking Social Security retirement benefits from full retirement age (FRA) to age 70. For people who were born before 1955 the FRA is age 66. Therefore, the decision metrics illustrated in this paper are valid for those individuals making the decision in 2018 and 2019. The benefit of deferring Social Security benefits beyond FRA is an 8 percent increase in future monthly benefits for each year that payments are deferred, a total increase of 32 percent for the four-year period. The cost of deferring is the loss of the benefits that could have been received during each of the four years during the deferment period.

While our investigation—similar to many prior analyses of the Social Security benefit timing decision—has been structured along the lines of traditional capital budgeting decision models, we have added some additional features to the list of benefits to be received. These additional benefits can greatly affect the analysis about when someone might break even by postponing Social Security benefits past FRA. First, because seniors can be vulnerable to unscrupulous individuals seeking to take advantage of their diminished capacities, the very structure of the Social Security payment system limits the ability to go forward with bad financial decisions (one cannot mortgage, sell, assign, or release to someone else in any way, the future benefits to be received). Second, because, as one ages the ability to earn additional dollars diminishes, for some low-income seniors, these marginal dollars have a quality value that makes them more valuable than nominal dollars [4]. Third, for those individuals whose spouses' (both current and qualifying former spouses) benefits are tied to their benefits, the increased deferred benefits also may apply to these individuals and other dependents.

Although someone can elect to start Social Security benefits as early as age 62, our analysis assumes the decision has already been made to postpone the benefits until at least FRA. Because there is no payback penalty for excess wages earned after FRA, whether the beneficiary continues to work—or does not—is not necessarily an issue in the decision process. Instead, the decision can be made strictly by analyzing the costs and benefits mentioned above. However, it is possible that continued work beyond FRA could even strengthen the arguments made here, as working beyond FRA might make it more financially viable to postpone Social Security benefits. In addition, work beyond FRA might also increase the calculated averaged indexed monthly earnings (AIME), which is discussed later and which is used to determine Social Security benefits paid.

## HISTORY

There can be no question that caring for our aging population is an issue of global magnitude. Scientific advancements in medical care, nutrition, and living conditions have led to an exploding senior population. By the time we reach the middle of the 21<sup>st</sup> Century, the number of seniors will exceed the number of young people for the first time in the history of the world [2].

Fortunately, the only thing certain about Social Security is that it certainly is not going to go away, neither through legislation nor due to economic challenges [7]. A continuous history of more than eighty years of New Deals, Better Deals, and Even Better Deals, has spawned an American population that believes it is entitled to, if not a luxurious lifestyle, at least a modest and comfortable independent life during those years when they are no longer able to work. Additionally, three generations have now passed since the idea that the welfare of aging parents was the responsibility of their children disappeared from our American culture. After such a lengthy absence, any illusions to bringing back such ideas are mere campaign rhetoric, which no one takes seriously, not even by the most conservative of politicians who still spew them about liberally.

At the same time, the great experiment with employer sponsored defined benefit pension plans invested in corporate equities that most thought in the 1960s would be the panacea to the nation's retirement problems did not pan out. The assumed rates of return used by actuaries to calculate the present values of each year's current endowment contributions were ridiculously based on a period that began after the equities market had just plunged more than ninety percent during the first three years of the Great Depression and then were accelerated upward by the effects of inflation and a recovering economy being boosted along by the ensuing major worldwide and regional wars.

In the early 1960s, Harold Soderman, Secretary Treasurer of the First Trust Company of St. Paul, boasted that the company had just made its final contribution to fund its employee defined benefit plan. Based on the pension fund's performance to date, Harold predicted that the future earnings on the current amount of the fund's invested capital would be more than sufficient to pay for the company's contractual defined pension benefits for all current and future employees [9]. Based on such ridiculously unrealistic investment expectations, many of our giant corporations crumbled under the weight of those pension obligations as their employees aged. And even those companies that survived, as well as many not-for-profit organizations, show little or no eagerness to leap into the deferred defined pension benefits business again.

Furthermore, while wise individuals who are healthy, educated, and endowed with the necessary talents may take advantage of employer-sponsored § 401(k) and § 403(b) plans, along with personal savings

and investment opportunities, and easily provide for their own retirement years, they are clearly not in the majority. In spite of these opportunities, more than half of the Boomers reaching FRA today have less than \$100,000 in personal savings accounts and other retirement investments [4]. While some might argue that any solution to the retirement dilemma should concentrate on training and educating this majority of the American people to change their spending and savings habits, the historical trend appears to be in the opposite direction.

## **THE CURRENT SOCIAL SECURITY TAX AND BENEFITS**

### **Social Security Tax**

The monies received from Social Security taxes are used to pay Social Security benefits to the taxpayers who are retired or disabled and additional benefits to certain dependents and spouses (perhaps most important from a social welfare perspective, after the death of the taxpayer, the benefits continue to the surviving dependents). The tax is paid on the earned income of workers, either as employees or as self-employed individuals.

Those who are employed pay 6.2% of their compensation, up to a maximum earnings base each year (\$128,400 for 2018) for Social Security taxes [1, Sec. 3101(a)]. The employer matches this tax, so the total remitted to the government is 12.4% of compensation, up to the maximum earnings base [1, Sec. 3111] [8, Sec. 430]. Self-employed individuals are treated as both the employer and the employee, so they pay 12.4% of their net earnings from self-employment, up to the maximum earnings base each year [8, Sec. 430], for Social Security taxes [1, Sec. 1401(a)].

### **Social Security Benefits**

Incorrectly, many taxpayers view the Social Security taxes they pay as participating in a government-sponsored retirement program, similar to an annuity that they might buy from an insurance company. Under this assumption, they expect to get back what they paid in plus earnings. However, the Social Security program is actually designed to distribute many benefits, in addition to retirement benefits, not in direct proportion to those who pay the taxes, but, instead, to promote the general welfare of our society as a whole.

For this purpose, even the program's primary role of paying retirement benefits, entails a wealth redistribution formula. Certain lower income individuals receive monthly payments calculated at 90 percent of the average indexed monthly earnings (AIME) on which they paid Social Security taxes. Other higher income individuals receive monthly payments calculated at 15 percent of the higher levels of the AIME on which they paid Social Security taxes. In addition, taxpayers with spouses and/or children pay no more Social Security taxes on their earnings than do taxpayers without such dependents. These dependents are often entitled to receive benefits simply due to the family relationship—and at no additional cost to the taxpayer. Many of these family benefits are paid in addition to the payment being received by the taxpayer due to age or disability. They do not diminish the amount of the taxpayer's benefit when compared to similar benefits paid to taxpayers without dependents. The direct payments to taxpayers cease at death, but the spousal and dependent payments continue after the death of the taxpayer and, especially in the case of a spouse, may actually increase. In addition, the retiree or decedent may have multiple qualifying beneficiaries, including ex-spouses.

Therefore, Social Security encompasses a totality of retirement, disability, welfare, and life insurance benefits, paid for by the same tax rate applied to all workers, regardless of the benefits each taxpayer might be entitled to depending upon his/her family status. Because of these individual differences, a simple decision model concerning when to start receiving benefits that fits everyone makes no sense. Instead, in this paper we present a model that is flexible and can be adapted to the individual's particular circumstances.

Certain retirement investments, such as § 403(b) or § 401(k) retirement plans, belong to the individual and can be passed on to his/her heirs. The Social Security program—although it has been expanded over time to cover spouses, dependents, survivors, and those who are disabled—does not provide benefits that can be willed to heirs. Instead, benefits are paid to survivors using very specific rules. But again, these benefits are provided as a welfare program, not as a vested retirement fund belonging to the individual.

Depending on an individual's lifespan, his/her marriage and family status, and other factors, there may be anywhere from no benefits being paid to significant benefits that are paid even after the individual's death. Therefore, an individual may pay Social Security taxes for many years and never receive any benefits from the program. Others may receive benefits for extended retirement periods, with additional survivors' benefits paid after death.

No matter which view a person takes—that Social Security is a retirement program, an insurance program, or a welfare program—it is obvious that Social Security fits within what we call entitlement programs: people believe the government has made promises to them based on their past payment of these taxes over time.

Social Security benefits include retirement benefits, survivor benefits, and disability benefits. While disability benefits are very helpful to those who qualify, the focus here will be on retirement and survivor benefits. However, because survivor benefits are, to some extent, calculated using the retirement benefits earned by an employee, our decision model compares the enhanced retirement benefits that can be received by deferring the retirement benefit start date against the cost (foregone benefits) of doing so.

Social Security retirement benefits are calculated using a worker's average indexed monthly earnings (AIME). The highest 35 years of earnings (with the maximum amount per year being the maximum earnings base for that year) are indexed and used to calculate this amount, which is then used to calculate the primary insurance amount (PIA). The PIA is the amount of benefit the individual would receive monthly if retirement takes place at the individual's full retirement age (FRA). The PIA for individuals is first calculated when they reach age 62, the earliest age that they can start receiving a reduced retirement benefit. However, FRA for an individual turning 62 in 2018 is age 66 years and 4 months. The current maximum retirement age for earning additional retirement benefits is age 70, regardless of when the individual was born.

The PIA is calculated using three set percentages multiplied by different brackets of the AIME. If someone first becomes eligible for Social Security benefits (turns 62) in 2018, the bend points for calculating PIA are \$895 and \$5,397 per month. The PIA for this individual would be 90% of the first \$895 of AIME plus 32% of the amount of AIME in excess of \$895 up to \$5,397 plus 15% of the AIME in excess of \$5,397. As a specific example, if someone turns 62 in 2018 and has AIME of \$10,000, the

PIA would be \$2,936.59 per month  $[(90\% \times \$895 = \$805.50) + (32\% \times (\$5,397 - \$895 = \$1,440.64)) + (15\% \times (\$10,000 - \$5,397 = \$690.45))]$ .

FRA was 65 up until 1983. FRA is the age at which someone who retires can take full Social Security retirement benefits without any reduction. However, individuals can elect early retirement benefits as early as age 62 (with a reduction in benefits for taking them early) or late retirement benefits as late as age 70 (with an increase in benefits for postponing them).

In 1983, an increased FRA was phased in over time, but this increase in FRA did not affect those who were already 45 or older, giving those who were younger and would be affected by the increased FRA more time to prepare. The FRA gradually rises to age 67 for those born after 1959. The options for early retirement benefits or late retirement benefits still exist, but the discount for early retirement benefits is larger for someone with a FRA later than 65. Likewise, the increase in benefits for postponing them is smaller for someone who has a later FRA, because this individual cannot earn additional benefits by postponing the start date beyond age 70.

### **THE SOCIAL SECURITY BENEFITS TIMING DECISION MODEL**

The law gives each qualified worker the right to start his/her retirement benefit at any time between ages 62 and 70. No one, other than a court appointed guardian, can make the decision for the worker. Selecting this best age to begin receiving Social Security retirement benefits is an important decision for our senior workers, mainly because the resultant difference in income and related tax consequences may be critical to their financial security.

Currently, the decision models and measures being used by senior workers to analyze this Social Security benefits timing decision, among other financial decisions, often are the same measures that have been developed to guide large business organizations in their financial decisions. However, because of differences of economic size, life cycle, mission, goals, etc., the large organization models may not fit the needs of these individuals.

At the same time, seniors do need some key strategic measures to focus on when making financial decisions. Therefore, there appears to be a need for the development of new measures specifically designed to meet the unique needs of seniors. The approach illustrated in this paper attempts to include in the measurement of Social Security benefits the internal controls protecting the senior from nefarious and unscrupulous scams and the added value of benefits for dependents, which can include a current spouse and one or more former spouses.

Because the approach used here is normative, it limits any conclusions to descriptions of what the effects of the different measurement concepts on decisions might be, given the constraints imposed. Therefore, at this stage, the paper represents a theoretical exploration, and subsequent empirical and/or applied research would be necessary to arrive at any practical application.

### **Quality Dollars**

Assigning a quality value to marginal dollars is an intriguing idea that has been around for a long time. However, the concept appears to be difficult to measure, in terms of both implementation and

acceptance. Nevertheless, it is easy to imagine that for some aging seniors a few incremental dollars of income may have greater value than the nominal value of the additional income.

For example, suppose the basic needs of food and shelter consume an elderly person's entire pension of \$1,500 per month with nothing left over for incidentals. An increase of \$300 per month in incremental dollars—providing the means to pay for public transportation, a warmer coat in winter, birthday and holiday gifts for grandchildren, and an occasional movie or play—could bring an increase in quality of life greater than the 20% increase in nominal dollars. If we could establish that adding these activities would double the individual's quality of life, can we not argue that the marginal dollars should be included at a quality value of \$1,500 in any pertinent decision model?

Current evidence indicates that seniors may not be considering the quality value of marginal income. The behavior of seniors when electing to start their Social Security retirement benefits tends to support the traditional economic theory of diminishing value of marginal dollars—90 percent of blue collar workers stop working and start their Social Security benefits at the earliest possible time, age 62 [3]. With the increasing percentage of seniors living below the poverty level, making the decision when to start their Social Security retirement benefits based on this theory may not have been in their best interest.

Using the proper measure of value is important because focusing on a wrong measure of value may be especially harmful to seniors, because their limited assets make them more vulnerable to the effects of each bad decision. Additionally, there is concern that seniors are especially vulnerable because they can easily be influenced to make bad decisions.

### **The Social Security Benefits Timing Decision**

The decision concerning the proper timing of the election to start receiving Social Security retirement benefits affects broad classes of seniors. Because of the number of seniors affected, this decision has attracted the attention of many professionals who have been willing to give advice.

The first time a person has to make a decision about when to start her/his Social Security retirement benefits occurs at age 62. While normal retirement for those retiring now is age 66, a reduced pension benefit may be elected as early as age 62. For example, if an individual born in 1953 or 1954 is entitled to receive a benefit (PIA) of \$2,000 per month starting at age 66, that person could have, instead, elected to take a reduced benefit of \$1,500 (75% of \$2,000) per month starting at age 62. This, of course, would have come at the cost of giving up the additional \$500 per month. On the other hand, the individual, upon now reaching age 66, could wait and defer starting the benefit until age 70 in order to increase the benefit to \$2,640 per month (132% of \$2,000)—a 76 percent increase over the benefit they might have taken at age 62.

While it is not analyzed in this paper, we have previously found that 90 percent of the lowest income workers start their Social Security benefits at age 62 [3]. While it appears that for many of these workers, that decision was clearly not in their own best interest, they did make the decision in accordance with advice publicly disseminated by professional financial advisors.

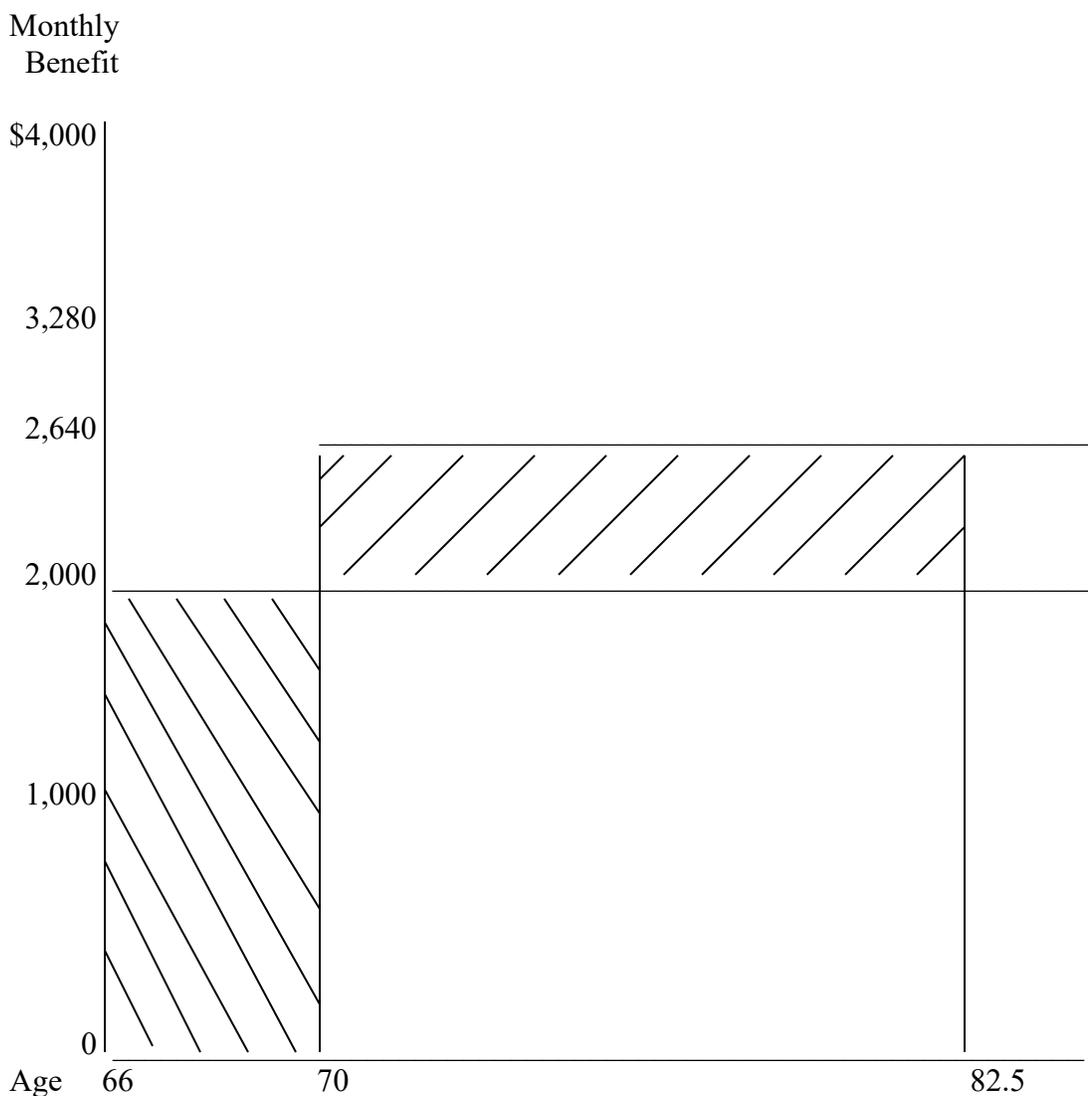
Indeed, some well known financial advisors who give advice to seniors on this issue—see, e.g., [5]—advise seniors to take the benefit as early as possible. For seniors in our examples in this paper, that

would be at age 66, again assuming that the decision has already been made not to take benefits prior to FRA. The argument these advisors present is: if a worker waits until age 70 to get the additional amount, he/she will lose four years of benefits and it will take 12.5 years at the higher benefit to recover the difference.” This is calculated as  $[48(2,000) / 640] / 12 = 12.5$  years.

Because this type of analysis does not adjust the numbers for the time value of money nor is there any adjustment of the dollar amounts for risk, it appears that these advisors are simply using a financial accounting payback model in conjunction with information on normal life expectancies. This analysis is illustrated in Figure 1.

**Figure 1**

**Social Security Benefits Timing Decision**



## **Adjusting for Risk and Quality**

While this simple model does not consider risk in the analysis, clearly, as you go farther into the future, things do, especially sources of income, become less certain. Therefore, because Social Security benefits are guaranteed payments of the U.S. government, not taking into consideration the risk-free value of the marginal Social Security dollars appears to be a critical omission in this analysis.

Traditionally, when adjusting different sources of income for risk, the guaranteed payments from U.S. Government sources have been used as the risk-free standard for comparison with other sources of potential income. For example, a 6 percent yield on U.S. Treasury bonds might have the same risk adjusted value as an 8 percent yield on corporate bonds (see, e.g., [6]). Therefore, because the potential additional nominal dollars from a Social Security retirement benefit to be received in the future are very certain, they must have a higher risk-adjusted value than the same amount of dollars from a riskier source. Add to that the fact that Social Security benefits are adjusted for inflation annually, while interest rates reflect expected inflation.

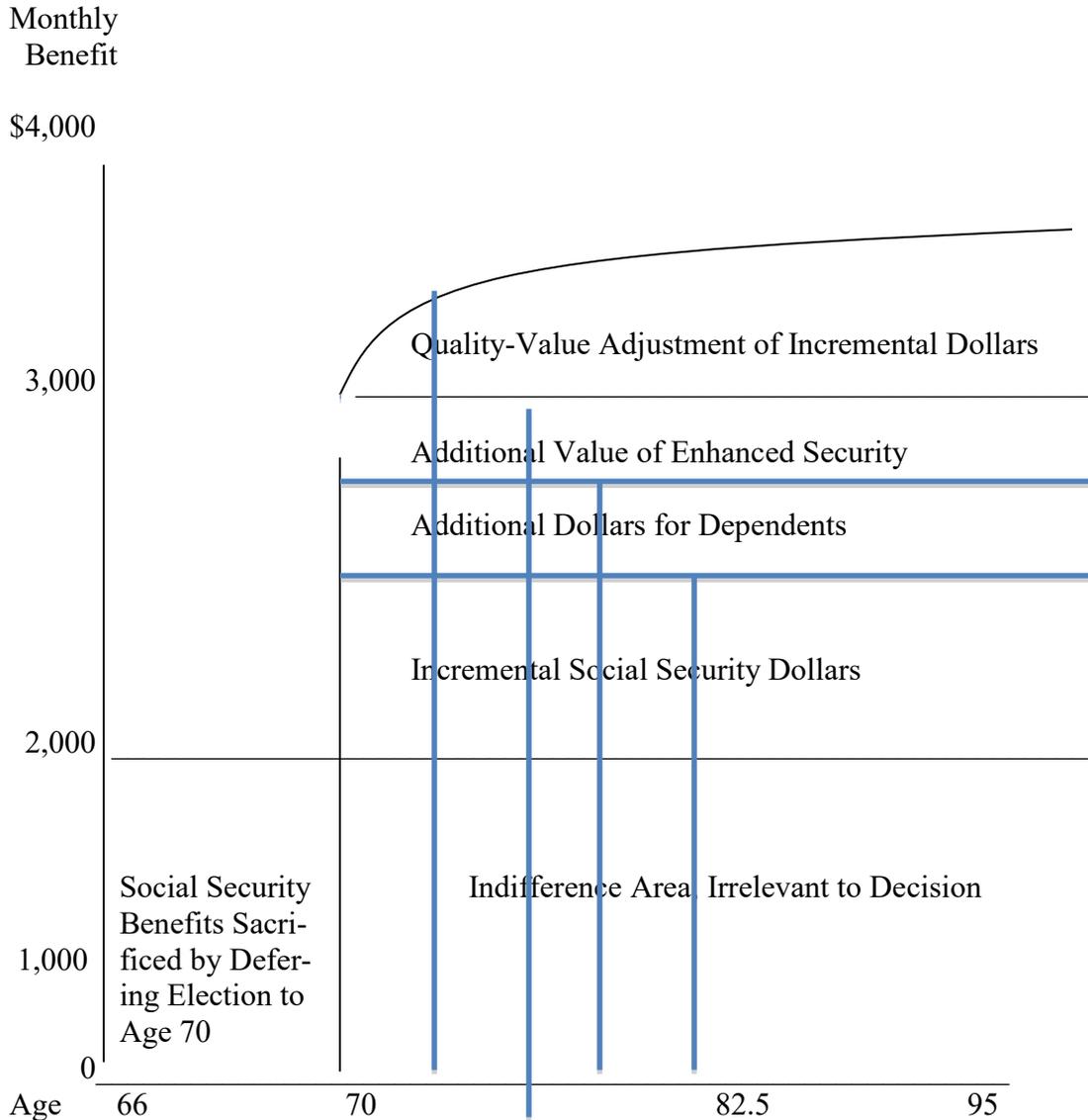
## **Other Adjustments to the Decision Model**

In Figure 2, we have added two more adjustments to the retirement benefit timing decision model. First, for those senior workers who have dependents (and perhaps, ex-spouses) who will also receive benefits based on the amount of the senior worker's benefit, those amounts also need to be included in the total value of benefits received. Second, some adjustment needs to be made for the security and safety value gained by the way the government structures and guarantees the benefit payments to protect them from unscrupulous individuals who prey on the diminished capacities of aging seniors. While it is well known that seniors have often been the target of the nefarious schemes of scammers, little work has been done as to how to include this concept into a financial decision model. Although, no doubt, the government has considered this problem in the system of distributing the Social Security benefits payments. In Figure 2, we have included it because it must have some value to many seniors.

The adjustment for amounts paid to dependents (usually spouses), would need to be calculated for each individual case, depending upon who the dependents are and how many. Because former spouses, who were married to the senior worker for at least 10 years, are eligible to take benefits based on that worker's benefit, there could be more than one spouse receiving secondary benefits—mathematically, this could be as many as five or six.

Figure 2

**Social Security Benefits Adjusted for Quality-Dollars  
Enhanced Security and Dependents**



The enhanced model shows clearly that as we add the value of the additional benefits to the value of the nominal dollars gained by deferring the decision to age 70, the resulting break-even age becomes shorter and shorter. The lines are descriptive and are not shown as estimates or averages, but reflect possible benefits in very realistic scenarios. In an extreme case with multiple former spouses able to claim benefits, which would entail no additional cost for the senior worker, the break-even point on a cost-benefit basis might even be less than a year.

**Example:** Lois, a successful hypnotist, married young and foolishly, only to divorce after 10½ years. She was soon swept into another marriage to a handsome patient who left her after 10½ years. Then, she had two more marriages of 10½ years, both ending in divorce. Lois now finds herself facing the decision when to start her Social Security benefits, which also affects the benefits of her ex-spouses, all of whom are older than she is.

While Lois is alive, each of her ex-spouses receives the larger of his own benefit or one-half of Lois's FRA benefit. This is true whether Lois starts benefits at FRA (assume Lois's FRA is 66), at 70, or in between.

If Lois defers starting until age 70, her benefits are increased by 8% per year, plus cost of living increases. So just considering Lois's cash flow, at age 66, she would weigh her FRA benefit for the rest of her life versus the 32% higher benefit for the rest of her life, but beginning 4 years later.

Now assume that the old gentlemen—Donald, George, Jeff, and Kamal—outlive Lois. At her death, each one who survives gets the larger of his own benefit or her FRA benefit if she started benefits at age 66, but if she waited until age 70 to start, each gets the increased benefit (32% more) for the rest of his life.

Assume Lois gets the maximum benefit at 66 in 2018 of \$2,788 per month, or \$33,456 per year. If Lois dies at age 71, each surviving ex-spouse receives the larger of his benefit or \$33,456 annually for the rest of his life.

Now assume Lois delays starting benefits until age 70. Her benefit will be \$3,680 per month, or \$44,160 per year (recall from above, the ex-spouses get the larger of their own benefit or one-half of \$33,456 annually). If Lois dies a year later, waiting until age 70 did not work out for Lois (she lost 4 years of benefits); however, Donald, George, Jeff, and Kamal receive \$44,160 each per year for the rest of their lives. If one were calculating return on investment for Lois's contributions to Social Security, it would be sweet, even though the spoils are to her ex-spouses.

In any present value analysis, it is clear that Lois should have waited, if she considered the benefits to herself and her surviving ex-spouses. Of course, she probably did not know of her early demise, and maybe she did not care about the windfall to those old men.

## SUMMARY AND CONCLUSION

Individuals need key strategic measures to focus on when making financial decisions. Focusing on the wrong measures can and do lead to bad decisions. This may be especially harmful to seniors because their limited assets make them more vulnerable to the effects of each bad decision. Additionally, for a variety of reasons, many believe that seniors can easily be influenced to make bad decisions.

Now add in the uncertainty about one's longevity. Returns on investment vary significantly depending on actual longevity, not only of the principal, but also of the survivors. It is difficult enough to predict the life of the principal, but it becomes even more difficult when the longevity of others is also considered.

Currently, the performance measures that are used to make the decision when a senior worker should start his/her Social Security retirement benefit may not be the best ones. Strong evidence, although mostly anecdotal, indicates that there is a need for different measures to direct the focus of lower income individuals when making economic decisions.

In spite of the research limitation, it appears that adjusting nominal dollars for risk and other unique structural differences might be helpful in improving the decision-making process. On an individual basis, this should at a minimum include the value of benefits received by dependents—usually current and former spouses. And recognizing that seniors may have diminished ability to protect themselves from unscrupulous con artists might be a critical factor in a decision model. Another factor that was considered was the idea that as seniors age, their ability to earn additional dollars, if needed, decreases. Therefore, guaranteed, risk-free, incremental Social Security dollars may have a quality value greater than their nominal value.

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