

The Perception Of Social Security Incentives For Labor Supply And Retirement: The Median Voter Knows More Than You'd Think*

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Abstract:

The degree to which the Social Security tax distorts labor supply decisions depends on the extent to which individuals recognize that future benefits are based on how much they worked. To measure the perceived linkage between labor supply and Social Security benefits, we administer a survey about the Social Security benefit rules to a representative sample of Americans aged 50-70. We find that the majority of respondents believe that their Social Security benefits increase with labor supply, i.e., that the Social Security benefit rules provide a positive work incentive. The magnitude of this perceived incentive varies across respondents, but people generally cite an incentive that is somewhat greater than the actual figure. We also surveyed people about their understanding of various provisions in the Social Security benefit rules. We find that some of these provisions (e.g., effects of delayed benefit claiming, and rules on widow benefits) are relatively well understood while others (rules on spousal benefits, provisions on which years of earnings are taken into account) are less well understood.

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1. Introduction

The Social Security system provides a complex set of implicit and explicit incentives for labor supply and retirement decisions. For example, Social Security decreases the benefits it pays out by about half a percent for each month that someone claims benefits before the full-benefit age. This incentive is relatively explicit, but other incentives require more detailed knowledge of the benefit rules. For example, because benefits are based on the 35 highest years of indexed earnings, one additional year of earnings generally increases benefits much less for someone who has already accumulated 35 years of earnings than for someone with a shorter work history.

While previous work by others (Coile and Gruber, 2007; Gustman and Steinmeier, 2005a) and ourselves (Liebman, Luttmer and Seif, 2008) has found that incentives from the Social Security system affect labor supply and retirement behavior, we know little about the extent to which people understand these incentives and which sources of knowledge people use to acquire information about Social Security. In this paper, we attempt to fill this gap in knowledge by surveying individuals about their understanding of the Social Security benefit rules.

A better understanding of individuals' perceptions of the Social Security system matters for three reasons. First, if there is a systematic misperception of the Social Security system among voters, political reform of Social Security will likely reflect these misconceptions. In other words, misperceptions can contribute to suboptimal policy choices. For example, if voters overestimate the benefits they will receive, there will be more political support for cuts in Social Security benefits to avoid an increase in Social Security taxes. Perceptions of the level of Social Security benefits have been studied by Bernheim (1988), Bernheim and Levin (1989), Gustman and Steinmeier (2001, 2005b), and Dominitz and Manski (2006). The general conclusion from this literature is that, while response rates to questions about Social Security benefit levels are low, the median (or average) perception is reasonably accurate despite a wide dispersion of answers.¹ Just as perceptions of the level of benefits affects pressures for the generosity of benefits, perceptions of the incentives of the Social Security system affect pressures on how to

¹ A related literature has examined individuals' knowledge about their private pension benefits. This literature generally finds high levels of misconceptions about pension plan provisions (see, e.g., Mitchell 1988 and Luchak and Gunderson 2000), though there is some indication that awareness of these provisions is improving (Starr-McCluer and Sundén 1999).

restructure it. For example, if the median voter perceives that additional Social Security taxes paid do not pay off in terms of increased future benefits, this will generate pressure to reform Social Security so that the link between taxes paid and benefits received becomes more evident (such as in a notional defined benefit system or through personal accounts). Thus, knowledge of people's perceptions of Social Security's incentive effects will allow us to better understand political pressures for reform.

Second, a misperception of incentives leads to privately suboptimal decisions. It may also be socially costly if the misperceptions exacerbate existing distortions to behavior. The extent of these misperceptions therefore informs the debate on the merits of designing a system with more transparent rules. Regarding pensions, Samwick (1998) provides strong evidence that people's retirement decisions respond to the incentives from their pension plans. However, as Chan and Stevens (2008) show, people in large part base their retirement decisions on perceived incentives, even if these perceptions are incorrect. Similarly, lack of awareness about the incentives from the Social Security system will cause people to make privately suboptimal decisions about their labor supply and retirement. Understanding how widespread the misperceptions are will give some insight into the utility cost of making suboptimal decisions.²

Third, the nature of the misperceptions provides useful information on how best to disseminate information about the Social Security program. With our survey, we can determine which features of the Social Security system are least understood, whether the degree of understanding varies by population subgroup, and when and how people acquire their information about Social Security. Mastrobuoni (2006) shows that the mailing of annual Social Security statements, which was phased in by age group in the mid- to late 1990s, caused an improvement in knowledge about benefit levels. It is reasonable to expect that information about other aspects of the Social Security can be similarly improved by information distribution efforts, and our survey results can help identify current provisions that are poorly communicated.

Our survey was administered to a sample of individuals aged 50 to 70 that is roughly nationally representative on demographic characteristics. These individuals had previously been recruited by the survey firm Knowledge Networks through random-digit dialing to become part of its panel of respondents. These panelists agree to take a weekly survey via the Internet using a

² Similarly, misperceptions of the level of benefits can lead to suboptimal savings decisions. Rohwedder and Van Soest (2006) show that those who overestimated their benefits before retirement are worse off in terms of several well-being measures during retirement.

PC or WebTV in exchange for free Internet and WebTV access. Our survey took about half an hour to complete and contained five sections. First, it asked about respondents' current or expected level of Social Security benefits, date of retirement, and start date of claiming benefits. Second, we measured respondents' perceptions of Social Security's incentives for labor supply by asking how additional earnings or additional years of work would affect their benefits. Third, we measured knowledge about various provisions in the Social Security benefit rules, such as the effect of the age of first claiming on the level of benefits, the earnings test, or the rules on spouse and widow benefits. Fourth, we experimentally varied how we framed the effect of delaying benefit claiming, and we examined whether these different frames affected attitudes towards delayed claiming. Finally, we asked a large number of background questions that will allow us to estimate what factors predict the accuracy of the perceptions.

Overall, our results indicate that a majority of respondents perceive positive labor supply incentives from the Social Security benefit rules. Over two thirds of respondents report that their benefits will increase if they work an additional year (holding constant the age at which they start claiming benefits), and over half of respondents state that additional earnings before claiming benefits would result in higher benefits. Since an individual's actual labor supply incentives are a complex function of his or her own exact earnings history as well as his or her spouse's earnings history, we cannot determine whether these perceptions are correct at the individual level. However, since the Social Security benefits rules do not in fact provide everyone with a strictly positive incentive for labor supply, we would not expect everyone to report positive incentives even if perceptions were perfect. Among those who report positive labor supply incentives, the median perceived size of the incentive tends to be larger than what we would expect for a typical worker with positive labor supply incentives.

Unlike the questions assessing perceived incentives, the questions about the various provisions of the Social Security do have unequivocally correct or incorrect answers. We find substantial variation across the provisions in the degree to which respondents understand them. For example, people are very familiar with the so-called early retirement penalty. About 90% of respondents correctly answer that delaying claiming benefits between the age of 62 and 66 will increase the benefit amount, and the median perceived benefit increase per year of delay (6.3%) is almost identical to the actual increase. People are also largely aware that delays in claiming between the ages of 66 and 70 increase benefits; however, about three quarters of respondents

incorrectly believe that delays beyond the age 70 will further increase benefits. Additionally, the rules governing how the age of first claiming affects benefit levels seem to be well understood, at least for the age range that is relevant for most respondents (generally between ages 62 and 70 in our sample), and the provisions regarding widow/widower benefits are similarly well-understood. In contrast, there is considerable confusion surrounding the rules governing spousal benefits. For example, over 40% of the sample incorrectly believes that his or her spouse would not be eligible for any Social Security benefits if the spouse had never worked, even if the spouse could potentially claim benefits based on the respondent's earnings history. However, among those who do believe that the spouse would receive benefits, the median respondent perceives the spousal benefit to be 45% of his or her own benefits, which is close to the true figure of 50%. Knowledge about the earnings test is also limited, with only about 40% correctly identifying the direction of its effect. Yet, among those who are aware of the earnings test, the median respondent believes the threshold is \$12,000, which is close to the actual threshold of about \$14,000. Lastly, knowledge about which years of earnings enter the benefit formula is very low. Given a four-item multiple choice question, only about 30% indicates that some portion of the highest years of earnings count towards benefits. Further, the median respondent believes that only the 5 highest years of earnings count, far fewer than the actual figure of the 35 highest years.

In other results, we find that people rely strongly on information from the Social Security Administration. About 90% of respondents list the annual Social Security statement as an information source they have used in the past, and four out of the five most highly rated information sources in terms of usefulness are communications from the Social Security Administration. When we manipulate the framing of the effects of delayed claiming on benefits, we find that switching from the frame currently used by the Social Security administration (“the break-even frame”) to alternative frames increases the fraction favoring retirement at age 65 rather than at age 62 to about 62% from 44%. This increase is statistically significant and suggests that the way in which some of the benefit rules are presented could affect retirement decisions. These results are consistent with Dominitz et al. (2007), who also found that way information about Social Security is presented affects people's hypothetical claim decisions.

Taken together, our results indicate that there is widespread awareness of the incentive effects of the Social Security benefit rules. However, even though the median response to many

of our survey questions was often very close to the true answer, the substantial heterogeneity of responses to most questions suggests that there could be large costs associated with individuals' making privately suboptimal decisions because of misperceptions. Overall, our results indicate that there is great potential for improved information dissemination about certain aspects of the Social Security benefit rules and that the way this information is framed can affect how people respond to it. However, to the extent that policy choices are based on perceptions of the median voter, the additional deadweight loss associated with suboptimal policy decisions may be limited, since the median voter appears to be well informed about many features of Social Security.

2. Survey Design and Experimental Manipulations

We contracted with Knowledge Networks to administer our survey instrument to a sample of its panel of respondents. These panelists, originally recruited through random-digit dialing, agree to take a 15-20 minute survey once a week via the Internet using a PC or WebTV in exchange for free Internet and WebTV access. In addition, the panelists often receive incentive payments and rewards through a loyalty program. Knowledge Networks collects basic demographic characteristics for all its panelists, and its panelists are roughly representative of the adult U.S. population according to these characteristics. Administering the survey online was beneficial because this method allowed us to ask more complicated questions than could be asked using a phone survey, and fielding the online survey cost only a fraction of what an in-person survey would have cost.

Our survey instrument consists of 74 questions, though the typical respondent was not asked every question because of skip patterns present in the instrument. Appendix A contains the complete survey instrument, which consists of five parts.

In the first part (Sections 1 and 2), we ask the respondents whether they are retired, when they retired or expect to retire, whether they currently claim Social Security, when they started claiming Social Security or expect to start claiming, and what their actual or expected level of Social Security benefit is. We also asked married respondents to answer these questions in relation to their spouses. The questions in the first part of the survey are used to determine the appropriate tense, wording, and skip patterns for later questions. For example, when asking about the effect of working one less year on the level of Social Security benefits (Q3.1), we adjust the wording of the question depending on whether or not the respondent already collects

Social Security benefits and whether the respondent is still working or already retired. In addition, the question wording contains the respondent's earlier answer about the (expected) age of retirement, the (expected) start age of claiming Social Security, and her (expected) monthly Social Security benefit.

The second part (Sections 3 and 4) contains questions about perceived incentives of the Social Security benefit rules on labor supply. We ask respondents what they believe will happen (or would have happened) to their Social Security benefits if they work (or had worked) one less year. The response to this question is the perceived incentive on the extensive margin of labor supply. We solicit both a qualitative answer, where respondents indicate whether their benefits would rise, stay the same, or decline; and a quantitative answer, where respondents specify what the resulting new level of benefits would be. Similarly, we ask about the perceived incentive on the intensive margin, namely the perceived effect of higher earnings on Social Security benefits. We also measure this incentive in both qualitative and quantitative terms. The true incentives of Social Security on labor supply vary widely across individuals because these incentives are a complex function of past earning history, marital status, and spousal earnings history (for details, see Feldstein and Samwick 1992 on intensive-margin incentives and Goda et al. 2009 on extensive-margin incentives). Because we only have approximate information about these determinants of true incentives, it is difficult to determine whether perceived labor supply incentives correspond to actual incentives for any given individual. Thus, the primary purpose of these questions is to estimate the population distribution and correlates of these perceptions rather than to ascertain whether a respondent's perceptions are correct.

In the third part (Sections 5-8), we ask respondents about their knowledge of five important components of the Social Security benefits rules: (1) the effect of the age of first claiming Social Security benefits on the level of benefits, (2) the earnings test, (3) the spousal benefit rules, (4) the widow(er) benefit rules, and (5) which years of earnings are used in the benefit calculation. In some cases, we ask about these rules as they pertain to the respondent (e.g., what would happen to your benefits if you became widowed?). The advantage of tailoring the questions to the respondent is that respondents may be more motivated to answer questions about themselves than about hypothetical persons or about Social Security rules per se. Moreover, we would expect that respondents are more likely to have information about features of rules that are directly relevant to them. The drawback, however, is that it is not always

possible to ascertain the correct answer for any given respondent or whether any given respondent understands the rule. For example, a respondent might answer that his benefits would remain the same if he became widowed. If, in fact, this respondent's benefit would remain the same because his own benefits are higher than his spouse's benefits, we cannot tell whether he applied the rule correctly or was not aware of the rule. Moreover, to the extent that we do not know his own exact PIA and his spouse's true PIA, we cannot tell for sure what would happen to his benefits if he were to become widowed. To overcome this drawback, we also ask some questions about hypothetical persons or explicitly about Social Security rules. For these questions, we can directly determine whether the answer is correct, which allows us to examine the predictors of knowledge about the Social Security benefit rules.

The fourth part (Section 9) consists of a framing experiment, where we experimentally vary how we present the effect of the age of claiming on the level of Social Security benefits. We present the effect as an increase in monthly benefits for later claiming (gain frame), a decrease in monthly benefits for early claiming (loss frame), or the first age at which the lifetime benefits under delayed claiming exceed the lifetime benefits under early claiming (the break-even frame). The wording of the break-even frame closely follows the wording that the Social Security Administration currently uses on its web site to educate people about tradeoffs from claiming earlier or later. After presenting one of these three frames, we ask a randomly selected group of respondents whether they think a neighbor would be better off claiming early or late. We ask the remaining respondents about their own preferred claim date, which is a counterfactual question for those who have already claimed Social Security benefits.

The final part of the survey (Sections 10-14) contains a variety of questions about the respondent's background. Some these questions, such as the ones about earnings histories, allow us to make a rough estimate of the true incentives faced by the respondent. Other questions are potential predictors of respondent knowledge about the Social Security system. For example, the questions regarding sources of information about Social Security will enable us to test whether respondents with a better understanding of Social Security rules get their knowledge from particular sources. In a similar vein, we ask questions to gauge a respondent's financial literacy, which Lusardi and Mitchell (2007a, b, c) and Lusardi (2008) have shown to be very important for decisions related to retirement. We also ask about the importance of Social Security for retirement spending and the fraction of a respondent's friends who are retired (and might

therefore be a source of knowledge). Finally, we ask about each respondent's total number of siblings as well as the number of older siblings, since siblings are a potential source of information about the program.

Since the survey asked many relatively hard questions, we also experimentally varied the way some of the questions were asked to determine whether respondents could give meaningful answers. For example, when we ask respondents how an increase in earnings would affect their Social Security benefits, we randomly choose this increase in earnings to be \$1,000, \$5,000, or \$10,000. This allows us to test whether those who were asked about larger earnings increases report larger benefit increases. We included a number of such experimental variations in question wording, and preliminary results indicate that respondents varied their answers in the expected direction. This increases our confidence that many respondents were able to give meaningful answers to questions that were relatively difficult.

3. Results

3.1 Sample Characteristics

Knowledge Networks fielded the survey from August 20, 2008, to September 10, 2008. A total of 266 panelists between the ages of 50 and 70 were invited to participate in the survey. The response rate was 75% with 199 respondents taking the survey. Nine of these respondents reported not being eligible at all for Social Security benefits; neither on their own record nor on the record of a spouse, ex-spouse, or late spouse. A further 11 respondents did not complete the survey, which means that the completion rate was 94%. Conditional on completing the survey, the item-response rates were very high, generally above 95%. The median completion time was 32 minutes, and respondents were paid a \$5 incentive because the survey length exceeded the typical length (about 20 minutes) for Knowledge Networks' surveys. The current sample size of 179 allows us to test the survey instrument and to analyze the average perception of incentives and features of the Social Security rules. To fully examine predictors of knowledge about the Social Security benefit rules and to determine which individuals have the most accurate perception of the incentives, we need a larger sample. This larger sample will be obtained by fielding the survey among approximately 2300 additional respondents in October of 2008.

Table 1 shows the demographic composition of our sample, which should be roughly nationally representative on the demographic characteristics of 50 to 70 year old individuals nationwide. Our sample has an average age of about 59 years, is just over half female, and is mostly non-Hispanic white (84%). The majority of respondents (64%) are married, and about three quarters live in one- or two-person households. The variation in income and education across respondents generally reflects the heterogeneity in this regard of the U.S. On the one hand, about 8 percent of our respondents are high school dropouts and about 20 percent live off of a household income of less than \$25,000 per year. On the other hand, about a quarter of the respondents have a college degree and about 16 percent have a household income of more than \$100,000 per year. When Knowledge Networks asked respondents about their labor force status (a 7-option multiple choice question), about 57 percent reported that they were working and about 26 percent reported that they were retired. When we ask respondents whether they are currently working for pay (with at least \$2500 in annual earnings), about 55 percent answer affirmatively. We classify respondents as retired if they both (i) do not currently work for pay (with at least \$2500 in annual earnings) and (ii) do not expect to work for pay in the future (with at least \$2500 in annual earnings). This definition, which we use in the rest of the paper, yields a retirement rate of 36 percent.

Two important dimensions along which respondents differ are retirement status and Social Security claim status. Retirement status matters because labor supply incentives from the Social Security benefit schedule still matter for future decisions of non-retired individuals. Additionally, Social Security claim status is important since those who have already claimed Social Security benefits have had more contact with the Social Security system and, in the process, may have gained more knowledge about the benefit rules. About 37 percent of our respondents currently receive some form of Social Security benefits. If we exclude the 10 percent of respondents who report receiving disability benefits after they stopped working, the fraction of respondents receiving Social Security benefits becomes 30%. The age at which people first claim Social Security benefits, their “claim age,” is often different from their retirement age, defined as the age at which they stop working and have no intention to work in the future. Slightly over half of our sample report a claim age that differs from their retirement age. This distinction is also evident in Table 2, which shows that 18 percent of our sample is either still working while receiving benefits or retired but not yet receiving benefits.

Not surprisingly, as Table 3 shows, the characteristics of those currently receiving Social Security benefits differ markedly from those who have yet to receive benefits. Not only are those claiming benefits on average almost 10 years older, they also have lower levels of education, are less likely to be married, and more likely to be female. Since there are such large demographic differences by claim status, it will be important to control for demographic characteristics when examining whether knowledge about Social Security is influenced by current claim status so as to avoid confounding claim status and demographic characteristics. Current recipients receive benefits that are about \$150 per month (or about 13%) lower than the expected benefits of those not yet claiming. However, virtually all of this difference can be explained by the fact that the current recipients of Social Security started claiming benefits at an earlier age. If all benefits are adjusted to the level that they would be if each person had started claiming (or would start claiming) at age 66, then the average level of (adjusted) benefits for both current recipients and future recipients is about \$1300 per month. This number is in rough accordance with administrative data from the Social Security Administration, which shows that the average PIA for retired workers making initial benefit claims was \$1194 in 2006. Adjusting to 2008 benefit levels would raise this number to about \$1290.³ The average monthly benefit received in our sample of \$1134 is similar to the average benefit level for new retired-worker beneficiaries of \$1125 (2006 data adjusted to 2008 benefit levels). Figure 1 presents the cumulative distribution functions (CDFs) of the actual and adjusted Social Security benefits, which shows that the distribution of reported benefits levels appears very plausible. Figure 2 reports the CDF of adjusted benefit levels for those already claiming and those yet to claim Social Security benefits. This figure confirms that the distribution of benefit levels is very similar for those groups, which indicates that, on average, those not yet receiving benefits have a reasonably good impression of the benefits that people actually receive.⁴

³ See table 6.A2 of the 2007 Annual Statistical Supplement to the Social Security Bulletin available at <http://www.ssa.gov/policy/docs/statcomps/supplement/2007/6a.pdf>.

⁴ Dominitz and Manski (2006) and Delavande and Rohwedder (2008) have gone one step further and elicited individuals' perceived probability distribution of their future Social Security benefits. Delavande and Rohwedder (2008) compare people's point estimate of their future Social Security benefits to their expected Social Security benefits (where the expectation is based on the perceived probability distribution) and find that both figures are very similar. This evidence suggests that the point estimates that we elicit in our survey can be interpreted as expectations. In addition, Rohwedder and Kleinjans (2006) examine the dynamics over time of individuals' perceived Social Security benefits and find that perceptions tend to become more accurate as people approach retirement.

Before turning to perceptions of incentives from the complex Social Security benefit rules, we first present perceptions of the marginal OASDI tax rate (Q3.3). The actual OASDI marginal tax rate is constant at 12.4% for the first \$97,500 in earnings in 2007 and is 0% at the margin for earnings above that amount. We explicitly differentiated between and asked about the employee and the employer portion. Among the 93% of respondents who reported earning less than \$100,000 in the last year they worked, the median response is that the respondent and his employer combined would have paid \$145 more in OASDI taxes if he had earned \$1000 more in the last year he worked. In other words, the median perception of the OASDI tax is 14.5%, which is remarkably close to the true figure of 12.4%. (Incidentally, the median response among the 9 respondents earning more than \$100,000 was an OASDI tax rate of 0%). A number somewhat above 12.4% could arise if some respondents mistakenly included the 2.9 percentage point Medicare payroll tax in their answer. Moreover, about three quarters of the non-self-employed respondents with earnings less than \$100,000 correctly report that the employee and the employer share the OASDI tax equally. Figure 3 shows the distribution of perceived marginal OASDI tax rates among those subject to the tax on the margin. The figure confirms that the median perception is very close to the actual rate but also shows that there is still a fair amount of dispersion around this median, with an interquartile range from 5% to 30%.

3.2 Perceptions of Incentives to Work Additional Years

We measured perceptions of extensive margin incentives by asking two questions (Q3.1 and Q3.2). First, we asked respondents what would happen to their Social Security benefits if they had stopped working for pay one year earlier, but had started collecting Social Security at the age that they actually did. Note that this question is hypothetical for those who are already retired. For those still working, the question asks about the effect of stopping work one year earlier than the age they had indicated as their expected retirement age. We asked a random third of respondents about the effects of retiring one year earlier, another third about retiring two years earlier, and a final third about retiring five years earlier. We took care that the question explicitly held the claim age constant so as not to measure the effect of the claim age on benefits.

We decided to ask about retiring earlier rather than about working additional years because respondents should have a better idea about their earnings during years that actually took place or that they expect to take place than about earnings in years when they did not work or do

not expect to work. Moreover, if we had asked about working longer while keeping the claim age constant, there is greater possibility that answers reflect the earnings test (which temporarily reduces benefits) rather than the effect of additional work on long-run benefits. The question was divided in to two parts. We first asked whether benefits would increase, stay the same, or decrease if they had stopped working earlier. Then, for respondents who reported that retiring earlier would change their benefit level, we asked what the resulting new amount of their benefits would be.

Table 4 reports individuals' perceptions of the incentives for working longer as provided by the Social Security benefits rules. We recoded the answers from the original question (which asked about working fewer years) so that higher numbers correspond to positive labor supply incentives, or how working additional years affects benefits. Panel A shows that 27 percent of respondents believe that working additional years would have no effect on their benefits and that 68 percent believe that this would increase their benefits. Social Security rules dictate that extra years of work will either increase or not change a person's benefits, depending upon (i) whether or not the person claims solely on his or her own record and (ii) whether the additional year will be part of the 35 highest years that enter the AIME calculation. About 10% of respondents do not claim solely on their own record, so for them working an additional year should not affect benefits. Moreover, of those claiming on their own record, about 70% respond that they will have an earnings history of at least 35 years at their retirement age. Thus, it is plausible that for some fraction of this latter group, the last year of work would not be included in the 35 highest years. The results in Panel A therefore suggest that overall people appear to be well aware that more years of work generally lead to higher Social Security benefits. This perception is somewhat stronger among those not yet receiving benefits compared to those already receiving benefits.

Panel B of Table 4 examines the perceived percentage increase in Social Security benefits from working one additional year among the subsample of respondents who believe that benefits will be strictly higher if they work an additional year. The median response is 7.1% with an interquartile range of 4.1% to 10.6%. The CDF of the responses is shown in Figure 4. The actual incentive on the extensive margin varies across individuals and depends on the person's exact earnings history. However, consider an individual who in the last year of work had indexed earnings of twice her average yearly income and who had an earnings history such

that the lowest year of earnings among her 35 highest years was half her average earnings. By replacing the lowest year by the current year, her AIME would rise by $100*(2-0.5)/35 = 4.3\%$. If she is on the 32% segment of the AIME-PIA schedule, and her PIA/AIME ratio is 50%, then the 4.3% increase in her AIME would translate into a $4.3*0.32/0.50 = 2.7\%$ benefit increase. This rough calculation suggests that individuals' perceptions of the extensive margin incentives are not tremendously different from typical incentives. In the end, however, people's assessments of the incentives on the extensive margin appear to be stronger than is typically the case in reality.

3.3 Perceptions of Incentives to Earn More

We used two different frames for the questions that measure incentives on the intensive margin and randomized respondents into one of the two frames, either monthly or lifetime. In the monthly frame, each respondent indicates what would happen to her monthly benefits if she had earned \$1000 more in the last year she worked (Q4.1 and Q4.2).⁵ The lifetime frame asks each respondent what would happen to the total Social Security benefits that she receives over her lifetime if she had earned more, and as a result, she and her employer combined had paid \$1000 more in Social Security taxes in the last year that she worked (Q4.3 - Q4.5). Both frames first ask for a qualitative answer and subsequently solicit a quantitative answer. The benefit of the monthly frame is that the question is more concrete and does not implicitly ask respondents to calculate the expected present discounted value of the benefit increase. However, when applying the lifetime frame, we can interpret people's responses to these questions as the fraction of the Social Security tax that is returned in the form of higher benefits; in other words, the question yields an estimate of the perceived effective Social Security tax rate.

Panel A of Table 5 presents the qualitative responses. Combining the qualitative answers from both frames in the first column, we find that 41 percent of respondents believe that higher earnings in the last year they worked would not have affected their benefits while 52 percent believe that higher earnings would have resulted in higher benefits. As was the case with the extensive margin incentives, the actual intensive margin incentives depend in a complex way upon the individual's earnings history, her marital status, and her spouse's earnings history. In particular, future benefits remain the same if (i) the individual does not solely claim benefits off

⁵ We randomly selected the increase in earnings to be \$1,000, \$5,000, or \$10,000 dollars to test whether the respondents' answers vary in the expected direction to the amount mentioned in the question, and we found that this is indeed the case.

of her own earnings record, (ii) the individual earns more than the maximum taxable amount of about \$100,000, or (iii) the higher earnings occur in a year that will not be among the 35 highest years of earnings when benefits are determined. Given these rules, it is quite plausible that for a substantial portion of respondents the true intensive margin incentive is indeed zero; higher earnings would not affect these respondents' benefits. Mirroring our findings on extensive margin incentives, the 2nd and 3rd columns show that the fraction perceiving positive incentives on the intensive margin is higher among those not yet receiving benefits than among those already receiving benefits. The final two columns show that perceptions of the intensive margin incentives are nearly identical for the monthly frame and the lifetime frame.

In Panel B, we present the quantitative results for this question using the monthly frame. We report the perceived dollar increase in the monthly Social Security benefit per \$1000 of additional earnings in the last year worked and limit the sample to those who indicate strictly positive benefit increases. The median respondent perceives \$1000 in extra earnings to result in a \$10 increase in monthly benefits, with an interquartile range from \$5 to \$35. The full distribution of responses is shown in Figure 5a. As a benchmark, consider a worker who is on the 32% segment of the AIME-PIA schedule. A \$1000 yearly earnings increase corresponds to an $\$83 (=1000/12)$ increase in monthly earnings for the year in question, which in turn would cause the AIME to increase by $\$83/35 = \2.40 , assuming this year would be part of the 35 highest years of earnings. On the 32% AIME-PIA segment, this \$2.40 increase in the AIME would raise the PIA by $0.32 * \$2.40 = \0.75 . Thus, the true effect is somewhere around one dollar for a typical person. Clearly, the median perceived response to the intensive margin incentive is an order of magnitude larger than the actual incentive.

Panel C examines the quantitative responses from the lifetime frame. Among those who perceive a strictly positive intensive-margin incentive, the median person believes that for \$1000 in additional Social Security taxes paid, she will receive an additional \$1000 in benefits over the course of her lifetime.⁶ The interquartile range for the responses spans \$500 to \$1500, and the full distribution is shown in Figure 5b. As a benchmark, the \$1000 in extra earnings for the worker considered above would have resulted in \$124 in additional OASDI tax payments. Assuming the worker had a life expectancy of 20 years and a discount rate of 5%, the value of

⁶ It conceivable, however, that a \$1000 benefit increase became a focal point for answers because the question asked about a \$1000 tax increase. To the extent this is the case, the lifetime frame question may not have elicited actual perceptions of the incentive on the intensive margin.

the extra \$0.75 per month paid over his lifetime would have been \$131. Thus, this worker would indeed over the course of his lifetime receive the additional Social Security taxes paid back in the form of higher benefits. This admittedly crude calculation is consistent with the much more refined calculation presented in Liebman et al. (2008). These authors show that Health and Retirement Study participants, whose average age of 60 is the same as that of the respondents to our survey, receive additional Social Security benefits over their lifetimes that on average have an expected present discounted value of \$560 for \$1000 in additional taxes paid. This average includes individuals who do not receive higher benefits when they pay more tax (e.g., because they claim spousal or widow benefits). If we average the responses across all individuals in our survey (substituting a zero for those who thought lifetime benefits would decrease or stay the same), we find that, on average, people indicate that they will receive \$715 in additional lifetime Social Security benefits per \$1000 in additional OASDI taxes paid. Thus, in contrast to the monthly frame, the lifetime frame yields measures of perceived incentives on the intensive margin that are close to the actual incentives.

3.4 Perceptions of Incentives to Claim Later

Next, we examine respondents' perceptions of the incentives for delaying claiming Social Security benefits. Strictly speaking, these incentives are not related to labor supply since the claim decision is separate from the retirement decision. However, in practice, many people may see these decisions as connected, especially if people mistakenly believe that the earnings test removes any incentive to work after claiming Social Security benefits. We ask two questions about incentives for delaying claiming. First, we ask respondents what they believe would happen to their own Social Security benefits if they would delay claiming benefits by one year, holding constant the age at which they stop working (Q5.1).⁷ The advantage of this question is that it asks about a delay in the claim decision around the age at which the respondent actually claims or expects to claim benefits. The drawback, however, is that we do not learn about the respondent's perceptions of the incentive to delay claiming at other ages. To overcome this drawback, we also asked all respondents about the benefits that a hypothetical person would receive at various claim ages (Q5.2).

⁷ We ask about a one-year delay in claiming to a random half of the sample and ask the other half about claiming one year earlier.

Table 6 presents the responses for both questions. The first column of Panel A shows that only just over half of the respondents (56%) believe that a delay in claiming would raise their benefits, while 35% believe that their benefits would remain the same. Since benefits do not in fact depend on marginal variations in the claim age beyond age 70, the second column shows the results for those who report (expected) claim ages that are valid and in the range where benefits vary with claim age. Still, only 58% of these respondents correctly indicate that benefits increase with claim age. This figure, however, is consistent with results by Dominitz et al. (2007), who ask a similar question to respondents in the RAND American Life Panel and find that 61% of respondent report that benefits would increase with claim age. In columns 3 through 5, we examine the respondents' perceptions of the effect of delayed claiming for a hypothetical person. Here, 90% correctly answer that delaying claiming from age 62 to age 66 would increase benefits, and 85% correctly respond that a delay from age 66 to age 70 would raise benefits. However, 73% mistakenly believe that claiming at age 74 instead of at age 70 would lead to higher benefits when in fact this delay has no effect on benefits. Thus, a large majority appears to be aware that benefits rise with claim age between the ages of 62 to 70, but only a quarter understands that this increase does not occur beyond the age of 70. The finding that a large majority is aware of the incentives to delay claiming (at least between the ages of 62 and 70) is consistent with evidence from Coile et al. (2002) who find that that the observed pattern of claim decisions generally corresponds to the pattern predicted by these incentives.

Panel B of Table 6 presents respondents' perceptions of the percentage increase in monthly benefits per year of delay in claiming. We limit the sample to respondents who perceive strictly positive returns from delaying. For delays in claiming between the ages of 62 and 66, the median response is that each year of delay leads to a 6.25% increase in monthly benefits, which is the true figure. The median perceived return to delaying claiming between the ages of 66 and 70 is 5%, whereas the true figure is 8%. While this median perceived return is still relatively close to the actual return, people are apparently unaware that returns to delaying are higher between the full-benefit age (generally age 66 in our sample) and age 70 than between age 62 and the full-benefit age. Finally, the last column of panel B shows that the median perceived return to delaying claiming from age 70 to age 74 is 3.6% per year when in truth there is no return at that point. Of course, since most people claim benefits well before age 70, there is little incentive for most people to acquire information about that aspect of the delayed claiming

rules. Figure 6 shows the full distribution of perceived returns to delaying claiming by one year for the three age ranges considered. The sample in Figure 6 is limited to those who perceive strictly positive returns to delaying claiming benefits.

3.5 Knowledge about Provisions of the Social Security Benefit Rules

In this section, we examine to what extent respondents are aware of four important provisions in the Social Security rules: (i) the earnings test, (ii) spousal benefits, (iii) widow(er) benefits, and (iv) which years enter into the AIME calculation. The degree of respondents' awareness of these provisions will help us better understand why perceived incentives for labor supply vary across individuals with different earnings histories and marital statuses.

3.5a Knowledge of the Earnings Test

The earnings test is a provision in the Social Security rules that reduces benefits for people who currently receive benefits, claim before the full-benefit age (generally 66 for our respondents), and have earnings above a certain threshold (\$13,560 in 2008). For people satisfying these criteria, current monthly benefits are reduced by \$1 for every \$2 in earnings above the threshold. However, upon reaching the full-benefit age, the benefit level is recalculated, treating the sum of benefit reductions due to the earnings test as the sum of forgone benefits had the person decided to claim at a later date. For instance, if the earnings test had reduced benefit payments by an amount equal to four months of benefits, the new benefit amount would be calculated as if the person had started claiming Social Security four months later than she actually did. Because of this benefit recalculation, the earnings test effectively shifts the benefit payments to a later age but does not substantially affect the total lifetime benefits paid to a typical person. If, as evidence by Van Soest and Michaud (2007) suggests, people view the earnings test as a pure tax (and don't recognize that foregone benefits in the short-term are returned in the form of higher future benefits), then the earnings test will be perceived as an incentive to retire and claim benefits immediately upon reaching the earliest eligibility age (age 62) or to reduce earnings from age 62 to 65 so that they are below the earnings test threshold.

We ask respondents to consider the (possibly) hypothetical situation that they had stopped working at age 62 and also had started claiming benefits in that year. We then ask a random 50% of them to consider what would happen to their benefits at age 64 if they return to

work for one year at that age and earn \$20,000 that year (Q5.3). Since the \$20,000 exceeds the earnings threshold and 64 is below the full-retirement age, the correct answer is that benefits in that year would be reduced. For the other 50%, we ask the same question but replace age 64 by age 68. Because age 68 exceeds the full-benefit age, the earnings test would not be applied, and the correct answer is that benefits would stay the same. The first column of Panel A in Table 7 shows the distribution of answers for those asked about earnings at age 64, while the second column pertains to age 68. In each column, a plurality chooses the correct answer, but this plurality consists of only 42-44 percent of the respondents. Thus, while many respondents have some knowledge of the earnings test, this awareness is far from pervasive. Next, we examine the perceived level of the earnings threshold among those respondents who possibly believe a threshold exists (namely, those answering that benefits would remain the same or be reduced as a result of the earnings test). For the exact wording, see Q5.4a and Q5.4b. Panel B shows that the median perceived level of the earnings test for earnings at age 64 is \$12,000, which is very close to the actual value of \$13,560. For earnings at age 68, the median perceived threshold is \$25,000. The fact that that median response is higher for age 68 than age 64 reflects the fact that a greater proportion of respondents indicate that there is no threshold for earnings at age 68 than at age 64, which we coded as a threshold of infinity. Still, the median perception is that earnings at age 68 are subject to an earnings test and that the threshold of this test is not very high. Figure 7 shows the full distribution of perceived levels of the earnings test among those who answered that earnings while receiving benefits would either reduce current benefits or would not affect them.

As a follow-up, we also asked whether future benefits would increase if current benefits were reduced due to the earnings test. Only 30% believed this to be the case, with 60% answering that future benefits would be unaffected and the remaining 10% answering that future benefits would also be cut. Thus, people appear to have little awareness of the provision that benefits received after the full-benefit age will be increased to roughly compensate for the benefits lost due to the earnings test.

3.5b Knowledge of Spousal Rules

Married individuals collect benefits equal to either 100% of the benefits based on their own PIA or 50% of the benefits based on their spouse's PIA.⁸ This provision has important implications for labor supply incentives. A worker whose benefits are determined by her spouse's PIA will have no incentive on the margin to earn more since additional earnings will not affect her benefits. On the other hand, a worker whose spouse claims benefits on his record has an additional incentive to earn more since these additional earnings will increase not only his own benefits but also those of his spouse. Whether or not it is optimal to claim spousal benefits depends on the ratio of the spouse's PIA to the respondent's PIA. If this ratio is smaller than 0.5, then it is optimal for a respondent's spouse to claim benefits on the respondent's record. If the ratio is larger than 2.0, then it is optimal for the respondent to claim on his spouse's record. For each respondent we calculate this PIA ratio by adjusting the reported own and spousal benefits for the reported claim ages and taking the ratio of the adjusted benefit amounts.

Table 8 examines individuals' awareness of the spousal benefit rules by asking the respondent what would happen to his or her spouse's benefit if the respondent had worked more and therefore received benefits that are \$100 greater than they actually are (Q6.1 and Q6.2). The correct answer is that there would be no change if the spousal to own PIA ratio exceeds 0.5 and that the spouse's benefits would increase by \$50 if the PIA ratio is less than 0.5. The first column of Panel A presents the answers of all married respondents while the remaining four columns split out the answers by PIA ratio. Overall, we find that 85% of all respondents believe that an increase in their benefits (caused by working more) would not affect the benefits their spouses receive. Even among those respondents whose spouses likely claim benefits off the respondent's record (because the PIA ratio is less than 0.5), 73% nonetheless believe that their spouse's benefits would not be affected if their own benefits were to rise. While our estimated PIA ratio undoubtedly has measurement error, this measurement error would need to be very severe to account for 73% that perceive no effect. Among those with spousal to own PIA ratios exceeding 0.5, over 92% correctly believe that own benefits increases caused by working more will not affect their spouse's benefits. Thus, the percentage of respondents who believe that extra earnings do not affect spousal benefits increases from 73% among those with a PIA ratio of

⁸ Technically, everyone first receives their own ("retired worker") benefits and then is eligible for spousal benefits to make up any difference between their own benefits and 50% of the benefits based on the spouse's PIA. Divorced individuals who have not remarried can claim benefits based on their ex-spouse's record if they were married to that spouse for at least 10 years.

less than 0.5 to more than 92% among those with a PIA ratio higher than 0.5. This finding indicates that there is some awareness of the spousal benefit rules, but this awareness is clearly far from universal since otherwise we would have seen a much larger increase in this percentage.

Because the linkage between the respondent's additional earnings and the spouse's benefits may be somewhat subtle and hard to understand, we asked a second question to assess spousal benefits. We asked the respondent what would happen to his spouse's benefit level if the spouse had never worked (Q6.3). The correct answer is that the spouse's claim-age adjusted benefits would be 50% of the respondent's claim-age adjusted benefits. We asked this question of all respondents with a PIA ratio of less than 2.0 (and asked the reverse question to those with a PIA ratio above 2.0, namely what would happen to the respondent's benefit if he had never worked). Panel B of Table 8 shows that 58% of all respondents believe that their spouse would still receive some benefits even if their spouse had never worked. Panel C shows that, among those who believe their spouse would receive some benefits even if she had never worked, the median respondent believes that the adjusted benefits for the spouse in that case would be 45% of the respondent's own adjusted benefits. This answer is quite close to the true figure of 50%, and the responses are reasonably tightly distributed around the median, as Figure 8 shows.

Of course, given that some people may mistakenly feel that everyone is entitled to a minimum Social Security benefit, the finding above does not necessarily imply that a respondent realizes that his spouse's benefits can be based on his earnings record. To investigate this possibility, we regress the spouse's adjusted benefits for the case that she had never worked on the respondent's own adjusted benefit using the subsample of respondents who reported that their spouse would receive some positive amount. We find a strong, highly statistically significant, positive effect of the respondent's benefit. The estimated coefficient is 0.36, which indicates that an increase in \$100 of the respondent's adjusted benefits is associated with a \$36 increase in the spouse's adjusted benefits for the case where the spouse had never worked. This is reasonably close to the actual increase of \$50 per \$100 of higher own benefits.

3.5c Knowledge of Widow(er) Rules

Widowed individuals receive benefits that are the maximum of the benefits available based from their own PIA and their late spouse's PIA. Thus, whenever the ratio of spousal PIA to own PIA exceeds unity, it is optimal to claim widow(er) benefits. This provision strengthens

the labor supply incentives for the spouse with the higher PIA since this spouse will never claim widow benefits herself, but her husband would claim widow benefits based on her record if she were to die first. Thus, the payoff of raising her PIA through additional labor supply is relatively high.

We examine whether respondents understand this provision by asking what would happen to their Social Security benefits if they were to become widowed (Q7.2). The correct answer is that their benefits would not be affected if the spousal to own PIA ratio is less than unity and that benefits would rise if the PIA ratio is greater than one. Panel A of Table 9 shows the responses for all married individuals in column 1 and breaks out these responses by PIA ratio in the next four columns. We find that 50% of all respondents believe they would receive the same benefits if they became widowed while 38% believe that their benefits would rise. Consistent with a widespread awareness of the widow(er) rules, the fraction that believes that benefits would remain the same drops monotonically from 73% for those with PIA ratios less than 0.5 to just under 8% for those with PIA ratios greater than 2.0. Conversely, the fraction that believes benefits would increase rises as the PIA ratio increases. This apparent awareness of widow(er) benefits is also evident in Panel B, which shows the perceived widow(er) benefit if the respondent became widowed as a percentage of her own current benefit. Those with a PIA ratio less than one would continue to claim their own benefits if they became widowed, and this percentage should therefore be 100, while those with a PIA ratio greater than one would now claim widow benefits based on their spouse's PIA and have a percentage greater than 100. The table shows that the median response indeed follows this pattern.

We also ask the respondent what would happen to her spouse's benefits if her spouse were to become widowed (Q7.3). When the spousal to own PIA ratio exceeds one, the spouse's benefit would not be affected if the respondent died; while for PIA ratios less than one, the spouse's benefits would increase. As panel C shows, this prediction is clearly borne out by the responses. The fraction of respondents who believe that their spouse's benefit would increase if their spouse were to become widowed rises monotonically from 80% for a PIA ratio less than 0.5 to about 15% for those with a PIA ratio greater than 2.0. Panel D shows that the median benefit for a widowed spouse as a fraction of the spouse's current benefit also follows the expected pattern. Thus, overall, Table 9 shows that respondents appear to be well aware of the widow(er) provisions in the Social Security benefit rules.

3.5d Knowledge of the 35 Year Rule

Social Security benefits are based on the average indexed earnings of the 35 highest years of indexed earnings (including zeros if the person has worked less than 35 years). This implies that the return to working an additional year is lower for those with more than 35 years of earnings because an additional year of working replaces an earlier year of earnings in the average. To find out whether people are aware of this provision, we give them a multiple choice question that asks which years of earnings determine the benefits of a person with a 40-year work history who claims benefits on his or her own record (Q8.1). Respondents could choose from four options: (a) based on the average of the ___ most recent years of earnings, (b) based on the average of the ___ highest years of earnings, (c) based on the average earnings between the ages of 16 and _____, or (d) based on the total number of years that the person had earnings exceeding \$2500 between the ages of 16 and _____. We asked respondents to choose one option and to fill in the corresponding blank. The correct option is option (b), and 35 should be entered into the corresponding blank. Option (a) was chosen most often with about 37% of respondents selecting it. Only about 30% of respondents correctly answered option (b), which is not much higher than the fraction that would choose this by pure chance. Thus, relatively few people seem to be aware of which years are taken into account. One might counter that for people with fewer than 35 years of earnings or with a strictly increasing earnings profile, the highest years are also the most recent years, so that options (a) and (b) coincide, and that for most others the difference between options (a) and (b) might in practice be very minor. However, respondents also have large misperceptions about the number of years of earnings that are considered. For both options (a) and (b), the median response is that 5 years are considered and even the 75th percentile is only 10 years. Thus, most respondents seem to think that the benefits are based on relatively few years of earnings.

These figures could explain why we found that perceived incentives on both the extensive margin and the intensive margin were higher than actual incentives; if the average is taken only over a few years, then increasing earnings in a single year has a greater impact on the overall average than if that average is taken over many years. It would also imply that people view the payroll tax as a pure tax for much of their careers.

3.6 Framing Experiment

People's decisions about when to claim benefits may be sensitive to how this choice is framed. To the extent that people link their retirement age to their claim decision, the framing of when to claim will also affect retirement behavior. People who consider claiming Social Security often visit a Social Security office or the Social Security website (as outlined below, we asked about the relative usefulness of various sources of Social Security information). The Social Security website presents this choice in a break-even frame: the age "at which the accumulated value of higher benefits (from postponing retirement) will start to exceed the accumulated value of lower benefits (from choosing early retirement)." Social Security officers are also instructed to use this break-even frame when counseling clients about when to start claiming benefits. Rather than in a break-even frame, this decision could be framed as a gain frame (the increase in monthly benefits by postponing claiming) or as a loss frame (the decrease in monthly benefits from claiming early). Any delay in claiming, which may also induce people to work longer, will alleviate financial pressure on the Social Security system. Thus, if a simple change in framing has an effect on the claim decision, it would provide a very useful tool for policy makers to convince people to claim later.

To examine whether the choice of framing has the potential to affect claim decisions, we randomly assigned one of the three frames to each respondent. In particular, we used the following wording for the three frames:

Loss frame:

The amount of someone's Social Security benefits depends on the age at which the person starts collecting Social Security benefits.

In particular, if a person starts claiming Social Security benefits at age 62 rather than at age 65, all his/her future benefits will be cut by 20% for as long as he/she lives.

Gain frame:

The amount of someone's Social Security benefits depends on the age at which the person starts collecting Social Security benefits.

In particular, if a person starts claiming Social Security benefits at age 65 rather than at age 62, all his/her future benefits will be increased by 25% for as long as he/she lives.

Break-even frame:

The amount of someone's Social Security benefits depends on the age at which the person starts collecting Social Security benefits.

In particular, a person who postpones claiming benefits from age 62 to age 65 has a break-even age of 76 years and 11 months. This means that at 76 years and 11 months, the accumulated value of higher benefits (from postponing retirement) will start to exceed the accumulated value of lower benefits (from choosing early retirement). Note: interest is not considered in the calculation.

We measured the respondent's attitude towards early claiming in one of two ways. We either asked the respondent whether a neighbor would be better off first claiming benefits at age 62 rather than at age 65 (Q9.2), or we asked the respondent at which age the respondent him or herself would start claiming if given the choice between claiming at age 62 or 65 (Q9.3).

Table 11 shows how respondents' attitudes towards claim behavior responded to the frame manipulations. Panel A shows that about 65% percent of the respondents who saw the gain frame or the loss frame said that the neighbor would be better off claiming at age 65 rather than age 62. In contrast, only 45% of those who were exposed to the break-even frame thought that the neighbor would be better of claiming at age 65. Compared to the gain or the loss frame, the break-even frame reduces the fraction of respondents who believe it is best to delay claiming by 20 percentage points. Panel B examines the effect of framing on respondents' own hypothetical claim decisions. Here we find that 52% of those who saw the loss frame favor delaying claiming, 67% of those who saw the gain frame favor delaying claiming, but that delay is only favored by 42% of those saw the break even frame. Thus, as with the advice to neighbor question, only under the break-even frame does a majority of respondents favor claiming early. Finally, Panel C combines the responses from Panels A and B. Not surprisingly, the combined results are similar to those in Panels A and B. The benefit of pooling the responses is that it gives us more statistical power to test whether the fraction of respondents favoring delayed claiming differs significantly between the breakeven frame and the other two frames. This is indeed the case. A probit regression shows that the break-even frame reduces the probability of favoring delayed claiming by 18.5 percentage points, and this estimate is statistically significant (p-value: 0.019). These results are consistent with results by Dominitz et al. (2007), who in a similar experiment find that the framing of the benefit of delayed claiming can affect hypothetical claim decisions.

3.7 Usefulness of Information Sources

Table 12 shows which information sources respondents report using to gain knowledge about their Social Security benefits. For each source of knowledge, we asked respondents to rate that source's usefulness on a 5-point scale, where 1 corresponds to "not useful at all" and 5 indicates "very useful." The table shows that mailings from Social Security are the most frequently consulted source with 90% answering that they use this source. Mailings are followed by consulting with one's spouse (82%) or with another relative (70%). A visit to the Social Security office is rated as the most useful source of knowledge, with an average rating of 4.26 on a five-point scale. In fact, four of the five most useful sources of knowledge are the various forms of information provided by the Social Security administration (in person visit, phone call, web site, and mailings). The only other information source listed in the top five most useful is information gained by talking to a financial advisor. Eldred (1977) also surveyed individuals about their sources of knowledge about the Social Security system. While his methodology was somewhat different, it is nevertheless interesting to note that about thirty years ago only a small minority (17%) listed information from the Social Security administration as their most important source of knowledge about the program.

4. Discussion

The Social Security benefit formula implicitly provides incentives for labor supply by generally rewarding higher earnings and additional years of earnings with higher future Social Security benefits. By fielding a survey about Social Security among a random sample of 50-70 year old individuals, we have gained a better understanding of how Americans perceive the incentives that Social Security benefit rules provide for labor supply. We find that a clear majority of individuals understand that increased labor supply leads to higher future benefits. However, the median response suggests that people perceive their benefits to be more sensitive to labor supply than is actually the case. These results indicate that it is incomplete to merely consider the disincentive effects from the Social Security tax without taking into account the Social Security benefit rules that provide a positive incentive for work. We also find that there is considerable dispersion in the perceived incentives and that many people misperceive these incentives. Since these misperceptions lead to privately suboptimal labor supply decisions,

better information about the link between labor supply and future Social Security benefits would be valuable to individuals.

In our survey, we also ask about people's understanding of the various provisions of the Social Security benefit rules. We find high levels of understanding of the provisions on widow(er) benefits and the rules governing how claim age affects benefits. However, individuals generally lack an awareness of the earnings test and the rules on spousal benefits; and only a few people are able to cite which years of earnings are taken into account in the Social Security benefit calculation. Thus, while respondents' understanding of Social Security rules varies across provisions, the rules that are relevant for a larger fraction of the population seem to be better understood. In other results, we find that the Social Security Administration is the most important source of information about Social Security benefits for most people. Since it is the most important information source, the way the Social Security Administration presents its information may affect people's decisions. Indeed, we find suggestive evidence that this is the case from an experiment where we changed the frame of the effects of delayed claiming. The experiment shows that the frame currently used by the Social Security administration ("the break-even frame") significantly increases the fraction favoring retirement at an early age compared to alternative frames.

We are currently in the process of additional data collection, which will increase our sample to about 2500 cases. With this larger sample, we will be able to answer questions that could not be answered with sufficient precision with the current sample. First, we will be able to explore whether the sample, which is roughly nationally representative of its age group in terms of demographic characteristics, is also nationally representative along other dimensions, such as financial literacy. This information will enable us to determine whether it is likely that our sample was in unobserved ways more sophisticated than the average individual between the ages of 50 and 70. Second, we will be able to estimate people's actual incentives and compare our estimated actual incentives to the reported perceived incentives. Third, we will be able to examine which factors predict individuals' knowledge of the Social Security system. In particular, we will examine how demographic characteristics, financial literacy, and sources of information affect knowledge. Fourth, we will be able to test whether the responses to certain questions varied significantly in the expected direction with experimental variation that we introduced in the wording of certain questions.

Is it possible to increase the accuracy of perceptions by providing information about the Social Security system? Further, would more accurate perceptions affect retirement behavior? The current survey provides the baseline for an experiment that we will conduct to answer these questions. The experiment entails an informational intervention administered to a random half of the non-retired respondents. The intervention will consist of a brochure explaining certain features of the Social Security benefit rules and a 15-minute web survey that is designed to further provide information about these rules. In future research, we hope to examine whether the informational intervention improved the accuracy of perceptions about the Social Security benefit rules and whether it affected retirement decisions.

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Appendix A: Questionnaire

Explanation

- Remarks between square brackets are just for the programmer.
- Variables are denoted in all capitals.
- Any programming remarks before the question name apply to the whole question.
- The solid lines indicate that a new screen should be shown.
- The numbers in parentheses in front of the selections boxes do not appear on the screen; they only indicate the value the variable will take if the relevant selection box is checked.

The variables below are set by the authors to experimentally vary the exact question wording that is shown to the respondents:

SEC1	Indicator for whether section 1 needs to be asked (1=yes, 0=no)
SEC2	Indicator for whether section 2 needs to be asked (1=yes, 0=no)
...	
SEC14	Indicator for whether section 14 needs to be asked (1=yes, 0=no)
XRET_CHG	Number of years earlier the respondent stopped working in section 3, equal to 1, 2, or 5 years
XEARNCH	Hypothetical earnings change in section 4 (1=\$1,000, 2=\$5,000, 3=\$10,000)
XINT_V	Version for the intensive-margin question (1=month frame, 2=lifetime frame)
XDEP_V	Version for whether benefits depend on claim age (1=reference age is 62, 2=reference age is 66)
XCLM_CHG	Whether Q5.1 asks about claiming earlier or later (1=later, 2=earlier)
XEARNTST	The age for which the earnings test question in section 5 is asked (64 or 68)
XFRAME	Frame in section 9 (1=loss frame, 2=gain frame, or 3=breakeven frame)
XFR_VER	Question type in section 9 (1=advice to neighbor, 2=making own decision again)
XFR_NAME	Name of the neighbor in the story in section 9 (1 = "Linda", 2 = "Robert")
XFR_OCC	Occupation of the neighbor in the story in section 9 (1 = "a high school English teacher", 2 = "an accountant", 3 = "a cleaning lady", 4 = "a steel worker")
XFR_PRON	Pronoun of the neighbor in the story in section 9 (1 = "he", 2 = "she")
XCONV	Determines choice amounts in Q13.3 (1 = lower set of amounts, 2 = higher set of amounts)

The following questions were later dropped or reordered:

Q1.2 was dropped

Q11.8 was moved from section 11 to section 1

Q14.5 was dropped

The following two variables are collected by Knowledge Networks prior to each respondent's participation:

PPMARIT denotes marital status, 1 corresponds to "married"

PPGENDER denotes gender, 1: Male, 2: Female

The following data-only variables are created for all respondents:

CREATE A NEW DATA-ONLY VARIABLE MARRIED:

SET MARRIED = 0 IF PPMARIT ≠ 1

SET MARRIED = 1 IF PPMARIT==1

CREATE A NEW DATA-ONLY VARIABLE SPOUSE:

SET SPOUSE = "HUSBAND" IF MARRIED ==1 AND PPGENDER==2

SET SPOUSE = "WIFE" IF MARRIED ==1 AND PPGENDER==1

CREATE A NEW DATA-ONLY VARIABLE SP_HISHER:

SET SP_HISHER = "HIS" IF MARRIED ==1 AND PPGENDER==2

SET SP_HISHER = "HER" IF MARRIED ==1 AND PPGENDER==1

Section 1: Own and Spousal Social Security and Retirement Plans

[IF XSEC1==0, SKIP TO SECTION 2]

Q.1.1: [INTRODUCTION]

We are researchers at Harvard University who are interested in understanding the amount of Social Security benefits that people receive or expect to receive. We also want to understand people’s beliefs about what determines the amount of their benefits.

This study will help create clearer and easier-to-understand materials about the Social Security program.

In this survey, we sometimes ask questions that may be hard to answer exactly. Please take time to consider the questions and give us your best guess even if you do not know the exact answer. Having your best guess will be very helpful to us.

Thank you very much for your help.

Q.1.3: [SS_KNOW] Assessment of own knowledge about Social Security

How knowledgeable do you consider yourself to be about what determines the amount of Social Security benefits that you receive or will receive?

- Very knowledgeable..... 1
- Relatively knowledgeable..... 2
- Somewhat knowledgeable..... 3
- Less than knowledgeable..... 4
- Not at all knowledgeable..... 5

Q.1.4: [SS_STATUS] Social Security Status

What best describes you:

- (1) I currently receive Social Security benefits..... 1
- (2) I don’t currently receive Social Security benefits but expect to receive them at some time in the future..... 2
- (3) I will never receive Social Security benefits.
..... 3

In answering this question, please include benefits you yourself receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, survivor benefits, or disability benefits.

[IF SS_STATUS ==MISSING: PROMPT]

[IF SS_STATUS ==MISSING AFTER PROMT: GO TO STANDARD CLOSE]

[ASK IF SS_STATUS==3]

Q.1.5: [SS_ELIG] Social Security Eligibility

Why do you think you will never receive Social Security benefits?

- (1) My main job was/is not covered by Social Security..... 1
- (2) I don’t have or will not have a sufficient work history to receive benefits..... 2
- (3) I do not think Social Security will be around by the time I would start claiming benefits..... 3
- (4) Another reason: _____..... 4

[SHOW IF SS_STATUS==3 AND SS_ELIG==3]

[SET SS_STATUS=2 IF SS_STATUS==3 AND SS_ELIG==3]

Q.1.6: [SSEL_AROUND]

Please assume for the remainder of this survey that Social Security will be around when you start claiming benefits.

[ASK IF SS_STATUS==3 AND SS_ELIG==1]

Q.1.7: [SSEL_SECTOR]

In what kind of business or industry is the job where you worked the most years? (For example: hospital, auto repair shop, mail order company, state government, elementary school).

[ASK IF SS_STATUS==3 AND IF SS_ELIG==2]

Q.1.8: [SSEL_QUALIF]

Approximately how many years have you worked for pay?
____ years

[ASK IF SS_STATUS==3 AND (SS_ELIG ≠ 3) AND (PPMARIT ≠ 5)]

[Note: PPMARIT=5 corresponds to “never married” and SS_ELIG=3 corresponds to those who thought Social Security would no longer exist]

Q.1.9: [SSEL_SPOUSE]

Individuals who are not eligible for Social Security based on their own work history are often eligible to receive Social Security benefits based on the earnings history of their spouse, late spouse, or ex-spouse.

Do you think you will be able receive benefits based on the earnings history of your [SPOUSE], late [SPOUSE], or ex-[SPOUSE]?

Yes..... 1
No 2

[IF SSEL_SPOUSE==1 AND SS_STATUS==3: SET SS_STATUS=2 AND CONTINUE WITH SURVEY]
[IF SSEL_SPOUSE==2 AND SS_STATUS==3: GO TO STANDARD CLOSE]

Q.1.10: [CLAIM_AGE] Social Security benefits claim age

[IF SS_STATUS==3 AND SS_ELIG NE 3 AND PPMARIT==5, GO TO STANDARD CLOSE.]

[ASK IF SS_STATUS==1 (RECEIVING BENEFITS):]
At what age did you start receiving Social Security benefits?
At age: _____

[ASK IF SS_STATUS==2 (NOT RECEIVING BENEFITS YET):]
At what age do you plan to start collecting Social Security benefits?
At age: _____

[ALWAYS: (THE CODE BELOW ENSURES CLAIM_AGE WILL NEVER BE MISSING)]
[SET CLAIM_AGE_ORIG=CLAIM_AGE]
[SET CLAIM_AGE=MAX(PPAGE+1, 62) IF CLAIM_AGE=MISSING AND SS_STATUS==2]
[SET CLAIM_AGE=MIN(PPAGE-1, 62) IF CLAIM_AGE=MISSING AND SS_STATUS==1]

Q.1.11: [WORK_NOW] Current Work Status

What best describes you:

I currently work for pay (with at least \$2500 in annual earnings) 1
I do not currently work for pay (with at least \$2500 in annual earnings)..... 2

[ASK IF WORK_NOW==2]

Q.1.12: [WORK_FUT] Expected Future Work Status

What best describes you:

I expect that in the future I will work for pay (with at least \$2500 in annual earnings)..... 1
I do not expect that in the future I will work for pay (with at least \$2500 in annual earnings)..... 2

[CREATE A NEW DATA ONLY VARIABLE: "RETIRED". SET RETIRED TO "0"]
[SET RETIRED=1 IF WORK_NOW==2 AND WORK_FUT==2]

Q.1.13: [RET_AGE] Retirement Age

[SHOW IF RETIRED==1]
At what age did you last work for pay (with at least \$2500 in annual earnings)?
At age: _____
 I never worked for pay

We will refer to this age in the rest of this survey as your "retirement age".

[IF RESPONDENT CHECK THE BOX "I NEVER WORKED FOR PAY", SET RET_AGE=0]

[SHOW IF RETIRED==0]
At what age do you plan to stop working for pay or to reduce your earnings to a minimal amount?
At age: _____

We will refer to this age in the rest of this survey as your expected "retirement age".

[ASK IF RET_AGE ≠ 0 AND RETIRED==1 AND RET_AGE<65 (R HAS SOME WORK HISTORY AND STOPPED WORKING BEFORE THE AGE OF 65)]

Q.11.8: [DISABLE] Stopped working because of a disability

After you stopped working, did you receive disability benefits?

Yes, I received Social Security Disability Insurance (SSDI)..... 1
Yes, I received Supplemental Security Income (SSI) 2
Yes, I received both SSDI and SSI..... 3
Yes, I received disability benefits, but don't know from which program 4

No, I did not receive disability benefits 5

[CREATE NEW VARIABLE SKIPDIS=0. -IF Q11_8==1 OR Q11_8==2 OR Q11_8==3 OR Q11_8==4, SET SKIPDIS=1]

[ALWAYS: (THE CODE BELOW ENSURES RET_AGE WILL NEVER BE MISSING)]

[SET RET_AGE_ORIG=RET_AGE]

[SET RET_AGE=MAX(PPAGE+1, 62) IF RET_AGE=MISSING AND RETIRED==0]

[SET RET_AGE=MIN(PPAGE-1, 62) IF RET_AGE=MISSING AND RETIRED==1]

[ASK IF MARRIED==1]

Q.1.14: [AGE_S] Spouse's current age

What is your [SPOUSE]'s current age (in years)?

_____ years.

N/A, I am not married.

[IF THE RESPONDENT CHECKS THE BOX N/A, THEN SET MARRIED=0]

[ASK IF MARRIED==1]

Q.1.15: [SS_STATUS_S] Spouse Social Security Status

What best describes your [SPOUSE]:

My [SPOUSE] currently receives Social Security benefits. 1

My [SPOUSE] doesn't currently receive Social Security benefits but
expects to receive them at some time in the future. 2

My [SPOUSE] will never receive Social Security benefits. 3

[SHOW IF PPGENDER==1 (MALE RESPONDENT)]

In answering this question, please include benefits your wife herself receives from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[SHOW IF PPGENDER==2 (FEMALE RESPONDENT)]

In answering this question, please include benefits your husband himself receives from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[ASK IF MARRIED==1 AND SS_STATUS_S==3]

[ONLY ASK CODE 3 IF PILOT TEST]

Q.1.16: [SS_ELIG_S] Spouse's Social Security Eligibility

Why do you think your [SPOUSE] will never receive Social Security benefits?

My [SPOUSE]'s main job was/is not covered by Social Security.
..... 1

My [SPOUSE] doesn't have or will not have a sufficient work history
to receive benefits. 2

Another reason: _____ 3

[ASK IF MARRIED==1 AND SS_STATUS_S==3]

Q.1.17: [SSEL_SPOUSE_S]

Individuals who are not eligible for Social Security based on their own work history are often eligible to receive Social Security benefits based on the earnings history of their spouse.

Do you think your [SPOUSE] will be able to receive benefits based on your earnings history?

Yes 1

No 2

[IF SSEL_SPOUSE_S==1, SET SS_STATUS_S=2]

[ASK IF MARRIED==1 AND SS_STATUS_S≠3]

Q.1.18: [CLAIM_AGE_S] Spouse's Social Security benefits claim age

[SHOW IF SS_STATUS_S==1 (RECEIVING BENEFITS)]

At what age did your [SPOUSE] start receiving Social Security benefits?

At age: _____

[SHOW IF SS_STATUS_S==2 (NOT RECEIVING BENEFITS YET)]

At what age does your [SPOUSE] plan to start collecting Social Security benefits?

At age: _____

[ALWAYS: (THE CODE BELOW ENSURES CLAIM_AGE_S WILL NEVER BE MISSING)]

[SET CLAIM_AGE_S_ORIG=CLAIM_AGE_S]

[SET CLAIM_AGE_S=MAX(PPAGE_S+1, 62) IF CLAIM_AGE_S=MISSING AND SS_STATUS_S==2 AND MARRIED==1]

[SET CLAIM_AGE_S=MIN(PPAGE_S-1, 62) IF CLAIM_AGE_S=MISSING AND SS_STATUS_S==1 AND MARRIED==1]

[SET CLAIM_AGE_S=62 IF PPAGE_S=MISSING AND CLAIM_AGE_S=MISSING AND SS_STATUS_S==1 AND MARRIED==1]

[SET CLAIM_AGE_S=62 IF CLAIM_AGE_S=MISSING AND SS_STATUS_S=MISSING]

[ASK IF MARRIED==1]

Q.1.19: [WORK_NOW_S] Spouse's Current Work Status

What best describes your [SPOUSE]:

My [SPOUSE] currently works for pay (with at least \$2500 in annual earnings)..... 1

My [SPOUSE] does not currently work for pay (with at least \$2500 in annual earnings) 2

[ASK IF MARRIED==1 AND WORK_NOW_S==2]

Q.1.20: [WORK_FUT_S] Spouse's Expected Future Work Status

What best describes your [SPOUSE]:

I expect that in the future my [SPOUSE] will work for pay (with at least \$2500 in annual earnings) 1

I do not expect that in the future my [SPOUSE] will work for pay (with at least \$2500 in annual earnings) 2

[ASK IF MARRIED==1]

[CREATE A NEW VARIABLE: RETIRED_S=0 IF MARRIED==1]

[SET RETIRED_S=1 IF MARRIED==1 AND WORK_NOW_S==2 AND WORK_FUT_S==2]

Q.1.21: [RET_AGE_S] Spouse's Retirement Age

[SHOW IF RETIRED_S==1]

At what age did your [SPOUSE] last work for pay (with at least \$2500 in annual earnings)?

At age: _____

My [SPOUSE] never worked for pay

We will refer to this age in the rest of this survey as your [SPOUSE]'s "retirement age".

[IF R CHECKS THE BOX "MY SPOUSE NEVER WORKED FOR PAY", SET RET_AGE_S=0]

[SHOW IF RETIRED_S==0]

As your best guess, at what age does your [SPOUSE] plan to stop working for pay or to reduce [SP_HISHER] earnings to a minimal amount?

At age: _____

We will refer to this age in the rest of this survey as your [SPOUSE]'s expected "retirement age".

[ALWAYS: (THE CODE BELOW ENSURES RET_AGE_S WILL NEVER BE MISSING)]

[SET RET_AGE_S_ORIG=RET_AGE_S]

[SET RET_AGE_S=MAX(AGE_S+1, 62) IF RET_AGE_S=MISSING AND RETIRED_S==0 AND MARRIED==1]

[SET RET_AGE_S=MIN(AGE_S-1, 62) IF RET_AGE_S=MISSING AND RETIRED_S==1 AND MARRIED==1]

Section 2: Perceived Total and Marginal Social Security Benefits

[IF XSEC2==0, SKIP TO SECTION 3]

Q.2.1: [BEN_LEVEL] Social Security Benefits Level

[SHOW IF SS_STATUS==1 (RECEIVING BENEFITS)]

Approximately how much are your monthly Social Security benefits?

Even if you do not know exactly, please give your best guess.

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household).

\$ _____ per month.

[SHOW IF SS_STATUS==2 AND RETIRED==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

How much do you expect your monthly Social Security benefits to be if you start collecting Social Security at age [CLAIM_AGE]?

Even if you do not know exactly, please give your best guess.

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

How much do you expect your monthly Social Security benefits to be if you stop working for pay at age [RET_AGE] and start collecting Social Security at age [CLAIM_AGE]?

Even if you do not know exactly, please give your best guess.

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[FOR ALL RESPONDENTS: CREATE A NEW VARIABLE BEN_ORIG = BEN_LEVEL]

[ASK IF BEN_LEVEL=MISSING]

Q.2.2: [BEN_LEVEL2] Benefits Level Follow-up A

We understand this is a hard question to answer. We would really like to have your best guess, even if this guess is not exactly right.

[SHOW IF SS_STATUS==1 (RECEIVING BENEFITS)]

As your best guess, how much are your monthly Social Security benefits?

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household).

\$ _____ per month.

[IF BEN_LEVEL2≠MISSING, SET BEN_LEVEL=BEN_LEVEL2]

[SHOW IF SS_STATUS==2 AND RETIRED==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

As your best guess, how much do you expect your monthly Social Security benefits to be if you start collecting Social Security at age [CLAIM_AGE]?

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL2≠MISSING, SET BEN_LEVEL=BEN_LEVEL2]

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

As your best guess, how much do you expect your monthly Social Security benefits to be if you stop working for pay at age [RET_AGE] and start collecting Social Security at age [CLAIM_AGE]?

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL2≠MISSING, SET BEN_LEVEL=BEN_LEVEL2]

[ASK IF BEN_LEVEL>3500]

Q.2.3: [BEN_LEVEL3] Benefits Level Follow-up B

Social Security benefits are never higher than \$3500 per month.

[SHOW IF SS_STATUS==1 (RECEIVING BENEFITS)]

Given that monthly benefits are less than \$3500, how much are your monthly Social Security benefits?

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household).

\$ _____ per month.

[IF BEN_LEVEL3≠MISSING, SET BEN_LEVEL=BEN_LEVEL3]

[SHOW IF SS_STATUS==2 AND RETIRED==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

Given that monthly benefits are less than \$3500, how much do you expect your monthly Social Security benefits to be if you start collecting Social Security at age [CLAIM_AGE]?

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL3≠MISSING, SET BEN_LEVEL=BEN_LEVEL3]

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

Given that monthly benefits are less than \$3500, how much do you expect your monthly Social Security benefits to be if you stop working for pay at age [RET_AGE] and start collecting Social Security at age [CLAIM_AGE]?

(As before, please report any Social Security benefits paid to you yourself, not benefits paid to any other member in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL3≠MISSING, SET BEN_LEVEL=BEN_LEVEL3]

[SHOW IF BEN_LEVEL=MISSING]

[IF BEN_LEVEL=MISSING, SET BEN_LEVEL=1000]

Q.2.4: [BEN_DEFAULT] Benefits Level Follow-up C

[SHOW IF SS_STATUS==1 (RECEIVING BENEFITS)]

Please assume for the remainder of the survey that your Social Security benefits are \$1000 per month.

[SHOW IF SS_STATUS==2 AND RETIRED==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

Please assume for the remainder of the survey that if you start collecting Social Security at age [CLAIM_AGE], your Social Security benefits will be \$1000 per month.

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

Please assume for the remainder of the survey that if you stop working for pay at age [RET_AGE] and start collecting Social Security at age [CLAIM_AGE], your Social Security benefits will be \$1000 per month.

[SHOW IF BEN_LEVEL>3500]

[IF BEN_LEVEL>3500, SET BEN_LEVEL=3500]

Q.2.5: [BEN_MAX] Benefits Level Follow-up D

[SHOW IF SS_STATUS==1 (RECEIVING BENEFITS)]

Please assume for the remainder of the survey that your Social Security benefits are \$3500 per month.

[SHOW IF SS_STATUS==2 AND RETIRED==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

Please assume for the remainder of the survey that if you start collecting Social Security at age [CLAIM_AGE], your Social Security benefits will be \$3500 per month.

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

Please assume for the remainder of the survey that if you stop working for pay at age [RET_AGE] and start collecting Social Security at age [CLAIM_AGE], your Social Security benefits will be \$3500 per month.

[SHOW IF MARRIED==1 AND SS_STATUS_S≠3]

Q.2.6: [BEN_LEVEL_S] Expected Spouse's Social Security Benefits Level

[SHOW IF SS_STATUS_S==1 (RECEIVING BENEFITS)]

Approximately how much are your [SPOUSE]'s monthly Social Security benefits?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household).

\$ _____ per month.

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

How much do you expect your [SPOUSE]'s monthly Social Security benefits to be if your [SPOUSE] starts collecting benefits at age [CLAIM_AGE_S]?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

How much do you expect your [SPOUSE]'s monthly Social Security benefits to be if your [SPOUSE] stops working for pay at age [RET_AGE_S] and starts collecting benefits at age [CLAIM_AGE_S]?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[FOR ALL RESPONDENTS: CREATE A NEW VARIABLE BEN_ORIG_S = BEN_LEVEL_S]

[ASK IF (BEN_LEVEL_S=MISSING OR BEN_LEVEL_S==0) AND MARRIED==1 AND SS_STATUS_S≠3]

Q.2.7: [BEN_LEVEL2_S] Spouse Benefits Level Follow-up A

We understand this is a hard question to answer. We would really like to have your best guess, even if this guess is not exactly right.

[SHOW IF SS_STATUS_S==1 (RECEIVING BENEFITS)]

As your best guess, approximately how much are your [SPOUSE]'s monthly Social Security benefits?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household).

\$ _____ per month.

[IF BEN_LEVEL2_S≠MISSING, SET BEN_LEVEL_S=BEN_LEVEL2_S]

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

As your best guess, how much do you expect your [SPOUSE]'s monthly Social Security benefits to be if your [SPOUSE] starts collecting benefits at age [CLAIM_AGE_S]?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL2_S≠MISSING, SET BEN_LEVEL_S=BEN_LEVEL2_S]

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

As your best guess, how much do you expect your [SPOUSE]'s monthly Social Security benefits to be if your [SPOUSE] stops working for pay at age [RET_AGE_S] and starts collecting benefits at age [CLAIM_AGE_S]?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL2_S≠MISSING, SET BEN_LEVEL_S=BEN_LEVEL2_S]

[ASK IF BEN_LEVEL_S>3500 AND MARRIED==1 AND SS_STATUS_S≠3]

Q.2.8: [BEN_LEVEL3_S] Spouse Benefits Level Follow-up B

Social Security benefits are never higher than \$3500 per month.

[SHOW IF SS_STATUS_S==1 (RECEIVING BENEFITS)]

Given that monthly benefits are less than \$3500, how much are your [SPOUSE]'s monthly Social Security benefits?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household).

\$ _____ per month.

[IF BEN_LEVEL3_S≠MISSING, SET BEN_LEVEL_S=BEN_LEVEL3_S]

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

Given that monthly benefits are less than \$3500, how much do you expect your [SPOUSE]'s monthly Social Security benefits to be if your [SPOUSE] starts collecting benefits at age [CLAIM_AGE_S]?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL3_S≠MISSING, SET BEN_LEVEL_S=BEN_LEVEL3_S]

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

Given that monthly benefits are less than \$3500, how much do you expect your [SPOUSE]'s monthly Social Security benefits to be if your [SPOUSE] stops working for pay at age [RET_AGE_S] and starts collecting benefits at age [CLAIM_AGE_S]?

Even if you do not know exactly, please give your best guess.

(Please report any Social Security benefits paid to your [SPOUSE], not benefits paid to you or other members in your household. Also, please give your answer in today's dollars, and ignore any inflation that may occur between today and when you collect benefits).

\$ _____ per month.

[IF BEN_LEVEL3_S≠MISSING, SET BEN_LEVEL_S=BEN_LEVEL3_S]

[SHOW IF (BEN_LEVEL_S=MISSING OR BEN_LEVEL_S=0) AND MARRIED==1 AND SS_STATUS_S≠3]

[IF BEN_LEVEL_S=MISSING, SET BEN_LEVEL_S=1000]

Q.2.9: [BEN_DEFAULT_S] Spouse Benefits Level Follow-up C

[SHOW IF SS_STATUS_S==1 (RECEIVING BENEFITS)]

Please assume for the remainder of the survey that your [SPOUSE]'s Social Security benefits are \$1000 per month.

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

Please assume for the remainder of the survey that if your [SPOUSE] starts collecting Social Security at age [CLAIM_AGE_S], [SP_HISHER] Social Security benefits will be \$1000 per month.

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

Please assume for the remainder of the survey that if your [SPOUSE] stops working for pay at age [RET_AGE_S] and starts collecting Social Security at age [CLAIM_AGE_S], [SP_HISHER] Social Security benefits will be \$1000 per month.

[SHOW IF BEN_LEVEL_S>3500 AND MARRIED==1 AND SS_STATUS_S≠3]

[IF BEN_LEVEL_S>3500, SET BEN_LEVEL_S=3500]

Q.2.10: [BEN_MAX_S] Spouse Benefits Level Follow-up D

[SHOW IF SS_STATUS_S==1 (RECEIVING BENEFITS)]

Please assume for the remainder of the survey that your [SPOUSE]'s Social Security benefits are \$3500 per month.

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==1 (NOT RECEIVING BENEFITS, BUT RETIRED)]

Please assume for the remainder of the survey that if your [SPOUSE] starts collecting Social Security at age [CLAIM_AGE_S], [SP_HISHER] Social Security benefits will be \$3500 per month.

[SHOW IF SS_STATUS_S==2 AND RETIRED_S==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

Please assume for the remainder of the survey that if your [SPOUSE] stops working for pay at age [RET_AGE_S] and starts collecting Social Security at age [CLAIM_AGE_S], [SP_HISHER] Social Security benefits will be \$3500 per month.

Section 3: Extensive-Margin Incentives

[IF SEC3==0, SKIP TO SECTION 4]

[IF RET_AGE == 0, SKIP TO SECTION 4 (SINCE RET_AGE=0 MEANS THE PERSON NEVER WORKED)]

[ASK IF RET_AGE ≠ MISSING AND CLAIM_AGE ≠ MISSING AND SKIPDIS ≠ 1]

Q.3.1: [EXT_INCENT_MC] Extensive-margin incentives, multiple choice

[SHOW IF SS_STATUS==1 AND RETIRED==0 (RECEIVING BENEFITS, NOT RETIRED)]

You answered before that you have not yet stopped working for pay, that your Social Security benefits are \$[BEN_LEVEL] per month, and that you started collecting benefits at age [CLAIM_AGE].

Suppose you had stopped working for pay at age [CLAIM_AGE -xRET_CHG], and started collecting benefits as you did, at age [CLAIM_AGE]. As your best guess, what would happen to your current Social Security benefits?

[SHOW IF SS_STATUS==1 AND RETIRED==1 (RECEIVING BENEFITS, ALREADY RETIRED)]

You answered before that you stopped working for pay at age [RET_AGE], that your Social Security benefits are \$[BEN_LEVEL] per month, and that you started collecting benefits at age [CLAIM_AGE].

Suppose you had stopped working for pay [IF xRET_CHG==1, INSERT: one year; IF xRET_CHG==2, INSERT: two years; IF xRET_CHG==5, INSERT: five years] earlier, at age [RET_AGE -xRET_CHG], and started collecting benefits as you did, at age [CLAIM_AGE]. As your best guess, what would happen to your current Social Security benefits?

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT RECEIVING BENEFITS, NOT RETIRED)]

You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month if you stop working for pay at age [RET_AGE] and start collecting benefits at age [CLAIM_AGE].

Suppose you stop working for pay [IF xRET_CHG==1, INSERT: one year; IF xRET_CHG==2, INSERT: two years; IF xRET_CHG==5, INSERT: five years] earlier, at age [RET_AGE -xRET_CHG], and start collecting benefits as planned, at age [CLAIM_AGE]. As your best guess, what would happen to your Social Security benefits?

[SHOW IF SS_STATUS==2 AND RETIRED==1 (RETIRED, BUT NOT RECEIVING BENEFITS)]

You answered before that you stopped working for pay at age [RET_AGE] and that you expect your Social Security benefits to be \$[BEN_LEVEL] per month if you start collecting benefits at age [CLAIM_AGE].

Suppose you had stopped working for pay [IF xRET_CHG==1, INSERT: one year; IF xRET_CHG==2, INSERT: two years; IF xRET_CHG==5, INSERT: five years] earlier, at age [RET_AGE -xRET_CHG], and start collecting benefits as planned, at age [CLAIM_AGE]. As your best guess, what would happen to your Social Security benefits?

[ASK FOR ALL RESPONDENTS TO Q3.1:]

- My Social Security benefits would still be \$[BEN_LEVEL] per month..... 1
- My Social Security benefits would be higher than \$[BEN_LEVEL] per month. 2
- My Social Security benefits would be lower than \$[BEN_LEVEL] per month. 3

[ASK IF (EXT_INCENT_MC==2 OR EXT_INCENT_MC==3) AND RET_AGE ≠ MISSING AND CLAIM_AGE ≠ MISSING]

Q.3.2: [EXT_INCENT_AMT] Extensive-margin incentive, new amount of benefit

What would be the new amount of your Social Security benefits?

My best guess is that the new amount of my Social Security benefits would be \$ _____ per month.

[CREATE A NEW STRING VARIABLE LASTYEAR]

[IF RETIRED==0, SET LASTYEAR = "LAST YEAR"]

[IF RETIRED==1, SET LASTYEAR = "THE LAST YEAR YOU WORKED"]

Q.3.3: [PERCEIVETAX_OWN] Perception of the Social Security payroll tax

What would have happened to the amount of Social Security (OASDI) payroll tax you paid [LASTYEAR] if you had earned \$1000 more than you actually did?

If I had earned \$1000 more, I would have paid \$ _____ more in Social Security payroll taxes.

Q.3.4: [PERCEIVETAX_EMP] Perception of the Social Security payroll tax

What would have happened to the amount of Social Security (OASDI) payroll tax your employer paid [LASTYEAR] if you had earned \$1000 more than you actually did?

If I had earned \$1000 more, my employer would have paid \$ _____ more in Social Security payroll taxes.

N/A, I am or was self-employed

[IF THE BOX IS CHECKED, SET PERCEIVETAX_SE=1]

Section 4: Intensive-Margin Incentives

[IF SEC4==0, SKIP TO SECTION 5]

[IF SKIPDIS==1, SKIP TO SECTION 5]

[IF RET_AGE == 0, SKIP TO SECTION 5 (SINCE RET_AGE=0 MEANS THE PERSON NEVER WORKED)]

[INSERT A NO-BACK]

[CREATE A NEW STRING VARIABLE LASTYEAR (THIS VARIABLE MAY ALREADY EXIST IF SECTION 3 WAS ASKED. IN THAT CASE, OVERWRITE THE EXISTING LASTYEAR VARIABLE)]

[IF RETIRED==0, SET LASTYEAR = "LAST YEAR"]

[IF RETIRED==1, SET LASTYEAR = "THE LAST YEAR YOU WORKED"]

[ASK IF XINT_V==1 (VERSION 1: MONTHLY BENEFITS)]

Q.4.1 [INT_INCENTY_MC] Intensive-margin incentives, Monthly, MC

[ASK IF SS_STATUS==1 (RECEIVING BENEFITS)]

You answered before that your Social Security benefits are \$[BEN_LEVEL] per month.

Suppose you had earned \$[IF XEARNCH=1, INSERT 1,000; IF XEARNCH=2, INSERT 5,000; IF XEARNCH=3, INSERT 10,000] more [LASTYEAR] than you actually did. As your best guess, what would happen to your current Social Security benefits?

- My Social Security benefits would still be \$[BEN_LEVEL] per month..... 1
- My Social Security benefits would be higher than \$[BEN_LEVEL] per month. 2
- My Social Security benefits would be lower than \$[BEN_LEVEL] per month. 3

[ASK IF SS_STATUS==2 (NOT YET RECEIVING BENEFITS)]

You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month.

Suppose you had earned \$[IF XEARNCH=1, INSERT 1,000; IF XEARNCH=2, INSERT 5,000; IF XEARNCH=3, INSERT 10,000] more [LASTYEAR] than you actually did. As your best guess, what would happen to your Social Security benefits?

- My Social Security benefits would still be \$[BEN_LEVEL] per month..... 1
- My Social Security benefits would be higher than \$[BEN_LEVEL] per month. 2
- My Social Security benefits would be lower than \$[BEN_LEVEL] per month. 3

[ASK IF XINT_V==1 AND (INT_INCENTY_MC==2 OR INT_INCENTY_MC==3)]

Q.4.2 [INT_INCENTY_AMT] Intensive-margin incentives, Monthly, new amount

What would be the new amount of your Social Security benefits?

My best guess is that the new amount of my Social Security benefits would be \$_____ per month.

[ASK IF XINT_V==2 (VERSION 2: LIFETIME BENEFITS)]

Q.4.3 [INT_INCENTL_MC] Intensive-margin incentives, Lifetime, MC

[ASK IF SS_STATUS==1 (RECEIVING BENEFITS)]

You answered before that your Social Security benefits are \$[BEN_LEVEL] per month.

Suppose you had earned more [LASTYEAR] than you actually did and that, as a result, your employer and you combined had paid \$1000 more in Social Security (OASDI) payroll taxes. As your best guess, what would happen to your current Social Security benefits?

- My Social Security benefits would be the same, \$[BEN_LEVEL] per month..... 1
- My Social Security benefits would be higher than \$[BEN_LEVEL] per month. 2
- My Social Security benefits would be lower than \$[BEN_LEVEL] per month. 3

[ASK IF SS_STATUS==2 (NOT YET RECEIVING BENEFITS)]

You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month.

Suppose you had earned more [LASTYEAR] than you actually did and that, as a result, your employer and you combined had paid \$1000 more in Social Security (OASDI) payroll taxes. As your best guess, what would happen to your Social Security benefits?

- My Social Security benefits would still be \$[BEN_LEVEL] per month..... 1
- My Social Security benefits would be higher than \$[BEN_LEVEL] per month. 2
- My Social Security benefits would be lower than \$[BEN_LEVEL] per month. 3

[ASK IF XINT_V==2 AND INT_INCENTL_MC==2]

Q.4.4 [INT_INCENTL_UP] Intensive-margin incentives, Lifetime, UP

You answered before that, if your employer and you combined had paid \$1000 more in Social Security (OASDI) payroll taxes, your Social Security benefits would increase. As your best guess, over your lifetime, how much would this increase in Social Security benefits be worth to you?

- Over my lifetime, this increase in benefits would be worth less than \$1000 to me. 1

Over my lifetime, this increase in benefits would be worth \$1000 to me2
 Over my lifetime, this increase in benefits would be worth more than \$1000 to me.3

[ASK IF XINT_V==2 AND INT_INCENL_MC==2 AND (INT_INCENL_UP==1 OR INT_INCENL_UP==3)]
 Q.4.5 [INT_INCENL_WORTH] Intensive-margin incentives, Lifetime, Worth

As your best guess, how much would this increase in lifetime Social Security benefits be worth to you?
 \$ _____.

Section 5: Knowledge about Early-Retirement Penalty/Delayed Retirement Credit and about Earnings Test

[IF SEC5==0, SKIP TO SECTION 6]
 [IF SKIPDIS==1, SKIP TO SECTION 6]

[ASK IF CLAIM_AGE ≠ MISSING]
 [IF XCLM_CHG==1 , SET ALT_AGE=CLAIM_AGE+1]
 [IF XCLM_CHG==1 , SET ALT_WHEN="ONE YEAR LATER"]
 [IF XCLM_CHG==2 , SET ALT_AGE=CLAIM_AGE-1]
 [IF XCLM_CHG==2 , SET ALT_WHEN="ONE YEAR EARLIER"]
 [IF CLAIM_AGE ≤ 62 , SET ALT_AGE=CLAIM_AGE+1]
 [IF CLAIM_AGE ≤ 62 , SET ALT_WHEN="ONE YEAR LATER"]
 [IF CLAIM_AGE > 69 , SET ALT_AGE=CLAIM_AGE-1]
 [IF CLAIM_AGE > 69 , SET ALT_WHEN="ONE YEAR EARLIER"]

Q.5.1: [AGEDEP_NY] Benefits sensitive to age of claiming?

[SHOW IF SS_STATUS==1 AND RETIRED==0 (RECEIVING BENEFITS, NOT RETIRED)]
 You answered before that you have not yet stopped working for pay, that your Social Security benefits are \$[BEN_LEVEL] per month, and that you started collecting benefits at age [CLAIM_AGE].

Suppose you had started collecting Social Security benefits [ALT_WHEN], at age [ALT_AGE], but stop working for pay as planned, at age [RET_AGE]. As your best guess, what would happen to your Social Security benefits?

[SHOW IF SS_STATUS==1 AND RETIRED==1 AND RET_AGE ≠ 0 (RECEIVING BENEFITS, RETIRED)]
 You answered before that you stopped working for pay at age [RET_AGE], that your Social Security benefits are \$[BEN_LEVEL] per month, and that you started collecting benefits at age [CLAIM_AGE].

Suppose you had started collecting Social Security benefits [ALT_WHEN], at age [ALT_AGE], but stopped working for pay as you did, at age [RET_AGE]. As your best guess, what would happen to your Social Security benefits?

[SHOW IF SS_STATUS==1 AND RETIRED==1 AND RET_AGE = 0 (RECEIVING BENEFITS, NEVER WORKED)]
 You answered before that your Social Security benefits are \$[BEN_LEVEL] per month, and that you started collecting benefits at age [CLAIM_AGE].

Suppose you had started collecting Social Security benefits [ALT_WHEN], at age [ALT_AGE]. As your best guess, what would happen to your Social Security benefits?

[SHOW IF SS_STATUS==2 AND RETIRED==0 (NOT YET RECEIVING BENEFITS, NOT RETIRED)]
 You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month if you stop working for pay at age [RET_AGE] and start collecting benefits at age [CLAIM_AGE].

Suppose you start collecting Social Security benefits [ALT_WHEN], at age [ALT_AGE], but stop working for pay as planned, at age [RET_AGE]. As your best guess, what would happen to your Social Security benefits?

[SHOW IF SS_STATUS==2 AND RETIRED==1 AND RET_AGE ≠ 0 (NOT YET RECEIVING BENEFITS, BUT RETIRED)]
 You answered before that you stopped working for pay at age [RET_AGE] and that you expect your Social Security benefits to be \$[BEN_LEVEL] per month if you start collecting benefits at age [CLAIM_AGE].

Suppose you start collecting Social Security benefits [ALT_WHEN], at age [ALT_AGE], but stopped working for pay as you did, at age [RET_AGE]. As your best guess, what would happen to your Social Security benefits?

[SHOW IF SS_STATUS==2 AND RETIRED==1 AND RET_AGE = 0 (NOT YET RECEIVING BENEFITS, NEVER WORKED)]
 You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month if you start collecting benefits at age [CLAIM_AGE].

Suppose you start collecting Social Security benefits [ALT_WHEN], at age [ALT_AGE]. As your best guess, what would happen to your Social Security benefits?

[ASK FOR ALL RESPONDENTS TO Q5.1:]

- My Social Security benefits would still be \$[BEN_LEVEL] per month..... 1
- My Social Security benefits would be higher than \$[BEN_LEVEL] per month. 2
- My Social Security benefits would be lower than \$[BEN_LEVEL] per month. 3

Q.5.2: [AGEDEP_RATE] Early retirement penalty / Delayed retirement credit

[ASK IF XDEP_V==1]

Consider a person who stops working for pay at age 62. Suppose this person would receive Social Security benefits of \$1000 per month if he or she started collecting benefits at age 62. We are interested to know what you think would happen to his/her Social Security benefits if he/she still stopped working for pay at age 62 but started collecting Social Security benefits at a different age. (Please ignore the effects of inflation.)

As my best guess, if the person

- started collecting benefits at age 62, the benefits would be \$ 1000 per month.
- started collecting benefits at age 66, the benefits would be \$ ____ per month.
- started collecting benefits at age 70, the benefits would be \$ ____ per month.
- started collecting benefits at age 74, the benefits would be \$ ____ per month.

[ASK IF XDEP_V==2]

Consider a person who stops working for pay at age 62. Suppose this person would receive Social Security benefits of \$1000 per month if he or she started collecting benefits at age 66. We are interested to know what you think would happen to his/her Social Security benefits if he/she still stopped working for pay at age 62 but started collecting Social Security benefits at a different age. (Please ignore the effects of inflation.)

As my best guess, if the person

- started collecting benefits at age 62, the benefits would be \$ ____ per month.
- started collecting benefits at age 66, the benefits would be \$ 1000 per month.
- started collecting benefits at age 70, the benefits would be \$ ____ per month.
- started collecting benefits at age 74, the benefits would be \$ ____ per month.

Q.5.3: [EARNTEST_EXIST] Knowledge of existence of the earnings test

[SHOW IF PPAGE < 62 AND RETIRED==0]

Suppose that you stopped working at age 62 and also claimed Social Security benefits that year.

[SHOW IF PPAGE < 62 AND RETIRED==1]

Suppose that you claimed Social Security benefits at age 62.

[SHOW IF PPAGE ≥ 62 AND (RET_AGE > 62 OR RETIRED==0)]

Suppose that you had stopped working at age 62 and also claimed Social Security benefits that year.

[SHOW IF PPAGE ≥ 62 AND (RET_AGE ≤ 62 AND RETIRED==1)]

Suppose that you had claimed Social Security benefits at age 62.

[SHOW IF PPAGE ≤ XEARNTST (IF XEARNTST=1, 64; IF XEARNTST=2, 68)]

What would happen to your Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] if, after retiring, you return to work for one year at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] earning \$20,000 that year.

- My Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would stay exactly the same. 1
- My Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would increase. 2
- My Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would decrease. 3

[SHOW IF PPAGE > XEARNTST (IF XEARNTST=1, 64; IF XEARNTST=2, 68)]

What would have happened to your Social Security at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] if, after retiring, you had returned to work for one year at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] earning \$20,000 that year.

My Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would have stayed exactly the same. 1
 My Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would have increased. 2
 My Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would have decreased. 3

[SHOW IF EARNTEST_EXIST == 1]

Q.5.4a: [EARNTEST_THRESA] Earnings threshold of the earnings test, A

[SHOW IF PPAGE ≤ XEARNTST (IF XEARNTST=1, 64; IF XEARNTST=2, 68)]

You just indicated that you thought that your Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would stay the same if you earn \$20,000 in that year. Is there any amount of earnings at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] that would cause a reduction in your benefits?

[SHOW IF PPAGE > XEARNTST (IF XEARNTST=1, 64; IF XEARNTST=2, 68)]

You just indicated that you thought that your Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would have been reduced if you had earned \$20,000 in that year. Is there any amount of earnings at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] that would have caused a reduction in your benefits?

[SHOW FOR ALL RESPONDENTS TO Q5.4A:]

Yes, once a person earns more than roughly _____ dollars per year at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68], benefits start being reduced. 1
 No, benefits are never reduced no matter how much a person earns at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68]. 2

[IF R CHECKS BOX (2), SET EARNTEST_THRESA=999999]

[SHOW IF EARNTEST_EXIST == 3]

Q.5.4b: [EARNTEST_THRESB] Earnings Threshold of the earnings test, B

[SHOW IF AGE ≤ XEARNTST (IF XEARNTST=1, 64; IF XEARNTST=2, 68)]

You just indicated that you thought that your Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would be reduced if you earn \$20,000 in that year. Is there any amount that you could earn at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] without having your benefits reduced?

[SHOW IF AGE > XEARNTST (IF XEARNTST=1, 64; IF XEARNTST=2, 68)]

You just indicated that you thought that your Social Security benefits at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] would have been reduced if you had earned \$20,000 in that year. Is there any amount that you could have earned at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] without having your benefits reduced?

[SHOW FOR ALL RESPONDENTS TO Q5.4B]

Yes, a person can earn roughly _____ dollars per year at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68] before benefits start being reduced. 1
 No, benefits are always reduced if you have any earnings at age [IF XEARNTST=1, INSERT 64; IF XEARNTST=2, INSERT 68]. 2

[IF R CHECKS BOX (2), SET EARNTEST_THRESB=0]

[ASK IF EARNTEST_EXIST==3 OR (EARNTEST_EXIST==1 AND EARNTEST_THRESA<999999)]

Q.5.5: [EARNTEST_RETURN] Knowledge about whether the earnings test affects future social security benefits

Suppose that, after you started receiving Social Security benefits, you earned enough that, as a result, your Social Security benefits were reduced in that year. What would happen to your Social Security benefits in later years (assuming you don't work anymore at that point)?

My Social Security benefits in later years would not be affected. 1
 My Social Security benefits in later years would be increased. .. 2
 My Social Security benefits in later years would be reduced. 3

[ASK IF EARNTEST_RETURN==2]

Q.5.6: [EARNTEST_FAIR] Knowledge whether increase in future benefits is approximately fair

Would this increase in benefits over your lifetime make up for the lost benefits in the year that you worked? The increase in benefits over my lifetime ...

... would roughly make up for the lost benefits during the year that I worked. 1

... would be more than what would be needed to make up for the lost benefits during the year that I worked.2
 ... would be less than what would be needed to make up for the lost benefits during the year that I worked.3

Section 6: Knowledge about Spousal Benefits

[IF SEC6==0, SKIP TO SECTION 7]

[IF MARRIED ≠ 1, SKIP TO SECTION 7 (I.E., IF R IS NOT MARRIED)]

[IF SS_STATUS_S=3, SKIP TO SECTION 7 (I.E., IF R DOES NOT EXPECT S TO BE ELIGIBLE FOR BENEFITS)]

[INSERT A NO-BACK]

[CREATE A NEW VARIABLE BEN_ADJ:

IF CLAIM_AGE ≤ 62, SET BEN_ADJ = 1.333 * BEN_LEVEL

IF CLAIM_AGE = 63, SET BEN_ADJ = 1.231 * BEN_LEVEL

IF CLAIM_AGE = 64, SET BEN_ADJ = 1.143 * BEN_LEVEL

IF CLAIM_AGE = 65, SET BEN_ADJ = 1.067 * BEN_LEVEL

IF CLAIM_AGE = 66, SET BEN_ADJ = 1.000 * BEN_LEVEL

IF CLAIM_AGE = 67, SET BEN_ADJ = 0.926 * BEN_LEVEL

IF CLAIM_AGE = 68, SET BEN_ADJ = 0.862 * BEN_LEVEL

IF CLAIM_AGE = 69, SET BEN_ADJ = 0.806 * BEN_LEVEL

IF CLAIM_AGE ≥ 70, SET BEN_ADJ = 0.758 * BEN_LEVEL]

[CREATE A NEW VARIABLE BEN_ADJ_S:

IF CLAIM_AGE_S ≤ 62, SET BEN_ADJ_S = 1.333 * BEN_LEVEL_S

IF CLAIM_AGE_S = 63, SET BEN_ADJ_S = 1.231 * BEN_LEVEL_S

IF CLAIM_AGE_S = 64, SET BEN_ADJ_S = 1.143 * BEN_LEVEL_S

IF CLAIM_AGE_S = 65, SET BEN_ADJ_S = 1.067 * BEN_LEVEL_S

IF CLAIM_AGE_S = 66, SET BEN_ADJ_S = 1.000 * BEN_LEVEL_S

IF CLAIM_AGE_S = 67, SET BEN_ADJ_S = 0.926 * BEN_LEVEL_S

IF CLAIM_AGE_S = 68, SET BEN_ADJ_S = 0.862 * BEN_LEVEL_S

IF CLAIM_AGE_S = 69, SET BEN_ADJ_S = 0.806 * BEN_LEVEL_S

IF CLAIM_AGE_S ≥ 70, SET BEN_ADJ_S = 0.758 * BEN_LEVEL_S]

[IF BEN_LEVEL_S=MISSING, SET BEN_ADJ_S=0]

[IF RET_AGE==0, SET BEN_ADJ=0]

[IF RET_AGE_S==0, SET BEN_ADJ_S=0]

[ASK IF BEN_LEVEL_S ≠ MISSING AND RET_AGE ≠ 0 (SINCE RET_AGE==0 MEANS THE PERSON NEVER WORKED)]

Q.6.1: [dSPBENDBEN_YN] Response of Spouse's benefits to own benefits, MC

[SHOW IF SS_STATUS_S==1 (SPOUSE ALREADY COLLECTING BENEFITS)]

You answered before that your [SPOUSE]'s Social Security benefits are \$[BEN_LEVEL_S] per month.

[SHOW IF SS_STATUS_S==2 (SPOUSE NOT YET COLLECTING BENEFITS)]

You answered before that you expect your [SPOUSE]'s Social Security benefits to be \$[BEN_LEVEL_S] per month.

[SHOW IF SS_STATUS ==1 (R ALREADY COLLECTING BENEFITS)]

Now suppose you had worked more and therefore you received Social Security benefits that are \$100 higher than they actually are (so your own benefits would be \$[BEN_LEVEL+100] instead of \$[BEN_LEVEL]).

[SHOW IF SS_STATUS ==2 (R NOT YET COLLECTING BENEFITS)]

Now suppose you had worked more and therefore you would receive Social Security benefits that are \$100 higher than you actually expect them to be (so your own benefits would be \$[BEN_LEVEL+100] instead of \$[BEN_LEVEL]).

[SHOW IF SS_STATUS_S==1 (SPOUSE ALREADY COLLECTING BENEFITS)]

Would your [SPOUSE]'s Social Security benefits change?

Yes1

No2

[SHOW IF SS_STATUS_S==2 (SPOUSE NOT YET COLLECTING BENEFITS)]

Would your [SPOUSE]'s expected Social Security benefits change?

Yes1

No2

[SHOW IF PPGENDER==1 (MALE RESPONDENT)]

In answering this question, please include benefits your wife herself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[SHOW IF PPGENDER==2 (FEMALE RESPONDENT)]

In answering this question, please include benefits your husband himself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[ASK IF BEN_LEVEL_S ≠ MISSING AND DSPBENdBEN_YN==1]

Q.6.2: [dSPBENdBEN] Response of Spouse's benefits to own benefits

[SHOW FOR ALL RESPONDENTS TO Q6.2]

What would be the new amount of your [SPOUSE]'s Social Security benefits?

My best guess is that the new amount of my [SPOUSE]'s Social Security benefits would be \$_____ per month.

[SHOW IF PPGENDER==1 (MALE RESPONDENT)]

In answering this question, please include benefits your wife herself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[SHOW IF PPGENDER==2 (FEMALE RESPONDENT)]

In answering this question, please include benefits your husband himself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[ASK IF BEN_LEVEL_S ≠ MISSING AND BEN_ADJ ≥ 0.5*BEN_ADJ_S AND RET_AGE_S ≠ 0 (I.E., SPOUSE'S BENEFIT LEVEL IS NOT MISSING, R HAS A SUBSTANTIAL EARNINGS HISTORY, AND SPOUSE HAS SOME WORK HISTORY SINCE RET_AGE_S≠0)]

Q.6.3: [SPBEN_NOWORK] Spouse's benefit level if spouse had never worked

[ASK IF SS_STATUS_S==1 (SPOUSE RECEIVING BENEFITS)]

You answered before that your [SPOUSE]'s Social Security benefits are \$[BEN_LEVEL_S] per month. What would your [SPOUSE]'s Social Security benefits be if your [SPOUSE] had never worked?

As my best guess, if my [SPOUSE] had never worked, I expect that my [SPOUSE]'s Social Security benefits would be \$_____ per month.

[ASK IF SS_STATUS_S==2 (SPOUSE NOT YET RECEIVING BENEFITS)]

You answered before that you expect your [SPOUSE]'s Social Security benefits to be \$[BEN_LEVEL_S] per month. What would your [SPOUSE]'s Social Security benefits be if your [SPOUSE] had never worked?

As my best guess, if my [SPOUSE] had never worked, I expect that my [SPOUSE]'s Social Security benefits would be \$_____ per month.

[SHOW IF PPGENDER==1 (MALE RESPONDENT)]

In answering this question, please include benefits your wife herself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[SHOW IF PPGENDER==2 (FEMALE RESPONDENT)]

In answering this question, please include benefits your husband himself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[ASK IF (SPBEN_NOWORK≠MISSING AND SPBEN_NOWORK≠0) AND BEN_ADJ ≥ 0.5*BEN_ADJ_S AND RET_AGE_S ≠ 0 AND RET_AGE ≠ 0] (I.E., SPOUSE'S BENEFIT LEVEL IF NOT WORKING IS NOT MISSING, R HAS A SUBSTANTIAL EARNINGS HISTORY, AND SPOUSE HAS SOME WORK HISTORY SINCE RET_AGE_S≠0)]

Q.6.4: [dSPBENdBEN_NOWORK] Response of spouse's benefits to own benefit level if spouse had never worked

You answered before that your [SPOUSE]'s Social Security benefits would be \$[SPBEN_NOWORK] per month if your [SPOUSE] had never worked.

[SHOW IF SS_STATUS==1 (R RECEIVING BENEFITS)]

Now suppose you had worked more and therefore you received Social Security benefits that are \$100 higher than they actually are (so your own benefits would be \$[BEN_LEVEL+100] instead of \$[BEN_LEVEL]). What would your [SPOUSE]'s Social Security benefits be in this scenario if your [SPOUSE] had never worked?

[SHOW IF SS_STATUS==2 (R NOT YET RECEIVING BENEFITS)]

Now suppose you had worked more and therefore you would receive Social Security benefits that are \$100 higher than you actually expect them to be (so your own benefits would be \$[BEN_LEVEL+100] instead of \$[BEN_LEVEL]). What would your [SPOUSE]'s Social Security benefits be in this scenario if your [SPOUSE] had never worked?

[SHOW FOR ALL RESPONDENTS TO Q6.4]

As my best guess, if my [SPOUSE] had never worked and I had raised my own benefits by \$100 per month by working more, I expect that my [SPOUSE]'s Social Security benefits would be \$_____ per month.

[SHOW IF PPGENDER==1 (MALE RESPONDENT)]

In answering this question, please include benefits your wife herself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[SHOW IF PPGENDER==2 (FEMALE RESPONDENT)]

In answering this question, please include benefits your husband himself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

[ASK IF BEN_LEVEL_S ≠ MISSING AND BEN_ADJ < 0.5*BEN_ADJ_S AND RET_AGE_S ≠ 0] (I.E., R HAS NO SUBSTANTIAL EARNINGS HISTORY)]

Q.6.5: [dBENdSPBEN_YN] Response of own benefits to spouse’s benefit level, YesNo

[SHOW IF SS_STATUS==1 (R RECEIVING BENEFITS)]

You answered before that your Social Security benefits are \$[BEN_LEVEL] per month.

[SHOW IF SS_STATUS==2 (R NOT YET RECEIVING BENEFITS)]

You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month.

[SHOW IF SS_STATUS_S==1 (SPOUSE RECEIVING BENEFITS)]

Now suppose your [SPOUSE] had worked more and therefore received Social Security benefits that are \$100 higher than they actually are (so your [SPOUSE]’s benefit level would be \$[BEN_LEVEL_S+100] instead of \$[BEN_LEVEL_S]).

[SHOW IF SS_STATUS_S==2 (SPOUSE NOT YET RECEIVING BENEFITS)]

Now suppose your [SPOUSE] had worked more and therefore would receive Social Security benefits that are \$100 higher than you actually expect them to be (so your [SPOUSE]’s benefit level would be \$[BEN_LEVEL_S+100] instead of \$[BEN_LEVEL_S]).

[SHOW IF SS_STATUS==1 (R RECEIVING BENEFITS)]

Would your Social Security benefits change?

Yes 1
No 2

[SHOW IF SS_STATUS==2 (R NOT YET RECEIVING BENEFITS)]

Would your expected Social Security benefits change?

Yes 1
No 2

[ASK IF BEN_LEVEL_S ≠ MISSING AND dBENdSPBEN_YN==1 AND BEN_ADJ < 0.5*BEN_ADJ_S (I.E., R HAS NO SUBSTANTIAL EARNINGS HISTORY)]

Q.6.6: [dBENdSPBEN] Response of own benefits to spouse’s benefit level

[SHOW FOR ALL RESPONDENTS TO Q6.6]

What would be the new amount of your Social Security benefits?

My best guess is that the new amount of my Social Security benefits would be \$_____ per month.

In answering this question, please include benefits you yourself would receive from the Social Security program whether these benefits are retired worker benefits, spouse benefits, or disability benefits.

Section 7: Knowledge about Widow Benefits

[IF SEC7==0, SKIP TO SECTION 8]

[ASK IF PPMARIT==2 (I.E., WIDOWED)]

Q.7.1: [BEN_S_ALIVE] Own benefits if spouse had still been alive

[SHOW IF SS_STATUS==1 (R ALREADY RECEIVING BENEFITS)]

You answered before that your Social Security benefits are \$[BEN_LEVEL] per month.

If your late [SPOUSE] had still been alive, what would have happened to your Social Security benefits (i.e., what would have happened to the benefits paid to you)?

Please assume that you would have made the same decisions about when to stop working and when to claim benefits if your late [SPOUSE] had still been alive.

As my best guess, if my late [SPOUSE] had still been alive, I expect my Social Security benefits would have been \$_____ per month.

[SHOW IF SS_STATUS==2 (R NOT YET RECEIVING BENEFITS)]

You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month.

If your late [SPOUSE] had still been alive, what would happen to your Social Security benefits (i.e., what would happen to the benefits paid to you)?

Please assume that you would have made the same decisions about when to stop working and when to claim benefits if your late [SPOUSE] had still been alive.

As my best guess, if my late [SPOUSE] had still been alive, I expect my Social Security benefits would be \$_____ per month.

[ASK IF BEN_LEVEL ≠ MISSING AND MARRIED == 1]

Q.7.2: [WBEN_SDIES] Own benefits if spouse dies

[SHOW IF SS_STATUS==1 (R ALREADY RECEIVING BENEFITS)]

You answered before that your Social Security benefits are \$[BEN_LEVEL] per month.

[SHOW IF SS_STATUS==2 (R NOT YET RECEIVING BENEFITS)]

You answered before that you expect your Social Security benefits to be \$[BEN_LEVEL] per month.

[SHOW FOR ALL RESPONDENTS TO Q7.2]

If you became widowed, what would happen to your Social Security benefits (i.e., what would happen to the benefits paid to you)?

Please assume that you would make the same decisions about when to stop working and when to claim benefits if you became widowed.

As my best guess, if I became widowed, I expect my Social Security benefits would be \$_____ per month.

[ASK IF SS_STATUS_S ≠ 3 AND BEN_LEVEL_S ≠ MISSING AND MARRIED==1]

Q.7.3: [WBEN_RDIES] Spouse's benefits if respondent dies

[SHOW IF SS_STATUS_S == 1 (SPOUSE RECEIVING BENEFITS)]

You answered before that your [SPOUSE]'s Social Security benefits are \$[BEN_LEVEL_S] per month.

[SHOW IF SS_STATUS_S == 2 (SPOUSE NOT YET RECEIVING BENEFITS)]

You answered before that you expect your [SPOUSE]'s Social Security benefits to be \$[BEN_LEVEL_S] per month.

[SHOW FOR ALL RESPONDENTS TO Q7.3]

If you died and your [SPOUSE] became widowed, what would happen to [SP_HISHER] Social Security benefits (i.e., what would happen to the benefits paid to your [SPOUSE])?

Please assume that your [SPOUSE] would make the same decisions about when to stop working and when to claim benefits if your [SPOUSE] became widowed.

As my best guess, if my [SPOUSE] became widowed, I expect [SP_HISHER] Social Security benefits would be \$_____ per month.

[ASK IF SS_STATUS_S ≠ 3 AND MARRIED==1]

Q.7.4: [WBEN_RETDATE] Spouse's benefits if retires early

Does the age at which you start collecting Social Security benefits matter for the Social Security benefits your [SPOUSE] would get if you died?

- Yes, if my [SPOUSE] became widowed, [SP_HISHER] benefits would be higher if I start collecting benefits at age 65 than if I start collecting them at age 62. 1
- Yes, if my [SPOUSE] became widowed, [SP_HISHER] benefits would be lower if I start collecting benefits at age 65 than if I start collecting them at age 62. 2
- No, if my [SPOUSE] became widowed, [SP_HISHER] benefits would be the same no matter when I start collecting my benefits. 3

Section 8: Knowledge about the 35-Year Rule

[IF SEC8==0, SKIP TO SECTION 9]

Q.8.1: [RULE35_CHOICE, RULE35_AMOUNT] Knowledge of 35-year rule:

Consider a person who worked for 40 years and who claims Social Security based on his or her own earnings history. Which years of this person's earnings are taken into account when calculating the amount of his or her Social Security benefits?

Choose only one option and fill in the corresponding blank:

Based on the most recent years:..... 1

The amount of Social Security benefits is based on the average of the _____ most recent years of earnings (fill in a number).

Based on the highest years:2

The amount of Social Security benefits is based on the average of the _____ highest years of earnings (fill in a number).

Based on earnings at particular ages:3

The amount of Social Security benefits is based on the average earnings for the years when this person was between the age of 16 and _____ (fill in an age).

Based only on number of years with earnings but not on level of earnings:4

The amount of Social Security benefits is based on the total number of years that this person had earnings of at least about \$2500 (in today's dollars) for years when this person was between the age of 16 and _____ (fill in an age).

Section 9: Effect of Framing Rules on timing of claiming of benefits on timing decisions.

[IF SEC9==0, SKIP TO SECTION 10]

Q.9.1: [FRAME_STORY] FRAME MANIPULATION:

The amount of someone's Social Security benefits depends on the age at which the person starts collecting Social Security benefits.

[IF XFRAME ==1 (LOSS FRAME), SHOW:]

In particular, if a person starts claiming Social Security benefits at age 62 rather than at age 65, all his/her future benefits will be cut by 20% for as long as he/she lives.

[IF XFRAME ==2 (GAIN FRAME), SHOW:]

In particular, if a person starts claiming Social Security benefits at age 65 rather than at age 62, all his/her future benefits will be increased by 25% for as long as he/she lives.

[IF XFRAME ==3 (BREAK-EVEN FRAME), SHOW:]

In particular, a person who postpones claiming benefits from age 62 to age 65 has a break-even age of 76 years and 11 months. This means that at 76 years and 11 months, the accumulated value of higher benefits (from postponing retirement) will start to exceed the accumulated value of lower benefits (from choosing early retirement). Note: interest is not considered in the calculation.

[ASK IF XFR_VER==1]

Q.9.2: [RET_ADVICE] Retirement advice to a neighbor

Suppose you had a 61-year old neighbor, [IF XFR_NAME=1, INSERT LINDA; IF XFR_NAME=2, INSERT ROBERT], who is [IF XFR_OCC=1, INSERT 'A HIGH SCHOOL ENGLISH TEACHER'; IF XFR_OCC=2, INSERT 'AN ACCOUNTANT'; IF XFR_OCC=3, INSERT 'A CLEANING LADY'; IF XFR_NAME=4, INSERT 'A STEEL WORKER']. Do you think [IF XFR_PRON=1, INSERT 'HE'; IF XFR_PRON=2, INSERT 'SHE'] would be better off if [IF XFR_PRON=1, INSERT 'HE'; IF XFR_PRON=2, INSERT 'SHE'] started claiming Social Security benefits at age 62 or at age 65?

I think [IF XFR_NAME=1, INSERT LINDA; IF XFR_NAME=2, INSERT ROBERT] would be better off if [IF XFR_PRON=1, INSERT 'HE'; IF XFR_PRON=2, INSERT 'SHE'] started collecting benefits at age 62..... 1

I think [IF XFR_NAME=1, INSERT LINDA; IF XFR_NAME=2, INSERT ROBERT] would be better off if [IF XFR_PRON=1, INSERT 'HE'; IF XFR_PRON=2, INSERT 'SHE'] started collecting benefits at age 65..... 2

[ASK IF XFR_VER==2]

Q.9.3: [HYP_CLAIMAGE] Own retirement claim expectation

[SHOW IF PPAGE ≤ 62]

If you had to choose between starting to claim Social Security benefits at age 62 and at age 65, what would you most likely choose:

I would start collecting Social Security benefits at age 62. 1

I would start collecting Social Security benefits at age 65. 2

[SHOW IF PPAGE > 62]

Suppose you were still 62 and you could choose (again) between starting to claim Social Security benefits at age 62 and at age 65, what would you most likely choose:

I would start collecting Social Security benefits at age 62. 1

I would start collecting Social Security benefits at age 65. 2

[IF RETIRED==1 AND RET_AGE≠0 AND XFR_VER==2, ASK:]

Q.9.4: [REGRET] Regret about retirement decision

Do you regret when you retired?

- Yes, I wish I had retired earlier..... 1
- Yes, I wish I had retired later..... 2
- No, I would have retired at the same age if I could do it all over again. 3

Section 10: Information Sources

[If SEC10==0, SKIP TO SECTION 11]

Q.10.1: [INFOSOURCE]

[GRID, RADIO BUTTON VERBAL ENDPOINT 5 POINT SCALE ANSWER – WITH NUMBER REFERENCE]

We are interested in the sources of your knowledge about what determines the amount of Social Security benefits that you receive or will receive.

Please rate the usefulness of each of the following information sources or say “N/A” if you have not received any information from that source.

Select all that apply:

	Not Applicable	Not useful at all	2	3	4	Very Useful
		1	2	3	4	5

- Q.10.1_A Visiting a Social Security office
- Q.10.1_B Phone call to Social Security
- Q.10.1_C The Social Security web site
- Q.10.1_D A mailing from Social Security

- Q.10.1_E Information from your employer
- Q.10.1_F Information from the AARP
- Q.10.1_G An on-line financial calculator
- Q.10.1_H Other Internet websites

- Q.10.1_I Talking to a financial advisor
- Q.10.1_J Talking to a co-worker
- Q.10.1_K Talking to friends

[ASK IF MARRIED==1]

Q.10.1_L Talking to your [SPOUSE]

Q.10.1_M

[SHOW IF MARRIED==1]

Talking to another relative

[SHOW IF MARRIED==0]

Talking to a relative

Q.10.1_N Other, _____

Section 11. Respondent Characteristics -- Information to Enable Us to Estimate the Actual Incentives that Individuals Face

[If SEC11==0, SKIP TO SECTION 12]

Q.11.1: Opening screen to section 11

Now, we will ask you some questions about your earnings and your earnings history so that we can make an estimate of how the Social Security system affects you.

[ASK IF RET_AGE ≠ 0 (SINCE RET_AGE==ZERO MEANS THE PERSON NEVER WORKED)]

[IF RET_AGE>AGE OR RET_AGE==MISSING, SET REF_YEAR = 2007

ELSE SET REF_YEAR = 2007-AGE+RET_AGE-1]

Q.11.2: [EARN_LAST] Own labor earnings in last year with earnings

Approximately how much did you earn in total in wage, self-employment, and salary income in [REF_YEAR]?

- \$5,000 or less 1
- between \$5,000 and \$ 7,499 2
- between \$7,500 and \$9,999 3
- between \$10,000 and \$12,499 4
- between \$12,500 and \$14,999 5
- between \$15,000 and \$19,999 6
- between \$20,000 and \$24,999 7
- between \$25,000 and \$29,999 8
- between \$30,000 and \$34,999 9
- between \$35,000 and \$39,999 10
- between \$40,000 and \$49,999 11
- between \$50,000 and \$59,999 12

between \$60,000 and \$74,999	13
between \$75,000 and \$84,999	14
between \$85,000 and \$99,999	15
between \$100,000 and \$124,999	16
between \$125,000 and \$149,999	17
between \$150,000 and \$174,999	18
\$175,000 or more.....	19

[ASK IF RET_AGE ≠ 0 AND EARN_LAST≠MISSING]

Q.11.3: [EARN_USUAL] Usual yearly earnings

After adjusting for the effects of inflation (i.e., measured in terms of how much you can buy with your earnings), were your earnings in [REF_YEAR] higher or lower compared to your typical earnings since you started working?

My earnings in [REF_YEAR] were very much lower (at least 75% lower)	1
My earnings in [REF_YEAR] were much lower (between 50% and 75% lower).....	2
My earnings in [REF_YEAR] were quite a bit lower (between 25% and 50% lower).....	3
My earnings in [REF_YEAR] were somewhat lower (between 10% and 25% lower).....	4
My earnings in [REF_YEAR] were roughly the same (within 10%)	5
My earnings in [REF_YEAR] were somewhat higher (between 10% and 25% higher).....	6
My earnings in [REF_YEAR] were quite a bit higher (between 25% and 50% higher).....	7
My earnings in [REF_YEAR] were much higher (between 50% and 75% higher)	8
My earnings in [REF_YEAR] were very much higher (at least 75% higher)	9

[ASK IF RET_AGE ≠ 0 (R HAS SOME WORK HISTORY)]

Q.11.4: [EARN_LENGTH] Length of own work history

Approximately how many years have you worked for pay? ____ years

Q.11.5: [WHOSE_RECORD] Type of Social Security benefits the person expects to claim

[SHOW IF SS_STATUS==1 (ALREADY RECEIVING BENEFITS)]

You answered before that your monthly Social Security benefits are \$[BEN_LEVEL].

[SHOW IF SS_STATUS==2 (NOT YET RECEIVING BENEFITS)]

You answered before that you expect your monthly Social Security benefits to be \$[BEN_LEVEL].

[SHOW FOR ALL RESPONDENTS TO Q11.5]

On whose earnings record do you think your benefits are based? They are based ...

... only on my own earnings record	1
... only on my current [SPOUSE]'s earnings record	2
... only on my previous [SPOUSE]'s earnings record.....	3
... only on my late [SPOUSE]'s earnings record	4
... on both my own and my current [SPOUSE]'s earnings records	5
... on both my own and my previous [SPOUSE]'s earnings records	6
... on both my own and my late [SPOUSE]'s earnings records....	7

[ASK IF MARRIED==1 AND RET_AGE_S ≠ 0 (SPOUSE HAS SOME WORK HISTORY)]

Q.11.6: [EARN_LENGTH_S] Length of spouse's work history

Approximately how many years has your [SPOUSE] worked for pay? ____ years

[ASK IF MARRIED==1 AND RET_AGE_S ≠ 0 AND RET_AGE ≠ 0 (SPOUSE HAS SOME WORK HISTORY AND R HAS SOME WORK HISTORY)]

Q.11.7: [EARN_COMP] Earnings compared to spouse's

Please consider a typical year in terms of your own and your [SPOUSE]'s earnings. In a typical year, were your earnings higher or lower compared to your [SPOUSE]'s earnings?

My earnings were typically very much lower (at least 75% lower)	1
-----------------------------------------------------------------------	---

My earnings were typically much lower (between 50% and 75% lower)	2
My earnings were typically quite a bit lower (between 25% and 50% lower)	3
My earnings were typically somewhat lower (between 10% and 25% lower)	4
My earnings were typically roughly the same (within 10%)	5
My earnings were typically somewhat higher (between 10% and 25% higher)	6
My earnings were typically quite a bit higher (between 25% and 50% higher)	7
My earnings were typically much higher (between 50% and 75% higher)	8
My earnings were typically very much higher (at least 75% higher)	9

Section 12: Information to enable us to estimate how important Social Security wealth is for this person (or other features of Social Security rules) and Predictors of Retirement and/or Social Security Knowledge

[IF SEC12==0, SKIP TO SECTION 13]

Q.12.1: [SS_IMPORTANT] Importance of Social Security for retirement income

[SHOW IF SS_STATUS==1 (ALREADY RECEIVING BENEFITS)]

Roughly, how important is income from Social Security relative to income from pensions, savings or other sources to pay for your household's spending?

(Please also include any Social Security income that other members in your household may receive or expect to receive in your answer).

Extremely important: Social Security pays for more than 75% of spending	1
Very important: Social Security pays for 50% to 75% of spending	2
Important: Social Security pays for 25% to 50% of spending	3
Not so important: Social Security pays for less than 25% of spending	4

[SHOW IF SS_STATUS==2 (NOT YET RECEIVING BENEFITS)]

Roughly, how important will income from Social Security be relative to income from pensions, savings or other sources to pay for your household's spending during retirement?

(Please also include any Social Security income that other members in your household may receive or expect to receive in your answer).

Extremely important: Social Security will pay for more than 75% of spending	1
Very important: Social Security will pay for 50% to 75% of spending	2
Important: Social Security will pay for 25% to 50% of spending	3
Not so important: Social Security will pay for less than 25% of spending	4

Q.12.2: [SS_WORK] Planning to work after claiming benefits

[SHOW IF SS_STATUS==1 (ALREADY RECEIVING BENEFITS)]

How likely do you think it is that you will decide to work for pay at least part-time sometime in the future?

Very likely	1
Likely	2
Unlikely	3
Very unlikely	4

[SHOW IF SS_STATUS==2 (NOT YET RECEIVING BENEFITS)]

How likely do you think it is that you will decide to work for pay at least part-time after you have started collecting Social Security benefits?

Very likely	1
Likely	2
Unlikely	3
Very unlikely	4

Q.12.3: [RET_FRIENDS] Fraction of friends retired

Roughly how many of your friends are retired?

By far most of my friends (more than 75%)	1
-------------------------------------------------	---

Most of my friends (between 50% and 75%)	2
Many of my friends (between 25% and 50%)	3
Relatively few of my friends (less than 25%).....	4

Q.12.4: [NUM_SIBLINGS, OLD_SIBLINGS] Number of siblings

In total, how many children did your parents have (including you)?

My parents had ____ children.

How many of these children were older than you? (Please fill in "0" if you were born first)

Growing up, I had ____ older siblings.

Section 13: Converting flow benefits to expected PDV of benefits (and vice versa)

[IF SEC13==0, SKIP TO SECTION 14]

Q.13.1: [HEALTH] Subjective Health

Now we'd like to ask two questions about your health. Would you say your health is excellent, very good, good, fair, or poor?

Excellent.....	1
Very good.....	2
Good.....	3
Fair.....	4
Poor.....	5
Can't answer	6

[CREATE A NEW VARIABLE LIV_AGE]

[IF PPAGE ≤ 65, SET LIV_AGE=75]

[IF 66 ≤ PPAGE ≤ 70, SET LIV_AGE=80]

[IF 71 ≤ PPAGE ≤ 80, SET LIV_AGE=85]

[IF 81 ≤ PPAGE ≤ 90, SET LIV_AGE=95]

[IF 91 ≤ PPAGE , SET LIV_AGE=105]

Q.13.2a: [PROB_LIVE] Expected Longevity

For the next question, please answer on a scale of 0 to 100, where "0" means that you think there is absolutely no chance it will happen, and "100" means that you think it is absolutely sure to happen.

As your best guess, what is the percent chance that you will live to be [LIV_AGE] or more?

[GIVE A SCALE OF 0-100 WITH 0 MARKED "ABSOLUTELY NO CHANCE" AND 100 MARKED "ABSOLUTELY CERTAIN"]

[ASK IF MARRIED==1]

[CREATE A NEW VARIABLE LIV_AGE_S]

[IF AGE_S ≤ 65 , SET LIV_AGE_S=75]

[IF 66 ≤ AGE_S ≤ 70 , SET LIV_AGE_S=80]

[IF 71 ≤ AGE_S ≤ 80 , SET LIV_AGE_S=85]

[IF 81 ≤ AGE_S ≤ 90 , SET LIV_AGE_S=95]

[IF 91 ≤ AGE_S , SET LIV_AGE_S=105]

Q.13.2b: [PROB_LIVE_S] Expected Longevity Spouse

As your best guess, what is the percent chance that your [SPOUSE] will live to be [LIV_AGE_S] or more?

[GIVE A SCALE OF 0-100 WITH 0 MARKED "ABSOLUTELY NO CHANCE" AND 100 MARKED "ABSOLUTELY CERTAIN"]

Q.13.3: [CONV_FACTOR] Benefits to PDV conversion factor

Suppose the government gave you a choice between:

Option A: A one-time payment to you at age [MAX(62, AGE+1)]. You will still receive all your future Social Security benefits as usual.

or

[SHOW IF MARRIED==1:]

Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be). Any benefits paid to your [SPOUSE] will stay the same.

[SHOW IF MARRIED==0:]

Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be).

[SHOW FOR ALL RESPONDENTS TO Q13.3]

Assume that all amounts shown are net of tax (i.e., you don't owe any tax on the one-time payment or on the increase in Social Security benefits).

We are now going to ask you whether you would choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits). We will ask this question four times (for different amounts of the one-time payment).

[Q13_3A, SHOW ON SAME SCREEN AS TEXT ABOVE]

[CREATE DATA-ONLY VARIABLE AMT1]

[IF XCONV==1, SET AMT1 = 15,000]

[IF XCONV==2, SET AMT1 = 40,000]

Option A

One-time payment of \$[AMT1]

Option B

Permanent \$100 increase in monthly Social Security benefits

[Q13_3B, SHOW ON SAME SCREEN AS ORIGINAL PROMPT]

[ASK IF Q13_3A ≠ MISSING]

[CREATE DATA-ONLY VARIABLE AMT2]

[IF XCONV==1 AND Q13_3A==1, SET AMT2 = 5,000]

[IF XCONV==1 AND Q13_3A==2, SET AMT2 = 40,000]

[IF XCONV==2 AND Q13_3A==1, SET AMT2 = 15,000]

[IF XCONV==2 AND Q13_3A==2, SET AMT2 = 80,000]

<orange>Suppose the government gave you a choice between:

<orange>Option A: A one-time payment to you at age [MAX(62, AGE+1)]. You will still receive all your future Social Security benefits as usual.

or

[SHOW IF MARRIED==1:]

<orange>Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be). Any benefits paid to your [SPOUSE] will stay the same.

[SHOW IF MARRIED==0:]

<orange>Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be).

[SHOW FOR ALL RESPONDENTS TO Q13.3]

<orange>Assume that all amounts shown are net of tax (i.e., you don't owe any tax on the one-time payment or on the increase in Social Security benefits).

<orange>We are now going to ask you whether you would choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits). We will ask this question four times (for different amounts of the one-time payment).

<yellow>Thank you. And what about the following choice:

<white>Would you choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits)?

Option A

One-time payment of \$[AMT2]

Option B

Permanent \$100 increase in monthly Social Security benefits

[Q13_3C, SHOW ON SAME SCREEN AS ORIGINAL PROMPT]

[ASK IF Q13_3B ≠ MISSING]

[CREATE DATA-ONLY VARIABLE AMT3]

[IF XCONV==1 AND Q13_3A==1 AND Q13_3B==1, SET AMT3 = 2,000]

[IF XCONV==1 AND Q13_3A==1 AND Q13_3B==2, SET AMT3 = 10,000]

[IF XCONV==1 AND Q13_3A==2 AND Q13_3B==1, SET AMT3 = 25,000]

[IF XCONV==1 AND Q13_3A==2 AND Q13_3B==2, SET AMT3 = 80,000]

[IF XCONV==2 AND Q13_3A==1 AND Q13_3B==1, SET AMT3 = 5,000]

[IF XCONV==2 AND Q13_3A==1 AND Q13_3B==2, SET AMT3 = 25,000]

[IF XCONV==2 AND Q13_3A==2 AND Q13_3B==1, SET AMT3 = 60,000]

[IF XCONV==2 AND Q13_3A==2 AND Q13_3B==2, SET AMT3 = 100,000]

<orange>Suppose the government gave you a choice between:

<orange>Option A: A one-time payment to you at age [MAX(62, AGE+1)]. You will still receive all your future Social Security benefits as usual.

or

[SHOW IF MARRIED==1:]

<orange>Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be). Any benefits paid to your [SPOUSE] will stay the same.

[SHOW IF MARRIED==0:]

<orange>Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be).

[SHOW FOR ALL RESPONDENTS TO Q13.3]

<orange>Assume that all amounts shown are net of tax (i.e., you don't owe any tax on the one-time payment or on the increase in Social Security benefits).

<orange>We are now going to ask you whether you would choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits). We will ask this question four times (for different amounts of the one-time payment).

<yellow>Thank you. And what about the following choice:

<white>Would you choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits)?

- | | |
|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| <u>Option A</u> | <u>Option B</u> |
| <input type="checkbox"/> One-time payment of \$[AMT3] | <input type="checkbox"/> Permanent \$100 increase in monthly Social Security benefits |

[Q13_3d, SHOW ON SAME SCREEN AS ORIGINAL PROMPT]

[ASK IF Q13_3C ≠ MISSING]

[CREATE DATA-ONLY VARIABLE AMT4]

[IF XCONV==1 AND Q13_3A==1 AND Q13_3B==1 AND Q13_3C==1, SET AMT4 = 500]
[IF XCONV==1 AND Q13_3A==1 AND Q13_3B==1 AND Q13_3C==2, SET AMT4 = 3,500]
[IF XCONV==1 AND Q13_3A==1 AND Q13_3B==2 AND Q13_3C==1, SET AMT4 = 7,500]
[IF XCONV==1 AND Q13_3A==1 AND Q13_3B==2 AND Q13_3C==2, SET AMT4 = 12,500]
[IF XCONV==1 AND Q13_3A==2 AND Q13_3B==1 AND Q13_3C==1, SET AMT4 = 20,000]
[IF XCONV==1 AND Q13_3A==2 AND Q13_3B==1 AND Q13_3C==2, SET AMT4 = 30,000]
[IF XCONV==1 AND Q13_3A==2 AND Q13_3B==2 AND Q13_3C==1, SET AMT4 = 60,000]
[IF XCONV==1 AND Q13_3A==2 AND Q13_3B==2 AND Q13_3C==2, SET AMT4 = 100,000]
[IF XCONV==2 AND Q13_3A==1 AND Q13_3B==1 AND Q13_3C==1, SET AMT4 = 2,000]
[IF XCONV==2 AND Q13_3A==1 AND Q13_3B==1 AND Q13_3C==2, SET AMT4 = 10,000]
[IF XCONV==2 AND Q13_3A==1 AND Q13_3B==2 AND Q13_3C==1, SET AMT4 = 20,000]
[IF XCONV==2 AND Q13_3A==1 AND Q13_3B==2 AND Q13_3C==2, SET AMT4 = 30,000]
[IF XCONV==2 AND Q13_3A==2 AND Q13_3B==1 AND Q13_3C==1, SET AMT4 = 50,000]
[IF XCONV==2 AND Q13_3A==2 AND Q13_3B==1 AND Q13_3C==2, SET AMT4 = 70,000]
[IF XCONV==2 AND Q13_3A==2 AND Q13_3B==2 AND Q13_3C==1, SET AMT4 = 90,000]
[IF XCONV==2 AND Q13_3A==2 AND Q13_3B==2 AND Q13_3C==2, SET AMT4 = 200,000]

<orange>Suppose the government gave you a choice between:

<orange>Option A: A one-time payment to you at age [MAX(62, AGE+1)]. You will still receive all your future Social Security benefits as usual.

or

[SHOW IF MARRIED==1:]

<orange>Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be). Any benefits paid to your [SPOUSE] will stay the same.

[SHOW IF MARRIED==0:]

<orange>Option B: A \$100 increase in all future monthly Social Security benefits (i.e., all future Social Security benefits paid to you will be \$100 per month higher than what they would otherwise be).

[SHOW FOR ALL RESPONDENTS TO Q13.3]

<orange>Assume that all amounts shown are net of tax (i.e., you don't owe any tax on the one-time payment or on the increase in Social Security benefits).

<orange>We are now going to ask you whether you would choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits). We will ask this question four times (for different amounts of the one-time payment).

<yellow>Thank you. And what about the following choice:

<white>Would you choose option A (the one-time payment) or option B (the permanent increase in all future Social Security benefits)?

- | | |
|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| <u>Option A</u> | <u>Option B</u> |
| <input type="checkbox"/> One-time payment of \$[AMT4] | <input type="checkbox"/> Permanent \$100 increase in monthly Social Security benefits |

Q13.4 [CONV_FOLLOWUP] Follow-up to Q13.3

[ASK IF Q13_3A==2 AND Q13_3B==2]

Can you briefly explain why you prefer a permanent increase in all future Social Security benefits by \$100 per month to a one-time payment of \$[AMT2]?

Section 14. Questions to measure financial literacy

[IF SEC14==0, SKIP TO SECTION 15]

Q.14.1: [FINLIT_INTRO] Financial Literacy, introduction

Next, we would like to ask you some questions to find out how people use numbers in everyday life and how they make decisions involving money.

Q.14.2: [FINLIT1_LOTTERY] Financial Literacy 1 – Lottery

If 5 people all have the winning numbers in the lottery and the prize is two million dollars, how much will each of them get? \$ _____

Q.14.3: [FINLIT2_COMPOUND] Financial Literacy 2 – Compound Interest

Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have in this account in total?

- More than \$200 1
- Exactly \$200 2
- Less than \$200 3
- I don't know 4

Q.14.4: [FINLIT3_INFLAT] Financial Literacy 3 – Inflation / Money Illusion

Suppose that in the year 2015, your income has doubled and prices of all goods have doubled too. In 2015, how much will you be able to buy with your income?

- More than today 1
- The same 2
- Less than today 3
- I don't know 4

Q.14.6: [FINLIT5_MUTUAL] Financial Literacy 5 – Advanced Knowledge: Mutual Funds

True or false? Buying a company stock usually provides a safer return than a stock mutual fund.

- True 1
- False 2
- I don't know 3

END OF SURVEY

Table 1: Demographic Characteristics of the Sample

	Mean	S.D.	Minimum	Maximum
<i>Age</i>	58.7	6.2	50	70
<i>Female</i>	0.53	0.50	0	1
<i>Black</i>	0.06	0.23	0	1
<i>White</i>	0.84	0.36	0	1
<i>Other</i>	0.10	0.30	0	1
Marital Status				
<i>Married</i>	0.64	0.48	0	1
<i>Widowed</i>	0.05	0.22	0	1
<i>Divorced</i>	0.13	0.34	0	1
<i>Separated</i>	0.02	0.15	0	1
<i>Never Married</i>	0.10	0.30	0	1
<i>Living with a Partner</i>	0.06	0.23	0	1
Household Size				
<i>1 Person</i>	0.28	0.45	0	1
<i>2 People</i>	0.46	0.50	0	1
<i>3 + People</i>	0.25	0.44	0	1
Education Level				
<i>High School Dropout</i>	0.08	0.28	0	1
<i>High School Degree</i>	0.35	0.48	0	1
<i>Some College</i>	0.31	0.46	0	1
<i>College Degree</i>	0.26	0.44	0	1
Household Income				
<i>Total Reported Income</i>	70,362	70,280	2,500	350,000
<i>25k or less</i>	0.20	0.40	0	1
<i>25k – 50k</i>	0.27	0.44	0	1
<i>50k – 75k</i>	0.23	0.42	0	1
<i>75k – 100k</i>	0.14	0.35	0	1
<i>100k +</i>	0.16	0.37	0	1
Work Status				
<i>Working (KN definition)</i>	0.56	0.50	0	1
<i>Working (our definition)</i>	0.54	0.50	0	1
<i>Retired (KN definition)</i>	0.27	0.45	0	1
<i>Retired (our definition)</i>	0.36	0.48	0	1
<i>Disabled</i>	0.07	0.26	0	1
<i>Unemployed</i>	0.06	0.24	0	1
<i>Not Working</i>	0.03	0.17	0	1
Region				
<i>Northeast</i>	0.19	0.39	0	1
<i>Midwest</i>	0.22	0.42	0	1
<i>South</i>	0.32	0.47	0	1
<i>West</i>	0.27	0.44	0	1
<i>N</i>	179			

Note: The KN definition of Working reflects the respondent's reported work status; our definition is based on the answer to Q1.11. Respondents indicating that they currently work for pay were coded a 1 on our Working variable. The KN definition of Retired is for self-reported retirement status; our definition is based on the combined answers to Q1.11 and Q1.12. Respondents indicating that they do not currently work and do not expect to work in the future were coded 1 on our Retired variable (see Appendix A for exact question wording).

Table 2: Distribution of Retirement Status and Claim Status

Social Security Claim Status	Retirement Status		Total
	<i>Not Retired</i>	<i>Retired</i>	
<i>Currently Receiving Benefits</i>	17 9.5%	50 27.9%	67 37.4%
<i>Not Yet Receiving Benefits</i>	97 54.2%	15 8.4%	112 62.6%
Total	114 63.7%	65 36.3%	179 100%

Table 3: Demographics and Social Security Benefit Levels by Claim Status

	<u>All Respondents</u>			<u>Receiving Benefits</u>			<u>Not Yet Receiving Benefits</u>		
	Mean	S.D.	Median	Mean	S.D.	Median	Mean	S.D.	Median
<i>Age</i>	58.7	6.2	58.0	64.0	5.7	66.0	55.5	3.8	55.0
<i>Married</i>	0.63	0.48	1	0.49	0.50	0	0.71	0.45	1
<i>Female</i>	0.53	0.50	1	0.57	0.50	1	0.51	0.50	1
<i>Less Than High School</i>	0.08	0.28	0	0.16	0.37	0	0.04	0.19	0
<i>High School Degree</i>	0.35	0.48	0	0.39	0.49	0	0.32	0.47	0
<i>Some College</i>	0.31	0.46	0	0.30	0.46	0	0.31	0.47	0
<i>College Degree</i>	0.26	0.44	0	0.15	0.36	0	0.33	0.47	0
<i>Claim Age</i>	62.4	8.1	62.0	58.2	10.6	62.0	64.9	4.5	65.0
<i>Retirement Age</i>	61.1	11.1	63.0	58.6	13.1	62.0	62.6	9.4	65.0
<i>Monthly Benefit Level (\$)</i>	1134	551	1136	1031	447	1000	1196	598	1200
<i>Adjusted Monthly Benefit Level (\$)</i>	1295	597	1296.40	1297	534	1262	1294	634	1317
<i>N</i>	179			67			112		

Note: The Adjusted Monthly Benefit Level is the Social Security benefit that the respondent would receive if he or she started claiming benefits at age 66.

Table 4: Incentives on the Extensive Margin by Claim Status

	All Respondents	Receiving Benefits	Not Yet Receiving Benefits
Panel A: Qualitative Results			
Perceived Effect of Working Additional Years on Benefits			
<i>Lower</i>	7 4.4%	6 12.8%	1 0.9%
<i>Same</i>	43 27.2%	12 25.5%	31 27.9%
<i>Higher</i>	108 68.4%	29 61.7%	79 71.2%
N	158	47	111
Panel B: Quantitative Results			
Perceived Percentage Increase in Benefits per Additional Year of Work			
<i>25th Percentile</i>	4.2	3.8	4.9
<i>Median</i>	7.1	5.6	7.2
<i>75th Percentile</i>	10.9	10.8	11.3
N	103	29	74

Note: Column percentages reported below cell frequencies. The sample in panel B is limited to those reporting an increase in benefits in Panel A.

Table 5: Incentives on the Extensive Margin by Claim Status

	All Respondents	By Social Security Status		By Frame Type	
		Receiving Benefits	Not Yet Receiving Benefits	Monthly Frame	Lifetime Frame
Panel A: Qualitative Results					
Benefit Levels in Response to Higher Earnings					
<i>Lower</i>	11 7.2%	5 10.6%	6 5.5%	5 6.9%	6 7.1%
<i>Same</i>	65 41.4%	23 48.9%	42 38.1%	31 42.5%	34 40.5%
<i>Higher</i>	81 51.6%	19 40.4%	62 56.4%	37 50.7%	44 52.4%
N	157	47	110	73	84
Panel B: Quantitative Results (Monthly Frame)					
Yearly Benefit Increase in Dollars per \$1000 Earnings Increase in the Last Year Worked					
<i>25th Percentile</i>	5	2	5		
<i>Median</i>	10	7	10		
<i>75th Percentile</i>	35	47	27.5		
N	37	9	28		
Panel C: Quantitative Results (Lifetime Frame)					
Lifetime Benefit Increase in Dollars per \$1000 in OASDI Taxes Paid					
<i>25th Percentile</i>	500	1000	450		
<i>Median</i>	1000	1000	1000		
<i>75th Percentile</i>	1500	1500	1750		
N	41	10	31		

Note: Column percentages reported below cell frequencies. The Frame Type determines whether Q4.1-Q4.2 were asked or whether Q4.3-Q4.5 were asked. Frame Types were randomly assigned. The samples in panels B and C are limited to those who perceive a strictly positive incentive.

Table 6: Perceived Incentive to Delay Claiming Social Security Benefits

	<u>Effect on Own Benefits</u>		<u>Effect on Benefits of a Hypothetical Person</u>		
	All respondents	Respondents claiming between ages 62 and 70	Claim at age 66 instead of 62	Claim at age 70 instead of 66	Claim at age 74 instead of 70
Panel A: Qualitative Results					
Perception of Effect of Delayed Claiming on Level of Benefits					
<i>Lower</i>	13 8.2%	12 8.3%	6 4.1%	3 2.0%	3 2.1%
<i>Same</i>	56 35.4%	48 33.3%	9 6.2%	19 12.9%	36 25.0%
<i>Higher</i>	89 56.3%	84 58.3%	131 89.7%	125 85.0%	105 72.9%
N	158	144	146	147	144
Panel B: Quantitative Results					
Perceived Percentage Increase in Benefits per Year of Delay in Claiming					
<i>25th Percentile</i>			4.7	2.5	2.3
<i>Median</i>			6.3	5.0	3.6
<i>75th Percentile</i>			8.3	6.3	5.6
N			130	125	105

Note: Column percentages reported below cell frequencies. Perceived effects on own benefits are based on Q5.1, with a randomly assigned condition for claiming either one year earlier or one year later. Perceived effects on benefits of a Hypothetical person are based on Q5.2. The sample in panel B is limited to those who perceived a strictly positive incentive to delay

Table 7: Knowledge of the Earnings Test

	Asked about Effect of Earnings at Age 64	Asked about Effect of Earnings at Age 68
Panel A: Qualitative Results		
Effect on Current Benefits of Earning \$20k per Year while Receiving Benefits		
<i>Lower</i>	31 41.9%	17 21.0%
<i>Same</i>	24 32.4%	36 44.4%
<i>Higher</i>	19 25.7%	28 34.6%
N	74	81
Panel B: Quantitative Results		
Maximum Allowable Earnings while Receiving Benefits before a Reduction in Benefit Levels Occurs		
<i>25th Percentile</i>	8000	8000
<i>Median</i>	12000	25000
<i>75th Percentile</i>	25000	No Limit
N	54	53

Note: Column percentages reported below cell frequencies. Sample in panel B is limited to those who believed that earnings while receiving benefits would reduce current benefits or not affect current benefits.

Table 8: Spousal Benefits

	All Respondents	By Ratio of Spouse's Adjusted Benefits to Own Adjusted Benefits			
		≤ 0.5	0.5 - 1	1 - 2	> 2
Panel A: Qualitative Results					
Effect on Spouse's Benefit if Respondent Works More and Therefore Receives \$100 More in Own Benefits					
<i>Change</i>	16 14.7%	4 26.7%	9 20.5%	3 7.9%	0 0%
<i>No Change</i>	93 85.3%	11 73.3%	35 92.1%	35 92.1%	12 100%
N	109	15	44	38	12
Panel B: Qualitative Results					
Perceived Spousal Benefit Level if Spouse Had Never Worked					
<i>Zero</i>	41 42.3%	8 53.3%	13 29.6%	20 52.6%	
<i>Some Positive Amount</i>	56 57.8%	7 46.7%	31 70.5%	18 47.4%	
N	97	15	44	38	
Panel C: Quantitative Results					
Adjusted Perceived Spousal Benefits if Spouse Had Never Worked as Percentage of Own Adjusted Benefits					
<i>25th Percentile</i>	33.3	29.2	33.3	40.0	
<i>Median</i>	44.8	43.4	40.0	50.9	
<i>75th Percentile</i>	58.3	50.0	54.4	71.4	
N	56	7	31	18	

Note: Column percentages reported below cell frequencies. The questions in panels B and C were not asked if the ratio of spousal adjusted benefits to own adjusted benefits was greater than 2.

Table 9: Widow Benefits

	All Respondents	By Ratio of Spouse's Adjusted Benefits to Own Adjusted Benefits			
		≤ 0.5	0.5 - 1	1 - 2	> 2
Panel A: Qualitative Results on Own Widow Benefits					
Effect of Becoming Widowed on Own Benefits					
<i>Lower</i>	14 12.5%	1 6.7%	9 20.5%	3 7.9%	0 0%
<i>Same</i>	56 50.0%	11 73.3%	28 63.6%	15 39.5%	1 7.7%
<i>Higher</i>	42 37.5%	3 20.0%	7 15.9%	20 52.6%	12 92.3%
N	112	15	44	38	13
Panel B: Quantitative Results on Own Widow Benefits					
Own Widow Benefits as Percentage of Own Current Benefits					
<i>25th Percentile</i>	100	100	100	100	160
<i>Median</i>	100	100	100	113.4	208.3
<i>75th Percentile</i>	131.7	100	100	147.1	350
N	112	15	44	38	13
Panel C: Qualitative Results on Spouse's Widow Benefits					
Effect of Spouse Becoming Widowed on Spouse's Benefits					
<i>Lower</i>	10 9.1%	1 6.7%	3 6.8%	6 15.7%	0 0%
<i>Same</i>	48 43.6%	2 13.3%	14 31.8%	21 55.3%	11 84.6%
<i>Higher</i>	52 47.3%	12 80.0%	27 61.4%	11 29.0%	2 15.4%
N	110	15	44	38	13
Panel D: Quantitative Results on Spouse's Widow Benefits					
Spouse's Widow Benefits as Percentage of Spouse's Current Benefits					
<i>25th Percentile</i>	100	106.7	100	100	100
<i>Median</i>	100	266.7	114.6	100	100
<i>75th Percentile</i>	150	431.2	150	111.8	100
N	110	15	44	38	13

Note: Column percentages reported below cell frequencies.

Table 10: Knowledge about Which Years of Earnings Count toward Benefits Calculation

	N	Percent Choosing that Option	25 th Percentile	Median	75 th Percentile
Most Recent Years	59	36.7%	5	5	10
Years with Highest Earnings	49	30.4%	5	5	10
Years between Particular Ages	17	10.6%	62	65	66
Number of Years Exceeding \$2500 in Earnings	36	22.4%	62	65	65.5

Note: Percentages reflect the percent of the overall sample (N=179) choosing each option. For exact wording see Q8.1.

Table 11: Effect of Framing of Benefit Rules on the Timing of Benefit-Claiming

	All Respondents	By Frame Type		
		Loss Frame	Gain Frame	Break-Even Frame
Panel A: Advice to Neighbor				
<i>Retire at Age 62</i>	34 42.0%	10 35.7%	8 33.3%	16 55.2%
<i>Retire at Age 65</i>	47 58.0%	18 64.3%	16 66.7%	13 44.8%
N	81	28	24	29
Panel B: Own Retirement Decision				
<i>Retire at Age 62</i>	45 46.4%	15 48.4%	11 33.3%	19 57.6%
<i>Retire at Age 65</i>	52 53.6%	16 51.6%	22 66.7%	14 42.4%
N	97	31	33	33
Panel C: Advice to Neighbor and Own Hypothetical Decision, Combined				
<i>Retire at Age 62</i>	79 44.4%	25 42.4%	19 33.3%	35 56.5%
<i>Retire at Age 65</i>	99 55.6%	34 57.6%	38 66.7%	27 43.6%
N	178	59	57	62

Note: Column percentages reported below cell frequencies. The Frame Type determines the version of the information told in Q9.1. Frame Types are randomly assigned.

Table 12: Information Sources

Source of Knowledge	Percent of Respondents Using this Source	Mean Usefulness
Visiting a Social Security Office	58.9%	4.26 (0.11)
Phone Call to Social Security	55.7%	3.64 (0.13)
The Social Security Website	51.4%	3.52 (0.14)
A Mailing from Social Security	90.1%	4.18 (0.08)
Information from Your Employer	61.7%	3.05 (0.14)
Information from the AARP	56.0%	3.18 (0.13)
An On-Line Financial Calculator	43.7%	2.79 (0.15)
Other Internet Websites	41.7%	2.60 (0.16)
Talking to a Financial Advisor	53.7%	3.61 (0.13)
Talking to a Coworker	61.5%	2.68 (0.11)
Talking to Friends	67.2%	2.84 (0.11)
Talking to Your Spouse	81.7%	3.49 (0.14)
Talking to A(nother) Relative	70.2%	3.02 (0.11)
Other	9.8%	2.77 (0.39)

The usefulness scale is defined as the average of all ratings of people who indicated using that source. The ratings range from 1 (not useful at all) to 5 (very useful). "Talking to Your Spouse" is only asked of married respondents. The option "Other" presented respondents with a text box in which to write the source.

Figure 1: Cumulative Probability of Social Security Benefits

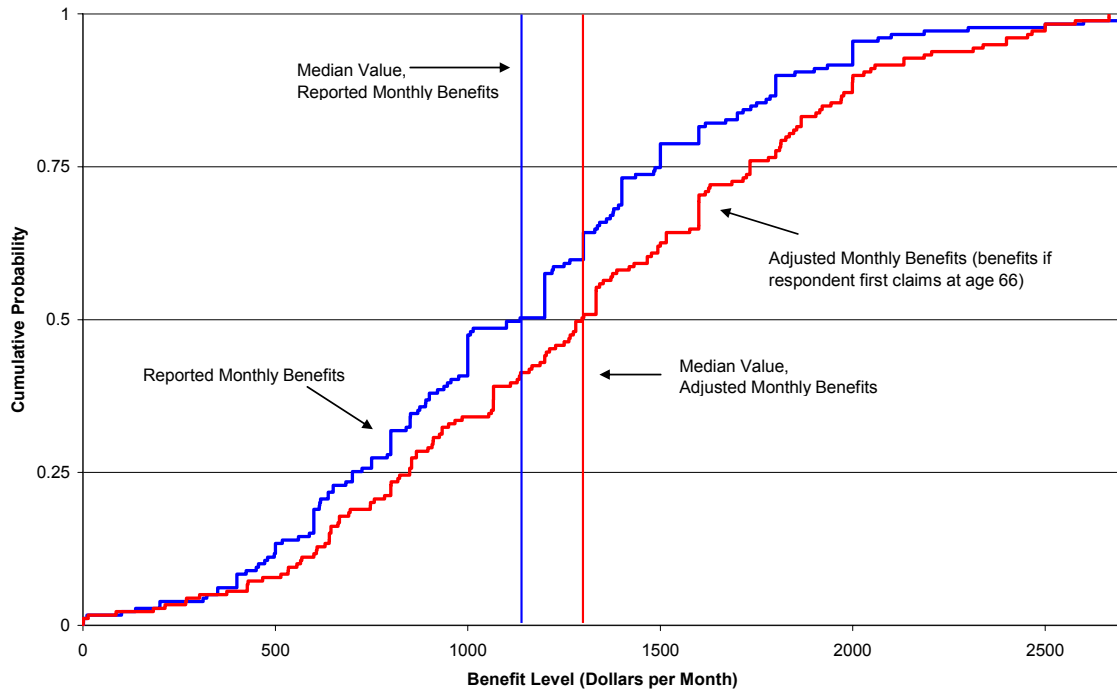


Figure 2: Cumulative Probability of Adjusted Social Security Benefits by Claim Status

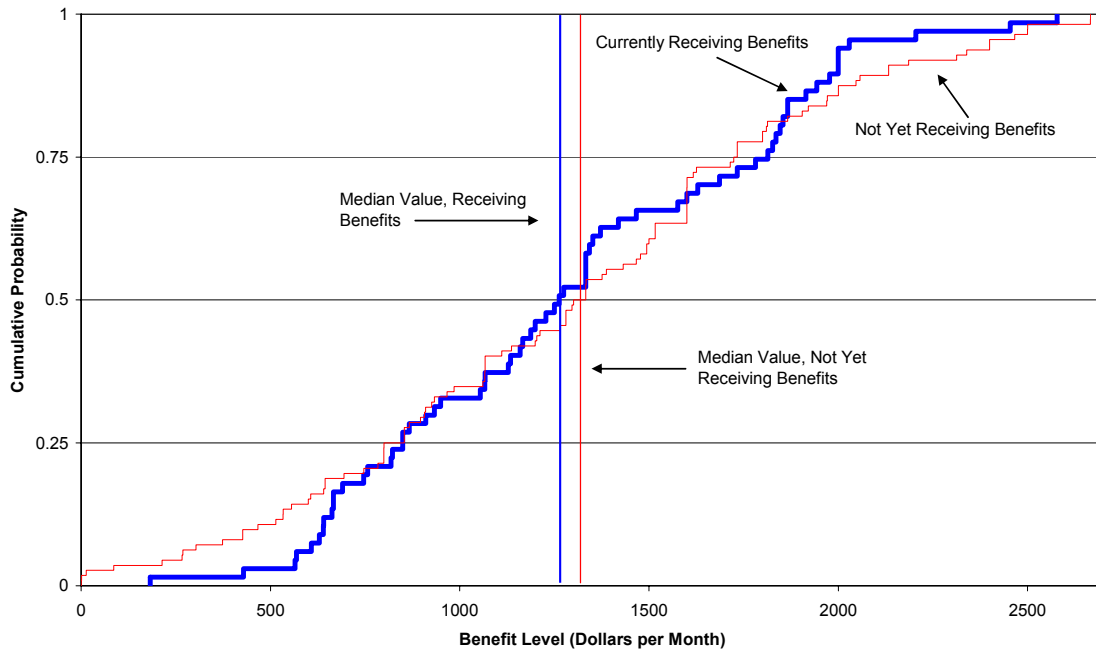


Figure 3: Perceived Marginal OASDI Tax

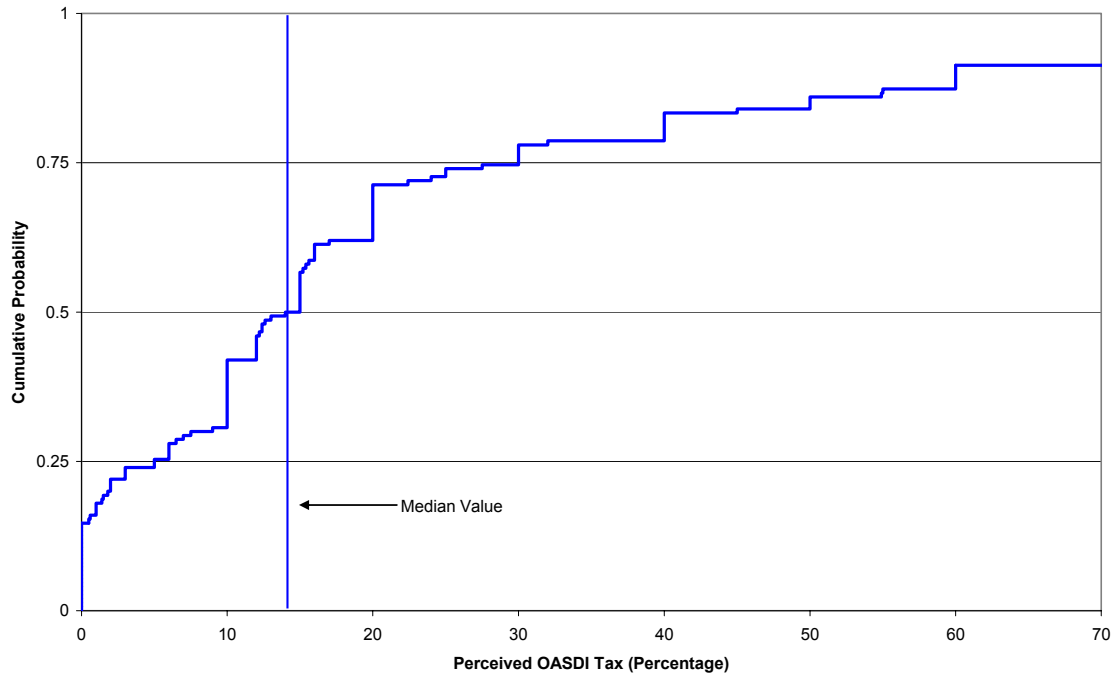


Figure 4: Perceived Percentage Increase in Benefits from Working an Extra Year

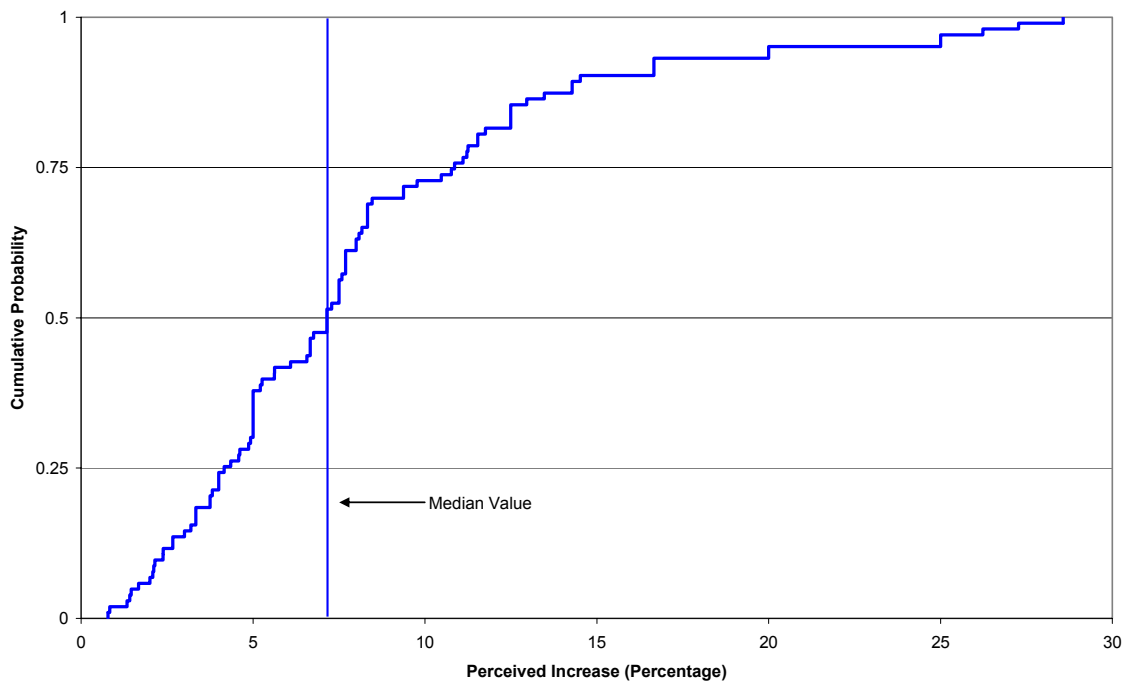


Figure 5a: Perceived Increase in Monthly Benefits per \$1000 in Extra Earnings

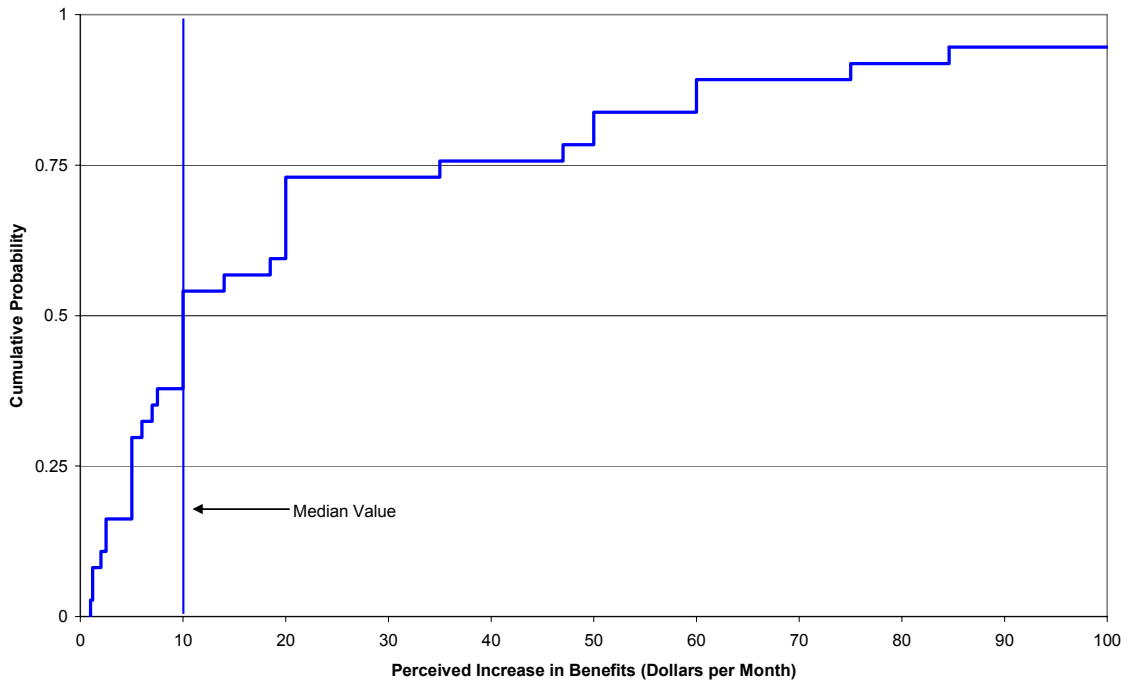


Figure 5b: Perceived Increase in Lifetime Benefits from \$1000 in Additional OASDI Taxes

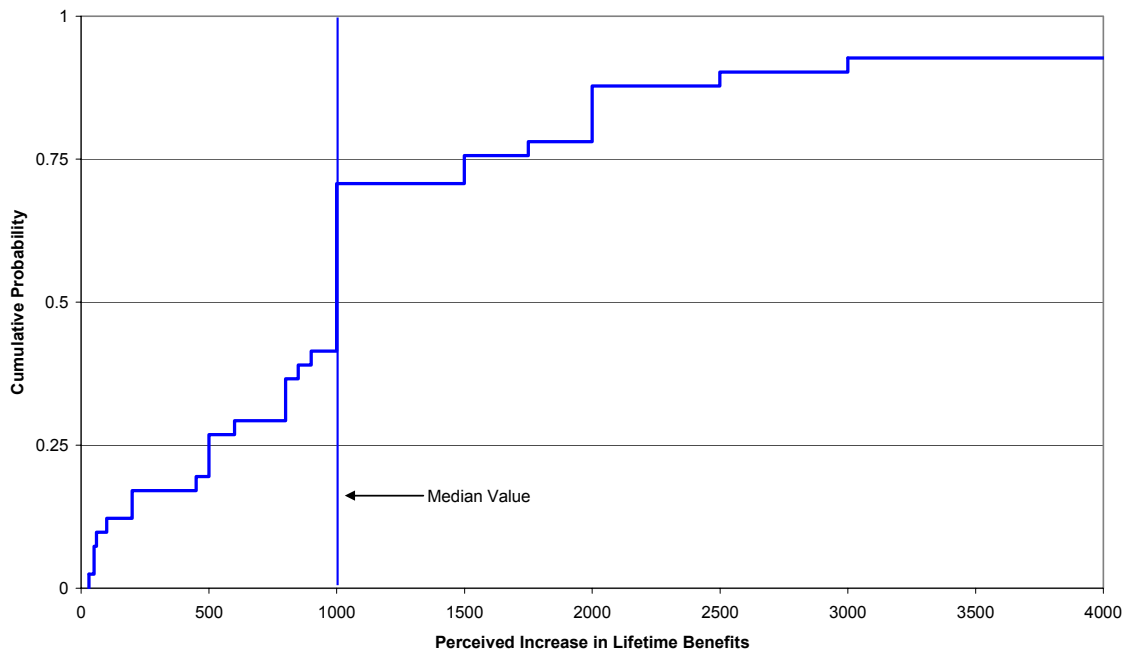


Figure 6: Perceived Incentive to Delay Claiming Benefits

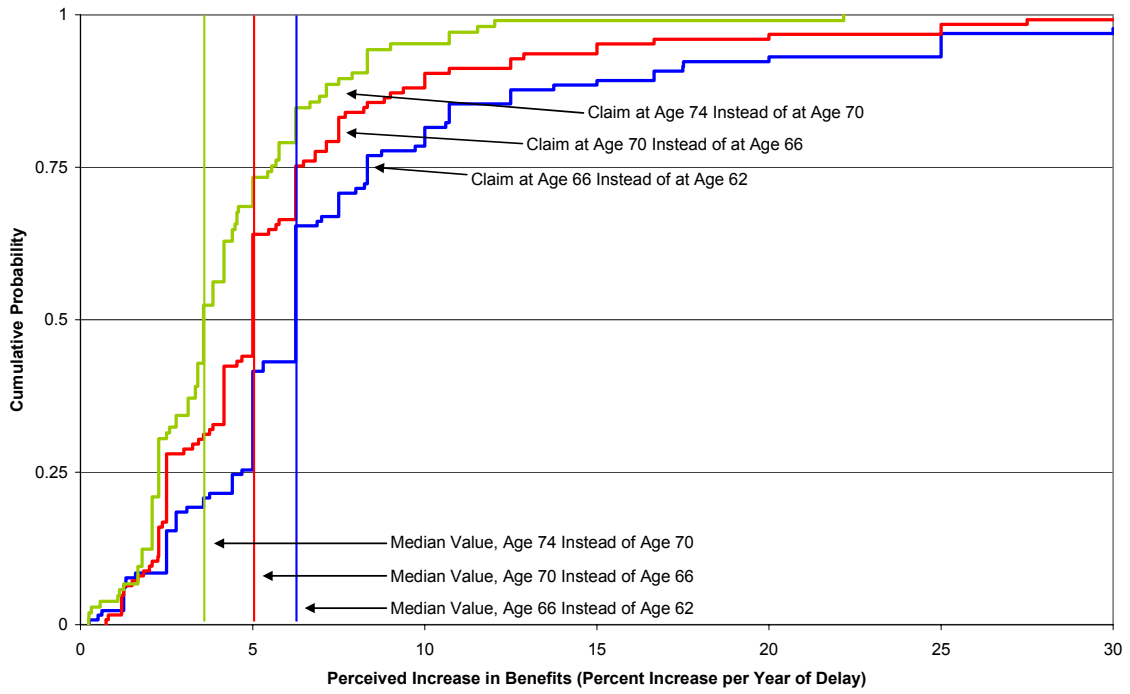


Figure 7: Knowledge of the Existence of the Earnings Test

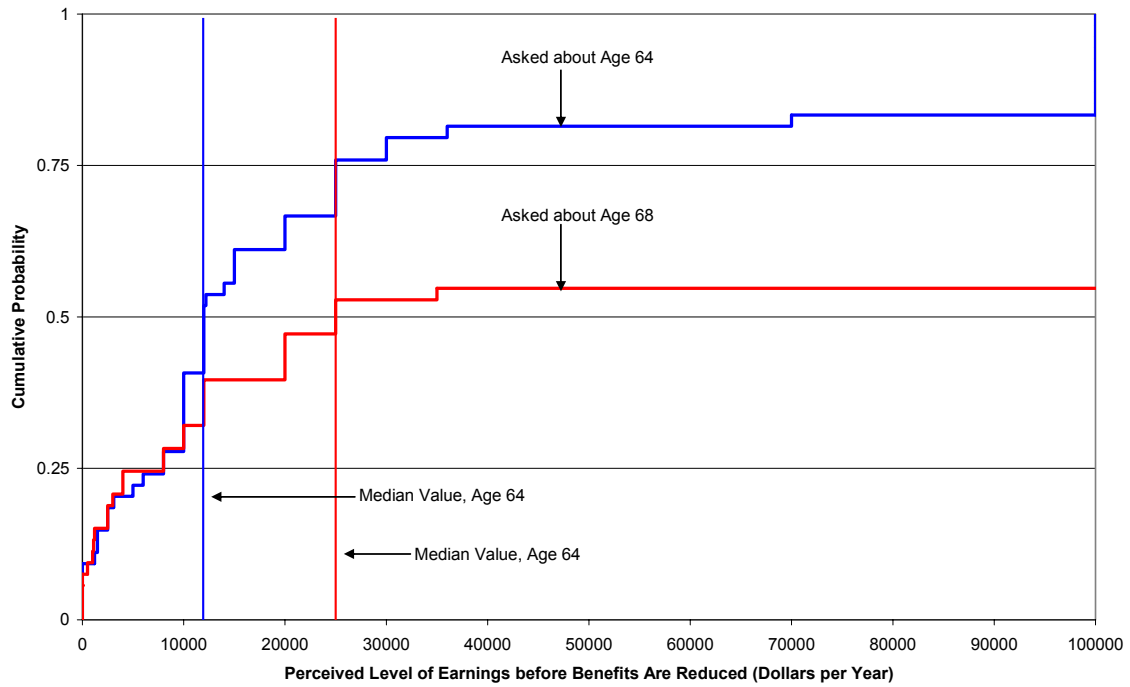


Figure 8: Spousal Benefits as a Percentage of Own Benefits if Spouse Had Never Worked

