**The Reintroduction of the Social Security Statement and its Effect on Social Security Expectations**

**Abstract**

This paper examines how the ongoing reintroduction of the Social Security Statement, staggered by every fifth birth year, affects American Life Panel respondents' expectations over their own Social Security benefits and Social Security programs on the whole. The rich panel design of the ALP allows for controls for prior Social Security knowledge and behavior, and a specialized module fielded to ALP respondents elicited recall of the Statement and use of alternate information. The majority of individuals who were sent a Statement recall receiving one, with high rates of non-recall concentrated among younger respondents. Statement sendees and *my Social Security* account holders highly value the information therein for retirement planning, and being sent this information led to an immediate and measurable impact on Social Security expectations. Namely, sendees' were more likely to expect to receive benefits, their planned claiming ages changed heterogeneously by prior knowledge, and they were less pessimistic about future cuts to the program, indicating that the information in the automatically sent Statement is both valuable and impactful, despite its availability from other sources.

## 1. Introduction

The Social Security Administration provides programs amounting to a quarter of the federal budget, greatly alleviating poverty amongst the elderly and disabled; however, the extent to which individuals understand the incentives contained in these programs and change their behavior in response is still unclear, despite the necessity of measuring these behavioral responses in welfare analyses. Although the cost of these programs is clear and often a source of political debate, individuals' knowledge of program structure and benefit entitlements are low (Greenwald et al. 2010). However, for the past two decades, SSA has embarked on a proactive information dissemination campaign to better educate all potential beneficiaries concerning their suite of SSA benefits. This campaign has led to greater program knowledge among potential beneficiaries as measured variously by the ability to provide an estimate of future Social Security (SS) benefits, the accuracy of this estimate, knowledge of specific program details, and take-up of SS programs (Biggs 2010; Mastrobuoni 2011; Smith and Couch 2014; Liebman and Luttmer

2015; Smith and Couch 2016; Armour *forthcoming*), but these outcomes are often specific to certain subgroups or limited to existing questions from surveys administered over twenty years ago, when the largest SS information dissemination campaign – the Social Security Statement – was phased-in.

This paper instead focuses on the reintroduction of the Statement in 2014 and provides an analysis of its impact on a range of SS knowledge and expectations, both generally and specific to the individual, by exploiting the unique opportunity to field a survey to American Life Panel (ALP) respondents who previously answered a survey module with detailed questions on Social Security knowledge. It provides estimates based on the current information environment, including the mediating effects of having an online *my Social Security* account.

By comparing the expectations of approximately 1,200 respondents in the nationally representative ALP and exploiting the reintroduction of the Statement – discontinued in early 2011 but reintroduced in late 2014 such that individuals receive a Statement every fifth birthday (e.g., 25, 30, 35, 40) – I compare SS expectations among the same respondents from prior surveys fielded in 2010, 2013, and early 2014. I ask these respondents additional questions as to dynamics of the SS program, whether they have a *my Social Security* account, and the ways in which they use these information sources.

The central findings include that individuals highly value information about their benefits from SSA. Individuals report the Statement and *my Social Security* accounts useful for planning for retirement and deciding when to claim Social Security benefits, especially surrounding retirement.

However, there is clear selection in those who are informed as to Social Security benefits. For example, *my Social Security* account holders tend to be better informed about SS program

details, *even before signing up for their accounts*. Additionally, among those sent Statements, many either did not receive them or forgot having received them; these individuals are highly skewed toward the younger end of the age distribution.

Regardless, the policy intervention of automatic Statement mailings had measurable impacts on knowledge and expectations. After being sent a Statement, individuals are more likely to report expecting to receive future benefits, especially if they previously did not expect to receive benefits. This effect is entirely mediated by knowledge about the Social Security system measured in 2010: for those who scored perfectly on a seven-question quiz, the Statement had no measurable impact on expected benefits. However, even among these highly informed individuals, being sent a Statement affected other expectations: those who score perfectly were more likely to expect to claim benefits at older ages among those recently sent a Statement. But this effect reversed for less knowledgeable individuals: those who scored a zero on this quiz expected to claim benefits earlier among those recently sent a Statement.

There was an additional effect that was not mediated by prior knowledge: recent sendees were less pessimistic about the possibility of future cuts to the program. There is an approximately 10 percentage point drop in their reported likelihood that Congress will make the Social Security system less generous in the next 10 years.

Overall, these results point to a strong role of SS communications in shaping expectations over the future of these benefits and a tight linkage between SS retirement claiming and labor supply informed by this information. Individuals also highly value this information, whether in the form of the Social Security Statement or online *my Social Security* accounts.

The rest of this paper is organized as follows: Section 2 discusses the history of the Statement, the relevant literature, and the variation in its reintroduction; Section 3 describes the

data used in these analyses; Section 4 describes the methodology and results; and Section 5 discusses and concludes.

## 2. The Social Security Statement

Starting in 1990, the Social Security Administration began providing standardized benefit statements for all individuals who requested them, and starting in late 1994, Statements were automatically sent out. These Social Security Statements eventually were sent annually to all individuals 25 and older between 2000 and 2011 who were not receiving SS benefits under Title II and had a retrievable mailing address from tax filings. They contained personalized information about OASDI benefits upon retirement, disability, or death. Although the Statement stopped being mailed out after March 2011 for budgetary purposes, it was reintroduced in September of 2014 after the Joint Explanatory Statement to the Consolidated Appropriations Act of 2014 that directed SSA to develop a plan that would "include a significant restoration of the mailing of statements to ensure that individuals are informed of their contributions and benefits under Social Security programs and have an opportunity to review their earnings records and correct any errors in a timely manner."[1] Instead of implementing the previous dissemination strategy of sending all potentially beneficiaries a Statement every year, SSA opted to send a Statement to individuals three months before every birthday ending in a 5 or 0. Hence, an individual turning 55 in December of 2014 was sent a Statement in September of 2014, whereas an individual turning 55 in November of 2014 would not be sent a Statement until August of 2019. These differences in the timing of receipt due to one's birth year relative to the Statement's

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[1] Congressional Record Vol 160., No. 9 (https://www.gpo.gov/fdsys/pkg/CREC-2014-01-15/html/CREC-2014-01-15-pt2-PgH475-2.htm)

reintroduction are the crux of my identification strategy of the effect of the Statement on my outcomes of interest.

However, returning to our knowledge as to the Statement's first introduction: consistent with the scale of the mailings, the accuracy of recent addresses reported on tax forms, and the salience of receiving a document from the Social Security Administration with personalized benefit information, prior research has found high rates of recall of Statement receipt in the 1990s. Greenwald et al. (2010) found that over two thirds of individuals sent Statements recall having received one.[2] Of those recalling receipt, 83%-90% report having read it carefully, with over 90% remembering that it contained personalized benefit calculations. A series of GAO reports finds results consistent with Greenwald et al. (2010). Smith and Couch (2014) show that personalized knowledge of the Full Retirement Age, own monthly benefit, and individual Social Security incentives is lacking before Statement receipt. This is despite there being rather high general knowledge about the Social Security program among Americans approaching retirement.

Because of the structure of the Statement's initial introduction – before all potential beneficiaries over the age of 25 were sent a Statement starting in Fiscal Year (FY) 2000, those aged 60 and over were sent a Statement in FY 1995, those 58 to 60 in FY 1996; in FY 1997, 53 to 58; in FY 1998, 47 to 53; and in FY 1999, 40 to 47 – researchers have been able to isolate the Statement's effect from age-specific differences and time trends. These researchers have found that receipt of the Statement improves these areas of Social Security knowledge, as evidenced by Mastrobuoni (2011)'s findings of fewer errors in HRS recipients' estimated future benefits compared to projected benefits after they receive a Statement. Armour (forthcoming) found that

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[2] In my analysis, this fraction is just below 0.7.

Social Security Disability Insurance application rates increased after Statement receipt, driven by individuals at least as likely to be accepted onto the program as the average applicant. These results indicate that the Statement was a highly effective outreach effort in terms of being read by the targeted recipients, with strong recall, both qualitatively and quantitatively, of the information presented therein. That Americans lack detailed knowledge about their own Social Security benefits and the incentives they face highlights the importance of providing personalized Social Security information to them, which is what the Statement did. However, these earlier studies suffered from the same drawbacks: they were limited to existing surveys with only a small range of questions on SS knowledge and expectations. Resulting inference of the mechanisms of the impact of the Statement on the outcomes measured was thus rendered infeasible. Although administrative data-based analyses can provide population-wide or certain subgroup estimates, these previous studies indicate substantial heterogeneity by characteristics generally not found in administrative data (e.g., health status, prior SS expectations).

As briefly discussed above, the Statement's reintroduction starting in September 2014. A Statement was sent to every individual not currently collecting SS benefits under Title II and who had filed payroll taxes with a retrievable address. Although unreported in this analysis for the sake of brevity, once one controls for age and year, no other characteristics predict being sent a Statement in any given year. This analysis thus uses variation in which age individuals are turning, and the resulting variation in having been sent a Statement, to identify the Intention-to-Treat impact of the Statement on knowledge and expectations separate from observable and unobservable confounding characteristics.

The Statement itself contains information on projected retirement benefit levels if a retiree elects to receive benefits at the Early Eligibility Age (62), the Full Retirement Age (between 65

and 67, depending on birth cohort), and age 70. Furthermore, information on one's family's survivor benefits are included, as well as one's current disability insurance coverage status. To construct the benefit information, SSA uses each individual's earnings history up to the calendar year before the Statement's release. The SSA also includes expected future earnings up to the three ages listed on the Statement, assuming constant earnings and no inflation (or, equivalently, national average wage growth equivalent to average price growth, discounted to today's dollars).

Although the Statement should only increase knowledge of the existence of programs, its effect on expected benefits will be heterogeneous based on prior expectations. Essentially, the Statement provides individuals with projected information about their monthly retirement benefits and current information on potential disability benefits. Prior work has shown that the Statement led workers to more accurately predict their projected benefits (Mastrobuoni 2011) and that there is a sizable Social Security wealth effect on labor supply (Friedberg 2000; Liebman, Luttmer, and Sief 2009). We would therefore expect highly heterogeneous responses depending on prior expectations. In this paper, I test the degree to which expectations change, leaving future analyses to explore how the Statement's information subsequently changed behavior using additional ALP modules.

### 3. Data

To this end, I field a new survey in the American Life Panel (ALP) to study how expectations over own SSA benefits shift after Statement receipt, as well as how retirement savings and labor supply change as a result. The ALP is a nationally representative internet panel survey, initially begun in 2006. There are over 6,000 active participants currently. The greatest advantage of the ALP is that one can link responses across all survey modules a respondent has completed, as well as target a module sample based on those who filled out specific prior modules. I focus on

the over 2,000 respondents still active in the ALP who answered an extensive module on SSA

knowledge in 2010, providing a baseline level of detailed SSA program knowledge for each

respondent. Furthermore, in 2013 most of these same respondents completed a set of modules

corresponding to the non-experimental 2012 Health and Retirement Study (HRS) modules.

These modules include information on own expected Social Security benefits as well as

expectations over changes to Social Security benefits in general, providing pre-Statement

measures of these expectations.

The full content of the ALP module fielded for this study – Module Survey 479 (ms479)

– is available upon request.[3] There are four broad categories of information elicited from

respondents of the prior Social Security knowledge survey and HRS modules: receipt and

expectation of SS benefits, how these benefits change with different work and claim ages, recall

and use of *my Social Security* accounts and Social Security Statements, and general impressions

of communications from and about SS benefits. The analysis in this paper focuses on the effects

of the Statement on current expectations and deviations on prior expectations; however, the

possibility of linking to additional ALP modules that elicited individuals' work histories will

allow for future heterogeneous analyses of numerous outcomes by deviation from expectations.

In contrast to prior economic analyses of the Statement's impact, I ask respondents

whether they remember receiving a Statement; past audit studies have found over 66% of

sendees remember receiving a Statement (Smith and Couch 2014). The outcome measures for

this analysis are from the 2012 HRS modules fielded to ALP respondents in 2013, corresponding

to the following paraphrasing: do you expect to receive SSA benefits, at what age, and what type

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[3] Contact parmour@rand.org for the paper version of the survey.

of benefits; and what is the likelihood that Congress will make Social Security benefits less generous in the next 10 years.

Using these standardized HRS question outcomes allows for both strong internal comparisons across ALP modules, as well as external comparisons to past findings using the HRS itself. Additionally, the survey asks questions as to access to SSA knowledge more generally: e.g., have you registered for an online *my Social Security* account that allows you to observe your earnings history and projected benefit? Have you accessed this account in the past year? Have you received a Social Security Statement in the mail in the past year?

Finally, respondents are then asked for open ended comments. Although few respondents provide these comments, they provide qualitative evidence of the strength of some reactions. For example, these selected responses indicate how some individuals interact with the information provided by SSA:

"After SSA stopped sending the yearly statement I signed up online so I could view the information and create a PDF to save."

"I'm a widow so I began receiving benefits at the age of 60. This year someone reapplied for my benefits, not me, I received a letter from ss because my regular benefits were much lower than survivor benefits so that had to be addressed. I went to the local office to get this cleared up."

"I didn't ever use the site or telephone info or stop by the local office until I was already on the verge of retirement, so the info I got was more in line with finding out what my status was, not for use in planning future activities."

4. **Methodology and Results**

The specific research design is driven by the Statement's reintroduction: from FY 2000 to 2011, Statements were automatically mailed to individuals with an address available from the IRS. These Statements were sent out three full calendar months prior to recipients' birth month for every payroll tax payee on file every year, but due to budgetary reasons, SSA ceased

automatic mailings in March of 2011. However, these Statements represent a legal mandate, and SSA resumed their mailing in September of 2014, with two important changes: first, individuals with *my Social Security* accounts would receive reminder emails once a year in lieu of paper Statements; and second, individuals without *my Social Security* accounts would receive a paper Statement three months before every fifth birthday (e.g., 25, 30, 35, etc.). The crux of my research design is correspondingly twofold: the ALP survey elicited from individuals as to whether they report having a *my Social Security* account before they would have been sent a Statement ("Had *my Social Security* Account before Recent Statement" or simply "Had *my Social Security* Account"), and respondents are grouped according to how recently they have received a Statement since its reintroduction. The identifying variation in information provision is illustrated by the following thought experiment: compare two individuals, one who just turned 30 in late 2014, and hence will receive a Statement for the first time in almost 4 years, and another who just turned 31 in late 2014, and hence won't receive a Statement for another 4 years. These individuals have otherwise very similar demographics (observable and controllable) and face similar economic environments, but differing with regard to how recently they have received a Social Security Statement. This example applies more generally: I compare not just 30 vs. 31 year-olds, but the approximately 60% of those who have received a recent Statement between September 2014 and September 2017 and the 40% who have not, across the age distribution. Additionally, due to ALP participation, I observe pre-Statement SSA knowledge (see Greenwald et al. 2010 for a description of the full range of information about SSA elicited from ALP respondents in the corresponding module), both generally and specific to individuals' own expected SSA benefits. I then control for a range of demographic variables, baseline Social Security knowledge, and having a *my Social Security* account, and then isolate the separate effect

of Statement receipt on expectations and behavior. In general, I estimate the following Intention-to-Treat linear equation:

$$Outcome_{i,2017} = \alpha + \beta_{2014-2015}1(Statement_{i,2014-2015}) + \beta_{2016-2017}1(Statement_{i,2016-2017}) +$$
$$\Lambda * PriorKnowledge_{i,2010} + \Gamma X_{i,2013} + \gamma PriorMySSA_{i,2017} + \varepsilon_{i,2017} \quad (1)$$

with standard errors clustered at the age-specific level.[4] The covariates in $X$ include age, age squared (or age group, where indicated), race/ethnicity, sex, and education. Prior Knowledge refers to each of seven questions that separately enter the regression with independent effects, although I also estimate specifications with the summed score of correct answers, ranging from 0 to 7. The two $\beta$'s estimate the effect in 2017 of having been sent a Statement in either 2014/2015 or 2016/2017, that is, having been sent a Statement in the last two years or the two years previously. The control group is thus those who would not have received a Statement since early 2011 or 2010. Prior mySSA refers to having a *my Social Security* account before being sent a recent Statement, as reported by the respondent, and thus having a distinct information intervention (an annual email reminder to check his/her account). I also estimate specifications wherein I interact the knowledge score with Statement receipt to measure heterogeneous effects across the knowledge distribution. All analyses reported are weighted using the ALP's raking weights (see https://www.rand.org/labor/alp/panel/weighting.html for further information on the construction and use of these weights). Although the analyses included in this paper limit to ITT estimation, future analyses may include first stage estimates of the impact of the Statement on

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[4] Since the outcome measures in this analysis occur at a point in time – 2017 – age clustering is equivalent to clustering at the birth-year level.

expectations and the subsequent impact of changes in expectations on outcomes of interest by drawing upon additional ALP modules eliciting complete work histories and thus provide estimates of the information conveyed in the Statement.

I estimate separate effects for 2014/2015 sendees vs. 2016/2017 sendees for two reasons. First, exploratory analyses indicated that there were substantially heterogeneous responses by the year of being sent a Statement;[5] however, estimates for these groupings were relatively similar, and separately estimating effects and interaction effects for each year of receipt severely limited power, especially given that the survey was administered in October and September of 2017, and the Statement was reintroduced in September of 2014, so there are disproportionately fewer 2014 and 2017 recipients. Second, more recent Statement recipients were more likely to recall having received the Statement, as reported in Figure 2, indicating that the informational effect of the Statement may diminish over time and thus should be separately estimated.

### Descriptive Statistics

Before beginning this analysis, Tables 1 through 6 present descriptive statistics of demographics, prior SS knowledge, SS expectations, and SS expected benefit type. These statistics are presented not just by the 2017 measurement in the current ALP module – ms479 – but also by 2013 and early 2014 measurements from ALP respondents' completion of the corresponding Health and Retirement Study (HRS) modules.[6] Also, the 2017 statistics are broken down by whether an individual reports having signed up for a *my Social Security* account and whether an individual has or has not been sent a recent Statement. All statistics presented, with the exception of sample sizes, are weighted with the ALP raking weights.

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[5] These analyses are available upon request; they do not differ significantly from the estimates reported in this paper.
[6] The exact timing of finishing this 2013 survey varied, but all respondents in this analysis completed it before any would have received a reintroduced Statement.

**Table 1** presents demographics by access to Social Security information, namely, currently having a *my Social Security* account, and whether the respondent had recently been sent a Statement (i.e., sent a Statement since its reintroduction in 2014). Although some of the demographic characteristics appear different across how recently one was sent a Statement, specifically race, education, and income, these differences are not statistically significant. Those who were most recently sent a Statement (i.e., in 2016 or 2017) tend to be older; there is no clear explanation for this difference beyond intrinsic sampling variability.

More notably, the population that has elected to sign up for a *my Social Security* account is disproportionately older, indicating that although technological engagement is higher among younger cohorts, this generational effect is more than overcome by the importance of SS benefits for older cohorts. Online *my Social Security* account holders also are disproportionately male, as well as more likely to be white. Although they are more likely to be more highly educated, they have a lower average income, thus they may be more dependent on SS benefits, and hence more motivated to fully understand these benefits, going forward.

**Table 2** presents the distribution of correct answers for Greenwald et al. (2010)'s 7-point metric of SS knowledge. All of these variables are from the 2010 ALP survey module "What Do People Know" and hence measure knowledge at least four years before the reintroduction of the Statement; at that time, respondents would have been receiving annual Social Security Statements. As Greenwald et al. (2010) note, knowledge of the details of SS benefits is low on average. Fortunately for this analysis, there are no statistically significant differences across this knowledge by how recently one was sent a Statement, either item-by-item or as an overall sum. However, for those who have reported having a *my Social Security* account (the vast majority of whom report having signed up for such an account in the past five years), knowledge of program

details is systematically, and statistically significantly, higher. There is thus a substantial amount of selection into signing up for *my Social Security* accounts, since they are more knowledgeable about SS benefit details *before even having a my Social Security account*.

**Table 3**Table 3 provides statistics as to current SS benefit receipt, expectations of future SS benefit receipt among current non-beneficiaries, and perceived likelihood of Congressional action reducing the generosity of SS benefits, either overall or with respect to the respondent's own benefit, in the next 10 years. This Table provides these statistics from the 2013 ALP module in which respondents answered HRS modules, as well as from the current ms479 ALP survey module. It further splits the latter measurements by holding a *my Social Security* account and having recently been sent a Statement.

Although there are generally more SS recipients in the 2017 measures, this difference is entirely explained by the higher average age of this subsample; otherwise, there are not many notable differences, with the exception of the most recent Statement recipients being more optimistic as to the likelihood of Congress making SS less generous (i.e., they considered it more likely that Congress will continue to maintain the current level of benefit generosity). It is also worth noting that those with *my Social Security* accounts are much more likely to be SS beneficiaries, only partially explained by the higher average age of this subsample. These *my Social Security* account holders are also much less likely to expect Congress to make SS less generous in the near future. Among those who were recently sent a Statement versus those who were not, there is a statistically significant increase in the fraction that expects future SS benefits.

**Table 4** presents results over which types of benefits the weighted 53% of respondents in 2017 expected to receive in the future. Individuals were free to select multiple types of benefits; hence they can sum to greater than one. Of those expecting benefits, the vast majority anticipate

receiving SS retirement benefits. However, 9% expect to receive disability benefits, and another 9% expect to receive spousal benefits, with much smaller fractions expecting to receive survivors or dependent benefits, or unsure of which benefits they may receive. Given that the fraction of individuals who will receive survivors' benefits is substantially higher than 2%, there is clearly a lack of knowledge as to this benefit eligibility, the likelihood of eventual receipt, or whether these benefits are distinct from retirement benefits.

Among recent Statement sendees, those who were sent a Statement in 2014 or 2015 are substantially more likely to expect Social Security disability benefits, while those who were sent a Statement most recently, in 2016 or 2017, were much less likely to expect these disability benefits and more likely to expect retirement benefits. Although there are no other statistically significant or substantial bivariate differences in which type of benefits individual expect to receive based on having been sent a Statement recently, those who have a *my Social Security* account also display markedly different expectations. Namely, they are nearly twice as likely to expect to receive disability benefits, more likely to expect retirement benefits, and less likely to be unsure of which benefit type they will receive.

**Table 5** shows a simple breakdown of the reasons why respondents in the 2017 ALP survey do not expect to receive SS benefits, among those who, given their work-history, are currently fully insured. Although many are simply mistaken – they misunderstood the question and responded with a claim that they were "not old enough" to claim retirement benefits, despite being asked if they *ever* expected to receive Social Security benefits, or they claim they have not worked long enough, despite reporting a sufficient work history to be fully insured – nearly 15% of individuals report being in ineligible occupations, such as public-sector teachers. However, the dominant reason for not expecting to receive Social Security benefits is a fundamental lack of

belief in Social Security continuing to exist. Although this breakdown is just across 2017 ALP respondents, some of whose attitudes may have been affected by recent Statement receipt, it indicates that an important channel for expecting Social Security benefits is a doubt over the existence of the program itself.

All of these descriptive statistics suggest that those with *my Social Security* accounts are systematically distinct from the general population: they are more likely to be receiving SS benefits, more knowledgeable about SS, more confident in its future, more likely to expect to receive disability benefits, and are generally more educated. To that end, in multivariate regression below, I will control for those who report signing up for a *my Social Security* account before they would have been sent a recent Statement in order to account for these differences and the different information environment (annual email reminder vs. paper document), as well as to avoid conflating any effect of receiving a recent Statement on signing up for a *my Social Security* account.[7]

Further, there are some apparent differences across those recently sent a Statement – more likely to expect future benefits, more confident in SS's continued generosity - but they are varied, both by type of expectation and how recently one was sent a Statement. Although inference requires controlling for covariates to infer the effect of the Statement itself, before embarking on regression analyses, I first turn to what people report about their interaction with *my Social Security* accounts and Statements.

### *Memory of and Attitudes toward Social Security Information*

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[7] Excluding these individuals reduces the statistical power but does not substantially affect the point estimates shown.

**Table 6** and **Table 7**, as well as Figures 1 and 2, review how well individuals recall receiving Statements and what they found useful about them. **Table 6** first presents the weighted fraction of survey module 479 respondents who report receiving SS income, and thus would not have been recently sent a Statement. Among those not receiving SS income, over 70% report ever having received a Statement. Although a few of these individuals would not have been sent a Statement ever – a few are young enough not to have received a Statement before 2011 and have not been sent a recent Statement, some may not have filed taxes to have retrievable addresses, and some may simply have moved without having their mail forwarded – this rate of recall of these Intended-to-Treat with Statement receipt is even higher than prior estimates of approximately two-thirds.

The next row shows the fraction that would have been sent a Statement since 2014 or those who have a *my Social Security* account and thus would be reminded to check their account. Slightly less than 60% respondents had an informational reminder or Statement sent to them, while slightly over 40% have not. Nearly a quarter of individuals who are not receiving SS income report having a *my Social Security* account,[8] with 14% percent of individuals who would have been sent a recent Statement were not sent one due to holding such an account. Finally, of those who were sent a recent Statement, nearly a third does not recall having received one. This lack of recall may be due to having forgot receiving one, having moved, or not having a retrievable address to begin with.

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[8] Given that there are approximately 30 million *my Social Security* accounts, this fraction seems high, although among the internet-connected respondents, adult individuals not currently receiving SS income, this fraction may not be as much as an overestimate as initially appears. The question in ALP module 479 was intended to be particularly discriminating and not include individuals who just visited the SSA website; they were asked "Have you ever signed up for an online *my Social Security* account from the Social Security website? This account provides personalized benefit information and allows you to check your history of earnings. You would have had to provide your name and Social Security Number to create a user ID and password."

Figure 1 and Figure 2 show the rate of recall of receiving recent Statement (that is, a Statement since 2014) among those who were sent a Statement, given their birth year, working in an eligible occupation, having a sufficient work history from earnings histories elicited in prior ALP modules, and not having a *my Social Security* account. That is, I use as my information as possible to limit the sample to those who actually should have been sent a Statement. Within this population, just over two thirds – 67.8% – recall receiving such a recent Statement. This figure is remarkably consistent with prior audit studies and surveys of the first Statement's introduction in the mid- to late-1990s.

In contrast to these prior studies, the ALP module elicits recall across the entire age distribution, indicating a sharp age gradient. Less than half of under 40 sendees recall receipt, whereas over 90% of sendees over 60 recall receipt. Future research is required to disentangle the many possible mechanisms – less accurate recent addresses for younger workers, lower likelihood of opening or reading paper mail among younger workers, or simply greater attention paid to communications from SSA among older workers.

Figure 2 shows recall rates by the year in which respondents were sent a Statement. Rates of recall are high across these years, but in recent years, 2016 especially, recall is highest. Given this difference in recall rates by how recently respondents were sent a Statement, as well as exploratory analyses I conducted, I separately estimate effects among those sent a Statement in 2014/2015 from those sent a Statement in 2016/2017.

**Table 7** presents means regarding how useful respondents found the Social Security Statement and their *my Social Security* account (among those recalling receiving a Statement or signing up for an online account). The majority of individuals found these information sources useful, although those who had a *my Social Security* account found it a more useful resource than

Statement recipients found the Statement. However, the Statement was found to be more useful for retirement purposes, both in deciding when to retire and when to claim SS retirement benefits. Although retirement planning accounts for the vast majority of perceived usefulness, individuals' *my Social Security* accounts were reported to be more useful for non-retirement, and in particular, SS disability benefits.

With these results in hand – that individuals generally report high levels of Statement receipt, of take-up of *my Social Security* accounts, and of the usefulness of these informational resources – we next turn to regression estimates of the impact of the Statement's reintroduction on expectations of Social Security benefits.

***Causal Impact of the Statement's Reintroduction on Expectations, Savings, and Work***

**Tables 8, 9, and 10** test the effect of being sent a Statement since its 2014 reintroduction on expectations over one's own SS benefits, expectations about program dynamics and generosity in general by estimating variations of equation 1.

**Table 8** first presents linear probability model results of the impact of being sent a Statement since 2014 on one's expectations of ever receiving SS benefits in the future. Bivariate comparisons indicated that Statement receipt may be associated with a greater likelihood of expecting future benefits. Column 1, a weighted regression including just the Statement variables shows that there is a positive relationship, especially for those sent a Statement in 2016 or 2017. However, this relationship is only marginally significant. Including demographic controls reduces these standard errors and now the estimate for recent Statement sendees is statistically significant at the 5% level; these variables are available in most surveys and would lead to inference as to the Statement having an effect on expectations. Fortunately, ALP respondents to

the ms479 survey were asked about whether they had a *my Social Security* account and had previously responded to a survey eliciting general SS knowledge. Including these measures leads to a large increase in the expectation of receiving SS benefits of nearly 21 percentage points. This estimate is highly statistically significant. Although the point estimate for those sent a Statement in 2014 or 2015, it is not statistically significant.

There is clearly an advantage in including prior SS knowledge and whether an individual had a *my Social Security* account in estimating the Statement's average impact, both in terms of variation explained and the size of the estimate. Moreover, the prior SS knowledge measures allow for heterogeneous impacts, presented in column 4 as the interaction of the 0 to 7 score – the number of the 7 questions an individual answered correctly in 2010. Being more knowledgeable about SS increases the likelihood of expecting SS benefits directly by 5.5 percentage points for every point in the knowledge score; receiving a recent Statement further increases the likelihood of expecting benefits by 38.4 percentage points. However, this effect is reduced by 5.9 percentage points for every point in the knowledge score. In other words, if one previously knew very little about SS, the Statement is likely to greatly increase the likelihood of expecting benefits; the more knowledgeable such a person is before Statement receipt, the less of an impact of the Statement on expecting benefits. In fact, for those with a perfect knowledge score of 7, there is no statistically significant net impact of the Statement on SS benefit expectations.

Columns 5 and 6 limit the sample to those who, in a 2013 ALP module, reported that they did not expect to ever receive SS benefits. This restriction reduces the sample to only 188 respondents; however, these respondents are even more reactive to the Statement. An individual with a 2010 knowledge score of 0 and who did not expect to receive SS benefits in 2013 is now

52.9 percentage points more likely to expect benefits in 2017 if they recently were sent a Statement. This effect is marginally significant for those sent a Statement in 2014 or 2015, but the point estimate is 27.6 percentage points. Once again, among those recently sent a Statement, those with a perfect knowledge score showed no effect of the Statement.

From **Table 5**, the majority of individuals who do not expect to receive SS benefits are concerned about SS itself continuing to exist. Given the strong effect of the Statement on this expectation among those who previously did not expect benefits, it is natural to examine how the Statement affects the perceived likelihood of changes to SS itself.

**Table 9** presents the results from the best available measure: in prior modules and in the ms479 module, respondents are asked for the likelihood, on a scale of 0 to 100, of Congress changing Social Security to make it less generous in the next 10 years. This question is asked of the Social Security system for anyone, which I refer to as "overall," as well as of the respondent's own benefits;[9] for example, a 61-year-old may consider it very unlikely that his benefits will be reduced, while he may consider it very likely that benefits will be reduced for individuals currently in their 20s.

From Column 1, the effects of being sent a Statement in 2016/2017 or in 2014/2015 are relatively similar: a 10-12 percentage point reduction in the perceived likelihood that Congress will make Social Security less generous. It is unclear why there is this greater faith in the generosity of the program, since the Statement itself includes the following language directly the benefit estimates: "Your estimated benefits are based on current law. Congress has made changes to the law in the past and can do so at any time. The law governing benefit amounts may change

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[9] It is worth noting that there are a substantial number of "irrational" responses to these questions, in which respondents report a higher likelihood of Congress cutting their own benefit than cutting the program at all, calling into question the validity of respondents' interpretation of this latter question as independent or conditional and introducing additional variation in this variable.

because, by 2033, the payroll taxes collected will be enough to pay only about 75 percent of scheduled benefits." This effect does not appear to be mediated by prior knowledge, although it is slightly more pronounced among those who previously did not expect to receive SS benefits. The effect on expectations over Congress making one's own benefits less generous is smaller and less significant, although the caveat to individuals' interpretation of this question applies. Further research is required to understand how this communication from SSA appears to quell concerns about the continued generosity or existence of SS benefits. Regardless, recently being sent a Statement does consistently increase expected receipt and generosity of these benefits.

Finally, **Table 10** presents estimates of the effect of being sent a Statement on expecting a non-retirement type of SS benefit – disability or spousal – as well as the effect of the Statemnt on expected claiming age. Perhaps not surprisingly given the small rates of expecting non-retirement SS benefits, any effects are at best small, and rarely statistically significant. There is some evidence that being sent a Statement in 2014/2015 increases the likelihood of expecting disability benefits, mitigated by prior knowledge of the existence of SS disability benefits, but limited sample sizes severely limit inference.

However, there is a measurable effect of the Statement on claiming age. Although the overall average is not statistically significant, this average null estimate masks substantial heterogeneity: those who received a score of 0 were likely to claim almost 2 years younger if they recently were sent a Statement. But for every point higher they score, the Statement moves this estimate by just over half a year, such that someone scoring a perfect knowledge score of 7 in 2010 now reports that they are likely to claim 2 years older if recently sent a Statement. These effects diminish and are no longer statistically significant if sent a Statement two or more years ago.

These regression results indicate that the Statement increases the likelihood of receiving SS benefits, but there is strong heterogeneity by prior knowledge of the Social Security system, with the Statement's effect largest among the previously least informed. This effect is large in magnitude, and despite a limited sample size, statistically significant. It is even stronger among those who previously did not expect to receive SS benefits. But the Statement's effect diminishes over time: there is no statistically significant effect among those sent a Statement at least two years ago.

The Statement also appears to increase faith in the continued generosity in SS benefits: recent recipients report a substantially lower likelihood that Congress will make SS benefits less generous in the next 10 years, despite the Statement itself asserting that the projected benefits reported therein are subject to change.

Finally, being sent a Statement changes the age people expect to claim, but it does so, once again, with a high degree of heterogeneity by prior knowledge: those with little knowledge of SS benefits expect to claim benefits earlier, but with more knowledge, the later individuals plan to claim.

## 5. Discussion, Future Research, and Conclusion

The descriptive statistics, recall, usefulness, and regression results all point to the Statement's reintroduction having a measurable impact on individuals' expectations over future SS benefit receipt (increasing expectations of future receipt, shoring up confidence in continued program generosity, and changing expected claiming ages), and individuals find the information therein, as well as the *my Social Security* account, highly useful for retirement planning.

However, this analysis is the first step in using American Life Panel data in analyzing the impact of the Statement's 2014 reintroduction on individuals' expectations and behavior. Future analyses can take advantage of additional survey modules eliciting full earnings histories from respondents. Including these measures would finally allow Statement research to move past Intention-to-Treat analyses to modeling how retirement behavior changes as a function of expectations. Specifically, the heterogeneous impacts on expected claiming age speaks to the importance of prior knowledge and expectations; the theoretical impact of the Statement on savings and retirement behavior depends on how the information contained therein compares to prior expectations. For example, there is clearly a positive shock to the respondents who previously did not expect to ever receive SS benefits and knew little about the program: there is an over 50 percentage point increase in expecting SS benefits. Such a positive shock to perceived Social Security wealth – from zero to a positive amount – is likely to have an effect on retirement planning, as evidenced by changes in expected age of claiming. However, careful analysis of how the Statement compares to expected SS benefits is necessary beyond this extreme case. Regardless, the effects of the Statement on expectations degrades quickly over time: estimated impacts are generally statistically significant if an individual was sent a Statement in the last year and a half, but this significance dissipates for those sent a Statement beforehand.

This analysis has found that individuals greatly value the information contained in the Statement as well as access to *my Social Security* accounts, and that they actively use this information in constructing their own expectations. Not only does the Statement itself impact expectations, but its effects dissipate quickly, suggesting that both the content of the communication and its frequency are both policy levers for changing perceptions of the Social Security system. With the ongoing American Life Panel, future analyses may be able to uncover

which types of respondents are most sensitive to ongoing information outreach, and in what ways their behavior changes.

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## Figure 1: Percentage of ALP Respondent Sendees Who Remember Receiving a Recent Statement

| Category | Percentage |
|----------|-----------|
| Overall | 67.8% |
| Under 40 | 43.5% |
| 40-49 | 74.8% |
| 50-59 | 83.1% |
| Over 60 | 92.1% |
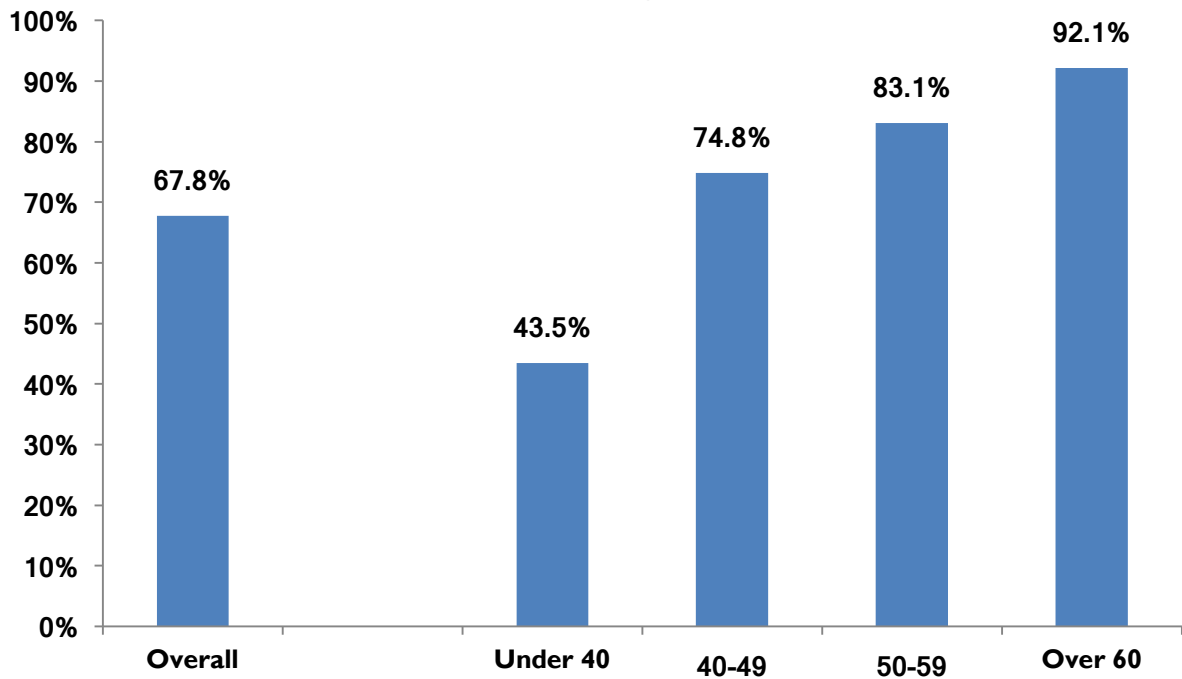
## Figure 2: Percentage of ALP Respondent Sendees Who Remember Receiving a Recent Statement

Year Sent Recent Statement

| Category | Percentage |
|----------|-----------|
| Overall | 67.8% |
| 2014 | 63.1% |
| 2015 | 63.0% |
| 2016 | 80.6% |
| 2017 | 68.7% |
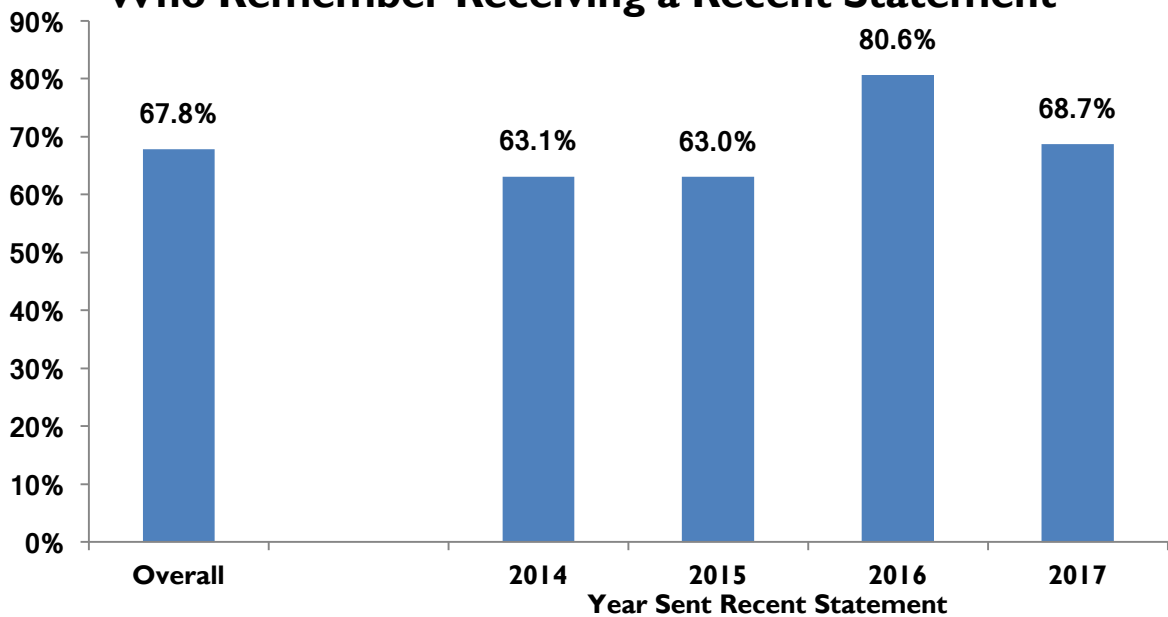
Note: Weighted calculations of individuals who would have been sent a Social Security Statement since 2014, due to prior work and not to having a *my Social Security* account by the year of sending, as well as due to their birthyear, who do not recall receiving a Statement in the past 5 years.

**Table 1: Demographic Characteristics by Social Security Information Exposure**

| | Overall | Has a my Social Security Account | Not Sent a Statement Since 2014 | Sent a Statement in 2014 or 2015 | Sent a Statement in 2016 or 2017 |
|---|---|---|---|---|---|
| Age | 51.29 | 54.82 | 51.67 | 47.44 | 52.34 |
| | (15.04) | (12.14) | (14.87) | (15.51) | (14.94) |
| Female | 0.52 | 0.41 | 0.57 | 0.52 | 0.47 |
| | (0.50) | (0.49) | (0.50) | (0.50) | (0.50) |
| White | 0.67 | 0.61 | 0.54 | 0.76 | 0.75 |
| | (0.47) | (0.49) | (0.50) | (0.43) | (0.43) |
| Black | 0.11 | 0.12 | 0.12 | 0.07 | 0.16 |
| | (0.32) | (0.32) | (0.33) | (0.26) | (0.37) |
| Other | 0.22 | 0.27 | 0.34 | 0.17 | 0.09 |
| | (0.42) | (0.44) | (0.47) | (0.37) | (0.28) |
| High School or Less | 0.41 | 0.34 | 0.46 | 0.32 | 0.50 |
| | (0.49) | (0.47) | (0.50) | (0.47) | (0.50) |
| Some College | 0.26 | 0.27 | 0.23 | 0.33 | 0.22 |
| | (0.44) | (0.44) | (0.42) | (0.47) | (0.42) |
| Bachelor Degree | 0.16 | 0.20 | 0.15 | 0.17 | 0.16 |
| | (0.37) | (0.40) | (0.36) | (0.37) | (0.37) |
| Graduate Degree | 0.16 | 0.20 | 0.16 | 0.18 | 0.11 |
| | (0.37) | (0.40) | (0.37) | (0.39) | (0.31) |
| Own Income | 65,736.91 | 67,332.60 | 71,433.95 | 57,800.23 | 63,516.64 |
| | (83,024.83) | (53,062.07) | (103,388.39) | (44,149.83) | (85,058.92) |
| | | | | | |
| Observations | 1,259 | 435 | 665 | 288 | 306 |

Note: Weighted averages of demographic and income measures in the 2017 ALP survey discussed in this paper. Standard deviations in parentheses.

**Table 2: Knowledge of Social Security Benefits in 2010**

| 2010 Correct Answer With Regard to: | Overall | Has a my Social Security Account | Not Sent a Statement Since 2014 | Sent a Statement in 2014 or 2015 | Sent a Statement in 2016 or 2017 |
|---|---|---|---|---|---|
| SS Benefits Based on Highest 35 Year Average | 0.20 | 0.26 | 0.17 | 0.18 | 0.24 |
| | (0.40) | (0.44) | (0.38) | (0.39) | (0.43) |
| SS Benefits Can Be Taxed | 0.60 | 0.69 | 0.61 | 0.63 | 0.56 |
| | (0.49) | (0.46) | (0.49) | (0.48) | (0.50) |
| SS Benefits Indexed to Inflation | 0.48 | 0.50 | 0.50 | 0.45 | 0.46 |
| | (0.50) | (0.50) | (0.50) | (0.50) | (0.50) |
| Claiming Age Affects SS Benefits | 0.61 | 0.71 | 0.58 | 0.58 | 0.64 |
| | (0.49) | (0.45) | (0.49) | (0.49) | (0.48) |
| Spouses Can Receive Benefits | 0.60 | 0.71 | 0.60 | 0.59 | 0.56 |
| | (0.49) | (0.46) | (0.49) | (0.49) | (0.50) |
| Can Collect at Different Time Age than Retirement | 0.60 | 0.70 | 0.62 | 0.49 | 0.62 |
| | (0.49) | (0.46) | (0.49) | (0.50) | (0.49) |
| Can Collect SS Benefits if Disabled | 0.64 | 0.75 | 0.63 | 0.59 | 0.66 |
| | (0.48) | (0.43) | (0.48) | (0.49) | (0.47) |
| **2010 Greenwald et al. Knowledge Score (0-7)** | 3.74 | 4.31 | 3.71 | 3.51 | 3.73 |
| | (2.45) | (2.31) | (2.45) | (2.42) | (2.49) |
| | | | | | |
| Observations | 1,259 | 435 | 665 | 288 | 306 |

Note: Weighted averages of SS knowledge from the 2010 ALP Module "What Do People Know." Standard deviations in parentheses.

**Table 3: Expectations of Social Security Benefits**

| | 2013/2014 Measures | 2017 Measures | 2017 - Has a my Social Security Account | 2017 - Not Sent a Statement Since 2014 | 2017 - Sent a Statement in 2014 or 2015 | 2017 - Sent a Statement in 2016 or 2017 |
|---|---|---|---|---|---|---|
| Currently Receiving SS Income | 0.21 | 0.29 | 0.39 | 0.28 | 0.21 | 0.35 |
| | (0.41) | (0.46) | (0.49) | (0.45) | (0.41) | (0.48) |
| | | | | | | |
| **If Not Currently Receiving SS Income** | | | | | | |
| Expects to Receive SS Income in the Future | 0.55 | 0.53 | 0.52 | 0.49 | 0.58 | 0.57 |
| | (0.50) | (0.50) | (0.50) | (0.50) | (0.50) | (0.50) |
| Age Expects to First Collect SS Income | 65.62 | 66.41 | 66.53 | 66.52 | 65.97 | 66.66 |
| | (4.43) | (3.45) | (3.20) | (3.14) | (3.62) | (3.78) |
| Expected Amount of Monthly SS Income | 1,430.94 | 1,533.45 | 1,684.61 | 1,569.16 | 1,509.17 | 1,457.29 |
| | (773.19) | (870.84) | (764.47) | (821.20) | (1,043.86) | (732.97) |
| | | | | | | |
| **In Next 10 Years, Likelihood (0-100) Congress will Make** | | | | | | |
| SS Less Generous Overall in Next 10 Years | 62.55 | 58.87 | 54.93 | 61.29 | 61.13 | 52.08 |
| | (31.56) | (28.35) | (28.65) | (28.22) | (27.82) | (28.25) |
| *Own* SS Entitlement Less Generous in Next 10 Years | 59.65 | 56.85 | 50.14 | 55.94 | 59.74 | 58.05 |
| | (31.55) | (31.16) | (29.50) | (32.12) | (30.11) | (29.51) |
| | | | | | | |
| Observations | 1,259 | 1,259 | 435 | 665 | 288 | 306 |

Note: Weighted averages of SS benefit receipt and SS expectations in the 2013/2014 ALP HRS survey modules and 2017 ALP survey discussed in this paper. Standard deviations in parentheses.

**Table 4: Expectations of Type of Future Social Security Benefit**

| | 2017 Measures | 2017 - Has a my Social Security Account | 2017 - Not Sent a Statement Since 2014 | 2017 - Sent a Statement in 2014 or 2015 | 2017 - Sent a Statement in 2016 or 2017 |
|---|---|---|---|---|---|
| **Among Those Expecting SS Benefits, Expected Benefit Type** | | | | | |
| Retirement | 0.91 | 0.96 | 0.94 | 0.82 | 0.94 |
| | (0.28) | (0.19) | (0.24) | (0.39) | (0.24) |
| Disability | 0.09 | 0.16 | 0.11 | 0.15 | 0.03 |
| | (0.29) | (0.37) | (0.31) | (0.36) | (0.16) |
| Spousal | 0.09 | 0.10 | 0.08 | 0.10 | 0.10 |
| | (0.29) | (0.30) | (0.27) | (0.30) | (0.30) |
| Survivors | 0.02 | 0.01 | 0.02 | 0.03 | 0.02 |
| | (0.15) | (0.11) | (0.13) | (0.17) | (0.14) |
| Dependent | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| | (0.06) | (0.00) | (0.07) | (0.09) | (0.06) |
| Don't Know | 0.04 | 0.02 | 0.04 | 0.05 | 0.05 |
| | (0.20) | (0.13) | (0.20) | (0.22) | (0.22) |
| | | | | | |
| Observations | 626 | 222 | 317 | 152 | 157 |

Note: Weighted averages of which SS benefits individuals expect among those expecting SS benefits in the 2017 ALP survey discussed in this paper. Standard deviations in parentheses.

**Table 5: Reasons Why Respondents Do Not Expect to Receive Social Security Benefits**

|  | Count | Weighted Percentage |
|---|---|---|
| Non-Beneficiaries Who Do Not Expect to Receive SS Benefits | 116 | |
| **Of Those Not Expecting, Reason Why:** | | |
| Misunderstood | 8 | 10.1% |
| Won't Have Worked Enough | 24 | 26.9% |
| Ineligible Occupation | 34 | 14.7% |
| Won't Live Long Enough | 4 | 1.0% |
| Don't Think Social Security Will Be Around | 58 | 53.4% |

Note: Counts and weighted percentages of reasons why individuals who do not expect to receive SS benefits in the 2017 ALP survey discussed in this paper.

**Table 6: Recall of Social Security Statement and my Social Security Accounts**

|  | Weighted Average | N |
|---|---|---|
| Currently Receiving SS Income | 0.29 | 1259 |
| | | |
| **Among Those Not Receiving SS Income** | | |
| Remember Ever Receiving Statement | 0.71 | 741 |
| Sent Statement/Reminder Since 2014 | 0.58 | 741 |
| Has a my Social Security Account | 0.24 | 741 |
| Not Sent a Statement Due to my Social Security Account | 0.14 | 459 |
| Don't Remember Recent Statement | 0.32 | 372 |

Note: weighted average of those reporting any SS income and Statement receipt and my Social Security account status among those who did not. Individuals who sign up for a my Social Security account are sent annual reminder emails to check their account. If an individual has signed up for a my Social Security account, they are not sent a Statement. The last row is the fraction of those who would have been sent a Statement (i.e., reached a fifth birthday, such as 30, 35, or 40, and did not report signing up for a my Social Security account prior to the year a Statement would be sent), but did not report receiving a Statement in the past five years.

**Table 7: Usefulness of Social Security Information**

|  | Social Security Statement | my Social Security Account |
|---|---|---|
| Found Useful For Retirement Planning or SS Claiming | 0.61 | 0.74 |
| | | |
| **Among Those Who Found it Useful** | | |
| Planning When to Retire | 0.67 | 0.60 |
| Planning When to Claim SS Retirement | 0.64 | 0.62 |
| Deciding Whether to Claim SS Disability | 0.12 | 0.17 |
| Deciding Whether to Claim Other SS Benefits | 0.12 | 0.14 |

Note: weighted averages among those reporting ever receiving a Social Security Statement or report having signed up for a my Social Security account.

**Table 8: Linear Probability Model Estimates of Being Sent a Statement on Expectation of Receiving Social Security Benefits, by Prior Knowledge and Expectations**

| | Ever Expect to Receive Social Security Benefits | | | | | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Sent Statement 2016/2017 | 0.177* | 0.167** | 0.207*** | 0.384*** | 0.315** | 0.529*** |
| | (0.0981) | (0.0623) | (0.0738) | (0.107) | (0.143) | (0.152) |
| Sent Statement 2014/2015 | 0.0421 | 0.0765 | 0.0874 | 0.187 | 0.211* | 0.276* |
| | (0.110) | (0.0721) | (0.0792) | (0.133) | (0.117) | (0.158) |
| | | | | | | |
| 2010 Greenwald et al. 0-7 Knowledge Score | | | | 0.0553*** | | 0.0705*** |
| | | | | (0.0174) | | (0.0223) |
| Knowledge Score X 2016/2017 Statement | | | | -0.0591*** | | -0.0821** |
| | | | | (0.0214) | | (0.0368) |
| Knowledge Score X 2014/2015 Statement | | | | -0.0287 | | 0.0016 |
| | | | | (0.0258) | | (0.0366) |
| | | | | | | |
| Demographic Controls | No | Yes | Yes | Yes | Yes | Yes |
| Prior Knowledge Controls | No | No | Yes | No | Yes | No |
| my Social Security Account Control | No | No | Yes | Yes | Yes | Yes |
| | | | | | | |
| Sample | SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries, In 2013 Did Not Expect SS Benefits | SS Non-Beneficiaries, In 2013 Did Not Expect SS Benefits |
| | | | | | | |
| Observations | 708 | 708 | 707 | 707 | 188 | 188 |
| R-squared | 0.029 | 0.216 | 0.277 | 0.283 | 0.358 | 0.390 |

Note: Weighted linear probability model, where dependent variable is whether 2017 ALP respondent expects to receive Social Security benefits in the future. Sample limited to respondents who do not report receiving Social Security benefits. Columns (5) and (6) further limit sample to those who reported not expecting Social Security benefits in 2013 ALP survey. Robust standard errors in parentheses, clustered at age level. Demographics include age, age squared, sex, race/ethnicity, and educational attainment. Prior knowledge controls include a dummy variable for the seven knowledge questions from Greenwald et al. (2010) ALP module. mySS control is whether an individual had an online my Social Security account prior to Statement's reintroduction. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

**Table 9: OLS Estimates of Being Sent a Statement on Expected Likelihood of Social Security Benefits Becoming Less Generous, by Prior Knowledge and Expectations**

| | Likelihood (0-100) That Congress will Make Social Security Less Generous in Next 10 Years | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Overall Benefits Less Generous | | | | Your Own Benefits Less Generous | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Sent Statement 2016/2017 | -11.94*** | -11.13* | -13.94*** | -13.58* | -5.803 | -1.298 | -12.82** | -4.695 |
| | (3.381) | (5.829) | (4.455) | (7.369) | (3.719) | (6.032) | (5.547) | (8.498) |
| Sent Statement 2014/2015 | -9.818** | -12.89 | -10.70 | -8.965 | -5.250 | -7.172 | -10.15* | -5.007 |
| | (4.165) | (9.745) | (7.380) | (12.87) | (4.104) | (7.595) | (5.359) | (8.445) |
| | | | | | | | | |
| 2010 Greenwald et al. 0-7 Knowledge Score | | -1.180 | | -0.204 | | -1.619 | | -0.0334 |
| | | (0.986) | | (1.383) | | (1.083) | | (1.289) |
| Knowledge Score X 2016/2017 Statement | | 0.168 | | 0.117 | | -1.239 | | -2.287 |
| | | (1.295) | | (1.969) | | (1.595) | | (2.014) |
| Knowledge Score X 2014/2015 Statement | | 0.571 | | -2.538 | | 0.358 | | -3.921* |
| | | (2.070) | | (2.952) | | (1.741) | | (2.163) |
| | | | | | | | | |
| Demographic Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Prior Knowledge Controls | Yes | No | Yes | No | Yes | No | Yes | No |
| my Social Security Account Control | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | | | | | | | | |
| Sample | SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries, In 2013 Did Not Expect SS Benefits | SS Non-Beneficiaries, In 2013 Did Not Expect SS Benefits | SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries, In 2013 Did Not Expect SS Benefits | SS Non-Beneficiaries, In 2013 Did Not Expect SS Benefits |
| Observations | 670 | 670 | 176 | 176 | 670 | 670 | 176 | 176 |
| R-squared | 0.167 | 0.130 | 0.318 | 0.251 | 0.241 | 0.219 | 0.397 | 0.322 |

Note: Weighted OLS, where dependent variable is expected likelihood of Congress making Social Security benefits less generous, by overall benefits or own personal benefits made less generous. Sample limited to respondents who do not report receiving Social Security benefits. Robust standard errors in parentheses, clustered at age level. Demographics include age, age squared, sex, race/ethnicity, and educational attainment. Prior knowledge controls include a dummy variable for the seven knowledge questions from Greenwald et al. (2010) ALP module. mySS control is whether an individual had an online my Social Security account prior to Statement's reintroduction. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

**Table 10: OLS and Linear Probability Model Estimates of Being Sent a Statement on Type of Benefit Expectations, by Prior Knowledge and Expectations**

| | Expects Disability Benefits | | | Expects Spousal Benefits | | | Expected Claiming Age | |
|---|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Sent Statement 2016/2017 | 0.0078 | -0.0168 | 0.0047 | 0.0254 | 0.0210 | 0.0042 | 0.108 | -1.889*** |
| | (0.0315) | (0.0716) | (0.0392) | (0.0640) | (0.0605) | (0.0682) | (0.628) | (0.603) |
| Sent Statement 2014/2015 | 0.0917** | 0.143 | 0.144* | 0.0627 | 0.199 | 0.218 | -0.482 | -1.647 |
| | (0.0429) | (0.0896) | (0.0836) | (0.0530) | (0.121) | (0.132) | (0.740) | (1.062) |
| 2010 Greenwald et al. 0-7 Knowledge Score | | 0.0160 | | | -0.0085 | | | -0.0004 |
| | | (0.0116) | | | (0.0120) | | | (0.133) |
| Knowledge Score X 2016/2017 Statement | | 0.0079 | | | 0.0078 | | | 0.578*** |
| | | (0.0169) | | | (0.0118) | | | (0.209) |
| Knowledge Score X 2014/2015 Statement | | -0.0073 | | | -0.0364 | | | 0.299 |
| | | (0.0208) | | | (0.0245) | | | (0.193) |
| Knew of SS Disability X 2016/2017 Statement | | | 0.0464 | | | | | |
| | | | (0.126) | | | | | |
| Knew of SS Disability X 2014/2015 Statement | | | -0.222 | | | | | |
| | | | (0.152) | | | | | |
| Knew of SS Spousal X 2016/2017 Statement | | | | | | -0.242 | | |
| | | | | | | (0.151) | | |
| Knew of SS Spousal X 2014/2015 Statement | | | | | | -0.0567 | | |
| | | | | | | (0.110) | | |
| Demographic Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Prior Knowledge Controls | Yes | No | Yes | Yes | No | Yes | Yes | No |
| my Social Security Account Control | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Sample | SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries | Married, SS Non-Beneficiaries | Married, SS Non-Beneficiaries | Married, SS Non-Beneficiaries | SS Non-Beneficiaries | SS Non-Beneficiaries |
| Observations | 625 | 625 | 625 | 403 | 403 | 403 | 612 | 612 |
| R-squared | 0.292 | 0.238 | 0.381 | 0.100 | 0.099 | 0.147 | 0.142 | 0.135 |

Note: Weighted OLS or weighted linear probability model. Sample limited to respondents who do not report receiving Social Security benefits. Robust standard errors in parentheses, clustered at age level. Demographics include age, age squared, sex, race/ethnicity, and educational attainment. Prior knowledge controls include a dummy variable for the seven knowledge questions from Greenwald et al. (2010) ALP module. mySS control is whether an individual had an online my Social Security account prior to Statement's reintroduction. *** $p<0.01$, ** $p<0.05$, * $p<0.1$