

# DO SOCIAL SECURITY STATEMENTS AFFECT KNOWLEDGE AND BEHAVIOR?

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## Introduction

Deciding when to retire and claim Social Security benefits is one of the most important financial decisions that workers face. Therefore, ensuring that they have easy access to clear and timely information about their benefit options is a key goal for policymakers. In 1995, the Social Security Administration introduced the “Statement,” a record of past earnings and a summary of estimated benefits at selected claiming ages that is designed to help workers plan for retirement.<sup>1</sup> The Statement is now mailed annually to all workers age 25 and over.

While the Statement has the potential to be a very valuable tool, little research has been done on its impact. A Gallup survey revealed that individuals who had received a Statement had a significant increase in their understanding of basic Social Security features.<sup>2</sup> The most recent U.S. Government Accountability Office report on the Statement found that 66 percent of workers remember receiving a Statement and 90 percent of these workers say that they remember the amount of estimated Social Security benefits.<sup>3</sup> These findings suggest that the Statement might improve knowledge, but provide no information about whether it changes behavior. Both topics are the subject of this *brief*.

This *brief* is organized as follows. The first section explains the data and methodology used in the analysis. The second and third sections present the findings on how the Statement impacts knowledge and behavior, respectively. The final section concludes that the Statement does increase knowledge for individuals who were not inclined to seek the information on their own, but the Statement does not appear to change behavior.

## Data and Methodology

To analyze the effects of the Statement, this study uses the 1992-2000 waves from the *Health and Retirement Study* (HRS), a longitudinal, biennial, and nationally representative survey of older Americans that began in 1992.<sup>4</sup> The HRS includes a variety of questions about households’ financial situation, including their retirement plans and whether they have claimed Social Security benefits. The analysis summarized in this *brief* is restricted to workers between ages 55 and 70.

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A standard experimental technique is to compare individuals who receive a treatment, such as information, to those who do not. In this case, it was possible to “create” such a design by separating out HRS households who had received a Statement from those who had not. The Statement mailings were phased in over a period of several years based on age (see Table 1), so creating the sample used in this study required information on the Statement’s mailing schedule (which was based on the federal fiscal year calendar), the birthdates of HRS households, and the date of each household’s HRS interview.

With this information, it is possible to create “treatment” and “control” groups for two types of comparisons. The first comparison is of workers of the same age who were born in different years. For example, 60-year-olds in the 1992 HRS sample did not receive a Statement, while many 60-year-olds in the 1994 HRS did receive one. The second comparison is of individuals born in the same year. For example, when the initial Statements were mailed, some 60-year-old workers born in 1934 received a Statement while others did not, depending on whether their birthday was before or after October 1 (the start of the federal fiscal year).<sup>5</sup> The final sample involves age/year of birth combinations where 56 percent of individuals had received a Statement and 44 percent had not.

TABLE 1. SOCIAL SECURITY STATEMENT IMPLEMENTATION SCHEDULE

Fiscal year	Number of statements sent (millions)	Recipient age group
1995	7.0	60+
1996	5.5	58-60
1997	12.4	53-58
1998	20.7	47-53
1999	26.6	40-47
2000	134.7	25+
2001	135.6	25+


Source: Couch and Smith (2010).

### *The Statement’s Treatment*

The Statement’s purpose is to make it easier for workers to obtain information about their Social Security benefit options, which should help them make better

retirement choices. Figure 1 shows a sample of the information contained in the Statement. Before the Statement was introduced, workers could ask SSA to compute their expected benefits, a process that usually took four to six weeks. Thus, a worker incurred some cost to obtain the information – he had to find out that it was possible to obtain the estimate from the SSA, make the contact, and then wait a month or more to receive the response. In contrast, the Statement automatically delivers this information directly to the worker’s mailbox every year.

FIGURE 1. EXCERPT FROM A SAMPLE SOCIAL SECURITY STATEMENT, CIRCA 1995-2000

 Your Estimated Benefits*	
You have earned enough credits to qualify for benefits. At your current earnings rate, if you stop working and start receiving benefits...	
At age 62, your payment would be about...	\$882/month
If you continue working until your full retirement age (67 years), your payment would be about...	\$1,278/month
At age 70, your payment would be about...	\$1,594/month
* 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 because, by 2042, the payroll taxes collected will be enough to pay out about 73 percent of scheduled benefits.	

Source: Mastrobuoni (2011 forthcoming).

According to the HRS, before the Statements started circulating, around 50 percent of households would contact the SSA by age 62.<sup>6</sup> The HRS includes a question on whether respondents can provide an estimate of their Social Security benefits: “if you start collecting Social Security benefits [at your expected claiming age], about how much do you expect the payments to be in today’s dollars?” It turns out that contacting the SSA had an enormous effect on the likelihood of providing a benefit estimate, almost doubling the probability, from 46 to 88 percent. Workers who *did not* contact the SSA tended to be younger, poorer, have less than a high school degree, poor health, and a shorter planning horizon.<sup>7</sup> The hypothesis is, then, that less well-informed groups would have the most to gain from receiving the Statement.

## Statement’s Effect on Knowledge

As predicted, the results of the study show that – for the entire sample – the Statement increases the probability of reporting a benefit estimate by 4.5 percentage points.<sup>8</sup> A separate equation shows that the effect is much larger – a full 10 percentage points – for those who had not previously contacted the SSA.

One hypothesis is that the effectiveness of the Statement may vary by the age of the recipient. For example, someone approaching retirement may be more likely to pay attention to the Statement and absorb the information than a younger individual. Therefore, the study next examined whether the age of the individual receiving the Statement affected the probability of reporting a benefit estimate. For this analysis, the sample is split into workers who had previously contacted the SSA and those who had not (see Table 2).

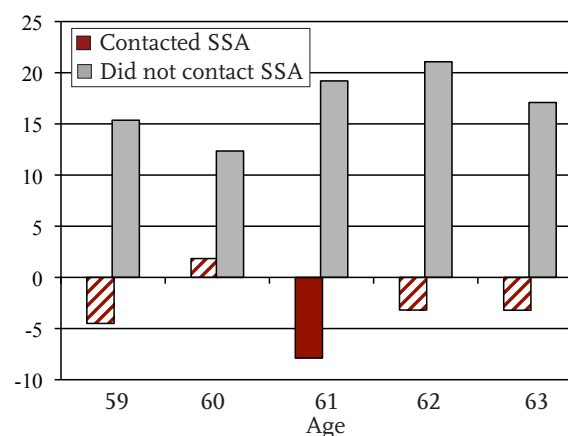
TABLE 2. SAMPLING FRAME FOR EXAMINING EFFECT OF STATEMENT ON PROBABILITY OF REPORTING A BENEFIT ESTIMATE, BY AGE

<b>Group A</b> Contacted SSA, Pre-Statement	<b>Group B</b> Did Not Contact SSA, Pre-Statement
<b>Group C</b> Contacted SSA, Post-Statement	<b>Group D</b> Did Not Contact SSA, Post-Statement

Source: Author’s illustration.

In the pre-Statement period, those who contacted the SSA (Group A) show a clear increase in the probability of reporting an estimate as they approach their expected retirement age. Those who did not contact the SSA (Group B) exhibit no such pattern in the pre-Statement period. However, in the post-Statement period (shown in Figure 2), the pattern is reversed: respondents who had previously contacted the SSA (Group C) show no significant difference while those who did not contact the SSA (Group D) show a clear improvement around the expected retirement age. Beginning at age 59, the Statement increases the fraction of workers who are able to provide an estimate by up to 20 percentage points; and these effects are highly statistically significant.<sup>9</sup> In relative terms, the effect around the expected retirement age increases the fraction of workers who are able to provide a benefit estimate by almost one-half.<sup>10</sup>

FIGURE 2. IMPACT OF STATEMENT ON PROBABILITY OF PROVIDING A BENEFIT ESTIMATE, WORKERS AGE 59-63, PERCENTAGE POINT CHANGE



Note: Solid bars are statistically significant; striped bars are not statistically significant.

Source: Mastrobuoni (2011 forthcoming).

The study also analyzed whether the Statement improves the accuracy of benefit estimates for those providing an estimate. In the pre-Statement period, the errors in benefit estimates for workers who did not contact the SSA (Group B) are much larger than for those who did contact the SSA (Group A). Consistent with expectations, the Statement appears to have improved the estimates for workers who did not contact the SSA (Group D), bringing the accuracy of their estimates in line with those of the workers who did contact the SSA (Group C).

The above analysis suggests that the Statement helps some workers become more knowledgeable about their Social Security benefits. Obtaining information seems to be costly. Therefore, directly providing workers with information reduces the cost and has the predictable effect of improving workers’ knowledge. The next section considers whether the additional knowledge about benefits translates into changes in retirement behavior.

## Statement’s Effect on Retirement Behavior

The second question is the extent to which increased knowledge about Social Security affects participants’ retirement plans. To answer that question, the study

builds on the extensive literature using Social Security “wealth.” Social Security wealth (SSW) equals the present discounted value of future Social Security benefits. The accrual (ACC) from working an additional year is then:

$$\text{ACC} = \text{SSW}(a+1) - \text{SSW}(a)$$

These accruals from postponing retirement vary by age and even within age due to differences in earnings histories, current earnings, and Social Security rules. As noted above, the analysis distinguishes between HRS respondents who had received a Statement at the time of their interview and those who had not. To estimate the impact of the Statement on retirement involves estimating an equation in which the benefit accrual (ACC) appears both by itself and then interacted with having received the Statement:

$$\text{Probability of being retired} = a_0\text{ACC}_i + a_1\text{ACC}_i \times \text{Statement} + b \text{ (other factors that could affect retirement) } + \text{error}$$

The exercise involved five different measures of Social Security accruals (ACC): 1) the ratio of initial benefits retiring this year compared to initial benefits retiring next year (which is derived directly from the Statement); 2) the percentage increase in SSW from retiring one year later; 3) the dollar increase in SSW from retiring one year later; 4) the percentage increase in SSW, after-tax; and 5) the peak value, measured as the difference between the maximum SSW and the current SSW. While all these accrual measures appear to affect the probability of retiring, the coefficients of the interactive term ( $a_1$ ) were always close to zero, meaning that people reacted to the incentives in the same way before and after receiving the Statement.

In short, it appears that the Statement does not improve individuals’ responsiveness to retirement incentives. This result could mean that people are behaving optimally before they receive the Statement or that the benefits they gain from reading the Statement are relatively small. Further research in this area is needed.

## Conclusion

Planning for retirement is a challenge for many workers, and accessible information about their options is of great importance. The Statement is designed to provide such information and, due to its vast reach, has enormous potential as a communications vehicle. This study finds that the Statement does increase knowledge – workers receiving a Statement are more likely to provide a benefit estimate, and their estimates tend to be more accurate. This improvement is concentrated among those workers who did not previously contact the SSA on their own.

In contrast, the analysis finds no impact of the Statement on retirement behavior. This result might mean either that workers are already behaving optimally or the information in the Statement is not sufficient to improve their retirement behavior. In any case, the Statement might still improve workers’ retirement planning if they become less likely to be surprised by the amount of their benefits. For example, if workers learned that their Social Security benefits would be less than anticipated, they might not change when they plan to retire, but they could decide to save more in advance.

## Endnotes

- 1 The mailing of Social Security Statements was required by legislation passed in 1989 (Public Law 101-239).
- 2 Gallup Inc. (1999-2000).
- 3 U.S. Government Accountability Office (2005).
- 4 For an overview of the HRS, see Juster and Suzman (1995).
- 5 Workers usually received their Statement one month before their birthdays. In 2000, SSA started sending the Statement three months before the worker's birthday.
- 6 Workers could either call an 800 number or visit a local SSA office.
- 7 For the full results of this analysis and others described in this *brief*, see Mastrobuoni (2011 forthcoming).
- 8 This result controlled for year of HRS interview, wealth, and health. The 4.5 percentage-point increase can be interpreted as an average treatment effect. Some workers who didn't contact the SSA before receiving the Statement might have contacted the agency later, showing an improvement that is now attributed to the Statement. Adjusting for this bias reduces the impact somewhat – to 3.1 percentage points.
- 9 The exception is age 64, for which the sample size is very small.
- 10 The effect at earlier ages is small. Workers in their 40s and early 50s are only 3-6 percentage points more likely to provide an estimate as a consequence of receiving the Statement. This finding casts some doubt on the utility of sending the Statement to young workers, who seem to show little interest in this information.

## References

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### About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

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