The Role of Information for Retirement Behavior: Evidence based on the Stepwise Introduction of the Social Security Statement

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1 Introduction

Many older workers know little about their retirement benefits and retirement incentives casting doubts on economists’ assumptions regarding full information and the perfect rationality of retirement and saving behavior. Ignorance, however, might be perfectly rational if obtaining information is more costly than what it is worth. The stepwise introduction of the Social Security Statement, a letter sent to inform workers about the amount of their future retirement benefits, generates exogenous variation in the cost of getting informed that can be exploited to improve our understanding of how access to information changes knowledge of Social Security benefits. The SSA was required to mail the annual Statement—then named the Personal Earnings and Benefit Estimate Statement—to all workers age 60 and older. In later years it has been sent according to the following (fiscal year, age) combinations: (1996, 58+), (1997, 53+), (1998, 47+), (1999, 44+), (2000, 25+). Workers usually receive their Statement one month before their birthdays. In fact, this seems to be a good timing since 65 percent of all workers claim immediately after their birthdays (15 percent of the claims occur in January and the remaining workers tend to claim uniformly across the year).

The way workers respond to that knowledge is also of interest. Despite the previous availability of information through a toll-free phone call, the Statement has a significant impact on workers’ knowledge about their benefits. Workers who have not contacted the Social Security Administration (SSA) before, they represent approximately half of the HRS sample aged 55 to 64, are 20 percentage points (50 percent) more likely to provide a Social Security benefit estimate after they receive the Statement. Despite these being very large effects, if workers were rational this additional information would not change workers’ retirement or saving behavior. On the other hand, some workers might just be procrastinating: the cost of becoming informed and learning when best to retire and how much to save are borne upfront, while the corresponding utility gains are received only sometime later. Workers with high discount rates should, therefore, get informed later. For these workers, the Social Security Statement might actually induce changes in behavior.

This paper models information acquisition and retirement exploiting the information on expectations available in the Health and Retirement survey together with the stepwise introduction of the Social Security Statements. I use the HRS data matched with SSA records. The first two waves of the HRS contain information on whether the respondent has contacted the SSA to request a benefit estimate, which is crucial given that, not surprisingly, the Statement affects only those workers who have not contacted SSA before. The administrative records are used to compute retirement incentives (see, for example, Coile and Gruber, 2007, Panis et al., 2002). Changes in workers’ responsiveness to these incentives upon introducing the Social Security Statements represent a test for rational and forward-looking behavior.

Standard economic theory assumes that all agents base their retirement de-
cisions on forward-looking variables, such as the present discounted value of the agents’ Social Security benefits (the income effect) and its changes due to working an additional year (the substitution effect). Hurd (1990) and Krueger and Meyer (2002) provide a comprehensive survey of studies that have tried to measure these effects. These studies typically assume implicitly that workers know their future benefits as a function of their retirement age and are able to compare future streams of benefits. Empirical evidence, however, suggests that these are strong assumptions. When asked, only around 50 percent provide an estimate of their expected Social Security benefits (Bernheim and Levin, 1989, Gustman and Steinmeier, 2001). Gustman and Steinmeier (2001) show that less than 30 percent of respondents are able to estimate their future benefits to within about $1,500 per year. Moreover, Lusardi and Mitchell (2006) show that financial illiteracy is widespread among older Americans. Only half of the age 50+ respondents can correctly answer two simple questions regarding interest compounding and inflation. Is it then reasonable to assume those same respondents are able to compute their retirement incentives, which typically involve relatively complex calculations?

Despite very little knowledge about retirement incentives, the fact that people seem to respond to incentives when making their retirement decisions has been called by Chan and Stevens (2008) an “important empirical puzzle in the retirement literature.” Gustman and Steinmeier (2001) try to test the robustness of retirement models when a measure of knowledge about benefits is added to the retirement regression. They find that knowledge does not affect workers’ responsiveness to changes in the present value of the stream of Social Security benefits from postponing retirement, which are also called accruals. Chan and Stevens (2008) go one step further and analyze how the interaction of knowledge and accruals affects workers’ decisions. The authors find that responsiveness to pension incentives is entirely driven by the 20 percent of workers who perceive them correctly. The validity of using measures of knowledge in the regressions, however, is questionable as knowledge is endogenous: workers gather information when they approach their expected retirement age. Knowledge acquisition needs to be modeled.

I find that workers surveyed in the HRS who did not contact the SSA to learn about their future Social Security benefits are less likely to provide a benefit estimate, and when they do provide an estimate it tends to be quite noisy. This is not surprising. The SSA’s benefit formula is complicated, and workers would have a hard time trying to calculate their expected benefits without the SSA’s

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1In our data that focuses on workers aged 55 and above, two-thirds of workers are able to provide an estimate.
2They do not find any link between knowledge and Social Security accruals, which they consider a result of data limitations. A limitation is that they can measure if workers correctly perceive their Social Security benefits, but not if they correctly perceive their Social Security accruals.
3Gustman and Steinmeier (2001) had already shown that having contacted the SSA is the strongest predictor for being knowledgeable about Social Security benefits.
help. This behavior might, therefore, be completely rational. In order to value the information, workers need to be able to use the information and need to be free to choose their retirement age. It is known that workers who face health problems or are liquidity constraints tend to retire as soon as possible. Consistent with this, I find that wealthier and healthier workers are significantly more likely to get informed. A more puzzling finding is that even after controlling for labor market experience, occupation, wealth, and health, black workers and workers with low levels of education are significantly less likely to know their benefits. One possible explanation for this persistent gap is that these workers are also more likely to be financially illiterate Lusardi and Mitchell (2006).

Regarding my “experiment,” I find the additional information about Social Security incentives provided by the Statement does not influence retirement or claiming behavior. I look at changes in workers’ expectations about their claiming age, and I find no evidence that receiving the first Statement generally induces some workers to update their expectations. Social Security claiming patterns also show no change upon the introduction of the Statement. Then I turn to study how this additional information affects workers’ retirement behavior. Given that the Statement reduces the cost of information the model predicts that workers who were at the margin of getting informed make better retirement decisions. I measure optimality based on the correlation between the retirement decision and the Social Security incentives. Differences between the perceived Social Security incentives and the true ones generate measurement error bias. The introduction of the Statement doesn’t reduce this bias. While this might at first seem disappointing given the 56 cents per Statement spent by the SSA, it either means that workers are already behaving optimally and that the marginal workers has only very small additional benefits from getting informed, or that the information contained in Statement is not sufficient to improve workers’ retirement behavior. Providing forecasted benefits at all 9 possible claiming ages may be additional information that workers might need. Moreover, the Statement provides workers with information about their benefits, but it does not calculate a worker’s SSW. If this weakens the beneficial effect of the Statement, a possible addition to the Statement could be a table that assists workers in calculating their SSW. Since the SSA cannot possibly use individual–specific mortality rates, one easy way to circumvent this problem would be to construct a two-way table that contains “suggested” retirement ages as a function of a worker’s own and his spouse’s life–expectancy.
References


