

How Do Subjective Longevity Expectations Influence Retirement Plans?

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The rapid increase in life expectancy over the past several decades – remaining life expectancy for the 65-year-old male cohort has increased from 14.7 years in 1980 to 18.7 years in 2012 (U.S. Social Security Administration, 2012) – has changed the calculus behind Americans’ retirement decisions. A longer retirement increases the funds needed to support one’s lifestyle, but, assuming healthy life expectancy has also increased, workers should be better able to continue working (Munnell and Sass 2008; Munnell, Soto, and Golub-Sass 2008).

An extensive literature has documented the ways in which financial and health incentives have affected retirement expectations and the ability of older workers to continue working. But less attention has been paid to how information about the dramatic increase in longevity has been transmitted to individuals approaching retirement, altering their perceptions about their ability, willingness, and need to work at older ages. Using the *Health and Retirement Study* (HRS) and an instrumental variables (IV) approach, this study examines how subjective life expectancy (SLE) influences planned retirement age and expectations of working at older ages, and how individuals update those expectations with new information.

Individuals who expect to live longer are expected to retire later for at least two reasons. First, a longer life requires greater wealth to finance consumption (Chang 1991, Kalemli-Ozcan and Weil 2010). Second, greater longevity is likely associated with better health during one’s working years, making continued work more feasible. But the literature examining the relationship between subjective longevity and retirement is not yet settled. Our study builds on this literature in two ways. First, we compare the relationship between SLE and both *actual* and *expected* retirement behavior of individuals age 50-61. Actual retirement behavior can deviate from plans for retirement when shocks arise, such as a new diagnosis or an acute medical episode, a job loss, the unexpected death of a spouse, or the need to care for a loved one. Retirement expectations – as expressed in survey questions about the age at which one expects to retire, or the probability one works to a milestone age – better reflect desired labor supply because they are set before these shocks occur. The only prior study to focus on the relationship between subjective longevity and expected retirement age is van Solinge and Henkens (2010), which involved a smaller sample of Dutch workers. Second, we examine how the *change* in subjective life expectancy alters retirement plans, which the literature has not previously explored. The study emphasizes how receiving new information about one’s own mortality induces an individual to reconsider his retirement plan.

When investigating retirement expectations, the study focuses on four outcome variables: 1) his expected retirement age, 2) his probability of working full-time at or after 62 (the Early Entitlement Age), and 3) his probability of working full-time at or after 65.

The key independent variable is a measure of longevity expectation. HRS asks each respondent their probability of living to ages 75 and 85.

We standardize the SLE measure using the actuarial projections of longevity by birth cohort and sex from the RAND version of the HRS, based on Vital Statistics life tables – that is, the objective life expectancy (OLE). The standardized measure is the difference between subjective and objective life expectancy (SLE-OLE): a value greater than zero indicates the individual has a higher probability than his average peer of living to the given age; a value less than zero indicates a more pessimistic expectation. This standardization accounts for both the differing expectations by age – a 62-year-old is likely to have a more accurate view of his probability of reaching age 75 than a 51-year-old – and the secular trend toward longer lives. Our preferred specification uses the standardized version of each variable (separately), but we also report results that use the SLE by itself.

The concern with SLE/OLE is classical measurement error: respondents sometimes report a higher probability of living to 80 than 75, and focal points like 0, 0.5, and 1 dominate the probability values. The relationship between SLE and retirement expectations may also be subject to endogeneity as some unobserved factors are correlated with both the SLE measure and with retirement expectations, such as general optimism. To address both concerns, we adopt the IV model suggested by Bloom et al. (2006), in which parents' current ages or ages at death are instruments for SLE. The validity of using parents' current ages or ages at death as instruments relies on the fact that each parent's longevity should impact middle-aged childrens' retirement expectations only through the channel of the offsprings' SLE.

The estimates in this paper suggest a large and statistically significant relationship between subjective life expectancy and retirement expectations. Respondents who are one standard deviation more optimistic about their survival to age 75 or 85 are 4-7 percentage points – or about 10 percent to 24 percent – more likely to be planning to work full time into their 60s, and they expect to work five months longer on average. To put these estimates in perspective, individuals in the highest tercile of the difference between SLE and OLE expect to work four months more than a median person, and 10 months longer than someone in the lowest tercile.

These results are fairly consistent across specifications but are somewhat stronger for women. We also find that increases in SLE over time for a given individual are associated with increases in his planned retirement ages and planning to work at ages 62 and 65. Actual retirement behavior also increases with SLE, but the relationship is somewhat weaker and the estimates are less precisely measured, similar to previous studies.

These results emphasize the importance of longevity expectations in retirement planning and, ultimately, making the decision to actually retire. In addition, these findings have important implications for modeling future labor force participation. With further health improvements, objective life expectancy continues to increase but, to extend one's working life, subjective life expectancy needs to increase as well. Our results suggest efforts to improve awareness about how the gains in life expectancy could benefit the minority who remain uninformed. In particular, the efforts should be directed toward those individuals whose SLE continues to lag OLE, perhaps because this group places heavy weight on the smaller gains in longevity experienced by their parents' generation than by their own. Better informing individuals about how working longer can substantially improve their retirement prospects may also be an effective means of extending their work and retirement plans.

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