What Causes Workers to Retire Before They Plan? Analyzing the Relative Importance of Health, Financial, Familial, and Employment Shocks

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Introduction

Many workers seem to have internalized the message that working longer is one way to bridge the gap between retirement needs and resources. But for many, these later retirement plans are not actually achieved: in the *Health and Retirement Study's* (HRS) initial cohort, 41 percent of those working at age 58 retired earlier than they were planning. Past research has identified several potential causes of earlier-than-planned retirement, including health, changes in marital and spousal employment status, and changes in retirement wealth. Yet, because these prior studies tend to focus on at most a few of these shocks, rather than all of these factors together, which factor is most important in determining earlier-than-planned retirement is unclear. Furthermore, little is known about the interaction between health deterioration and retiree health insurance (RHI), despite this issue's importance informing predictions of the effect of the ACA on the timing of retirement. If health insurance outside of employment through RHI allows workers to respond to deteriorating health by retiring before they planned, then by offering all employees a health insurance option outside employment, the ACA may encourage earlier-than-planned retirement.

This paper uses data from the HRS to estimate a model of early retirement and determine the relative importance of four different sets of "shocks" that may induce someone to deviate from their retirement plans. The first type of shock is changes to an individual's health. Because workers may "self-justify" their early retirement by claiming their health got worse, the paper analyzes changes in objective health measures, such as the appearance of activity-limiting arthritis, instead of relying on self-reported health. The effect of health shocks is allowed to differ based on whether a worker has health insurance outside of employment through RHI. The assumption is that workers with health insurance can retire after a health shock, whereas those without may have to persevere until Medicare is available. The second type of shock is employment changes – either shifting employer or losing of a job due to layoff or business closings. The third type of shock includes familial changes such as a spouse's retirement, the declining health of a spouse, a change in marital status, or a resident child leaving the home. The final type of shock considered is a significant change in financial wealth. By including all these shocks together in a model of early retirement, this paper is able to quantify their relative importance to the common phenomenon of early retirement.

To date, which factors are most associated with workers deviating from their planned retirement dates is unclear. Though several studies consider these shocks individually, only Munnell, Jivan, and Triest (2004) have examined the relative contribution of each of these factors, and that study does not consider the differences in the relationship between early retirement and shocks by the type of job separation or by access to health insurance outside of employment.

Data and Methodology

This paper uses data from waves 1-11 of the HRS, collected between 1992 and 2012, to estimate a model of early retirement. The sample consists of all individuals in the original HRS cohort (born 1931-1941) working at the interview closest to their 58^{th} birthday. At the time of the age-58 interview, working individuals are asked when they plan to, or think they will, retire; approximately 60 percent have a valid answer. The remainder – some of whom report they "never" plan to retire – is assigned their answer from the next wave in which they report an actual planned retirement age and the model includes a control indicating the lack of an initial answer. The dependent variable is equal to one if their actual retirement age (retiring fully) is at least one year prior to the planned retirement age.

The model includes four categories of shocks that can occur between the age-58 interview and the actual retirement age: 1) health; 2) employment; 3) familial; and 4) financial. For health, we sum up the number of negative health indicators (out of 13) reported by the respondent in each period; the magnitude of the health shock is the difference between the maximum health index between their planning age and their planned retirement age, subtracting their initial value. The health shock is also interacted with a variable indicating the availability of health insurance outside of employment, either through an individual's current employer, a past employer, or a spouse's employer.

Employment shocks are separated into: 1) changing employers without a layoff or business closing; 2) changing employers after a layoff or business closing; and 3) losing a job in a layoff or business closing and not finding re-employment. Some specifications control for characteristics of the new job, including whether it: 1) pays more; 2) is less stressful; 3) requires fewer hours; or 4) is less physical. Familial shocks include changes in: 1) marital status; 2) spousal employment/retirement; 3) spousal health (using the same health index); and 4) the

presence of resident children. Financial shocks include separate indicators for gains or losses of 50 percent of the initial financial wealth to allow for asymmetric responses to changes in wealth.

The model also includes a vector of demographic and other "initial" characteristics that are associated with the initial retirement expectations. If expectations are "rational," the correlation between the initial values and early retirement should be zero, but including these controls in the model accounts for any systematic differences in prediction accuracy.

The empirical analysis takes place in two steps. First, a probit model is estimated where the dependent variable indicates workers retired before they planned. The estimates from this first step reveal the strength of the relationship between early retirement and the shocks included in the model for those workers that experience them. Of course, this estimation is only part of determining which shocks are most responsible for early retirement – the prevalence of the shocks matters too. To incorporate both prevalence and the strength of the relationship, the second step uses the estimates from the probit to form counterfactual predictions of the share of workers that would have retired early had no one experienced shocks. The more these counterfactual predictions deviate from reality, the more important the shock in determining early retirement.

Results

Our results indicate that health is the most important factor in earlier-than-planned retirement, followed by involuntary job loss, and then changes within the family, especially a spouse's retirement. Changes in financial wealth do not have a significant impact on the probability of early retirement. Health is associated early retirement in two ways: 1) workers in bad health when making their retirement plans are more likely to retire earlier than others, even if their health does not change; and 2) deterioration in health leads to earlier-than-expected retirement. The estimates indicate that if all individuals made their plans in the absence of any negative health conditions and experienced no health shocks, then early retirement would fall by 4.5 percentage points, from the current rate of 41.3 percent to 36.8 percent. If no workers experienced involuntary job loss, the reduction in early retirement would be smaller, at 1.9 percentage points, and if workers' familial situation remained stable (i.e., no spouse's retirement, no change in marital status, no children exiting the home) the reduction would be 1.5 percentage points. Interestingly, if all shocks and poor initial health are removed, the decrease in earlier-

than-planned retirement is 6.3 percentage points, leaving an unexplained 35.0 percent of individuals retiring early. This finding suggests that idiosyncratic, hard-to-measure factors may have greater influence, such as job satisfaction, outside employment prospects, or the attractiveness of leisure time, and marks a direction for future research.

The results indicate that workers who switch jobs are less likely to retire early than those that do not, suggesting increased mobility may allow workers to better achieve their retirement goals. Workers with RHI or Medicare are not significantly more likely to retire early in response to a health shock than workers without these outside sources of health insurance. This finding indicates that increased access to health insurance outside of employment through the ACA should not have a large effect on early retirement.

Conclusion

This paper explores whether health, employment, family, or finances are most likely to be associated with earlier-than-planned retirement. The results suggest health is most important, followed by involuntary job loss and familial shocks such as a spouse's retirement or a decline in a spouse's health. Financial shocks appear to play only a small role. At the same time, these factors explain only about 15.3 percent of all early retirements, suggesting other factors play a role that causes people to inaccurately forecast their retirement date even as late as age 58. Future research should explore these factors and examine why people seem to have trouble making accurate predictions.

From a policy perspective, one of the more interesting results is that retiree health insurance has at most only a moderate (and insignificant) impact on early retirement. Another possibility is that individuals with retiree health insurance would be able to respond to health shocks by retiring early without sacrificing health care provided by their employer. This possibility does not play out in the data and suggests the ACA, which also makes health care available outside of employment, should have only a modest impact in encouraging earlier-than-planned retirement.

References

Munnell, Alicia H., Robert K. Triest, and Natalia Jivan. 2004. "How Do Pensions Affect Expected and Actual Retirement Ages?" Working Paper 2004-1. Chestnut Hill, MA: Center for Retirement Research at Boston College.