University of Michigan Retirement Research Center

Retirement and Wealth

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Executive Summary

Retirement decisions are likely related, among other things, to decisions about saving and about when to begin claiming Social Security benefits. For various reasons, however, retirement and saving are seldom studied together. Researchers and policy analysts who evaluate effects of Social Security policy on retirement decisions typically use a single equation model in which saving is taking place in the background, but no information on saving is used explicitly in the analysis. Rather, a number of factors influence retirement decisions, including the change in value of Social Security benefits when they are claimed at different ages. This *Issue in Brief* provides a summary of a study that examined these issues. We extend and test the standard single equation analysis by estimating two equations, a retirement equation and a saving equation. We then ask whether the factors that are expected to affect saving and retirement in the standard, single equation model actually have the effects that the model supposes. We find that the relation between saving and retirement is not accurately represented by the standard model and that using this model can yield misleading research results, and therefore, misleading policy implications. Our work suggests that an alternative to the standard approach is required, especially if the retirement models are to be used for analyzing Social Security policies.

Background

Social Security retirement benefits are reduced if early retirement is taken but paid in full if workers begin claiming at 65. The standard model relates changes in the value of Social Security benefits when claiming is delayed to the decision to retire. Typically the equation also includes other important factors affecting the retirement decision, such as wages, health status and family circumstances. However, this model does not fit the data well. People retire disproportionately at ages 62 and 65, but nothing in the single equation model does a good job of explaining why. We also understand very little about why so many workers claim early benefits when there appears to be rewards to delayed claiming.

Part of the puzzle may be related to the fact that these models seldom include time and leisure preferences. Considering only the desire for leisure time, the leisure preference, these models make a straightforward prediction about retirement and saving. Namely, a worker who has a high leisure preference will want to retire early, will tend to save a lot in order to finance a longer retirement, and will have a high level of wealth. A worker with a low preference for leisure will retire later and have less wealth. The characteristics that encourage early retirement would also encourage saving.

Time preference relates to the relative desire for spending now versus later. Time preference affects saving such that workers with a high time preference will tend to save less and vice versa.

Factors that encourage people to retire earlier would also encourage them to save more to finance that earlier retirement if time and leisure preferences are not related to each other. However, it is very plausible that they are related. For the worker with a high leisure preference, there is a strong incentive to have higher wealth in order to be able to retire early. But the worker who values his leisure time is also likely to want to spend. On balance, this worker will probably retire early, but his level of savings, or wealth is uncertain. Thus, the assumptions of the standard model no longer hold, and the relationship between retirement and wealth is ambiguous.

In order to evaluate predictions about the relation between retirement and saving generated by the standard approach, we test two separate equations, one for retirement and the other for saving. Factors considered and expected to affect these outcomes include earnings, pension and Social Security values and incentives, age, race, sex, health, education, occupation and other job characteristics, and planning horizon (how long one thinks ahead). If the standard approach is right, we might expect that the factors that predict the decision to retire would be the same as those that predict the decision to save (and hence wealth). Moreover, if the standard approach is right, the retirement equation should explain the peaks in retirement at ages 62 and 65 and why benefits are claimed early despite benefit formulas that increase the value of the benefits at better than an actuarially fair rate if claiming is postponed.

Data

The Health and Retirement Study (HRS) is a longitudinal, nationally representative study of older Americans. This study began in 1992 with an initial cohort of 9,800 individuals from 7,702 households, with at least one household member born from 1931 to 1941. The study continued to interview respondents at 2-year intervals. We use data through 1998, the last interview year available. Further sample restrictions (such as including only those who were not retired in 1992) brings our sample down to 8,900 and through further restrictions to 5,600 when we look at saving.

Summary of Major Findings

- Although some of the factors predicting retirement and wealth have the expected effects in each equation, most do not.

- We find a sharp increase in the probability of retirement at age 62 that is not explained by the retirement model. This is a sign that even though the equations include measures of the increase in the value of social security with delayed retirement, the cause of the increased retirement behavior at age 62 has not been included in the model.

- Social security incentives are often measured by the increment in the value of benefits associated with deferred retirement. The increment in the value of benefits depends, however, on when benefits are claimed. Our findings show that those who retire completely are claiming their benefits too early to be maximizing the expected value of these benefits. Yet measures of Social Security benefit accrual used in these retirement models often include in their measure of the gain to deferring retirement, the increase in the value of benefits from deferred claiming. On the one hand, early retirees are seen not to defer benefit acceptance despite the actuarial advantage. On the other hand, later retirees are said to defer their retirement in order to gain the advantage of deferring benefit acceptance. These explanations are not mutually consistent and again suggest the standard model cannot explain how the structure of Social Security benefits affects retirement.

- We also develop a measure of the future value of pensions and Social Security that eliminates a problem with the standard measure used in most studies of retirement.

Conclusion

Accurate analysis of policy changes, such as changing the Social Security early retirement age, require theoretical and statistical models that accurately represent the decisions to retire and to save, as well as factors that affect both of these decisions. We have provided evidence that it is not only important to study retirement and wealth simultaneously but have also shown that models that only focus on retirement may not be correct. Thus, we show that a prediction of the standard model of retirement is that those who retire earlier for particular reasons would also save more for those same reasons. But when we predict wealth accumulated through 1992, we do not observe that the factors associated with earlier retirement are also associated with higher saving. A more complex model is required to understand the relation between Social Security and retirement. Without such a model, one will obtain misleading predictions about how changes in the Social Security age of early entitlement will affect retirement behavior.

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