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Title: Labor Market Reentry After Retirement and Choice of Retirement State: A Selection-Adjusted Hazard Model

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Following retirement, many workers in the U.S. return to work. Their economic status or perceptions of retirement might change enough to induce a return to work. A hazard model is a model of the time until an event occurs. In this case, the event is returning to work following retirement. People may give an indication of their feelings about retirement by declaring themselves fully or partially retired. In that case, a hazard model can be estimated for the two groups separately. However, if this was a wage equation, a selection bias correction would be appropriate because the division between full and partial retirement might be correlated with wages through unmeasured factors. The same comment applies to the log hazard of returning to work, so a selection bias correction would be appropriate in the hazard models, also.

This paper tests for the presence of selection bias by estimating a probit model of full versus partial retirement, calculating a Heckman lambda, and testing the hypothesis that lambda has no effect in the hazard model. This is not a structural model, but lambda is the expected value of the log disturbance given the group in which a person is found, and a significant effect indicates the presence of significant selection bias in some form.

This paper then proposes a structural model of selection-corrected hazard models, using the bivariate normal distribution for the disturbances.

The data in this paper are from the Retirement History Survey and follow a sample of 4027 retirees. Of these, 3352 were fully retired and 675 were partially retired. Despite the smaller sample size, the effect of selection seems to be greater among the partly retired.