## WORKING PAPER

## Executive Summary

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## CAN UNEXPECTED RETIREMENT EXPLAIN THE RETIREMENT-CONSUMPTION PUZZLE? EVIDENCE FROM SUBJECTIVE RETIREMENT EXPECTATIONS

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With a growing number of workers approaching retirement, the preparedness of these households to finance consumption during their retirement years is becoming a topic of increasing concern. Assessing if households are adequately saving for retirement is a difficult task because differences in factors that are hard to quantify such as tastes, risk preferences, and patience will affect the optimal level of wealth accumulation. In light of these difficulties, economists have relied upon the rational expectations version of the Life-Cycle/Permanent Income hypothesis (LCPIH) to judge whether households are adequately saving for retirement. Specifically, if households are rational and foresighted, then their consumption should not change upon leaving the labor force. Contrary to this hypothesis, however, empirical investigations have concluded that household consumption falls at the time of retirement, even for those retirements that are expected.

This fall in consumption at retirement is referred to as the "retirement-consumption puzzle." A number of alternative explanations for the observed decline in consumption at retirement have been offered in order to rehabilitate the model. These hypotheses range from household marital bargaining models to hyperbolic (rather than geometric) discounting to empirical evidence suggesting that households have a planned fall in consumption at retirement.

In this paper, we examine the extent to which unexpected retirements can explain the retirement-consumption puzzle. The prediction of the LCPIH is that consumption should not fall *if households retire when expected*. Prior papers have examined observed changes in consumption at retirement. But to the extent that retirement is caused by an unexpected event such as a job loss or disability, the observed fall of consumption at retirement does not refute the LCPIH. While previous researchers have used instrumental variables techniques that exploit rapid changes in retirement that occur at the ages when workers become eligible for government retirement benefits, these methods may be flawed if either the age-consumption relationship is not correctly specified in the empirical model or the expected and observed probabilities of retiring at each age are not the same.

Our goal in this paper is to use a (plausibly) better instrument for expected retirement: retirement expectations elicited from survey respondents. Under the rational expectations hypothesis, worker's retirement expectations are valid instruments for retirement. Equally as important, we demonstrate that these expectations responses are much stronger instruments than simply relying on the discontinuity in the age-retirement relationship and therefore are less likely to be subject to the problems mentioned above.

Using data from the Retirement History Survey and the Health and Retirement Survey, we test whether consumption falls at retirement using subjective retirement expectations as an instrument for retirement. Both reduced form and two-stage least squares estimates of the relationship between consumption changes and expected retirement indicates demonstrate strong evidence that consumption falls at retirement even when households retire when expected. While these results reject the LCPIH, the retirement consumption decrease is nearly 50 percent smaller in magnitude when using subjective retirement expectations as an instrument relative to using age as an instrument. Therefore, while our results provide strong evidence of fall in consumption at retirement, our arguably better methodology produces a smaller consumption decrease than the previous literature.

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