

# CHANGES IN CONSUMPTION AND ACTIVITIES AT RETIREMENT MICHAEL D. HURD AND SUSANN ROHWEDDER

Economists have used the term retirement-consumption puzzle to refer to the finding that individuals seem to reach retirement not adequately prepared and appear to reduce spending in response. Following workers over time, this study shows that fewer than half of those who retire recollect a spending decline at retirement. Actual spending change also does not decline at retirement. We find no evidence for a lack of forward-looking behavior: anticipations are broadly consistent with recollections, and the median actual spending change is approximately zero. There is no retirement-consumption puzzle based on our direct measure of spending change at retirement.

The life-cycle model is used by many economists to study savings and retirement behavior. central premise of the model is that individuals will save during their working lives so that they will have adequate resources at retirement (when wages are no longer a source of income) to maintain the standard of living they enjoyed during their working lives. Some empirical findings, however, are at odds with this prediction. British and U.S. households apparently reduce spending, or consumption at retirement. The reduction cannot be explained by the life-cycle model, so it has been referred to as the retirement-consumption puzzle. An interpretation is that at retirement individuals discover they have fewer economic resources than they had anticipated prior to retirement, and as

a consequence reduce consumption. This brief summarizes our findings investigating this puzzle using panel data. In fact, we find no evidence of a drop in spending at retirement, and conclude that there is no puzzle.

# Why Should Consumption Drop at Retirement?

There are other interpretations of the retirement-consumption puzzle. The most obvious interpretation has to do with work-related expenses, but it appears that such expenses are not large enough to explain the observed drops in consumption at retirement. A second obvious explanation is that retired households have considerably more leisure. The increased leisure can be used to purchase goods more efficiently or to substitute homeproduced goods for purchased goods, but it could also lead to

increases in purchased goods because of complementarities. If some uses of time are substitutes for marketpurchased goods and some are complements, the overall effect is an empirical matter. A third explanation is that the timing of retirement is uncertain. Some workers retire earlier than anticipated because of a health event or unemployment, resulting in an unexpected reduction in lifetime resources, and the reduction leads to a concurrent reduction in consumption. Such a reduction in consumption is well within the spirit of the life-cycle model.

The literature shows that food spending declines at retirement but not over all populations at all times. An unanswered question is what causes the variation. We also note that other studies do not address

the issue of whether any spending changes were anticipated, which is an important part of the retirementconsumption puzzle.

The most direct way to address whether retirement is associated with an unexpected drop in consumption would be to ask workers prior to retirement whether and by how much they expect their consumption to change when they retire; and ask retired workers how their spending did change when they retired. We previously provided such evidence. We found that most workers anticipate a drop.

### **Prior Work**

This study compared our previous findings about anticipated and recollected changes in consumption at retirement, which were based on cross-section data, with new results based on panel data. Using crosssection data from the Consumption and Activities Mail Survey (CAMS), we found that, prior to retirement, households anticipate reducing consumption at retirement, and that the anticipations are fully consistent with the reductions that households report having made when they did retire. That is, reductions in consumption are on average consistent with rational anticipatory behavior. We also found that the pattern of time-use by the retired is qualitatively consistent with models where consumption and leisure are not separable. In such a model we would expect that the volume of purchased goods would change in a discontinuous manner when the volume of leisure changes in a discontinuous manner as it does at retirement. We found that retirees use some of the additional leisure time in ways that are suggestive of home production and that could spending significantly. Unfortunately we do not have good information on activities that are complementary to spending.

These results are direct evidence against the interpretation that, prior to retirement, workers did not correctly forecast their low levels of economic resources, and had to reduce consumption in accommodation. They would not have anticipated the decline in consumption. contrast, our cross-section results suggest that on average people are not surprised at retirement by the decline in spending and we should look for mechanisms associated with retirement that would allow for a reduction in consumption. These mechanisms would include the cessation of work-related expenses and changes in spending as a result of the large discontinuous change in leisure time. They would also include unexpected events that precipitate earlier-than-expected retirement, and which result in a reduction in life-time resources.

# **Findings**

- In cross-section, before retirement 68% of the population anticipate a decline in spending at retirement, but that only 52% recollected a reduction.
- In panel, 59% of those retiring between waves 1 and 2 of CAMS anticipated a decline, yet just 46% recalled a decline.
- Thus, both in cross-section and in panel the fraction of respondents anticipating a decline is larger than the fraction of respondents reporting a decline in spending once retired, and also the relative difference between anticipations and recollections is about the same: 13-16 percentage points.

#### Conclusion

Our main result is that anticipations and recollections of spending change at retirement reported by workers we followed over time are approximately the same as what we have previously found in cross-section and that changes in the pattern of time-use before and after retirement are similar to our previous findings based on cross-section. In panel fewer than half of those who retired between the waves recollect a spending decline. We also find that actual spending change, on average or at the median, does not decline at retirement. Our conclusion is that we find no evidence for a lack of forwardlooking behavior: anticipations are broadly consistent with recollections, and the median actual spending change is approximately zero. There retirement-consumption puzzle based on our direct measure of spending change at retirement.

## **About the Researchers**

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#### About the MRRC

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