

# WORKING PAPER

## *Executive Summary*

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## EVALUATING MICRO-SURVEY ESTIMATES OF WEALTH AND SAVING

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Macroeconomic estimates of the national accounts document a severe collapse in the U.S. household saving rate that has persisted for over 25 years. Yet, few studies have explained this saving decline, and the macroeconomic data appears insufficient to distinguish the mechanism by which households have decreased their saving rates while simultaneously accumulating more wealth.

This paper overviews changes in household wealth accumulation and saving using wealth data from three micro-level surveys: Survey of Consumer Finances (SCF), Panel Study of Income Dynamics (PSID), and Health and Retirement Survey (HRS). The SCF is a cross-section dataset that oversamples individuals at the top of the wealth distribution and provides detailed wealth information for approximately 4 thousand cases per year from 1983-2004. The PSID is a longitudinal dataset including wealth and active saving information for 7 to 8 thousand families per year from 1984 to 2005. Finally, the HRS serves as a larger panel dataset (12 to 17 thousand observations per year) to use as a comparison for the wealth accumulation and active saving of older cohorts from 1992-2004. Each dataset offers its own advantages and disadvantages, but all three provide comparable measures of wealth, active saving, and net wealth accumulation over six periods. In all, we have a detailed picture of the amount households purport to have saved as well as the amount their net worth has changed between 1983 to 2005. Through our analysis, we offer a micro-level comparison of household saving and wealth accumulation, explore problems inherent to micro-level valuations of wealth, and assess the value of using household-level datasets to examine wealth accumulation and saving behavior in the United States.

We first document the rise in wealth accumulation from the micro-level surveys in comparison with the evolution of household wealth as shown in the Flow of Funds. The Flow of Funds and SCF valuations of net worth correspond closely in 1998 and prior years, but the SCF reports much higher levels of wealth after 1998. The estimates of wealth in the PSID and HRS are very similar to those of the SCF for the bottom 95 percent of the wealth distribution, but they severely under-represent households in the top five percent of the wealth distribution. The three household surveys yield similar patterns of rising wealth by age and educational attainment. The profiles of the SCF are consistently more steeply sloped than those of the HRS and PSID, however, reflecting the inclusion of wealth at the very top of the distribution.

As a cross-section survey, the SCF cannot provide direct evidence on changes in wealth holdings and saving. The PSID and the HRS both include questions that allow the construction of measures of wealth accumulation and saving over the six subperiods of the surveys' history.

There is a concern that longitudinal surveys may be biased due to attrition from the sample. If attriters have systematically different wealth holdings than those who remain in the survey, the data will present a skewed picture of wealth changes over time. By tabulating wealth separately for those who never left the sample, those who left due to death, and those who left for other reasons, we observe that in the case of the HRS there is very little difference in the wealth of those who stay and those who leave for reasons other than death. However persons who died between 1992 and 2006 had average wealth holdings less than 60 percent of those who remained in the survey. The evidence of a mortality bias in the wealth data of the PSID is significant but less pronounced, probably due to the wider age range of households and incomplete data on the mortality of persons who exit the survey.

We also use the longitudinal data to estimate the relationship between wealth and mortality, and to compute adjustment factors for differential mortality that can be used to adjust the age-wealth profile obtained from cross-sectional surveys, such as the SCF. The result is greater evidence of wealth decumulation at older ages.

A major advantage of the longitudinal surveys is the ability to distinguish between active saving and passive saving when computing changes in net worth between survey waves. We examine saving for three components of wealth: (1) housing, (2) fixed price assets (deposit accounts, bonds, other debt), and (3) equity-type assets that are subject to capital gains and losses (real estate, business, corporate equities). For housing we use home prices, the change in mortgage values, and home improvements to construct active and passive saving measures. For equity-type assets the surveys provide information on net purchases, and passive saving is the residual of the change in asset holdings less active saving. For fixed price assets, by definition, saving is the change in the value of the asset.

In our analysis of saving and wealth change, we observe that rates of saving are higher for households that own businesses or equity holdings and for households with more educated heads. There is also a humped-shaped distribution of saving by age. But, in contrast with the macroeconomic data, neither survey shows a consistent decline in the average rates of saving over time.

Finally, we use fixed-effects regressions to show a significant influence of income, prior wealth, and capital gains on saving. In both surveys, there is some evidence of a negative association between capital gains and saving, but those results are strongly influenced by issues of measurement error.

The estimates of saving and wealth change for both surveys prove quite volatile across sub-periods and subgroups despite attempts to correct for extreme values. We illustrate this by reporting the distribution of the saving rates in the PSID and HRS as a ratio of active saving to average income over the period. The wide variance in these ratios highlights problems with the recorded responses to the wealth and saving questions.

We conclude that the measures of saving derived from the PSID and the HRS have value, but they are subject to significant errors introduced either through recording errors or inconsistent interviewee responses. The first type of error can be reduced by more extensive editing, but inconsistent responses raise additional problems. While reminding respondents of prior answers create concerns about distorting current responses, computer-assisted interviewing should make it possible to add some post-interview questions to inquire about and verify particularly large between-wave changes.

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