

# WORKING PAPER

## *Executive Summary*

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### LIFETIME EARNINGS, SOCIAL SECURITY BENEFITS, AND THE ADEQUACY OF RETIREMENT WEALTH ACCUMULATION

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The United States has traditionally depended on the so-called three-legged stool — Social Security, private pensions, and additional personal saving — to finance retirement, but all three legs are becoming increasingly creaky. Social Security and Medicare face financial long-term shortfalls, due to a combination of the imminent retirement of the baby boom generation, lengthening lifespans generally, and projections of rising per-capita health care expenditures. The trend in pensions from defined benefit to defined contribution plans brings with it a set of opportunities but also a set of risks for future retirees. Official aggregate saving rates have been extremely low in recent years, and evidence shows that some households save very little, especially in the form of financial assets.

The extent to which households are already saving adequately for retirement is thus an important issue for policy makers, especially as they deal with issues like Social Security reform. It is also a central issue in academic research that aims to understand the fundamental forces that shape the way people make saving and forward-looking decisions.

Despite the importance of the question, there is still widespread controversy on how well households are preparing for retirement. Our paper departs from most previous analyses in two key ways. First, most models of optimal wealth accumulation assume that earnings are known in advance; we examine optimal saving behavior under the assumption that households do not know what their future earnings will be. We show that uncertainty about future earnings implies that there will be a *distribution* of optimal wealth-earnings ratios, rather than a single ratio, among households that are otherwise observationally equivalent (that is, have the same age, education, pension status, marital status, and wage history). This changes the *interpretation* of observed saving patterns relative to a model where earnings are known in advance. In particular, it implies that some households should be expected to exhibit low ratios of wealth to lifetime earnings even if every household is forward-looking and making optimal choices.

The second way in which we depart from most previous research is to base our measures of adequate wealth accumulation on lifetime earnings rather than current earnings. Because current earnings jump around, they are less likely to be good indicators of lifetime well-being than lifetime earnings measures will be.

Our results suggest that households at the median of the wealth-lifetime earnings distribution are saving as much as, or more, than the underlying model suggests is optimal, and households at the high end of the wealth distribution are saving significantly more than the model indicates is optimal. But we also find significant undersaving among the lowest 25 percent of the population.

The central role of Social Security in the income of many elderly households highlights the potential impact of policy reforms on the adequacy of saving. We find that a large cut in Social Security benefits would have a significant deleterious effect on the adequacy of households' current saving, and that the problem would be much greater among lower-income households and among households with less education than other households.

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