

Wealth Shocks and Retirement Timing: Evidence from the Nineties

Purvi Sevak

IB 2002-027 April 2002



# **Executive Summary**

The way in which Americans save for retirement has fundamentally changed over the past 25 years. The growth of defined contribution (DC) relative to defined benefit (DB) plans accounts for much of this change. With DB plans, upon retirement from a firm, workers receive a guaranteed pension payment based on their years of service and salary. Many such DB plans have been replaced with DC plans, such as the 401(k) which invest plan monies according to the worker's choice. The stock of assets available upon retirement depends on the amount contributed, the worker's investment choices, and the return on the money invested. Whereas employers bear the risk in DB plans, workers bear the financial risk in DC plans. The share of retirement resources in risky assets may increase further under Social Security reform that includes individual retirement accounts. Although individual accounts may increase Social Security wealth, and the shift from DB to DC pensions may increase pension wealth, these changes will continue to add substantial uncertainty to retirement resources. This means that the chances that workers will reach their planned retirement age with substantially greater or lower wealth than expected increases. The question arises, will these unexpected increases or losses in retirement wealth affect the timing of retirement? In this Issue in Brief, I provide a summary of work that evaluated one part of that question, namely, do increases in wealth cause people to retire earlier?

In order to answer this question, we need to be able to study changes in wealth that are not caused by individual behavior (such as saving), but by some external event (like winning the lottery). The bull market of the 1990s provides just such a scenario. The appreciation of public equity markets in that period provided many households with capital gains (increases in wealth) that were both large and unprecedented. Economists refer to such changes as shocks. Shocks can be positive, as in the case of capital gains, and they can be negative, which would be the case with a capital loss, such as many workers have recently experienced as the stock market has tumbled. I address the effect of positive shocks on the probability of retirement. It is for future work to address the question of how negative shocks affect retirement timing.

Using data from the University of Michigan Health and Retirement Study (HRS) linked to Social Security earnings records, I employ two strategies to isolate the effects of positive wealth shocks on retirement behavior. I first look at the effects of wealth shocks between 1992 and 1998, accounting for wealth already held at baseline in 1992. I then compare changes in retirement rates among those holding DB plans versus those holding DC plans, between 1992 and 1998. Both analyses show that men who had large windfalls in their pension wealth retire earlier than other men.

## The Data

The Health and Retirement Study (HRS) is a longitudinal, nationally representative study of older Americans. The survey began in 1992 with an initial cohort of 12,652 persons aged 51-61 or married to someone who was. For the first set of tests, I limit the sample to those who stayed in the study from 1992 to 1998 and I use only individuals who were not retired as of 1996 and focus on retirement transitions between 1996 and 1998. The resulting sample size is 1,837 men and 1,726 women. For the second set of tests, I use two mutually exclusive sets of individuals who are between the ages of 55 and 60 in 1992 and 1998, and have had some sort of pension. This method uses HRS respondents who entered the study in 1998.

# Summary of Major Findings

Unexpected Capital Gains and Retirement Transitions between 1996 and 1998

- A wealth shock between 1992 and 1998 that would allow spending in retirement years to double increases the probability of retirement between 1996 and 1998 for men by seven to nine percentage points, or by about 40 to 50% of the average retirement rate. This finding holds even after I account for other factors that are expected to affect retirement age as of 1992.
- Because many individuals were not invested in the stock market, the wealth effect on retirement of the bull market increased the retirement rate by just two percent. As an increasing share of household wealth is invested in the stock market, either through private saving, pensions, or Social Security individual accounts, the aggregate effect of stock market fluctuations on retirement rates should increase.

# Pension Type and Changes in Retirement Rates between 1992 and 1998

- Whereas retirement rates among men with defined benefit pension plans stayed steady between 1992 and 1998, retirement rates among men with defined contribution pension plans increased significantly. Because those with DC plans had greater exposure to the stock market, this provides further evidence of wealth shocks on retirement.
- After accounting for factors other than the stock market that could have changed retirement rates between 1992 and 1998 (by using men with DB pension plans as a comparison group), and other factors that could affect retirement rates including industry and health, I find that capital gains in pension wealth increased retirement rates among men ages 55-60 by 6.7 percentage points.

Purvi Sevak is an Assistant Professor of Economics at Hunter College.

This work was supported by a grant from the Social Security Administration through the Michigan Retirement Research Center (Grant # 10-P-98358-5). The opinions and conclusions are solely those of the authors and should not be considered as representing the opinions or policy of the Social Security Administration or any agency of the Federal Government. Michigan Retirement Research Center Institute for Social Research University of Michigan 426 Thompson Street, Room 3026 Ann Arbor, MI 48104-2321

#### Phone (734) 615-0422 Fax (734) 615-2180

http://www.mrrc.isr.umich.edu mrrc@umich.edu

### Regents of the University of Michigan

David A. Brandon, Ann Arbor Laurence B. Deitch, Bingham Farms Daniel D. Horning, Grand Haven Olivia P. Maynard, Goodrich Rebecca McGowan, Ann Arbor Andrea Fischer Newman, Ann Arbor S. Martin Taylor, Grosse Pointe Farms Katherine E. White, Ann Arbor Mary Sue Coleman, ex officio

The Michigan Retirement Research Center is supported by a grant from the Social Security Administration (grant number 10-P-98358-5).