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EMPIRICAL REGULARITY SUGGESTS RETIREMENT RISKS

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This brief launches a new initiative on the retirement preparedness of U.S. households. Stay tuned for the debut of the National Retirement Risk Index this spring.

Introduction

Baby boomers have often been characterized as a generation in love with consumption and incapable of accumulating assets for a rainy day — or retirement. But you couldn't tell from the data. The Survey of Consumer Finances (SCF), the Federal Reserve's comprehensive survey of household wealth in the United States, shows that the boomers have been accumulating wealth at much the same pace as the cohorts ahead of them.[1] From 1983 through 2001, the period during which the surveys were conducted, the ratio of wealth to income has remained virtually unchanged at any given age. At first glance, this regularity seems comforting, suggesting that the boomers and the cohorts that follow are as well prepared for retirement as their parents. But that conclusion is wrong. For while the boomers have been accumulating wealth at much the same pace as their parents, the world has changed in four important ways: 1) the prevalence of defined benefit pension plans — an asset not included in the definition of wealth in the SCF — has declined dramatically over the last 20 years; 2) interest rates have fallen significantly, so a given amount of wealth will now produce less retirement income; 3) life expectancy has increased, so accumulated assets must support a longer period of retirement, and; 4) health care costs have risen substantially and show signs of further increase, indicating a need for greater accumulation of retirement assets.

This brief presents the data from the seven Surveys of Consumer Finances conducted between 1983 and 2001, and then discusses why each of the factors listed above — the decline in defined benefit pensions, the drop in rates of return on capital, the increase in life expectancy, and the rise in health care costs — all require an increase in the wealth-to-income ratio to produce a comparable standard of living in retirement. In other words, the constant wealth-to-income ratios suggest a deterioration in retirement readiness.

The Empirical Regularity

Figure 1 presents the ratio of wealth to income by age for each Survey of Consumer Finances. Wealth includes all financial assets, 401(k) accumulations, and real estate less any outstanding debt. Income includes earnings and returns on financial assets.[2] The notion is that the wealth-to-income ratio is a good proxy for the extent to which people can replace their pre-retirement earnings in retirement. The graph shows that the median value of the wealth-to-income ratio rises from about 0.25 for those aged 20-22 to about 4 for those aged 59-61. The really important news in the chart is that the ratios for each age from each survey lie virtually on top of one another.[3] That is, the pattern of wealth accumulation by age appears to have remained virtually unchanged over the seven surveys from 1983 to 2001.

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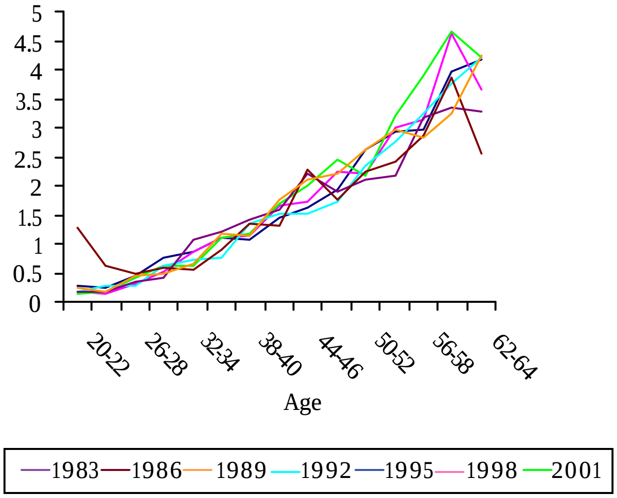
Figure 1. Ratio of Wealth to Income from the Surveys of Consumer Finances, 1983-2001



Source: Authors' estimates from the various Surveys of Consumer Finances.

Why the Regularity Is Not Good News

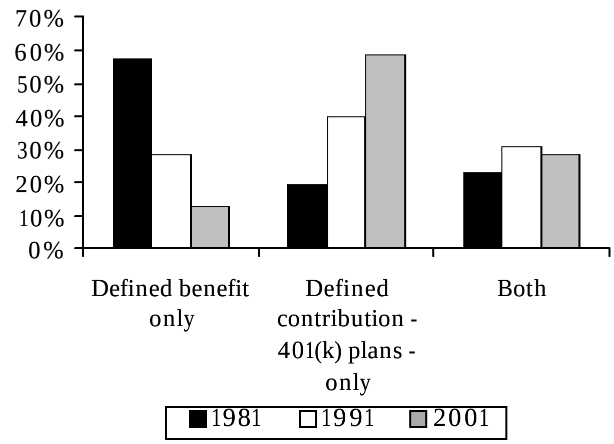
The amazingly stable pattern of wealth to income is not good news for four reasons — 401(k) plans have replaced defined benefit plans, interest rates have declined, life expectancy has increased, and health care costs have risen. Each of these developments requires higher wealth-to-income ratios if households are to maintain their standard of living in retirement.

The Shift to 401(k) Plans

The nature of pension coverage has changed dramatically. Twenty years ago, most people with pension coverage had a traditional defined benefit plan that pays a lifetime annuity at retirement. Today the world looks very different. Most people with a pension have a defined contribution plan — typically a 401(k) (see Figure 2). In contrast to defined benefit plans, 401(k) plans are like savings accounts. Generally the employee, and often the employer, contributes a specified percentage of earnings into the account. These contributions are invested, usually at the direction of the employee, mostly in mutual funds consisting of stocks and bonds. Upon retirement, the worker generally receives the balance as a lump sum.

Defined benefit plans and 401(k) plans are treated very differently in the Survey of Consumer Finances. Accruals of future benefits under defined benefit plans are not included, because they are very difficult to value on an annual basis. On the other hand, the buildup of assets in 401(k) plans is included. Thus, the wealth reported in the 1983 SCF significantly understated the well-being of the participants because they had a lot of defined benefit "wealth" that was not reported. In contrast, the participants in the 2001 survey had much less defined benefit wealth, since their pension accruals occurred primarily in 401(k) plans. The shift from unreported to reported pension accruals would have been expected to increase the wealth-to-income ratio, but instead the ratio remained stable.

Figure 2. Percent of Wage and Salary Workers with Pension Coverage by Type of Plan, 1981-2001

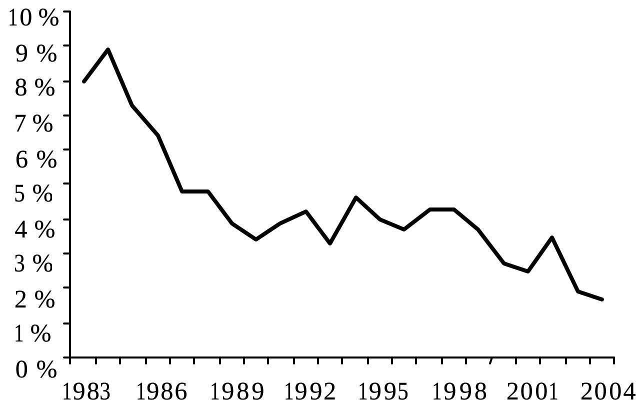


Sources: U.S. Department of Labor (2004); and authors' calculations from Board of Governors of the Federal Reserve System (2003).

Decline in Real Interest Rates

As noted above, wealth is a proxy for gauging the extent to which people will be able to replace their pre-retirement income. The higher the interest rate, the more income the wealth will be able to generate. The relevant interest rate for this purpose is the real interest rate — that is, the amount by which interest earnings exceed inflation. A real interest rate of 6 percent will produce three times as much annual income as an interest rate of 2 percent. Thus, if people were interested in generating a given stream of income, the significant decline in interest rates since 1980 would have been expected to boost wealth accumulations (see Figure 3). But it did not.

FIGURE 3. REAL INTEREST RATE,* 1983-2004



*Note: The real interest rate is the difference between the nominal interest rate on special obligation bonds held in the Social Security trust funds and the increase in the consumer price index.

Source: U.S. Social Security Administration (2005).

Increase in Life Expectancy

Since 1983, life expectancy at age 65 has increased by 1.7 years for men and 0.6 years for women (see Figure 4). These increases translate into an 11 percent longer retirement period for men and 3 percent for women. As a result, for any given level of income one would have expected workers to accumulate more wealth in order to support themselves over their longer period in retirement. But, as noted above, the pattern of wealth to income by age has been remarkably stable.

FIGURE 4. LIFE EXPECTANCY AT 65 FOR MEN AND WOMEN,* 1983 AND 2001

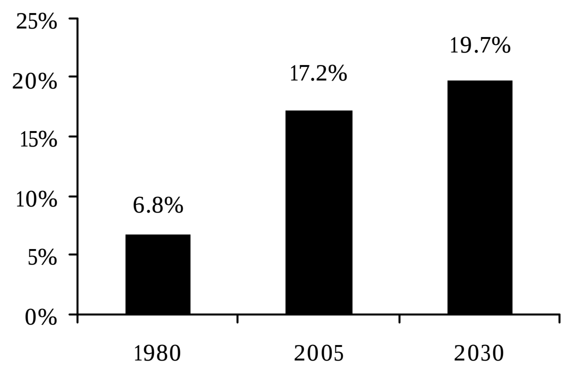
* Note: The numbers reported in the table are cohort life expectancies, which reflect mortality improvement expected in the future.

Source: U.S. Social Security Administration (2005).

Increase in Health Care Costs

Finally, health care costs have been on the rise and are projected to continue to increase. Even older Americans, who have Medicare to cover a large share of their medical bills, have seen out-of-pocket expenditures increase significantly. For example, out-0f-pocket expenditures for premiums and copayments under Medicare Part B, the program that covers physicians' services, have risen from 6.8 percent of the average Social Security benefit in 1980 to 16.9 percent today and are projected to reach 19.7 percent in 2030. The rising cost of health care relative to Social Security is one more reason why people should have higher wealth-to-income ratios today than in the past to maintain their standard of living in retirement.

FIGURE 5. MEDICARE PART B OUT-OF-POCKET EXPENDITURES AS A PERCENTAGE OF THE AVERAGE SOCIAL SECURITY BENEFIT



Source: Centers for Medicare and Medicaid Services (2005).

Conclusion

In short, the world has changed in four important ways since the 1983 Survey of Consumer Finances. Each of these changes would have been expected to lead to higher wealth-to-income ratios if people were aiming to preserve their standard of living in retirement. Instead, the pattern of wealth accumulation has remained virtually unchanged. The phenomenon suggests that people are increasingly less prepared for retirement.

Endnotes

1 The Survey of Consumer Finances (SCF) is a triennial survey of a nationally representative sample of U.S. households. It is conducted by the Federal Reserve Board in cooperation with the Statistics of Income Division of the Department of the Treasury. The SCF collects detailed information on households' assets, liabilities, and demographic characteristics. Because the SCF over-samples wealthy individuals, it provides the most comprehensive measure of wealth of any household survey. See Aizcorbe et al. (2003) for a detailed description of the SCF.

2 The exact definition in the SCF includes wages, investment income, interest and dividend income, capital gains or losses, unemployment payments, alimony, welfare, pension income, and some other less common income; it is essentially all pre-tax income that comes into a household in a given year.

3 In a recent article, Gist (2005) noted that wealth-to-income ratios in 2001 looked very much like those in 1983.

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CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE

About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decisionmakers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

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