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2010 SCF SUGGESTS EVEN GREATER RETIREMENT RISKS

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Introduction

People often ask how baby boomers compare with their parents in terms of being prepared for retirement. The easiest way to answer that question is to look at the ratio of wealth to income from the 2010 *Survey of Consumer Finances* (SCF), the Federal Reserve's comprehensive triennial survey of household wealth in the United States, and compare it to earlier surveys.¹ 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.

This *brief* proceeds as follows. The first section shows the wealth-to-income ratio for each SCF survey from 1983 through 2010. The ratio in 2010, in the wake of the financial crisis and ensuing recession, was way below that for all the other survey years. The second section identifies four reasons why people need a *higher* wealth-to-income ratio to be as well off as their parents – increased life expectancy, the shift to 401(k)s, higher health care costs, and lower real interest rates. The third section concludes that the constant ratio of wealth to income between 1983 and 2007 should never have been a source of comfort. The world has changed in important ways that all require more wealth to sustain living standards in retirement. Thus, the sharp *decline* in the wealth-to-income ratio reported in the 2010 SCF signals even more serious problems for future retirees.

Ratio of Wealth to Income

Figure 1 on the next page presents the ratio of wealth to income by age for each *Survey of Consumer Finances* from 1983 through 2010. 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 wealth-to-income ratio is a good indication of the extent to which people can replace their pre-retirement earnings in retirement.

Do not try to distinguish among the individual lines in Figure 1. The point of the chart is that the ratios for each age from each survey lie virtually on top of one another. That is, the pattern of wealth accumulation by age appears to have remained virtually unchanged over the nine surveys from 1983 to 2007.

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FIGURE 1. RATIO OF WEALTH TO INCOME FROM THE SURVEYS OF CONSUMER FINANCES, 1983-2010

Source: Author's estimates from U.S. Board of Governors of the Federal Reserve System, Survey of Consumer Finances (SCF), 1983-2010.

The graph shows that wealth amounted to a fraction of income for those aged 20-22 and rose to about four times income for those aged 59-61. The clear outlier is 2010, where the ratios at every age are substantially below those in the other surveys.

Why 2010 is Particularly Bad News

The amazingly stable pattern of wealth to income over the period 1983 to 2007 should not be a source of comfort for four reasons – people are living longer; 401(k) plans have replaced defined benefit plans; health care costs have increased; and real interest rates have declined. All these changes mean people should have had higher wealth relative to income in each successive survey. In this context, the sharp drop in the ratio of wealth to income for each age group in the 2010 survey is particularly alarming.

Increase in Life Expectancy

Life expectancy has increased, so accumulated assets must support a longer period of retirement. Between 1983 and 2010, life expectancy at age 65 rose by 3.5 years for men and 1.8 years for women (see Figure 2). 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, the pattern of wealth to income by age has been remarkably stable, and it actually declined in 2010.





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 (2012a).

The Shift to 401(k) Plans

The shift from defined benefit to 401(k) plans (see Figure 3) would also have been expected to increase wealth-to-income ratios reported in the SCFs. Defined benefit plans and 401(k) plans are treated very differently in the SCF. 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, assets in 401(k) plans are included. Thus, the 1983 SCF significantly understated the wellbeing of participants because it did not report their defined benefit "wealth." In contrast, the 2010 survey included most pension wealth since most retirement saving occurred through 401(k) plans.³ The shift from unreported to reported retirement assets would have been expected to increase the wealth-to-income ratio, but instead the ratio remained stable.

Figure 3. Workers with Pension Coverage By Type of Plan, 1983, 1995, and 2010



Source: Authors' calculations based on the 1983, 1995, and 2010 SCF.

Increase in Health Care Costs

Health care costs have risen substantially and show signs of further increase, indicating a need for greater accumulation of retirement assets. 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-of-pock-





Source: Centers for Medicare and Medicaid Services (2012).

et expenditures for premiums and copayments under Medicare Part B, the program that covers physician services, have risen from 7.5 percent of the average Social Security benefit in 1983 to 17.0 percent in 2010 (see Figure 4) and are projected to climb further in the future. 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.

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 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. Real interest rates have fallen significantly since 1983 (see Figure 5 on the next page), so a given amount of wealth will now produce less retirement income. If people were interested in generating a given stream of income, the significant decline in interest rates would have been expected to boost wealth accumulations. But it did not.



Note: The real interest rate is the difference between the nominal interest rate on bonds held in the Social Security trust funds and the 10-year inflation forecasts for years 1991-2011. Prior to 1991, due to data limitations, the inflation measure is the increase in the Consumer Price Index. *Sources*: U.S. Social Security Administration (2012b); U.S. Bureau of Labor Statistics (2012); and Federal Reserve Bank of Philadelphia (2012).

Conclusion

In short, the stability of wealth-to-income ratios over the nine SCF surveys between 1983 and 2007 should always have been a serious source of concern. During this period, the world changed in four important ways, and 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 remained virtually unchanged, which suggested that people were increasingly less prepared for retirement. In this context, the significant *decline* in the ratios of wealth to income for each age group reported in the 2010 SCF is truly alarming.

Endnotes

1 The SCF uses 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 Bricker et al. (2012) for a detailed description of the SCF.

2 The exact definition of income 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 Much of the saving in 401(k) plans is subsequently rolled over into Individual Retirement Accounts (IRAs). IRA holdings are also included in the SCF.

References

- Bricker, Jesse, Arthur B. Kennickell, Kevin B. Moore, and John Sabelhaus. 2012. "Changes in U.S. Family Finances from 2007 to 2010: Evidence from the Survey of Consumer Finances." *Federal Reserve Bulletin* 98(2): 1-80.
- Centers for Medicare & Medicaid Services. 2012. Unpublished data obtained through personal communication with the Office of the Actuary. Baltimore, MD.
- Federal Reserve Bank of Philadelphia. 2012. Survey of Professional Forecasters. Philadelphia, PA.
- Munnell, Alicia H., Anthony Webb, and Luke Delorme. 2006. "Empirical Regularity Suggests Retirement Risks." *Issue in Brief* 41. Chestnut Hill, MA: Center for Retirement Research at Boston College."
- U.S. Board of Governors of the Federal Reserve System. *Survey of Consumer Finances*, 1983-2010. Washington, DC.
- U.S. Bureau of Labor Statistics. 2012. Consumer Price Index, 1983-1990. Washington, DC.
- U.S. Social Security Administration. 2012a. The Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. Washington, DC: U.S. Government Printing Office.
- U.S. Social Security Administration. 2012b. "Nominal Interest Rates on Special Issues." Available at: http://www.ssa.gov/oact/progdata/newIssueRates. html.

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