

HOW DID THE RECESSION OF 2007–2009 AFFECT THE WEALTH AND RETIREMENT OF THE NEAR RETIREMENT AGE POPULATION IN THE HEALTH AND RETIREMENT STUDY?

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This article uses household wealth and labor market data from the Health and Retirement Study (HRS) to investigate how the recent “Great Recession” has affected the wealth and retirement of those approaching retirement age as the recession began, a potentially vulnerable population. The retirement wealth of people aged 53–58 in 2006 declined by a relatively modest 2.8 percent by 2010. Relative losses were greatest among those with the highest wealth when the recession began. Most of the loss in wealth is due to a declining net value of housing, but several factors may provide this cohort with time to recover its housing losses. Although unemployment rose during the Great Recession, that increase was not mirrored by flows out of full-time work or partial retirement. To date, the retirement behavior of the Early Boomer cohort does not differ much from that of older cohorts at comparable ages.

Introduction

This article uses household wealth and labor market data from the Health and Retirement Study (HRS) to investigate how the “Great Recession” of December 2007–June 2009 has affected the wealth and retirement of people who were approaching retirement age as the recession began. Near-retirees would seem to be highly vulnerable to an unexpected downturn, as they have very few effective options for adjusting their behavior in the short term. They can postpone retirement and save at a higher rate, but postponing retirement is of little help to those who have lost their jobs. Moreover, there is little time to increase savings, so any large losses from the recession are likely to be permanent, affecting welfare throughout retirement.

HRS data enable us to introduce four analytical innovations. First, the HRS provides panel data that allow us to calculate changes in key outcomes for the

same individuals over the full course of the recession. Second, HRS data enable us to compare the changes in outcomes between cohorts—during the recession for those nearing retirement age at its onset, and over a comparable age span for members of older cohorts. Third, we can identify the prevalence of those who gained or lost wealth in the recession according to their place in the wealth distribution. Fourth, although speculation about the recession’s effects usually focuses on

Selected Abbreviations

| | |
|-----|-------------------------------|
| DB | defined benefit |
| DC | defined contribution |
| HRS | Health and Retirement Study |
| IRA | individual retirement account |
| SCF | Survey of Consumer Finances |

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measures of retirement expectations, the HRS provides detailed data on actual retirement outcomes.

Our analysis measures wealth comprehensively, accounting for the values of defined benefit (DB) and defined contribution (DC) pensions, lifetime Social Security benefits, individual retirement accounts (IRAs), the net value of housing, and other accumulated financial and nonfinancial wealth. With these data, we measure the extent to which the recession's effects on volatile assets were cushioned by more stable assets.

Measures of employment-related outcomes reported by the HRS include the extent of full-time work, full and partial retirement, hours of work, and unemployment, as well as the number of people who report themselves being not retired but also not working. We measure flows among these statuses between 2006 and 2010. The HRS data also allow us to understand what underlies changes in employment patterns and how conditions in the job market affect retirement flows. For example, the HRS reports involuntary layoffs, as well as other reasons for changes in employment status, including anticipation of a job loss. It also reports enrollment in disability programs.

When we examine the cohort approaching retirement age during the Great Recession, we find that on average their real wealth fell by 2.8 percent. When members of cohorts 6 and 12 years older were the same age (53 to 58), their wealth increased about 5 percent in real terms. To be sure, the economic environment facing the Great Recession's near-retirees differed from that experienced by cohorts who approached retirement in more stable economic times. Workers nearing retirement 6 and 12 years before the Great Recession benefitted disproportionately from the boom in housing prices and the stock market. Nevertheless, the comparison suggests that the recession depressed the wealth of near-retirees by at most 8 percent.

As for labor market outcomes, although the data suggest high layoff rates during the Great Recession, they were only slightly higher than the rates experienced by members of older cohorts when they were the same ages. Much has been written about changes in retirement behavior induced by the recession, but individuals aged 53–58 when the recession began retired at roughly the same pace as did members of older cohorts at comparable ages.

The article proceeds in five sections. The first measures the distribution of changes in the various components of wealth over a period spanning the

recession. The second compares the changes in wealth experienced by the retirement-age population during the Great Recession with the changes experienced by members of older cohorts at comparable ages. The third section distinguishes those who gained wealth from those who lost. The fourth examines changes in labor market outcomes, including the numbers in various labor market statuses, flows among those statuses (including flows into retirement and reversals in retirement status), and reasons for status changes. The fifth section concludes.

Changes in Wealth Between 2006 and 2010 for Near-Retirees

We begin by describing the components of total wealth and the characteristics of the study sample. We then discuss how the wealth component values changed over the course of the recession for those who approached retirement age as it began.

Components of Total Wealth

The basic elements of wealth include the present value of projected lifetime Social Security benefits; pension benefits; the value of the primary home, net of mortgage debt; and the value of other real estate (primarily second homes), business assets, vehicles, financial assets (including direct stock holdings), and assets in IRAs. We calculate pension benefit wealth separately for DB and DC plans, with detail for DC plans from current and previous jobs and for stock holdings in all DC plans. Social Security benefit calculations are described below; the Appendix describes the calculations of the other components of wealth and the imputation procedures used when values for specific components are missing.¹

Projected lifetime Social Security benefits include an individual's own earned benefits plus spouse and survivor benefits (where eligible), calculated under specific life expectancy assumptions. The calculations assume that the respondent stops working and claims benefits as soon as eligible (the "claim now" scenario). Our calculations are from Kapinos and others (2008), which assumes that earnings end in 2004, when many people in our study sample were a number of years from being able to claim their Social Security benefits at age 62. With work assumed to end in 2004, projected benefits are not adjusted to reflect earnings between 2005 and 2010. We adopt this rough approximation when calculating Social Security wealth because we do not have adequate data with which to update the claim-now values for Social Security that

would be associated with additional work after 2004. The mean of the ratio of claim-now benefits to benefits claimed at full retirement age is 0.87; the ratios vary between zero and 1.6, with one extreme value equal to 2.6. We include the actual benefit amount for those already receiving benefits in the base year.²

Sample Characteristics

The study sample comprises HRS participants who are members of the Early Boomer cohort; that is, those residing in households with at least one member aged 53–58 in 2006. The analysis includes only respondents who participated in both the 2006 and 2010 surveys and whose household structure remained unchanged over the 4 years. We excluded households reporting wealth within the top or bottom 1 percent of households in the relevant year.³ Table 1 reports average values, weighted using 2006 as the base year.⁴

Values for households in the median 10 percent of wealth are reported in Table 2, and Table 3 reports results for those in the bottom quartile of total wealth.

Components of Wealth in 2006

Table 1 reports values for 2006 and 2010, with 2006 values adjusted to 2010 dollars to enable meaningful comparisons. The total wealth of the Early Boomer population is 2.8 percent lower in 2010 (\$847,000) than it was in 2006 (\$871,000). Thus, the cohort approaching retirement age has experienced a modest reduction of total wealth during the recession. The story is similar for households in the median 10 percent of wealth (Table 2): total wealth in 2010 (\$621,000) is 4.3 percent lower than in 2006 (\$649,000). However, for households in the bottom quartile (Table 3), wealth declines only 0.8 percent between 2006 (\$124,000) and 2010 (\$123,000).

Table 1.
Effect of the Great Recession on the average value of wealth in Early Boomer households, by component: 2006 (adjusted) and 2010

| Component | 2006 | | 2010 | | Ratio of values, 2010 to 2006 |
|---|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|
| | Mean value (thousand dollars) | Percent of total | Mean value (thousand dollars) | Percent of total | |
| Total | 871 | 100.0 | 847 | 100.0 | 0.97 |
| Social Security plus pensions | 476 | 54.6 | 473 | 55.8 | 0.99 |
| Social Security benefits ^a | 256 | 29.4 | 256 | 30.2 | 1.00 |
| All pensions | 220 | 25.3 | 218 | 25.7 | 0.99 |
| DB plans | 150 | 17.3 | 141 | 16.6 | 0.94 |
| DC plans | 70 | 7.9 | 78 | 9.2 | 1.11 |
| DC plan from previous job | 18 | 2.0 | 28 | 3.3 | 1.56 |
| DC plan from current job | 53 | 6.0 | 51 | 6.0 | 0.96 |
| Current-job DC plan stock holdings | 33 | 3.7 | 25 | 3.0 | 0.76 |
| Net housing value | 167 | 19.2 | 128 | 15.1 | 0.77 |
| Real estate | 35 | 4.1 | 26 | 3.1 | 0.74 |
| Business assets | 38 | 4.4 | 31 | 3.7 | 0.82 |
| Net value of vehicles | 20 | 2.3 | 17 | 2.0 | 0.85 |
| Financial assets | 78 | 9.0 | 84 | 9.9 | 1.08 |
| Direct stock holdings | 38 | 4.4 | 42 | 5.0 | 1.11 |
| IRA assets | 58 | 6.7 | 87 | 10.3 | 1.50 |
| IRA stock holdings | 43 | 4.9 | 56 | 6.6 | 1.30 |
| IRA plus stock holdings plus DC in stocks | 123 | 14.1 | 137 | 16.2 | 1.11 |

SOURCE: Authors' calculations using HRS.

NOTES: Based on 1,949 observations. Sample excludes households in the top and bottom 1 percent of wealth in each survey year. Data are weighted.

Early Boomer households are those with at least one member born during 1948–1953.

Subtotals do not necessarily equal the sum of rounded components.

All values are 2010 dollars.

a. Social Security wealth is held constant in real terms by construction.

Trends in Components of Total Wealth

As seen in Table 1, pensions and Social Security are the two most important asset categories in 2006, together accounting for 54.6 percent of total wealth. The corresponding value for households in the median 10 percent of total wealth is 64.0 percent (Table 2) and for those in the bottom quartile it is 83.7 percent (Table 3). These results illustrate a well-known pattern in which Social Security accounts for a larger share of total wealth among those toward the bottom of the wealth distribution, a relationship not fully offset by the increasing importance of pensions among those toward the top of the wealth distribution. For households in the Early Boomer cohort, Social Security accounts for 29.4 percent of household wealth on average, for 43.9 percent of total wealth among median-wealth households, and for 79.2 percent of total wealth

for bottom-quartile households. In 2006, pensions accounted for roughly one-quarter of total wealth at the mean, one-fifth for median households, and one-twentieth for households in the bottom quartile.

The net value of housing is the next largest component of total wealth. On average, it accounts for 19.2 percent of total wealth in 2006. Net housing value respectively accounts for 21.0 percent and 10.5 percent of wealth for households in the median 10 percent and in the bottom quartile of total wealth.

Financial and IRA assets together account for 15.7 percent of total wealth at the mean. For median-wealth households, they account for 7.9 percent of total wealth, while for those in the bottom quartile, debt cancels out the combined value of checking and savings accounts, DC plans, bonds, treasury bills, and other assets.

Table 2.
Effect of the Great Recession on the average value of wealth in Early Boomer households in the median 10 percent of wealth, by component: 2006 (adjusted) and 2010

| Component | 2006 | | 2010 | | Ratio of values, 2010 to 2006 |
|---|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|
| | Mean value (thousand dollars) | Percent of total | Mean value (thousand dollars) | Percent of total | |
| Total | 649 | 100.0 | 621 | 100.0 | 0.96 |
| Social Security plus pensions | 415 | 64.0 | 420 | 67.6 | 1.01 |
| Social Security benefits | 285 | 43.9 | 284 | 45.7 | 1.00 |
| All pensions | 130 | 20.1 | 136 | 21.9 | 1.05 |
| DB plans | 94 | 14.5 | 90 | 14.5 | 0.96 |
| DC plans | 37 | 5.7 | 46 | 7.4 | 1.24 |
| DC plan from previous job | 8 | 1.2 | 15 | 2.4 | 1.88 |
| DC plan from current job | 29 | 4.5 | 31 | 5.0 | 1.07 |
| Current-job DC plan stock holdings | 20 | 3.1 | 18 | 2.9 | 0.90 |
| Net housing value | 137 | 21.0 | 88 | 14.2 | 0.64 |
| Real estate | 18 | 2.8 | 9 | 1.4 | 0.50 |
| Business assets | 9 | 1.4 | 21 | 3.4 | 2.33 |
| Net value of vehicles | 18 | 2.8 | 15 | 2.4 | 0.83 |
| Financial assets | 23 | 3.4 | 16 | 2.6 | 0.70 |
| Direct stock holdings | 7 | 1.2 | 10 | 1.6 | 1.43 |
| IRA assets | 29 | 4.5 | 52 | 8.4 | 1.79 |
| IRA stock holdings | 21 | 3.3 | 33 | 5.3 | 1.57 |
| IRA plus stock holdings plus DC in stocks | 54 | 8.4 | 68 | 11.0 | 1.26 |

SOURCE: Authors' calculations using HRS.

NOTES: Based on 200 observations for 2006 and 193 observations for 2010. Sample excludes households in the top and bottom 1 percent of wealth in each survey year. Data are weighted.

Early Boomer households are those with at least one member born during 1948–1953.

Subtotals do not necessarily equal the sum of rounded components.

All values are 2010 dollars.

Changes in Components of Wealth 2006–2010

We examine changes in the components of total wealth by comparing 2006 and 2010 values, using 2010 dollars for both years. Note that the present value of Social Security (\$256,000) does not change because we use the 2010 base to calculate the present value no matter the base year of the survey. Otherwise, we would find differences in total wealth between 2006 and 2010 simply because of the passage of time.⁵

Changes in earnings induced by the recession may affect the present value of Social Security benefits. If the recession alters earnings in later years, those differences change the average lifetime earnings on which monthly benefit amounts are calculated. Although we do not have Social Security earnings records for 2010 with which to calculate any resulting differences in benefit amounts, the effect of the recession on Social Security wealth is likely to be very modest.

Benefit adjustments for early and delayed benefit claiming are designed to be actuarially fair, so that changes in Social Security wealth due to additional work and delayed claiming will be much smaller than the associated changes in annual benefits. Recession-induced changes in employment will be the major source of change in Social Security wealth. Even here, for many people the change will mean that earnings from an earlier year will be used in calculating benefits, instead of covered earnings on a job that was lost due to the recession. When we examine the changes in employment and retirement induced by the recession, we find that these changes are very modest, so that the induced change in Social Security wealth should likewise be very modest. Nevertheless, because we calculate Social Security wealth as of claiming age in 2004, we understate the recession's effect on it in 2010. Benefit claiming at the earliest entitlement age also

Table 3.
Effect of the Great Recession on the average value of wealth in Early Boomer households in the lowest wealth quartile, by component: 2006 (adjusted) and 2010

| Component | 2006 | | 2010 | | Ratio of values, 2010 to 2006 |
|---|-------------------------------|------------------|-------------------------------|------------------|-------------------------------|
| | Mean value (thousand dollars) | Percent of total | Mean value (thousand dollars) | Percent of total | |
| Total | 124 | 100.0 | 123 | 100.0 | 0.99 |
| Social Security plus pensions | 104 | 83.7 | 104 | 84.7 | 1.00 |
| Social Security benefits | 98 | 79.2 | 97 | 79.0 | 0.99 |
| All pensions | 6 | 4.5 | 7 | 5.7 | 1.25 |
| DB plans | 3 | 2.3 | 4 | 3.0 | 1.28 |
| DC plans | 3 | 2.2 | 3 | 2.6 | 1.19 |
| DC plan from previous job | 1 | 0.4 | a | 0.6 | 1.75 |
| DC plan from current job | 2 | 1.8 | 3 | 2.0 | 1.09 |
| Current-job DC plan stock holdings | 1 | 1.2 | 11 | 0.9 | 0.79 |
| Net housing value | 13 | 10.5 | 14 | 11.5 | 1.08 |
| Real estate | 1 | 0.8 | 1 | 0.7 | 0.90 |
| Business assets | 1 | 0.9 | 1 | 0.5 | 0.55 |
| Net value of vehicles | 5 | 4.1 | 5 | 3.7 | 0.92 |
| Financial assets | -2 | -1.5 | -4 | -2.8 | 1.75 |
| Direct stock holdings | a | 0.2 | a | 0.3 | 2.00 |
| IRA assets | 2 | 1.5 | 2 | 1.7 | 1.05 |
| IRA stock holdings | 1 | 0.7 | 1 | 1.0 | 1.33 |
| IRA plus stock holdings plus DC in stocks | 3 | 2.3 | 3 | 2.4 | 1.07 |

SOURCE: Authors' calculations using HRS.

NOTES: Based on 478 observations. Sample excludes households in the top and bottom 1 percent of wealth in each survey year. Data are weighted.

Early Boomer households are those with at least one member born during 1948–1953.

Subtotals do not necessarily equal the sum of rounded components.

All values are 2010 dollars.

a. Less than \$500.

reduces Social Security wealth for families because of the limit on widow's benefits.

We can make a very crude calculation to indicate an upper limit of the likely effect of using the "claim now" scenario. That upper limit is the difference in benefits between the "claim now" scenario, where the individual stops working immediately (overstating the effect of the recession on work), and the early entitlement scenario, where all respondents are assumed to work until early entitlement age (yielding a major overstatement of the change in work due to the recession). For those in our sample who are younger than 62 in 2006, own benefits are \$101,000 in the "claim now" scenario, \$116,000 if claimed at early entitlement age, and \$120,000 if claimed at full retirement age. Again, the overall understatement in the effect of the recession on own benefits will be much less than the 13 percent difference in calculated Social Security wealth between individuals who "claim now" and those who claim at early retirement age. This understatement is likely to be less than 13 percent even when the calculation includes spouse and survivor benefits.

Between 2006 and 2010, the present value of lifetime wealth held in all pensions fell by about 1 percent in real terms, from \$220,000 to \$218,000. The value of DB plans declined about 6 percent. Conversely, the mean real value of DC plans increased by 11 percent, from \$70,000 to \$78,000. The real value of DC plans held from previous jobs increased by 56 percent between 2006 and 2010, whereas those provided by current jobs decreased by 4 percent. However, the number of people classified as having a DC plan from a previous job is affected by the number who left their jobs in the previous 4 years. Excluding the plans that entered the previous-job category between 2006 and 2010, the growth in balances of plans from previous jobs would be 20 percent. The 4 percent decline in current-job DC plan balances was cushioned by contributions made over the 4-year period. The value of stock holdings in current-job DC plans fell by about one-quarter. Note that some of the value of DB and DC plans rolled over into IRAs for those with nonretirement separations between 2006 and 2010. Thus, part of the turnover in pension balances is reflected in IRA assets, which increased 50 percent, from \$58,000 to \$87,000, over the 4-year period. However, a composition effect underlies these changes, as explained below.

Changes between survey years in the composition of households with an IRA influence the apparent broad growth in real IRA balances. In our sample, the 159 households that had no IRA balance in 2006

had an average IRA balance of \$178,000 in 2010. By contrast, the 191 households that had no IRA balance in 2010 reported an average balance of \$64,000 in 2006. For the 580 households that reported an IRA balance in both years, average balances increased from \$139,000 to \$216,000, or by 55 percent. Once again, however, these increases are affected by the presence of those who had an IRA in 2006 and also rolled a pension from a current or previous job into an IRA between 2006 and 2010.

Four asset categories suffered major declines in value over the recession: housing, real estate (mainly second homes), business assets, and the net value of vehicles. Housing wealth is the largest of these assets, representing almost one-fifth of total wealth in 2006. In real terms, net housing wealth declined by 23 percent between 2006 and 2010. The decline in net housing wealth is greater than the decline in housing prices because the wealth calculation subtracts any mortgage obligation from the gross value of the house. Thus, net housing wealth is more sensitive to the decline in housing prices than is gross housing wealth. The \$39,000 decline in real net housing wealth from \$167,000 to \$128,000 equals 4.5 percent of total wealth held at the onset of the recession.⁶ In fact, the decline in housing wealth exceeds the entire decline in total wealth of households, having absorbed the increases in wealth that accrued from other assets.

Although nearly 30 percent of our sample described their area as a "poor" housing market, negative net housing wealth is not common among members of the Early Boomer cohort. As seen in Table 4, in 2006, 42 out of 1,949 households had negative net housing wealth, averaging -\$81,716. In 2010, 92 households had negative housing wealth, averaging -\$66,047 per household. Although this is a serious problem for the affected households and the average amount "under water" is quite high, only 5 percent of households in the Early Boomer cohort had negative housing wealth, even by 2010. Only 3.2 percent of homeowners fell behind in their mortgage, with 0.9 percent reporting they faced possible foreclosure. Most had paid off enough of their mortgage by 2006 to avert going under water as a result of the recession. Although multiple adverse events—such as losing a job, being unable to pay the mortgage, and as a result losing a home—are a major issue for younger people, only 0.3 percent of this older sample reported losing a job and facing potential or actual foreclosure.

The decline in housing wealth will affect consumption during retirement less than the fall in housing

values would suggest. Individuals typically hold housing wealth intact throughout most of retirement, spending it only after health deteriorates substantially or family structure changes, as with the death of a spouse or entry into a nursing home (Venti and Wise 2004). This means that most nonhealth-related expenditures over the course of retirement are financed by a combination of Social Security, pensions, and financial assets. In 2010 dollars, average total wealth excluding net housing value actually grew by 2.1 percent over the period of the recession, from \$704,000 to \$719,000.

Bricker and others (2012) use statistics from the Survey of Consumer Finances (SCF) to examine changes in wealth over the 2007–2010 period. Although comparing results drawn from the HRS with those drawn from the SCF is useful, the comparisons are not straightforward. That study focuses on the full population; in the few results it reports for near-retirees, the age groups most comparable to those in our study are 45–54 and 55–64. In addition, that study’s authors calculate wealth differences from cross-sectional data, comparing different people at similar ages at the beginning and the end of the full period of the recession. By contrast, we focus on changes in a panel, comparing wealth levels for the same individuals at the beginning and the end of the recession. In a related paper, Bricker and others (2011) report results for a SCF panel that covers 2006–2009. Thus, their reference period is not identical with this study’s 2006–2010, which may be a problem if, as seems likely, some residual adverse effects of the recession extend beyond its formally recognized end date. The SCF panel differs from the HRS panel in other respects as well.⁷

Bearing these differences in mind, we compare specific findings in Bricker and others (2012) with our findings for the HRS population. Mean wealth in 2006, reported in 2010 dollars for members of the panel reported in the present study (where one member of the household is aged from 53 to 58 in 2006), is \$871,000 overall and \$649,000 for those in the median 10 percent of wealth.⁸ Eliminating the DB pension and Social Security categories, mean wealth in the HRS data is \$465,000 among all households and \$270,000 among households in the median 10 percent of wealth. Mean wealth figures for the HRS are well below the mean values found in the SCF, because the SCF sample heavily weights the high-income oversample. Recalling that the SCF excludes Social Security and DB pensions, mean wealth in the 2007 SCF, reported in 2010 dollars, is \$695,000 and \$987,000 for those families in 2007 with a head aged 45 to 54, and aged 55 to 64, respectively; the corresponding median values are \$194,000 and \$266,000. Once the HRS wealth figures are adjusted to eliminate Social Security and DB pension wealth, we see that the median wealth figures for the SCF and HRS are much closer than are the means.

The change in mean wealth, excluding Social Security and DB pensions, is much smaller in the HRS than in the SCF. For those in the SCF aged 45 to 54, mean wealth declines by 17.5 percent; for those aged 55 to 64, mean wealth declines by 10.8 percent. In the HRS, including pensions and Social Security for the panel, mean wealth declines by 2.8 percent. Excluding DB pensions and Social Security, mean wealth falls by 3.2 percent. Remember that the HRS data refer to changes in total wealth experienced over the 4 years

Table 4.
Households with negative net house value, gross house values, and mortgages in 2006 and 2010 (weighted)

| Year | Sample size | Households with negative net house value | | All households | |
|---|-------------|--|---------------------|-----------------------|--------------------|
| | | Number | Mean net value (\$) | Mean gross value (\$) | Mean mortgage (\$) |
| Full sample | | | | | |
| 2006 | 1,949 | 42 | -81,716 | 218,409 | 68,862 |
| 2010 | 1,949 | 92 | -66,047 | 194,203 | 66,319 |
| Households in median 10% of wealth | | | | | |
| 2006 | 200 | 3 | -28,002 | 198,189 | 75,791 |
| 2010 | 193 | 17 | -90,817 | 174,149 | 86,233 |
| Households in bottom wealth quartile | | | | | |
| 2006 | 478 | 11 | -77,188 | 28,605 | 16,945 |
| 2010 | 478 | 22 | -55,583 | 33,801 | 19,683 |

SOURCE: Authors' calculations using HRS.

by the same individuals, while the changes reported in the SCF are cross-sectional.

Cross-Cohort Comparisons

Next, we consider how changes in wealth for the Early Boomer cohort compare with those observed for earlier cohorts. If we are to determine the full effects of the recession, we need some idea of how wealth would have grown in more stable economic times. To document differences over similar age spans in earlier periods, we examine the cohorts whose members were aged 53–58 in 2000 (the “War Baby” cohort) and those aged 53–58 in 1994 (commonly known as the “original HRS cohort,” as this group comprised the study’s initial panel).

To be sure, the experiences of the two earlier cohorts may be unusual in their own respects,

featuring a stock market boom (1994–1998) and a housing bubble (2000–2004). We also are aware that differences in the path of wealth accumulation between members of the Early Boomer and older cohorts may reflect influences other than the recession, such as long-term demographic, economic, and behavioral trends. Nevertheless, bearing the differences in mind, cross-cohort comparisons are informative.

As we have found, the total wealth of the Early Boomer population declined by 2.8 percent over the period of the Great Recession. By comparison, wealth grew by 7.6 percent for the original HRS cohort and by 3.2 percent for the War Babies at similar ages (Table 5). Thus, with the two earlier cohorts enjoying gains averaging 5.4 percent, Early Boomers’ net wealth at the end of the Great Recession would have been about 8 percent higher had it grown at the same rate.

Table 5.
Change in the value of wealth for Early Boomers during the Great Recession compared with the experience of two earlier cohorts at the same ages, by component of wealth

| Component | Early Boomer cohort: 2010 value relative to 2006 value | War Baby cohort: 2004 value relative to 2000 value | Original HRS cohort: 1998 value relative to 1994 value |
|---|--|--|--|
| Total | 97.2 | 103.2 | 107.6 |
| Social Security plus pensions | 99.4 | 95.4 | 102.2 |
| Social Security benefits ^a | 100.0 | 100.0 | 100.0 |
| All pensions | 99.1 | 90.8 | 106.0 |
| DB plans | 94.0 | 90.5 | 100.6 |
| DC plans | 111.4 | 91.5 | 129.7 |
| DC plan from previous job | 155.6 | 155.3 | 177.4 |
| DC plan from current job | 96.2 | 80.0 | 113.3 |
| Current-job DC plan stock holdings | 75.8 | -- | -- |
| Net housing value | 76.6 | 138.7 | 106.5 |
| Real estate | 74.3 | 123.8 | 95.9 |
| Business assets | 81.6 | 97.1 | 96.8 |
| Net value of vehicles | 85.0 | 105.0 | 91.3 |
| Financial assets | 107.7 | 104.7 | 126.5 |
| Direct stock holdings | 110.5 | 93.8 | 160.0 |
| IRA assets | 150.0 | 90.3 | 157.1 |
| IRA stock holdings | 130.2 | -- | -- |
| IRA plus stock holdings plus DC in stocks | 111.4 | -- | -- |
| Observations | 1,949 | 2,028 | 3,401 |

SOURCE: Authors' calculations using HRS.

NOTES: Data are weighted. For each period, values for the earlier year have been adjusted to the later year's constant-dollar value.

Samples exclude households in the top and bottom 1 percent of wealth in each survey year.

Early Boomer households are those with at least one member born during 1948–1953. War Baby households are those with at least one member born during 1942–1947. Original HRS cohort households are those with at least one member born during 1936–1941.

-- = not available.

a. Social Security wealth is held constant in real terms by construction.

We can also compare changes in the value of pensions and IRAs over the period of the recession with those experienced by members of older cohorts. Trends in pension coverage, rules, and availability by plan type have affected the three cohorts differently. For instance, the share of Early Boomers reporting they lost their pension roughly doubled the shares reported by each of the comparison cohorts (not shown). Early Boomers with DB plans reported more coverage changes than did members of earlier cohorts at comparable ages, and Early Boomers with DC plans reported fewer changes. Although these changes may indicate effects of the recession, some of the differences may instead reflect longer-term trends as well as changes in survey questions over the years.

Table 6 compares the changes in wealth components by cohort. Average pension wealth increased by about 6 percent (from \$201,000 in 1994 to \$213,000 in 1998)

for members of the original HRS cohort, with nearly all of the increase attributable to DC plan holdings. By contrast, total pension wealth remained essentially steady for members of the Early Boomer cohort over the period of the Great Recession, with DB values declining and DC values growing. Remember that rollovers move funds from the pension category to the IRA category. In both periods, the growth in IRA wealth was substantial, expanding by roughly half in a 4-year span.

The housing bubble affected the growth of total wealth experienced by the older cohorts. In broad terms, wealth in the form of housing value increased by 6.5 percent (from \$108,000 to \$115,000) between 1994 and 1998, grew by 38.4 percent (from \$111,000 to \$154,000) between 2000 and 2004, and fell 23.4 percent (from \$167,000 to \$128,000) between 2006 and 2010. More specifically, because housing constituted

Table 6.
Average value of wealth for Early Boomers before and after the Great Recession compared with the experience of two earlier cohorts at the same ages, by component of wealth (thousands of dollars)

| Component | Early Boomers | | War Babies | | Original HRS | |
|---|---------------|------|------------|------|--------------|------|
| | 2006 | 2010 | 2000 | 2004 | 1994 | 1998 |
| Total | 871 | 847 | 866 | 894 | 788 | 848 |
| Social Security plus pensions | 476 | 473 | 479 | 457 | 453 | 463 |
| Social Security benefits ^a | 256 | 256 | 239 | 239 | 251 | 251 |
| All pensions | 220 | 218 | 240 | 218 | 201 | 213 |
| DB plans | 150 | 141 | 169 | 153 | 164 | 165 |
| DC plans | 70 | 78 | 71 | 65 | 37 | 48 |
| DC plan from previous job | 18 | 28 | 11 | 17 | 7 | 14 |
| DC plan from current job | 53 | 51 | 60 | 48 | 30 | 34 |
| Current-job DC plan stock holdings | 33 | 25 | -- | -- | -- | -- |
| Net housing value | 167 | 128 | 111 | 154 | 108 | 115 |
| Real estate | 35 | 26 | 42 | 52 | 49 | 47 |
| Business assets | 38 | 31 | 35 | 34 | 31 | 30 |
| Net value of vehicles | 20 | 17 | 20 | 21 | 23 | 21 |
| Financial assets | 78 | 84 | 106 | 111 | 83 | 105 |
| Direct stock holdings | 38 | 42 | 64 | 60 | 35 | 56 |
| IRA assets | 58 | 87 | 72 | 65 | 42 | 66 |
| IRA stock holdings | 43 | 56 | -- | -- | -- | -- |
| IRA plus stock holdings plus DC in stocks | 123 | 137 | -- | -- | -- | -- |
| Observations | 1,949 | | 2,028 | | 3,401 | |

SOURCE: Authors' calculations using HRS.

NOTES: Data are weighted. For each cohort, values for the earlier year are adjusted to the later year's constant-dollar value.

Samples exclude households in the top and bottom 1 percent of wealth in each survey year.

Early Boomer households are those with at least one member born during 1948–1953. War Baby households are those with at least one member born during 1942–1947. Original HRS cohort households are those with at least one member born during 1936–1941.

-- = not available.

a. Social Security wealth is held constant in real terms by construction.

13.7 percent of total wealth (\$788,000) in 1994, housing wealth growth accounted for 0.9 percentage points of the 7.6 percent increase in total wealth for the original HRS cohort. For the War Babies, the growth in real housing wealth by itself would have increased real total wealth by 5.0 percent, but because of declines in other categories, total wealth increased only 3.2 percent. For the Early Boomers, the decline in housing value alone would have reduced total wealth by 4.5 percent, but because of modest gains in other categories, total wealth declined by only 2.8 percent.

In sum, this relatively informal analysis suggests that the Early Boomers experienced only a modest decline in total wealth over the period of the Great Recession. They accumulated less wealth over the period of the recession than they would have had they shared the near-retirement economic experience of members of cohorts born 6 or 12 years earlier, but a good part of that difference reflects the fact that members of the War Baby cohort enjoyed an atypical wealth increase from the housing bubble.

Households with Gains and Losses in Wealth

In this section we distinguish between those whose total wealth (and individual assets) gained or lost value over the period spanning the Great Recession. Table 7 reports the percentage of individuals experiencing changes in each of the components of wealth between 2006 and 2010, and the average changes in value. The wealth values in Table 7 differ from those in Table 1, which reflects assets held by all members of the cohort. Thus, Table 1 includes zero values in the averages, while Table 7 includes values only for the subgroup of the population that actually owns the asset.⁹

Of the five assets with the highest values in Table 1, Social Security wealth was held by 98.0 percent of households in 2006, while 71.1 percent held pension wealth, 79.3 percent owned a home, 65.8 percent had financial assets, and 43.3 percent had IRA balances. Nearly 43 percent of households lost more than 5 percent of their total wealth between 2006 and 2010.

Table 7.
Distribution of Early Boomer households by change in value of wealth over the course of the Great Recession, by component of wealth

| Component | Percentage of households with any holdings in 2006 | Among households holding any wealth in the given component in 2006, percentage as of 2010 with— | | | Among households holding any wealth in the given component in both 2006 and 2010 | |
|--------------------------|--|---|---------------------------------|------------------------------------|--|--|
| | | Loss in value greater than 5% | Growth in value greater than 5% | Change in value between -5% and 5% | Mean value in 2010 (thousands of dollars) | Percent change in mean value 2006–2010 |
| Total | 99.8 | 42.9 | 39.8 | 17.3 | 842 | -2.6 |
| Social Security benefits | 98.0 | ^a 0.0 | ^a 0.0 | ^a 100.0 | 261 | 0.0 |
| All pensions | 71.1 | 49.8 | 40.3 | 9.9 | 328 | 1.2 |
| DB plans | 50.0 | 69.2 | 26.1 | 4.7 | 314 | -0.1 |
| DC plans | 49.7 | 41.5 | 42.5 | 15.9 | 162 | 6.6 |
| Net housing value | 79.3 | 61.9 | 32.5 | 5.7 | 157 | -24.5 |
| Real estate | 15.3 | 76.9 | 22.4 | 0.7 | 214 | -15.5 |
| Business assets | 11.8 | 74.1 | 25.3 | 0.7 | 345 | -5.4 |
| Net value of vehicles | 86.2 | 60.6 | 36.9 | 2.5 | 20 | -16.4 |
| Financial assets | 65.8 | 46.4 | 50.9 | 2.5 | 151 | 3.5 |
| Direct stock holdings | 25.6 | 73.0 | 25.2 | 1.8 | 194 | 7.8 |
| IRA assets | 43.3 | 44.8 | 51.5 | 3.6 | 216 | 40.2 |
| IRA stock holdings | 35.5 | 53.3 | 43.2 | 3.5 | 161 | 16.5 |

SOURCE: Authors' calculations using HRS.

NOTES: Based on 1,927 observations. Sample excludes households in the top and bottom 1 percent of wealth in 2006 and in the top 1 percent of wealth in 2010.

Early Boomer households are those with at least one member born during 1948–1953.

Subtotals do not necessarily equal the sum of rounded components.

Calculations are based on 2006 values in 2010 dollars.

a. Social Security wealth is held constant in real terms by construction.

Total wealth increased by more than 5 percent for 39.8 percent of households, and 17.3 percent of households experienced a change of 5 percent or less in real terms. The average real value of total assets fell by 2.6 percent between 2006 and 2010.¹⁰

For most assets, the share of households experiencing a loss in value of greater than 5 percent exceeds the share for which the asset gained over 5 percent in value. Nearly 50 percent of households with a pension experienced more than a 5 percent loss in pension value, while 40.3 percent experienced a gain of more than 5 percent in value. The remaining 9.9 percent of households experienced a change of less than 5 percent in absolute value. In terms of housing wealth, households losing more than 5 percent in value outnumbered those gaining more than 5 percent by 61.9 percent to 32.5 percent. Among households with a positive value for both 2006 and 2010, net housing value declined by one-quarter. The values of real estate holdings (mainly second homes), business assets, and vehicles also declined. However, the other major asset categories showed gains that were almost large enough to offset those losses. The real value of pensions rose by 1.2 percent; DB plan values were steady and DC plan balances grew with increasing contributions over the period, as well as with real interest and other payments. Financial assets increased by 3.5 percent, and IRA assets gained 40.2 percent. Some of the gain in IRA assets almost certainly reflects the effects of rollovers. Note, however, that with the overall real pension wealth increase of 1.2 percent between 2006 and 2010, the increase in the values of pensions due to contributions and additional work was sufficient to offset the pension value lost to rollovers.

Comparing households that gained or lost DB pension wealth, we begin with the households that had DB pension wealth in 2006. Of the 918 observations with DB pension wealth that changed by more than 5 percent by 2010, 664 experienced a reduction in value, while 254 experienced a gain. Losers experienced an aggregate loss of \$76.6 million, while gainers accumulated \$43.2 million (not shown). However, when we limit the sample to those who have DB pension wealth in both years, 527 households lost DB wealth totaling \$44.6 million, while 254 households gained \$43.2 million. Thus, once we condition on having a DB pension asset in both years, although the number of households experiencing losses roughly doubles the numbers of gainers, the dollar value of pension gains and losses roughly balance, with a gain-to-loss ratio of about 0.97.

The gains and losses of DC wealth are less balanced. For households reporting DC wealth in 2006, 394 experienced losses while 396 had gains. Despite those similar counts, aggregate DC pension losses (\$45.2 million) were 31 percent greater than gains (\$34.4 million). If we restrict the sample to households reporting DC wealth in both 2006 and 2010, 199 households lost DC wealth and almost twice as many, 396, experienced gains. The value of gains was roughly \$34.4 million, while losses were \$27.3 million, so that gains outstripped losses by about 26 percent.

Also among those holding DC wealth in 2006, stocks comprised roughly the same share of the portfolios of those who experienced gains as for those who endured losses. Stocks accounted for 60 percent of DC value in 2006 for those whose DC wealth dropped during the recession, and 53 percent afterward; the corresponding figures for those who gained DC wealth are 61 percent and 50 percent.

In Tables 8 and 9, we examine the distributions of households experiencing total wealth losses and gains ordered by their wealth decile. Table 8 shows that 39 percent of households in the lowest wealth decile experienced a decline in the total value of their assets. This share increases to 70 percent of the households in the highest wealth decile. Thus, as wealth increases, the proportion of households experiencing a loss grows. This outcome suggests that the sources of wealth held by those in the lowest wealth decile may be much less vulnerable to the recession than are the sources of wealth held by those in the top deciles. A comparison of Table 3 (showing the mean value of holdings for members of the lowest quartile of total wealth) with the mean values for all households shown in Table 1 appears to support that premise, as members of the lower quartile are much less likely to own a house, to have stocks or bonds, or to have pensions. Indeed, 79 percent of the wealth held by members of the lowest wealth quartile is Social Security wealth. Measurement errors, especially errors of omission in the 2006 wealth data, may also play an important role in the pattern of increasing prevalence of losses among the higher wealth deciles, and may affect the ratio of mean wealth in 2010 to mean wealth in 2006.¹¹

Table 8 also sorts households according to the proportion of wealth lost. Nineteen percent of households in the lowest wealth decile experienced a loss of up to 10 percent of total wealth, 12 percent experienced a loss of more than 20 percent, and 6 percent experienced a loss of more than half their total wealth.

Table 8.
Distribution of Early Boomer households experiencing a decline in real wealth during the Great Recession by 2006 wealth decile

| Decile | Mean wealth in 2006 (thousands of dollars) | Mean wealth in 2010 relative to mean wealth in 2006 | Percentage of households experiencing any decline | Percentage of households experiencing a decline of— | | | | |
|--------------|--|---|---|---|--------------|--------------|--------------|---------------|
| | | | | Up to 10% | 10.1% to 20% | 20.1% to 30% | 30.1% to 50% | More than 50% |
| 1 (lowest) | 56 | 1.46 | 39 | 19 | 6 | 3 | 3 | 6 |
| 2 | 150 | 1.39 | 39 | 26 | 6 | 2 | 3 | 2 |
| 3 | 256 | 1.17 | 45 | 15 | 11 | 5 | 8 | 6 |
| 4 | 392 | 1.08 | 54 | 15 | 15 | 8 | 10 | 5 |
| 5 | 520 | 1.13 | 46 | 21 | 9 | 7 | 8 | 2 |
| 6 | 661 | 1.04 | 56 | 12 | 13 | 11 | 12 | 7 |
| 7 | 858 | 1.11 | 54 | 15 | 11 | 9 | 12 | 7 |
| 8 | 1,097 | 1.10 | 52 | 15 | 13 | 7 | 13 | 4 |
| 9 | 1,492 | 0.91 | 68 | 16 | 16 | 14 | 10 | 12 |
| 10 (highest) | 2,524 | 0.82 | 70 | 12 | 11 | 15 | 20 | 13 |

SOURCE: Authors' calculations using HRS.

NOTES: Based on 1,927 observations. Sample excludes households in the top and bottom 1 percent of wealth in 2006 and in the top 1 percent of wealth in 2010.

Early Boomer households are those with at least one member born during 1948–1953.

Subtotals do not necessarily equal the sum of rounded components.

Calculations are based on 2006 values in 2010 dollars.

Table 9.
Distribution of Early Boomer households experiencing an increase in real wealth during the Great Recession by 2006 wealth decile

| Decile | Mean wealth in 2006 (thousands of dollars) | Mean wealth in 2010 relative to mean wealth in 2006 | Percentage of households experiencing any increase | Percentage of households experiencing an increase of— | | | | |
|--------------|--|---|--|---|--------------|--------------|--------------|---------------|
| | | | | Up to 10% | 10.1% to 20% | 20.1% to 30% | 30.1% to 50% | More than 50% |
| 1 (lowest) | 56 | 1.46 | 49 | 15 | 4 | 5 | 6 | 19 |
| 2 | 150 | 1.39 | 59 | 20 | 12 | 6 | 8 | 16 |
| 3 | 256 | 1.17 | 54 | 21 | 10 | 3 | 6 | 15 |
| 4 | 392 | 1.08 | 46 | 13 | 8 | 6 | 7 | 12 |
| 5 | 520 | 1.13 | 54 | 17 | 10 | 6 | 8 | 14 |
| 6 | 661 | 1.04 | 45 | 11 | 8 | 7 | 9 | 9 |
| 7 | 858 | 1.11 | 46 | 9 | 9 | 8 | 7 | 13 |
| 8 | 1,097 | 1.10 | 49 | 17 | 7 | 5 | 10 | 11 |
| 9 | 1,492 | 0.91 | 32 | 11 | 7 | 5 | 4 | 5 |
| 10 (highest) | 2,524 | 0.82 | 30 | 13 | 9 | 5 | 2 | 2 |

SOURCE: Authors' calculations using HRS.

NOTES: Based on 1,927 observations. Sample excludes households in the top and bottom 1 percent of wealth in 2006 and in the top 1 percent of wealth in 2010.

Early Boomer households are those with at least one member born during 1948–1953.

Subtotals do not necessarily equal the sum of rounded components.

Calculations are based on 2006 values in 2010 dollars.

In the highest wealth decile, 12 percent of households experienced a loss of up to 10 percent, 48 percent lost more than 20 percent of their wealth, and 13 percent experienced a loss of more than half their assets.

Table 9 examines households gaining wealth between 2006 and 2010. The share of households experiencing a gain in assets increases from the lowest to the second wealth decile, but the share generally declines between the fifth and tenth deciles. Forty-nine percent of households in the lowest wealth decile experience a gain in wealth over the period of the recession, while 30 percent of households in the top wealth decile experience a gain. Thirty percent of households in the lowest decile experienced a gain in wealth of at least 20 percent. Only 9 percent of households in highest wealth decile experienced a gain of at least 20 percent.

Retirement Outcomes

This section analyzes retirement flows for members of the Early Boomer cohort over the period of the recession and compares those flows with the retirement patterns of members of earlier cohorts over the same age span. Retirement behavior differs across cohorts for many reasons, so a simple comparison will not isolate the effects of the recession. Nevertheless, it is useful to consider retirement dynamics within and across cohorts.

Retirement Within the Early Boomer Cohort

Table 10 shows retirement flows between 2006 and 2010 for members of the Early Boomer cohort. Retirement status categories are not retired, partially retired, completely retired, not relevant, and not working-not retired. “Not relevant” comprises

Table 10.
Retirement status of Early Boomers before and after the Great Recession, by sex: 2006 and 2010
(in percent)

| Status in 2006 | Percentage distribution in 2006 | Status in 2010 | | | | | |
|-------------------------|---------------------------------|----------------|-------------|-------------------|--------------------|--------------|-------------------------|
| | | Total | Not retired | Partially retired | Completely retired | Not relevant | Not working-not retired |
| Overall | | | | | | | |
| Total | 100.0 | 100.0 | 49.2 | 11.0 | 21.6 | 3.8 | 14.5 |
| Not retired | 62.8 | 100.0 | 70.0 | 7.1 | 11.1 | 0.2 | 11.7 |
| Partially retired | 10.3 | 100.0 | 28.3 | 44.8 | 14.9 | 1.4 | 10.6 |
| Completely retired | 10.7 | 100.0 | 2.1 | 4.6 | 80.3 | 7.0 | 6.0 |
| Not relevant | 6.2 | 100.0 | 3.8 | 6.0 | 34.7 | 29.9 | 25.6 |
| Not working-not retired | 10.0 | 100.0 | 19.2 | 10.3 | 23.5 | 9.3 | 37.7 |
| Men | | | | | | | |
| Total | 100.0 | 100.0 | 54.6 | 9.1 | 21.6 | 1.2 | 13.6 |
| Not retired | 72.0 | 100.0 | 71.0 | 6.8 | 11.0 | 0.0 | 11.1 |
| Partially retired | 6.8 | 100.0 | 26.0 | 45.1 | 18.4 | 0.0 | 10.5 |
| Completely retired | 10.4 | 100.0 | 2.0 | 5.2 | 81.1 | 3.1 | 8.6 |
| Not relevant | 2.3 | 100.0 | 2.1 | 2.1 | 56.3 | 26.1 | 13.5 |
| Not working-not retired | 8.5 | 100.0 | 16.7 | 6.3 | 31.3 | 3.0 | 42.8 |
| Women | | | | | | | |
| Total | 100.0 | 100.0 | 44.3 | 12.7 | 21.6 | 6.2 | 15.2 |
| Not retired | 54.4 | 100.0 | 68.6 | 7.5 | 11.2 | 0.4 | 12.3 |
| Partially retired | 13.5 | 100.0 | 29.3 | 44.7 | 13.3 | 2.1 | 10.7 |
| Completely retired | 11.0 | 100.0 | 2.2 | 4.1 | 79.6 | 10.3 | 3.9 |
| Not relevant | 9.7 | 100.0 | 4.2 | 6.8 | 30.0 | 30.8 | 28.3 |
| Not working-not retired | 11.4 | 100.0 | 20.9 | 13.0 | 18.2 | 13.6 | 34.2 |

SOURCE: Authors' calculations using HRS.

NOTES: Early Boomers were aged 53–58 in 2006.

Rounded components of percentage distributions do not necessarily sum to 100.

individuals such as homemakers or caregivers who indicate that the HRS retirement question is irrelevant because they do not work for pay, or for other reasons. “Not working-not retired” reflects either unemployed and actively seeking a job or willing to accept a job but not actively searching.

We determined retirement status primarily according to the reported number of hours worked. For ambiguous cases, we also considered self-reported retirement status. “Not retired” describes all respondents working 30 or more hours per week and 1,560 or more hours per year, as well as those who declare “not retired” status and report between 1,250 and 1,560 hours worked. “Partially retired” describes respondents working no more than 25 hours per week or between 100 and 1,560 hours per year, except those noted above. “Not working-not retired” describes respondents who report their labor market status as “not working” and their retirement status as either “not retired” or “partially retired.” We consider respondents who report a “not working” labor market status and a “retired” status to be “completely retired.” Finally, “not relevant” describes those who report a “not working” labor market status and a “not relevant” retirement status.

Table 10 shows that 62.8 percent of the Early Boomers were not retired in 2006 and that the figure fell to 49.2 percent in 2010. Thus, a considerable share of the cohort exited full-time work as its members aged from 53–58 in 2006 to 57–62 in 2010. The share of the cohort that was partially retired remained relatively unchanged, increasing from 10.3 to 11.0 percent, while the percentage that was completely retired increased from 10.7 percent to 21.6 percent. The not working-not retired category—which should capture the involuntarily unemployed along with others who may or may not have realistic job market expectations but who claim to be available for work—increased from 10.0 percent in 2006 to 14.5 percent in 2010.

Notice the reversals in status. Among those completely retired in 2006, 2.1 percent had become not retired in 2010, and another 4.6 percent became partially retired. Among those partially retired in 2006, 28.3 percent were not retired in 2010.

Women are less likely to have worked over their full lifetimes and are more likely to retire at an earlier age when they do work. Although 72.0 percent of men were not retired in 2006, 54.4 percent of women were not retired. Thus, despite the recent upward trend in

labor force participation for women and the growing continuity of their time spent at work, women still exhibit lower full-time labor market activity. Consequently, men were less likely to be partially retired (6.8 percent versus 13.5 percent of women), although men and women were almost equally likely to be fully retired (10.4 percent and 11.0 percent, respectively). Over the period from 2006 to 2010, the share of men in the cohort classified as not retired fell by 17.4 percentage points. For women, that share declined 10.1 percentage points. The change in shares that were completely retired were roughly the same for men and women; for men, the share increased by 11.2 percentage points and for women, it increased by 10.6 percentage points. The increase in the fraction who were not working-not retired was slightly higher for men than for women.

Of course, none of these intracohort numbers can tell us the effects of the recession on retirement outcomes or flows. We will attempt some simple cross-cohort comparisons that may hint at the effects of the recession.

Differences in Retirement Flows Between Cohorts

Using HRS panel data, we can examine whether the retirement outcomes for members of the Early Boomer cohort, whose retirement decisions were affected by the recession, differ from those of older cohorts, whose decisions were not. By observing the differences in retirement flows for members of each cohort, we can see the net effect of conflicting influences. For example, the wealth effect of falling assets tends to produce an increase in the average retirement age, while the declining availability of suitable labor market opportunities tends to accelerate retirement. To be sure, as long as there are other forces at work differentially affecting the retirements of members of different cohorts, simple comparisons of labor market flows among members of different cohorts are only a useful first step.

Table 11 replicates Table 10 for the War Baby Cohort, who were aged 53–58 in 2000. Table 12 presents the retirement flows for members of the original HRS cohort, who were aged 53–58 in 1994. By way of background, the unemployment rate was 6.1 percent in 1994, 4.0 percent in 2000, and 4.6 percent in 2006. Thus, the Early Boomers faced an initial unemployment rate that falls between those experienced by members of the comparison groups. After 4 years, the

respective unemployment rates were 4.5 percent in 1998, 5.5 percent in 2004, and 9.6 percent in 2010. The unemployment rate decreased by 1.6 percentage points for members of the original HRS cohort and increased by 1.5 percentage points for members of the War Baby cohort. By contrast, and reflecting the effect of the Great Recession, unemployment increased 5.0 percentage points over the observation period for those in the Early Boomer cohort.

Comparing Tables 10, 11, and 12, the not-retired share of the population at the end of the 4-year observation period is only slightly lower for the Early Boomers exposed to the recession (49.2 percent) than for those in the older cohorts (51.7 percent and 50.6 percent). The percentage of War Babies who are completely retired at the end of the observation period (19.3 percent) is a couple of points higher than for the original HRS cohort (15.8 percent) and a couple

of points lower than for the Early Boomers (21.6 percent). Despite the wide differences in the initial levels of and in the changes to the overall unemployment rate, the basic retirement flows look similar between the three cohorts. There is only a small difference in the fraction of respondents who reduced their work effort (transitioning from not retired to partially or fully retired, or from partially retired to fully retired) between the War Baby and Early Boomer cohorts. The fractions working the same amount or increasing their work effort over the 4-year period are also similar between the cohorts.

The percentage of Early Boomers not retired declined by 13.6 percentage points, from 62.8 percent to 49.2 percent, between 2006 and 2010. For the War Babies, the decline in the not-retired share of the population was also 13.6 percentage points. For the original HRS cohort, it was 10.6 percentage points. In each

Table 11.
Retirement status of War Babies in 2000 and 2004 (in percent)

| Status in 2000 | Percentage distribution in 2000 | Status in 2004 | | | | | |
|-------------------------|---------------------------------|----------------|-------------|-------------------|--------------------|--------------|-------------------------|
| | | Total | Not retired | Partially retired | Completely retired | Not relevant | Not working-not retired |
| Total | 100.0 | 100.0 | 51.7 | 11.4 | 19.3 | 8.9 | 8.7 |
| Not retired | 65.3 | 100.0 | 72.2 | 8.6 | 11.2 | 1.7 | 6.2 |
| Partially retired | 9.4 | 100.0 | 23.6 | 43.2 | 16.5 | 5.8 | 10.9 |
| Completely retired | 7.8 | 100.0 | 4.8 | 5.3 | 69.2 | 15.4 | 5.4 |
| Not relevant | 10.0 | 100.0 | 3.2 | 4.9 | 30.5 | 47.4 | 13.9 |
| Not working-not retired | 7.5 | 100.0 | 20.8 | 11.0 | 26.8 | 17.0 | 24.4 |

SOURCE: Authors' calculations using HRS.

NOTES: War Babies were aged 53–58 in 2000.

Rounded components of percentage distributions do not necessarily sum to 100.

Table 12.
Retirement status of original HRS cohort members in 1994 and 1998 (in percent)

| Status in 1994 | Percentage distribution in 1994 | Status in 1998 | | | | | |
|-------------------------|---------------------------------|----------------|-------------|-------------------|--------------------|--------------|-------------------------|
| | | Total | Not retired | Partially retired | Completely retired | Not relevant | Not working-not retired |
| Total | 100.0 | 100.0 | 50.6 | 10.8 | 15.8 | 16.1 | 6.6 |
| Not retired | 61.2 | 100.0 | 74.5 | 6.8 | 10.4 | 3.5 | 4.8 |
| Partially retired | 8.9 | 100.0 | 24.0 | 47.3 | 9.6 | 10.6 | 8.6 |
| Completely retired | 10.2 | 100.0 | 3.4 | 4.3 | 53.5 | 33.9 | 5.0 |
| Not relevant | 6.0 | 100.0 | 3.1 | 5.0 | 18.2 | 65.1 | 8.6 |
| Not working-not retired | 13.8 | 100.0 | 17.5 | 12.6 | 15.0 | 41.2 | 13.7 |

SOURCE: Authors' calculations using HRS.

NOTES: Original HRS cohort members were aged 53–58 in 1994.

Rounded components of percentage distributions do not necessarily sum to 100.

cohort, the partially retired shares changed little over the observation periods, increasing by 0.7 percentage points for the Early Boomers, by 2.0 percentage points for the War Babies, and by 1.9 percentage points for the original HRS cohort.

The largest differences among the cohorts are in the changes in the shares of respondents in the not working-not retired category. For the Early Boomers, that group increased by 4.5 percentage points over the 4 years. For the War Babies, the increase was a modest 1.2 percentage points, and for the members of the original HRS cohort, the not working-not retired share fell 7.2 percentage points. The wider growth of that category among the Early Boomers suggests an adverse effect of the Great Recession on retirement flows.

Useful cross-cohort analysis might also consider specific measures of employment change over the 4-year reference period, such as changes in hours of work, long-term job tenure, self-reported layoffs or unemployment, accepting a “window” plan from an employer encouraging retirement, or participating in the Social Security Disability Insurance or Supplemental Security Income programs. We observe only two substantial cross-cohort differences (not shown). The first involves the fraction unemployed, which increases by 3.0 percentage points for Early Boomers, declines by 1.5 percentage points for the original HRS cohort, and increases by 0.3 percentage points for War Babies. The second involves the percentage of respondents reporting unemployment at *any* time in the 4-year period, which ranges from about 3.7 percent for the original HRS cohort to 4.5 percent for the War Babies to 7.9 percent for the Early Boomers.

In terms of layoffs, the fraction of Early Boomers reporting they were laid off increased by 2.9 percentage points over the 2006–2010 reference period. The shares of laid off respondents in the original HRS and War Baby cohorts increased by 1.8 percentage points and 0.9 percentage points over the respective reference periods. The change in the share of long-tenure workers retiring over the course of the Great Recession differs little from that of earlier cohorts at similar ages. In all three cohorts, the share of members with 10 or more years in their current jobs at the beginning of the reference period ranged between about 36 percent and 39 percent. Of course, smaller shares were still holding those same jobs at the end of the 4-year reference period; but the Early Boomers’ share of long-tenured workers actually declined less than did those of the comparison cohorts.¹² Finally, although the share of

Early Boomers participating in Supplemental Security Income and Disability Insurance grows over time, the participation pattern differs little from those of the other cohorts.

In sum, we observe only a few adverse labor market outcomes due to the Great Recession against a background of little change in the retirement of long-term jobholders, or in the reductions in work effort observed over the period. Nevertheless, unemployment is up; layoffs increase by 1 or 2 percentage points relative to the experience of the War Babies; and the share of the cohort falling in the not employed-not retired category increases.

We next investigate the relationship between the relatively constant share of the workforce working full time or part time over the period of the Great Recession, and the growing share who are not retired-not working. Accordingly, Table 13 examines how a previous layoff experience influences not retired-not working status. We have seen that the increase in layoffs due to the recession is modest. Table 13 shows that a small but increasing share of those who are not retired but not working were previously laid off. In 1998, that share was 13.2 percent; it fell to 9.5 percent in 2004 then rose to 17.4 percent in 2010. Among those presently laid off in 1998, 25.6 percent indicated they were not retired-not working. In 2004, the proportion had risen to 28.0 percent. However, in 2010, 55.0 percent of laid-off workers indicated they were not retired-not working. This trend is unsurprising, as laid off workers who wish to resume working have more difficulty locating a new job. Table 13 also reports the share of the not working-not retired population that experienced a layoff sometime over the past 4 years (two waves): 22.2 percent in 1998, 20.3 percent in 2004, and 26.7 percent in 2010.¹³

We also examined changes that led to an exit from employment that might be considered involuntary. These include instances in which the supervisor or coworkers induced exit, wages or hours were reduced or were about to be reduced, the respondent felt a layoff was imminent, job duties or location changed, pension or health insurance changes induced exit, or an early retirement window induced exit. Although adverse events have received a great deal of publicity, the incidence of such events leading to involuntary exit during the Great Recession does not differ substantially from that of previous years.

Table 13.**Relationship between layoff experience and self-reported "not retired-not working" status: 1998, 2004, and 2010**

| Status | 1998 | 2004 | 2010 |
|---|------|------|------|
| Total not retired-not working | 302 | 241 | 409 |
| Total laid off | 156 | 82 | 129 |
| Laid off and not retired-not working | 40 | 23 | 71 |
| Percentage of not retired-not working who have been laid off | 13.2 | 9.5 | 17.4 |
| Percentage of those laid off who are not retired-not working | 25.6 | 28.0 | 55.0 |
| Laid off at least once in last 4 years and not retired-not working | 67 | 49 | 109 |
| Percentage of not retired-not working who were laid off at least once in last 4 years | 22.2 | 20.3 | 26.7 |

SOURCE: Authors' calculations using HRS.

To summarize, reported unemployment is higher for those experiencing the Great Recession, but other measures of activity or related outcomes do not differ much between Early Boomers and members of older cohorts when they were the same age.

Conclusions

The retirement wealth held by individuals aged 53 to 58 in 2006, just before the onset of the Great Recession, declined by a relatively modest 2.8 percent by 2010. In a time of more typical economic conditions, their wealth would have increased over the 4-year period. Members of older cohorts accumulated approximately 5 percent of additional wealth over the same age span. To be sure, a part of that increase resulted from the housing and stock market bubbles.

The adverse labor market effects of the Great Recession are more modest. Although unemployment grew, that increase was not mirrored by a decline in full-time work or partial retirement. All told, the retirement behavior of the Early Boomer cohort, at least to date, looks similar to that observed for members of older cohorts at comparable ages. Early Boomers nearing retirement age have largely avoided experiencing multiple adverse events. Most of their loss in wealth is due to a fall in the net value of housing. However, very few in this cohort have found themselves owing more on their mortgage than their house is currently worth, and housing is the one asset this cohort is not likely to cash in for another decade or two; therefore, Early Boomers have time to potentially recover their lost housing wealth. The wealth held by poorer households was least affected by the recession. Relative losses were greatest for those who had the highest wealth when the recession began.

Among our specific findings:

1. Social Security and pension benefits, accounting for 55 percent of the total wealth of those approaching retirement at the onset of the recession, retained their value and thus played a major role in cushioning total wealth from the effects of the recession.
2. The real wealth of households in the lowest wealth quartile fell by only 1 percent. In those households, Social Security accounts for 79 percent of total wealth.
3. Although 43 percent of households in the Early Boomer cohort experienced a decline in real wealth of more than 5 percent, another 40 percent experienced an increase of more than 5 percent. Households experiencing losses outnumbered those with gains in all but three asset categories: DC pensions, financial assets, and IRA assets.
4. Thirty-nine percent of households in the lowest decile of real wealth in 2006 experienced a loss in wealth. By contrast, 70 percent of the households in the highest wealth decile experienced a loss. The share of households losing more than 20 percent in real wealth ranges from 12 percent of the households in the lowest wealth decile to 48 percent of households in the highest wealth decile.
5. The share of households experiencing a gain in wealth is 49 percent for those in the lowest real wealth decile in 2006, and falls to 30 percent of the households in the highest wealth decile. Thirty percent of the households in the lowest wealth decile experienced a wealth gain of at least 20 percent, while 9 percent of the households in the highest wealth decile experienced a gain of at least 20 percent.

6. The share of the population not retired, as measured by a combination of hours of work and self-reported status, fell from 62.8 percent of the members of the Early Boomer cohort in 2006 to 49.2 percent in 2010. For men, the share of the population not retired declined by 17.4 percentage points over the 4-year period from a base of 72.0 percent, while for women the share declined 10.1 percentage points from a base of 54.4 percent.
7. The 13.6 percentage point decline in the share of the population classified as not retired in the Early Boomer cohort matches the decline observed for members of the War Baby cohort 6 years earlier, and exceeds the 10.6 percent decline observed for members of the original HRS cohort 12 years earlier.
8. The growth in the shares of respondents who are unemployed and who report they are not employed but not retired were substantially greater during 2006–2010 than in the periods experienced by members of older cohorts at the same ages.

These findings raise two key questions: Why was employment not reduced during the recession, and why were retirements not accelerated, even though unemployment was higher? First, some who could retain their jobs postponed their retirement. Second, those who were laid off were less likely to leave the labor force. Thus, the net increase in the number who remained at work was enough to offset the job losses of those who had been laid off.

Appendix: Procedures Used in Empirical Calculations for Table 1

The sample includes all households with one member aged from 53 through 58 in 2006 who participated in the HRS in both 2006 and 2010. We exclude households in the top and bottom 1 percent in total wealth, as well as those that experienced a divorce, separation, or entry of new spouses or partners during that period.

DB benefits are the sum of expected lifetime benefits. Expected benefits from current jobs are prorated values for the most valuable DB plan based on self-reported data. DB benefits from previous jobs are in current dollars as of 2006 and 2010. For DB plans from current or previous jobs in current-pay status, we calculate the present value of the remaining benefits as of 2006 and 2010. DC balances are the sum of all DC accounts from respondents' current and/or previous jobs.

We impute for missing and refused responses, and for responses of “don’t know.” We use a variety of imputation methods, depending on the number of observations available. These include a mixed method; a regression which forms the basis for a nearest neighbor imputation; or, when few observations are available, a hot-decking process. We also impute when values are reported only in the form of brackets. The imputation sample includes only those who meet the required conditions. For example, DB values are imputed only from that set of respondents reporting they have a DB plan. The explanatory covariates for pension variables include employment status, age, education, race, earnings, marital status, occupation, industry, union membership, government employee status, and job tenure. For financial assets, we used sex, marital status, and number of earners in the household (one or two).

Notes

¹ For 2006 and 2010, imputations are generated for HRS data. RAND imputations for 2010 wealth data were not available at the time we wrote this article. To isolate the effects of using our imputations rather than RAND’s, we calculated total wealth excluding Social Security and pensions for 2006, using the RAND imputes and our imputes. The totals are identical. In calculations where we report wealth changes for members of earlier cohorts at ages 53–58, we use wealth estimates from RAND for both years.

² We calculate the present value of lifetime Social Security wealth in 2006 by increasing the present value of lifetime Social Security wealth in 2004 (as calculated by Kapinos and others) to the base year of 2010. To do so, we multiply the 2004 figure by 1.058 to the 6th power. We then divide the 2010 value by 1.028 to the fourth power to reduce it to its 2006 value. In all calculations, we assume a consumer price index annual increase of 2.8 percent and a nominal interest rate of 5.8 percent, approximations used by the Social Security Board of Trustees.

³ In 2006, 2,544 households had at least one member aged 53–58. Of those, 2,079 households also took part in the 2010 survey, and 1,988 households had the same household structure. We eliminated households in the top 1 percent of wealth in either 2006 or 2010 and in the bottom 1 percent in 2006, leaving 1,949 households.

⁴ Although one might consider using different weights for each period, doing so might introduce changes that stem from the differences in the weights, rather than from differences in the underlying asset values for those who have the same type of asset in both years. In other words, we want to know how assets changed for a fixed number of individuals, and not necessarily how average assets of those aged 53–58 in 2006 differ from those of people aged 57–62 in 2010. In

any case, reweighting would likely change the results little, if at all.

⁵ Although it is reasonable to calculate present values as of the survey date, and Social Security wealth becomes more valuable as an individual approaches potential beneficiary status, our exercise aims to isolate the differences in wealth over the period of the recession. Accordingly, we evaluate the wealth equivalent of income *flows* as of the same date even though the periods are 4 years apart. Thus, when we compare values in real 2010 dollars, there is no change in the value of Social Security wealth. Past earnings are indexed through age 60, and most members of this cohort cannot change the years of earnings counted through early retirement age by changing claiming behavior. Butrica, Johnson, and Smith (2011) point out that, in computing average indexed monthly earnings, the wage index used by the Social Security Administration to inflate past earnings is reduced for those who reach age 60 after the recession began. We do not make that adjustment.

⁶ On average, the gross value of housing declined from \$218,409 in 2006 to \$194,203 in 2010, a drop of 11 percent. However, mortgage debt averaged \$68,862 in 2006 and \$66,319 in 2010, so the \$24,000 decline in gross housing prices amounted to a 16.2 percent decline in nominal net housing wealth.

⁷ Other important differences include the SCF's special oversample of high-income households, producing higher reported wealth levels than those in the HRS. By contrast, we eliminate households in the top (and bottom) 1 percent of reported wealth. Furthermore, both of the studies using SCF data exclude DB pensions from measures of total wealth; yet at the onset of the recession, DB wealth accounted for two-thirds of total pension wealth for those approaching retirement age. In addition, those studies exclude Social Security wealth, which accounts for one-quarter of the total wealth of the retirement-age population. Finally, SCF data report wealth values only when the respondent family holds that component of wealth. By contrast, the asset values shown in Table 1 reflect the total value of the particular asset in the population, and the share of total wealth held by the entire age-relevant population represented by the asset in question.

⁸ Because the medians we report for the HRS are the average values for the median 10 percent of all wealth holding households, the value of Social Security and of DB pension wealth can be subtracted from the value of total assets in Table 2, yielding a consistent estimate of wealth held outside those categories. Because the medians reported in Bricker and others (2012) are conditional on the individual owning the asset, one cannot make similarly consistent estimates for other asset types.

⁹ Additionally, Table 1's sample excludes households in the top and bottom 1 percent of wealth in 2006 (for 2006 wealth levels) and 2010 (for 2010 wealth levels). Table 7 also

excludes the top 1 percent of wealth holding households for both years, but excludes the bottom 1 percent only for 2006. This accounts for the slight difference in number of observations.

¹⁰ Statistics on households with gains and losses should be interpreted with caution, as wealth numbers are subject to significant error. Some respondents may neglect to report an asset in one survey while reporting it in another. When changes are estimated, the reported gain or loss for an individual who neglected to report the asset in one year or another will be equal to the full amount of the asset. Additionally, assets are imputed separately in each year of the survey. Imputations based on cross-sectional data will create very large gains or losses when the same household is not used to impute the missing asset, or asset bracket, in both years. A related problem involves the proper treatment of zeroes versus blanks. When encountering those problems, we have either classified them as "not applicable" and imputed the values for the observations or eliminated them. In addition, we have taken steps to reduce the influence of outliers, and provided supplementary results for medians (by quartile and decile) as well as means.

¹¹ Such errors are especially likely to understate the share of households in the lower decile that lose wealth because of the recession. Households that actually have higher levels of wealth but fail to report or understate the value of one or more major assets are much more likely to appear in the lowest wealth decile in 2006. Although it may be uncommon to fail to report having a house, even a financially knowledgeable respondent may confuse the net and gross value of a house. If the expected sale price net of the mortgage is reported as a house's gross value, its value will be substantially understated. Such an error might not be repeated in 2010. Thus, if an asset value is understated in 2006, and that understatement is not repeated in 2010, the household will be placed in too low a wealth decile for 2006, and will also exhibit an artificially large gain in assets between 2006 and 2010.

¹² This change is the net result of two forces: job loss resulting from increased layoffs during the recession and the decision to delay retirement by some workers who have experienced a loss in wealth.

¹³ One should be careful when drawing conclusions about the total amount of income or wealth lost because of unemployment. To the extent that those with lower incomes or wealth are more likely to become unemployed, the decline in income and wealth will be proportionately smaller than the increase in the share of the labor force unemployed.

References

Bricker, Jesse, Brian Bucks, Arthur Kennickell, Traci Mach, and Kevin Moore. 2011. "Surveying the Aftermath of the Storm: Changes in Family Finances from 2007 to 2009." Finance and Economics Discussion Series

- Working Paper No. 2011-17. Washington, DC: Federal Reserve Board.
- Bricker, Jesse, Arthur 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.
- Butrica, Barbara A., Richard W. Johnson, and Karen E. Smith. 2011. "The Potential Impact of the Great Recession on Future Retirement Incomes." CRR Working Paper No. 2011-9. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Kapinos, Kandice, Charlie Brown, Michael Nolte, Helena Stolyarova, and David Weir. 2008. "Social Security Wealth Measures." Ann Arbor, MI: University of Michigan Institute for Social Research, Health and Retirement Study.
- Venti, Steven F., and David A. Wise. 2004. "Aging and Housing Equity: Another Look." In *Perspectives on the Economics of Aging*, edited by David A. Wise, 127–175. Chicago, IL: University of Chicago Press.