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Baby Boomers vs Their Parents: Economic Well-being and Health Status

Abstract

In this chapter, we use the Social Security Administration's simulation model known as MINT (Modeling Income in the Near Term) to examine the projected health and economic status of Baby Boomers and their parents during retirement. Our projections indicate that boomers will enjoy higher levels of economic well-being and health than their parents, yet the distribution of income and wealth is more unequal among Boomers. For example, the ratio of income to poverty-level income grows three times faster at the 90th percentile than at the 10th percentile. Health problems are concentrated among persons of lower economic status in both generations, but the degree of concentration does not increase across generations.

Disciplines

Economics

Comments

The published version of this Working Paper may be found in the 2007 publication: *Redefining Retirement: How Will Boomers Fare?.*

Chapter 6

Baby Boomers versus Their Parents: Economic Well-Being and Health Status

Joyce Manchester, David Weaver, and Kevin Whitman

As the leading edge of the Baby Boom turns age 60, many are interested in the anticipated well-being of this large cohort during their golden years. An active literature debates whether Boomers have saved enough to have adequate retirement income, defined various ways, while a separate literature makes projections of the health and disability status of retired Boomers. In this chapter, we merge the two questions by examining how Baby Boomers might compare with their parents' cohort, in terms of economic wellbeing and health status. We also explore interactions between two measures of well-being and note patterns in dispersion across income and wealth distributions. We define the parents' cohort in 1998 as persons aged 62–72, and we compare them to Baby Boomers in 2022, also at ages 62–72.

Our projections are derived from the MINT model developed by the Social Security Administration (SSA). The rich underlying data which feed the microsimulation model include longitudinal earnings records from SSA, which, in conjunction with other administrative and survey data, allow for the careful modeling of the major sources of income in retirement. In addition, wealth accumulation and spend down over the life cycle are modeled in MINT, providing an opportunity to assess whether Boomers will have saved enough for their retirement years. Also a number of health variables, both subjective and objective, are projected in MINT, offering another dimension along which we can compare Boomers' wellbeing with that of their parents' generation. To highlight the dispersion issues, we focus on results for the 10th and 25th percentiles, the median, and the 75th and 90th percentiles. In addition, we examine outcomes for special groups of interest including those in poor or fair health, those unable to work, the disabled, and those with less than average life expectancy.

In what follows, we first examine the literatures on economic well-being and health status, and then we describe the MINT model and variables used in the analysis. Particular attention is paid to descriptions of the health variables, as these have been used infrequently in MINT-based research. Next, we analyze projected changes by cohort in economic outcomes, health conditions, and the interaction between these two measures of wellbeing.

Prior Research on Cross-Cohort Changes in Economic Well-Being and Health Status

Economic Well-being

Many studies have examined the economic well-being of Baby Boomers relative to that of earlier generations at the same ages. Those studies generally indicate that Baby Boomers seem to be a step ahead of their parents in accumulating resources for retirement. One study compared survey data on income, consumption, and wealth of Boomers in 1989 to that of their parents' generation in the early 1960s when they were the same age (Sabelhaus and Manchester 1995). Results showed that Boomers, on average, accumulated more wealth relative to income at ages 25–44 than their parents' generation at the same life stage thirty years before. But measured consumption had not increased as much as measured income for young adults. Other studies along the same lines were reviewed in a Congressional Budget Office report (2003). These studies did not compare the projected well-being of Boomers to their parents in retirement.

To assess Baby Boomers preparedness for retirement, some studies have asked whether Boomer households are likely to have enough income and assets to maintain their living standards in retirement. Research on the adequacy of saving concluded that significant under saving was likely (Bernheim 1993; Moore and Mitchell 2000). Using midpoint assumptions, Bernheim found that households were saving only 36–38 percent of the amount needed to maintain their standard of living in retirement, taking into account Social Security and pensions. Yet more recently, Gale (1997) argued that when housing equity is included in wealth, about two-thirds of Baby Boomer households appear to be accumulating adequate wealth. Butrica et al. (Chapter 4, this volume) report that some demographic subgroups of Baby Boomers are less likely than current retirees to maintain their preretirement living standards.

The methodology for measuring savings adequacy is undergoing change in recent analysis, mainly by introducing a stochastic life-cycle model in which families save both for retirement and as a precaution against uncertainty. Engen et al. (1999) define adequacy as wealth accumulation sufficient to permit consumption smoothing, or, more precisely, the marginal utility of consumption over the life cycle. Introducing a precautionary saving motive implies that, *ceteris paribus*, consumption rises with age. Their

model calculates optimal saving rates for each household and then reports any shortfall relative to actual ratios of wealth to income found in the Health and Retirement Survey. The authors note that determining savings adequacy is difficult when preretirement earnings fluctuate. Thus households with the same age, education, and pension status will display a range of optimal savings levels if earnings shocks are experienced in the preretirement years. They conclude that more than 60 percent of the households exceeded the target ratio of wealth to earnings. Households in the bottom quartile of the distribution of actual wealth/earnings ratios were under saving.

Also using a stochastic life-cycle framework, Scholz et al. (2005) incorporate many behavioral features known to affect consumption, including precautionary savings, buffer stock behavior, asset-tested public transfers, end-of-life uncertainty, medical shocks, and a progressive income tax. Households are seen to form realistic expectations about earnings, Social Security benefits, and pension benefits. The authors use data from the Health and Retirement Study in 1992 as inputs in calculating optimal lifecycle consumption profiles and household-specific optimal wealth targets; Social Security earnings records provide forty-one years of information on actual earnings. As in Engen et al. (1999), earnings shocks cause optimal wealth to vary substantially, even for observationally identical households. Their results indicate that more than 80 percent of HRS households have accumulated more wealth than optimal. For those not meeting their targets, the magnitudes of the deficits are typically small.

Finally, several studies suggest poverty will decline and real income will rise among Boomer retirees because of real wage growth over time, which affects Social Security benefits, pensions, and other sources of retirement income. Butrica and Uccello (2004), using the DYNASIM model, project declining poverty and rising real income for Boomers. Wentworth and Pattison (2001–02) use data from the Current Population Survey (CPS) and simulate changes in aged poverty under different assumptions regarding real wage growth. They find sharp declines in poverty over the 1997–2020 periods under the assumption of real wage growth at 1 percent per year and noticeable declines occur even if real wage growth is half this level. Butrica et al. (Chapter 4, this volume) also project declining poverty and increasing real income for the Boomer generation.

Health Status

The future health status of Baby Boomers in retirement will influence their overall well-being as well as the quantity of resources needed to maintain their standards of living. Changes in the health and disability of older

people during the last few decades may give us some insight into how Boomers may differ from their parents in terms of health. A recent review of the literature finds that most dimensions of health among the older population have improved during the last two decades (Crimmins 2004). Mortality has continued to decline, and disability and functioning loss are less common now than in the past. In addition, having a disease appears to be less disabling than in the past. However, the prevalence of most diseases has increased in the older population as people survive longer with disease.

Recent work on measuring disabilities points to three societal trends in areas other than health or functioning that might contribute to reported declines in disability levels (Wolf et al. 2005). Those societal trends include a reduced supply of informal care, changes in the technology of self-care, and changes in the definition and perception of both 'ability' and 'disability'. Such factors emphasize that reported disability may not be an objective measure of true health status, but certainly the interaction of true health status and one's ability to function under changing circumstances may be important in analyzing well-being from the perspective of health.

While the overall trends show improvements in health and disability, differences across demographic groups exist. Data from the National Long-Term Care Survey (NLTCS) show that Americans aged 65–69 in the 1980s and 1990s manifest a significant improvement in health over those decades, but the dynamics differ in gender and race groups (Arbeev et al. 2004). For example, the authors find a larger increase in the proportion of nondisabled blacks aged 65–69 compared with whites. In addition, they report a larger increase in the proportion of nondisabled males compared with females. It is interesting to speculate whether some of those differences may be traced to economic well-being.

A cloud on the horizon concerns the rising incidence of obesity. Sturm et al. (2004) investigate whether older Americans are becoming more or less disabled due to obesity. Unhealthy body weight has increased dramatically, but other data show that disability rates have declined. The authors use data from the Health and Retirement Study to estimate the association between obesity and disability and then combine those data with trend estimates of obesity rates from the Behavioral Risk Factor Surveillance Survey. They find that if current trends in obesity continue, disability rates will increase by 1 percent per year more in the 50–69 age groups than if there were no further weight gain.

Health status matters during the early years of retirement not only because it affects overall well-being but also because it has a bearing on financial resources needed for the retirement years. Research at the National Center for Health Statistics suggests that persons reporting better health at age 70 lived longer than persons in worse health (Lubitz 2004). Moreover, they spend most of their longer life span past age 70 in excellent

or good health. Persons who report poor health at age 70 lived only twothirds as long and spent most of that time in fair or poor health. An interesting finding is that the total, cumulative medical spending from age 70 until death was similar for persons in good health at 70 versus those in poor health at 70. That result holds even though the less healthy persons had fewer years to accumulate costs. Worse health, which produces higher yearly costs, offsets the effect of fewer years to accumulate costs.

Households with health insurance prior to retirement have a better chance of protecting their nest eggs than those with no health insurance (Levy, Chapter 8, this volume). In addition, the health status of persons in the early retirement years may reflect the level of health care they were able to access as working adults. Hence the measured wealth and health of households in their 60s is in part influenced by the presence of health insurance earlier in their working lives. One shortcoming of this study is that we have no data on which households had access to health insurance prior to becoming eligible for Medicare at age 65.

Methodology

In what follows, we use the SSA's MINT microsimulation model in which the starting population is based on samples from the Survey of Income and Program Participation (SIPP).¹ Survey data from the SIPP are augmented with matched administrative records on benefits and earnings from the SSA. The 1926 through 1972 birth cohorts are represented in MINT. The economic, demographic, and other experiences of these cohorts are projected through the year 2039.² In this analysis, persons from the 1926-1936 cohorts ('parents') are compared to individuals from the 1950–1960 cohorts whom here we loosely identify with Baby Boomers. While these comparison groups are not based on actual parent-child relationships, they are useful constructs in assessing generational changes. All members of the middle Boomers are represented in our Boomer sample, as are several cohorts from the Early Boomers and one cohort (the 1960 cohort) from the Late Boomers.³ Economic and health conditions are examined for the year in which members of each group are aged 62-72 (1998 for the parents and 2022 for the Boomers). Thus, while the results do not address the circumstances of the 'oldest old' from each generation, the age range is wide enough to meaningfully discuss each generation's prospects in retirement.⁴

Projection methods in MINT vary with the type of factor being projected. Some variables are projected based on statistical relationships estimated from surveys such as the SIPP, the Panel Study of Income Dynamics (PSID), and the Health and Retirement Study (HRS). In other cases, a nearest-neighbor approach is used, which assigns the experiences of an

older SIPP respondent to a younger respondent who is similar in observable ways. Finally, for the early birth cohorts, some variables for the 1990s are taken directly from the SIPP survey or the matched administrative records.

We consider four measures related to health, based on work by Toder et al. (2002). Two health measures are based on self-assessed health status and are projected using statistical equations estimated from HRS data. As in a number of surveys, respondents in the HRS are asked whether their general health status is 'excellent, very good, good, fair, or poor'. Researchers created a dichotomous variable (1 if in fair or poor health, 0 otherwise) and estimated its relationship to several socioeconomic variables; these estimates are used to predict health status at a starting age (age 51) for MINT respondents. Any changes in health status from age 51 forward are then assigned to MINT respondents based on additional empirical work, using the HRS, on transitions from one health status to another. A similar approach is taken with the other type of self-assessed health: whether an individual had an impairment that limited or prevented work.

Toder et al. (2002) found particularly strong relationships between self-assessed health status and education. For example, even after controlling for lifetime earnings, subsequent (observed) mortality, sex, and race/ethnic status, the coefficients on educational status were large and statistically significant. Education was also found to be an important variable in explaining transitions from one health status to another as one age. The estimated relationships between health status and education will drive many of the findings in this paper and, while suggestive, should also be viewed with caution. Baby Boomers were far less likely to drop out of high school than their parents (10.9% compared with 26.9% in the MINT samples) and because of this will be projected to exhibit improvements in health status. This study raises the possibility that education may not have a strictly causal relationship with health status and therefore projections across cohorts may produce inaccurate results. That work did not model an explicit time trend in the health equations for MINT. Rather, trends exhibited in the MINT model reflect changes in the underlying determinants of health (e.g. education). Toder et al. (2002) cite research suggesting a trend toward improved health status is occurring even after controlling for socioeconomic variables. Thus, projected improvements in health status for Baby Boomers in MINT may be somewhat understated.

The SIPP contains self-assessed measures of health status, but these are not used in MINT because the SIPP measures lack a necessary longitudinal component (Toder et al. 2002). In MINT, both Boomers and their parents have health status estimated from the HRS-based equations. However, because SIPP has health and economic measures at a point in time, it is possible to compare survey reports with MINT findings, at least for the

parents of the Boomers. These comparisons reveal that MINT generates an appropriate incidence of health problems for the parents' generation, but that survey reports in SIPP indicate a stronger relationship between poor health and low income.⁵ MINT estimates likely capture key relationships between health status and economic variables, but it is unknown whether the strength of those relationships is accurately measured and therefore an important topic for future research.

Projections of subjective measures (self-assessed health) have limitations. For this reason, we also rely on two more objective variables reflecting health status, namely mortality and receipt of disability insurance (DI) benefits from Social Security.⁶ These variables have strengths (and some weaknesses) compared to self-assessed measures.⁷ For example, at least for parents of the Boomers, DI receipt in MINT is taken directly from SSA's administrative records. For Boomers, many will also have DI receipt observed in administrative records, but receipt after middle age must be projected based on current law DI benefits; thus they do not take into account any future legislative changes. We note that DI receipt is not a pure measure of health status: workers must meet the insured status requirements for DI benefits, namely, that they have worked long enough and recently enough in Social Security covered employment. The insured status issue is important because many more Boomer women are likely to be insured for disability benefits compared to their parents' generation (we return to this point below).

Disability receipt, earnings, and mortality in MINT are projected forward using a 'nearest-neighbor' approach. For example, consider a Boomer in the SIPP who turns 44 in the year 2000 (the last year's matched administrative records are available). To project earnings from ages 45-49 for this 'target' respondent, a 'donor' in the SIPP population at least age 49 in the year 2000 will be found. The donor will be selected based on having characteristics, including pre-age 45 earnings (relative to the economy-wide average earnings), that are similar to the target. The age-44 Boomer will be assigned the relative earnings, disability status, and mortality experience of the donor for ages 45-49.8 So, if the donor was observed to have become disabled between the ages of 45–49 (which would be known from matched SSA records), then the target respondent would be projected to become disabled between those ages. The procedure would be repeated, but using different donors, to complete a respondent's projected disability and mortality experience through age 65.9 A final step involves benchmarking disability and mortality results to projections from SSA's Office of the Chief Actuary (OCACT). Mortality after age 65 is based on statistical equations relating mortality to socioeconomic and other variables.

In what follows, we use both income and wealth measures to characterize economic well-being. Two income measures are used: income relative to

the poverty-level standard and income relative to average earnings in the economy. Income and poverty thresholds are used to form welfare ratios, which is defined as family income divided by the appropriate poverty threshold. Welfare ratios can then be used to define the population that is poor (with a welfare ratio < 1), but the distribution of welfare ratios can also be used to describe the well-being of the overall population. Income relative to average earnings in the economy provides another perspective, namely, indicating how retirees fare relative to workers and whether there are generational changes after adjusting for economy-wide wage growth. In MINT, family income equals the sum of individual and spouse (if married) income from Social Security, earnings, assets, defined benefit (DB) pensions, and Supplemental Security Income plus any income from a coresident family member.¹⁰ For the parents, the matched earnings data are used to measure earnings in 1998 and used to calculate Social Security benefit amounts. For Boomers, future earnings must be projected and then used to determine earnings and Social Security benefit amounts in 2022. These projections assume no changes to Social Security benefits.¹¹ Poverty thresholds as per the US Bureau of the Census vary by family size and are updated each year to reflect price changes (the thresholds used for the Boomers in 2022 were derived by adjusting existing thresholds for expected inflation).

Pension income is captured in two ways in MINT. First, income from a DB plan is a direct source of income. For both Boomers and parents, some respondents have this source of income projected (although many of the parents have DB pension income in the SIPP).¹² Second, MINT projects account balances of defined contribution (DC) plans. The starting points for these projections are account balances reported in SIPP, adjusted to match levels in the Survey of Consumer Finances (SCF). Asset allocations within the account are based on age-specific profiles developed using data on 401(k) plans from the Employee Benefit Research Institute (EBRI) and the Investment Company Institute (ICI). Contributions to plans are based on SIPP responses and EBRI/ICI data. Rates of return on asset classes are based (approximately) on historical returns, but individual outcomes are modeled stochastically (based on draws from a normal distribution). The MINT projections attempt to account for future job changes and the possibility that retirement accounts will be cashed out and spent on a job change. Retirement account wealth is part of the wealth that is used to determine asset income in MINT. Thus, in principle, both types of pensions are captured in the income-related measures in MINT such as welfare ratios.13

The values of home equity and net financial wealth are also projected in MINT. The measure of net financial wealth we use for wealth comparisons is nonpension wealth, which excludes the value of retirement accounts such

as 401(k) plans. By excluding retirement accounts, the wealth comparisons between Boomers and their parents will not be driven by changes in the types of pensions received by each generation (DB vs. DC). Financial wealth is net of credit card debt, doctors' bills, and other unsecured debt. Both the value of home equity and net financial wealth are expressed as per capita measures; for respondents who are married, the per capita measure is simply the household value divided by two.¹⁴ Home equity projections in MINT compare closely to those reflected in the 1998 SCF, indicating that home equity values for the parents of the Boomers in 1998 (when they were age 62-72) are validated. Home equity values for Boomers as of 1998 also lined up with SCF values, but it is an open question as to whether MINT can accurately project the values forward to their retirement years. One concern is that the statistical equations used to project home equity were developed on data that do not reflect sharp trends associated with housing that occurred after 1998; both home values and debt secured by homes have increased sharply since 1998.¹⁵

Results

Demographic Overview

Table 6-1 summarizes key characteristics of the populations examined below. Here, 'parents' are defined as those born from 1926–36 (age 62–72 in 1998), while 'Boomers' are defined as those born from 1950–60 (age 62–72 in 2022). One finding is that parents have noticeably lower levels of educational attainment: nearly 27 percent did not finish high school and only 18 percent graduated from college. By contrast, only 11 percent of Boomers dropped out of high school and nearly 29 percent hold college degrees. Minority groups make up a larger percentage of the retiree population in 2022 than in 1998. Of particular note is the rapid growth of Asian/Native American and Hispanic retirees. The prevalence of marriage among members of the parents' generation is greater, but perhaps of equal interest, the relative sizes of the unmarried groups differ across generations. Specifically, Boomers will have decidedly higher percentages of never-married and divorced persons, making it a more heterogeneous group.

The Economic Status of Baby Boomers and Their Parents

In what follows, individuals are classified as being 'in poverty' if their family income is less than the appropriate household-size-adjusted poverty threshold in the year of analysis. MINT projects a significant decrease in

TABLE 6-1Demographic Characteristics of Parents'
Generation in 1998 and Boomers'
Generation in 2022, Both at Age 62–72

	Parents (%)	Boomers (%)
Sex		
Female	54.0	53.7
Male	46.0	46.4
Ethnicity		
White	81.9	74.0
African-American	8.4	9.9
Asian/Native-American	3.5	6.5
Hispanic	6.2	9.6
Education Level		
High school dropout	26.9	10.9
High school graduate	55.3	60.4
College graduate	17.8	28.6
Marital Status		
Never married	4.2	6.5
Married	69.8	65.1
Widowed	16.2	11.9
Divorced	9.9	16.5

Source: Authors' calculations.

the poverty rate from 6.8 percent in the parents' generation to 4.4 percent among the Baby Boomers (see Table 6-2).¹⁶ The projected decrease in poverty from earlier cohorts to Boomers is consistent with both historical trends in aged poverty and the findings of other studies (Butrica and Uccello 2004; Butrica et al., this volume). The projected decrease in poverty is largely the result of expected growth in real wages, since the poverty level is indexed to prices (wages are projected to grow faster than prices by an annual rate of 1.1%).

Next we report the welfare ratio, or the ratio of family income to the family poverty threshold.¹⁷ Our results show that the welfare ratios at the 10th, 25th, 50th, 75th, and 90th percentiles will all rise, from the time the parents' generation is aged 62–72 to when the Boomers reach the same age (see Table 6-3). This again reflects, in large part, the effects of projected real wage growth. It is also possible to use the welfare ratio to measure *relatively* low income: one relative measure of low income is the percentage of persons with a welfare ratio less than half the median for the group. Using this measure, 19.4 percent of the parents have low income relative to their peers versus to 21.5 percent of Boomers (percentages not shown). This illustrates an important point regarding trends in the incidence of low

TABLE 6-2Percentage in Poverty: Parents' Generation in 1998 and
Boomers' Generation in 2022, both at Age 62–72

Parents	6.8%
Boomers	4.4%
Percentage change	-35.2%

Source: Authors' calculations.

Notes: The official definition of poverty in the United States is based on a comparison of pretax cash income with poverty thresholds that vary by age, family size, and composition. The thresholds, which are adjusted each year for inflation, were initially developed in the 1960s based on a determination of the minimum amount of income needed to provide for an inexpensive but adequate food diet and other expenses (Fisher 1992). MINT analysis generally uses the official approach to measuring poverty in the United States. However, MINT projects only the major sources of cash income and uses only the thresholds that apply to the elderly population.

income: using an absolute standard (the poverty threshold), Boomers will be less likely to have low income than their parents, but the opposite is true using a relative standard.

Table 6-3 also shows that welfare ratios at each percentile are not projected to increase at the same rate: that is, the ratio between the 90th and the 10th percentiles is expected to increase from 7.98 to 11.17. Thus, there is an increase in absolute economic well-being throughout the income distribution, but also an increase in income inequality. Income inequality can be formally measured with a Gini coefficient, where the Gini of 0 represents complete income equality and a value of 1 represents complete inequality. For parents, the coefficient equals 0.513, and for Boomers, the coefficient rises to 0.596. Although this suggests rising inequality, it should be noted that the Gini coefficient is only one measure of inequality and that other inequality indices may rank distributions differently (Litchfield 1999).¹⁸ Rising inequality of income across generations is consistent with recent

TABLE 6-3 Income as a Percentage of Poverty-Level Income: Welfare Ratios for
Parents' Generation in 1998 and Boomers' Generation in 2022, both
at Age 62–72

	10th Percentile	Lower Quartile	Median	Upper Quartile	90th Percentile
Parents	1.3	2.2	3.7	6.1	10.1
Boomers	1.6	2.9	5.3	9.5	18.0
Percentage change	27.8%	33.3%	40.3%	57.3%	78.8%

Source: Authors' calculations.

TABLE 6-4Per Capita Income as a Percentage of the Average Wage: Parents'Generation in 1998 and Boomers' Generation in 2022, both at Age62–72

	10th Percentile (%)	Lower Quartile (%)	Median (%)	Upper Quartile (%)	90th Percentile (%)
Parents	23.2	40.6	69.5	115.2	193.6
Boomers	22.8	41.5	74.7	140.2	265.2
Percentage change	-1.6	2.3	7.4	21.7	37.0

Source: Authors' calculations.

Notes: For an unmarried person, per capita income equals his or her individual income. For a married couple, the total income of the couple is divided by two. The average wage equals historical or projected values of the Social Security Administration's Average Wage Index series, which measures average earnings in the economy.

research on increasing earnings inequality (Lee 2005). In addition, it may reflect the greater underlying heterogeneity in the Boomer population.

Another income-based measure of economic well-being is presented in Table 6-4: per capita income as a percentage of the average earnings in the economy. This measure provides two perspectives: how retirees fare relative to workers in the analysis year, and whether the income gains exhibited by Boomers persist after accounting for wage growth. Median per capita income of the parents' generation, at ages 62–72, is about 70 percent of average earnings in 1998. Per capita income rises sharply for Boomers at the upper part of the income distribution, but less so at the median. For Boomers, median per capita income at ages 62–72 is about 75 percent of the projected average earnings in the economy in 2022. At the 90th percentile, the figure is 265 percent of average earnings, which reflects a sizable increase relative to the parents' generation. The Gini coefficients for this income measure reflect the changes in the income distribution. For the parents' generation the Gini coefficient equals 0.517, but rises to 0.601 for Boomers.

Median per capita net wealth is also projected to increase relative to average earnings (Table 6-5). As a ratio of the average wage, it rises from 1.1 in the parents' generation to 1.3 for Boomers. In constant \$2004 (not shown in Table 6-5), median wealth rises from \$36,700 to \$57,700. The projected increase in retirement wealth from the parents' generation to the Boomers is consistent with what would be expected given the results of previous studies examining recent trends in wealth. For example, Sabelhaus and Manchester (1995) determined that Boomers aged 25–44 were accumulating total wealth (housing and financial) more quickly than their parents at the same age. Poterba et al. (2001) found that the ratio of assets saved for

TABLE 6-5Net Nonpension Financial Wealth for Parents' Generation in 1998and Boomers' Generation in 2022, both at Age 62–72: Per CapitaRatio of Wealth to Average Wage

	10th Percentile	Lower Quartile	Median	Upper Quartile	90th Percentile
Parents	0.0	0.2	1.1	4.2	11.3
Boomers	0.0	0.3	1.3	5.0	17.1
Percentage change	NA	113.3%	18.9%	18.4%	51.2%

Source: Authors' calculations.

Notes: For an unmarried person, per capita net wealth equals his or her net wealth. For a married couple, the total wealth of the couple is divided by 2.

retirement to wage income increased from 0.39 to 2.02 during 1975–1999; this result, however, was largely due to the increased prevalence and use of DB pension plans.

As with the income distribution, the distribution of financial wealth is more unequal for the Boomer generation. The Gini coefficient for the wealth distribution of the parents' generation equals 0.816; the corresponding percentage for the Boomers is 0.861.¹⁹ Again, however, wealth generally increases at every part of the distribution for the Boomers.

There are also projected to be substantial cross-cohort differences in housing wealth. The MINT model projects lower median home equity relative to the average wage for Boomers (Table 6-6). This differs from Coronado et al. (Chapter 14, this volume) but MINT uses data that do not capture recent trends in the housing market so our results should be viewed with caution. It is interesting to note that *mean* housing wealth is projected to increase among Boomers both in constant dollar terms and relative to the average wage. Tabulations from MINT (not shown in Table 6-6) indicate that, across generations, mean housing wealth increases from \$58,000 to \$89,000 (\$2004) and from 1.76 times the average wage to 2.04 times the average wage. In other words, MINT projects a more unequal

TABLE 6-6 Home Equity for Parents' Generation in 1998 and Boomers'Generation in 2022, both at Age 62–72: Per capita Ratio of HomeEquity to Average Wage

	10th Percentile	Lower Ouartile	Median	Upper Ouartile	90th Percentile
		~		\sim	
Parents	0.0	0.1	1.2	2.5	4.2
Boomers	0.0	0.1	0.8	2.3	4.9
Percentage change	NA	0.00%	-33.1%	-8.0%	18.5%

Source: Authors' calculations.

distribution of housing wealth where the median declines but the mean rises. This can also be seen with Gini coefficients. The Gini coefficient for the home equity distribution of the parents' generation is 0.571, but rises substantially to 0.690 for the Boomers.²⁰

Overall, the results presented in this section are consistent with the general conclusions offered by CBO (2003) following a review of studies on the Boomer population: namely, that economic well-being will improve for the typical Boomer. As the detailed distributions of outcomes presented in this section make clear, however, median outcomes do not present policymakers with a complete picture of relevant populations. Further, conclusions about the Boomers' prosperity relative to their parents depend crucially on the measure of economic well-being. By one measure of low income (poverty), Boomers will see sharp improvements in well-being. Using another measure (percentage with a welfare ratio less than half the group median), Boomers are characterized by a slightly higher proportion of low-income individuals. Finally, whether well-being for the typical Boomer improves sharply or only modestly depends on whether financial resources are adjusted across generations using price growth or wage growth. Relative to average wages in the economy, the typical Boomer will see only modest improvements in retirement income, while those at the upper end of the income distribution are expected to experience significantly larger improvements.

The Health Status of Baby Boomers and their Parents

Turning next to health status, our projections indicate sizable majorities of both parents and Boomers are in good or excellent health at ages 62–72 (Table 6-7). Almost three-quarters of Boomers are projected to assess their heath status as good or excellent at these ages. The percentage of persons in fair/poor health declines by over 4 percentage points across generations or at about a rate of 0.2 percentage points per year (twenty-four years separate the two groups under study).

TABLE 6-7Self-Assessed Health Status: Parents'Generation in 1998 and Boomers'Generation in 2022, both at Age 62–72

	Fair/Poor (%)	Good/Excellent (%)
Parents	30.9	69.2
Boomers	26.6	73.4
Percentage change	-13.7	6.1

Source: Authors' calculations.

TABLE 6-8 Work Limitations for Parents' Generation in 1998 and Boomers'Generation in 2022, both at Age 62–67

	No Limitation (%)	Work Limited (%)	Unable to Work (%)
Parents	68.1	14.2	17.7
Boomers	72.2	12.6	15.3
Percentage change	5.9	-11.4	-13.7

Source: Authors' calculations.

Projections regarding work limitations also indicate health improvements for Boomers (Table 6-8). For 72 percent of Boomers in the 62–67 age range, health will not limit or prevent the kind or amount of work they can do, according to projections. The percentage without a work limitation is projected to increase by 4 percentage points across generations or about 0.2 percentage points per year. Note that only 15 percent of Boomers will be unable to work at these ages.

The projected decline from the parents' generation to the Baby Boomers in the incidence of health problems that either limit work or make work impossible is supported by recent historical data. Crimmins, Reynolds, and Saito (1997) find an overall decrease in the percentage of those aged 50–69 that report being unable to work, using National Health Interview Survey data from 1982 to 1993. The authors conclude that the most significant improvements in this measure of health occurred for those between the ages of 62 and 69 and were primarily correlated with increases in educational attainment.

As noted earlier, the MINT model does not include a time trend in its projections of health status. Toder et al. (2002) found that MINT captured improving health over time, but the magnitude of the improvements was smaller than historical data would suggest. Thus, the estimates of improved health among Boomers are likely conservative, meaning that Boomers may enjoy better health in retirement than these projections indicate. In addition, Weir (Chapter 5, this volume) suggests that improved medical treatments may lead to better health outcomes over the next few decades. A respondent is categorized as disabled in MINT if he or she ever received or is projected to receive disability benefits from Social Security. Upon initial inspection of the MINT data for those aged 62–72 in 1998 and 2022 (Table 6-9), an apparent paradox emerges: although Baby Boomers exhibit lower incidences of fair/poor health and work limitations than their parents, they simultaneously demonstrate an increase of 20.4 percent in receipt of disability benefits. This result requires explanation.

The receipt of DI benefits is not an entirely consistent measure of health across birth cohorts because numerous factors other than health

A. During Lifetime for Parents' Generation in 1998 and Boomers' Generation in 2022, both						
at Age 62–72 Parents	9.8%					
Boomers	11.8%					
Percentage change		20.4%				
	Men (%)	Women (%)				
B. By Generation and Gender 2022, both at Age 62–72	for Parents' Generation in 1998 and	Boomers' Generation in				
Parents	12.5	7.5				
Boomers	12.8	10.9				
Percentage change	2.7%	45.5%				

 TABLE 6-9 Disability receipt

Source: Authors' calculations.

can influence benefit receipt. Many of those factors are discussed in the Zayatz (1999) analysis of Social Security's DI program. These include legislative reforms, the state of the economy, demographic changes, shifts in work patterns, and changes in the medical requirements for enrollment. Some changes that are particularly relevant in the context of disability rates increasing from the parents' generation to the Boomers' are the programmatic expansion of DI eligibility and the involvement of more women in the workforce. MINT projects an increase in the percentage of persons who have ever received DI benefits by generation and by sex (panel 9A). The percentage of women aged 62-72 that are projected to ever receive DI benefits is projected to increase from 7.5 percent in the parents' generation to 10.9 percent in the Boomers' generation (a 45.5% increase). The increase for men is much smaller. Thus, while DI receipt has grown for both groups-for many of the reasons discussed by Zayatz-factors related specifically to women are of paramount importance. Baby Boomer women have more substantial work histories and are more likely to be insured for disability benefits. Thus, the trend in disability receipt across generations is driven by underlying work patterns and other factors and likely does not reflect declining health.

Life expectancy represents the mean projected age of death for those in the two analysis groups. Recall that the age range is 62–72 for each group; thus, all members in each group have lived or are projected to live to at least age 62. Although not as direct as self-reported health (SRH) status, life expectancy represents another important measure of physical well-being. MINT projects a modest increase in the average age of death for those living to at least age 62 from the 85.3 in the parents' generation to 86.7 for Baby

TABLE 6-10Life Expectancy for Those Who Survive to at Least Age
62 for Parents' Generation in 1998 and Boomers'
Generation in 2022, both at Age 62–72

Parents	85.3
Boomers	86.7
Percentage change	1.7%

Source: Authors' calculations.

Boomers (Table 6-10). This improvement in life expectancy is consistent with recent trends and projections from other sources. In the twentieth century life expectancy at age 65 rose by over nine years and although this trend is projected to slow somewhat, the positive change in mortality is expected to continue in the future (Wilmoth 2005).

The increase in life expectancy from the parents' generation to that of the Baby Boomers projected by MINT is another indicator of improvements in projected health status for the 1950–1960 birth cohort. In sum, MINT projections indicate Boomers can expect to live healthier lives, at least in the first ten years of retirement, as well as longer lives.

The Relationship between Health and Economic Well-Being

Thus far, we have concluded that the average Baby Boomer can expect to do better than his or her parents, according to almost all measures of economic well-being and health status. But good health will not be universal. The economic status of those who suffer from health problems is a significant concern, as past research indicates that this group is more likely to be financially disadvantaged. Although the correlation between economic and health status is well documented, the causal relationship is not fully known. For example, Sapolsky (2005) finds that relative poverty may actually decrease physical well-being. For our analysis of those aged 62–72, it is likely that the two factors are mutually reinforcing; the relatively poor become less healthy and are able to earn less during their lifetimes because of employment problems associated with physical problems.

Within each generation, the relationship between health status and economic well-being is clear: those with health problems have sharply lower economic status (Table 6-11). For example, the overall poverty rate in the parents' generation is 6.8 percent, but it rises to 10.3 percent for parents in poor/fair health. Similarly high poverty rates occur using other measures of health problems: 9.9 percent (limited in work), 10.1 percent (unable to work), 9.1 percent (DI receipt), and 8.2 percent (shorter than average

	Poverty	Median Welfare Ratio	Median Wealth
Overall			
Parents	6.8	3.7	1.1
Boomers	4.4	5.3	1.3
Percentage change	-35.2%	40.3%	18.9%
Poor/fair health			
Parents	10.3	3.0	0.6
Boomers	7.6	4.0	0.8
Percentage change	-26.8%	34.3%	32.2%
Work limited			
Parents	9.9	3.7	0.8
Boomers	6.2	5.2	1.2
Percentage change	-37.4%	39.8%	43.4%
Unable to work			
Parents	10.1	3.4	0.6
Boomers	6.5	4.3	0.9
Percentage change	-35.6%	28.2%	36.5%
Disabled			
Parents	9.1	2.5	0.3
Boomers	4.0	3.8	0.8
Percentage change	-56.2%	49.8%	203.9%
Less than average life expectancy			
Parents	8.2	3.4	0.9
Boomers	5.3	4.9	1.2
Percentage change	-35.6%	42.7%	30.7%

TABLE 6-11Economic Well-Being and Health Status for Parents' Generation in1998 and Boomers' Generation in 2022, both at Age 62–72

Source: Authors' calculations.

life expectancy). In addition, those in the parents' generation with health problems consistently have lower median welfare ratios and median net financial wealth. This same pattern appears for Boomers, though it is possible the MINT projections understate the relationship between poor health and low economic status. As noted earlier for the parents' generation, tabulations from survey data revealed a somewhat larger effect than did MINT estimates.

One concern for policymakers may be whether Boomers' improvements in economic well-being will be distributed equally with regard to health, or whether Boomers with health problems will miss out on the effects of economic growth. Table 6-11 suggests improvements in economic wellbeing even for persons with health problems. The overall poverty rate declines by 35.2 percent across generations. Declines of similar magnitude



Figure 6-1. Concentration curve of fair/poor health by welfare ratio for parents. (*Source*: Authors' calculations using the Modeling Income in the Near Term (MINT) model. See text.)

are found across generations for persons with health problems. For example, Boomers unable to work are still 35.6 percent less likely to be in poverty than parents with the same health status. The results hold for other measures of health problems and other measures of economic wellbeing (median welfare ratios and net financial wealth). One intriguing result for Boomers relates to receipt of DI. The economic well-being of those who have survived to age 62 and received DI is projected to improve dramatically.

Another way to assess the relationship between health conditions and economic status is through a concentration curve or an associated concentration index. These tools are used in health economics to determine the extent to which health problems are concentrated among persons with limited resources (World Bank 2006). As an example, Figure 6-1 presents the concentration curve for the parents' generation using the poor/fair health measure. On the vertical axis is the cumulative percentage of persons in poor/fair health and on the horizontal is the cumulative percentage of all persons (ranked from low to high in economic status, using welfare ratios). The curve lies above the 45 degree line because poor/fair health is concentrated among persons with low welfare ratios. For example, the poorest 10 percent of the population contains 15 percent of the population that is in poor or fair health. A concentration index, which ranges from -1 to 1, can be calculated based on the area of the concentration curve



Figure 6-2. Concentration index by health measure. (*Source*: Authors' calculations using the Modeling Income in the Near Term (MINT) model. See text.)

(World Bank 2006). Negative values are associated with curves above the 45 degree line. The concentration index value associated with Figure 6-1 is -0.16 which indicates that, in the parents' generation, poor or fair health is moderately concentrated among persons with low income. For ease of exposition, concentration index values, rather than graphical displays of concentration curves, are presented for each generation and each health measure (see Figure 6-2).

The concentration index values presented in Figure 6-2 can be used to assess three issues: whether health problems are associated with low income, the degree to which such problems are concentrated among those with low economic status, and whether the relationship between health and income is changing across generations. First, all values of the index, regardless of health measure or generation, are negative. Thus, health problems are consistently found to be concentrated among persons with low income. Second, the degree of concentration appears to be limited. None of the index values are close to the negative bound for a concentration index (-1). In addition, except for DI receipt, the index values are not far from 0 (ranging from about -0.05 to -0.15). An index value of 0 would indicate that health problems are spread evenly among the population without regard to income. Finally, there is no pattern to suggest Boomers will exhibit greater health inequality (concentration index values for the Boomers are lower for three of the five health measures).

Disability receipt stands out from the other measures because of the high value of its concentration index. It is important to keep in mind,

however, that the estimation methods for the self-assessed health measures may not fully capture the relationship between economic status and health outcomes. As noted earlier, actual survey data revealed a stronger relationship than MINT estimates. In contrast, DI receipt may be measured more accurately (it is based wholly or in part on SSA administrative data). This suggests some caution in interpreting the absolute size of the index values for the self-assessed health variables. Finally, note that the value of the concentration index for DI receipt falls sharply across generations. This is consistent with results from Table 6-11: Boomers will witness a weaker relationship between low income and disability receipt.

Conclusions and Discussion

The well-being of the Baby Boomers in retirement is a topic of increasing importance to researchers and policymakers. Our study examines economic well-being in the context of projected health and disability status, an approach we believe offers a more complete picture of how Boomers will fare in their retirement years. Our projections indicate that Boomers will enjoy higher levels of real income and lower levels of poverty in retirement than their parents. Income among Boomers is projected to be more unequal, but it is important to note that real income rises across generations at all parts of the income distribution. Income relative to average earnings in the economy is also projected to increase among Boomers. As the average wage is one measure of a society's standard of living, these results suggest that Boomers' economic progress is not limited to inflationadjusted gains. It should be noted, however, that increases in income relative to average earnings occur mainly at the upper portions of the income distribution and are only of modest size at median values. Further, these results address income relative to earnings in a given analysis year but do not consider income relative to career earnings. Butrica et al. (Chapter 4, this volume) suggest that replacement rates for many Boomers will be lower than for current retirees.

Results regarding net nonpension financial wealth exhibit a similar pattern to the income results. Boomers are projected to have higher levels of this measure of wealth, both in real terms and relative to the average wage. Gini coefficients indicate wealth is more unequal among the Boomers than their parents, but all parts of the net nonpension wealth distribution exhibit improvements. Mean home equity is projected to increase for the Boomers, but not median home equity, a result that may indicate problems in projecting home equity.

Boomers are projected to have relatively fewer health problems in retirement than their parents. This is true regardless of the health measure

employed. These results bode well for policy efforts to encourage additional work at later ages. Only 15 percent of Boomers is projected to be unable to work at ages 62–67 because of health problems. Another encouraging result is that improvements in economic well-being for the Boomer generation occur even for those with health limitations. For example, among persons in poor or fair health, the poverty rate falls by nearly 27 percent when comparing Boomers to their parents. Unlike the results regarding income and wealth, projections do not indicate increasing inequality in health status. Poor health is not increasingly concentrated across generations among persons with limited resources. Nevertheless, we find a consistent correlation between low economic status and health problems. Policymakers concerned with low-income individuals should realize such individuals also fare poorly when health status is used to assess wellbeing.

Our analysis suggests several directions for future research. Additional research on methods to project health conditions is warranted, perhaps focusing on direct measurement of health trends as well as changes due to underlying population characteristics. In addition, direct measures of disabling conditions would be invaluable, including functional limitations or an inability to engage in activities related to independent living. Finally, one of the important economic variables used in the study—home equity—does not appear to move in tandem across generations with other variables measuring economic resources. Projections on home equity in MINT could be examined in light of more recent data on housing wealth.

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Notes

 1 The MINT model used for this paper is the combined MINT 3.0/4.0 version, which is based on SIPP panels from 1990–93 and 1996. Earlier versions of MINT such as MINT 3.0 do not include the 1996 panel.

 2 A MINT extended or 'MINTEX' model has also been developed, which projects outcomes for birth cohorts through 2017. Results from MINTEX are not needed for this paper because the latest birth cohort examined here is from 1960.

³ Regarding the parents' sample, our birth cohorts generally predate the 'original HRS' cohorts.

⁴ By restricting the age range to 10 years, data on the parents' generation is often drawn directly from survey or administrative data and not subject to the uncertainties associated with projections.

⁵ Both the 1998 MINT results and the 1996 SIPP survey reports indicate that about 30 percent of persons aged 62–72 are in poor or fair health. Both sources indicate persons in poor or fair health have a higher poverty rate, but the MINT results indicate a weaker relationship. In MINT, the poverty rate of those in poor or fair health is 1.5 times higher than the rate for persons of all health statuses. The corresponding figure in the SIPP is 1.9.

⁶ The DI beneficiaries are converted to retired worker beneficiaries at the full retirement age (FRA) under Social Security. The measure in this paper is based on whether the respondent received DI benefits at some point, which includes persons who converted at the FRA.

⁷ Note, however, that Rupp and Davies (2004) found that self-assessed health was predictive of subsequent mortality.

⁸ MINT is benchmarked to several projections in the 2004 report of the Social Security Trustees, including projections of real wage growth at a level of 1.1 percent per year.

⁹ Note that earnings after age 50 are projected using a specific retirement model rather than a nearest-neighbor approach.

¹⁰ Coresident income is estimated as an aggregate in MINT and is not broken down by source of income.

¹¹ Social Security is projected to be able to pay current law scheduled benefits until 2040 (Board of Trustees, *Federal Old-Age and Survivors Insurance and Disability Insurance Trust Fund* 2006). The FRA under Social Security is scheduled to increase under current law and the Boomers will face a larger early retirement penalty than did their parents.

¹² Projections of DB pension income for private sector jobs utilize plan formulas maintained in the Pension Insurance Modeling System (PIMS). The PIMS information is statistically matched to each job of the respondent covered by a pension. Different methods are used for public-sector pensions.

¹³ Additional information on DB and DC pension projections is available in Toder et al. (2002).

¹⁴ The techniques used in MINT to project home equity and financial wealth are complicated. A good discussion can be found at Toder et al. (2002) and Smith et al. (2005). Initial values of home equity and financial wealth are available for SIPP respondents. The initial values for financial wealth (but not home equity) are adjusted to match outcomes in the SCF. A series of statistical equations based on the PSID, HRS, and SIPP are used to 'age' a respondent's home equity and wealth values.

¹⁵ The SCF data indicate median house values, relative to the average wage, increased by about 30 percent between 1998 and 2004. The increase in the median debt secured by homes also rose sharply (24%).

¹⁶ All figures in this paper include data reported to the 10th place, however the percentage change figures are computed using the same data with the 100th place included. Thus, if attempting to compute percentage change based on the included data, results will differ.

¹⁷ For more on poverty line concepts see Fisher (1992).

¹⁸ Litchfield (1999) contains a discussion of this issue and methods to resolve ambiguous rankings by different measures.

¹⁹ Relative to income, wealth typically has a more unequal distribution. For United States, Rodríguez et al. (2002) report a Gini of 0.803 for household net worth and a Gini of 0.553 for income.

²⁰ Although the results on home equity should be viewed with caution, Toder et al. (2002) offer possible rationales for the declining median values projected by MINT including the larger percentage of the population that is African-American or Hispanic, significant growth in housing values compared to wage growth during the 1960s and 1970s that benefited the parents' generation, longer mortgage terms, and increased use of home equity loans.

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