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# Understanding Baby Boomers' Retirement Prospects

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## Abstract

This chapter assesses Baby Boom retirement prospects by comparing the outlook for this cohort with experiences of previous generations. We simulate the impact of aging using the Social Security's Model of Income in the Near Term and project retirement incomes for a representative group of individuals born between 1926 and 1965. We conclude that Baby Boomers can expect to have higher real incomes in retirement than current retirees and lower poverty rates. Yet the gains in family income are not equally distributed, so, for instance, never-married Boomer women will be relatively better off, and high school Boomer dropouts will be relatively worse off than current retirees. And when we compare Boomer retirement incomes to their own pre-retirement living standards, we find that post-retirement incomes are not predicted to rise as much as pre-retirement incomes. In addition, certain population subgroups will remain economically vulnerable, including divorced women, never-married men, Hispanics, high school dropouts, those with weak labor force attachments, and those with the lowest lifetime earnings.



## Disciplines

Economics

## Comments

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

Chapter 4

# Understanding Baby Boomers' Retirement Prospects

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The economic well-being of future retirees in the Baby Boom cohort—the 76 million people born 1946–64—is of concern to many policymakers, particularly those concerned with the US Social Security system (Board of Trustees 2006). Yet relatively little is known about how this birth cohort will fare in retirement. This chapter compares the US Baby Boom cohort with previous generations along several dimensions, focusing specifically on the level, distribution, and composition of expected retirement income, and also on the adequacy of this income in maintaining their economic well-being.

An analysis of the retirement security of future generations requires techniques to simulate the aging of a population into the future (cf. Butrica, Iams, and Smith 2003). Accordingly, we rely on the Social Security's Model of Income in the Near Term (MINT), a micro simulation model that projects lifetime demographics and labor force activity, and ultimately retirement incomes, for a representative group of individuals born between 1926 and 1965.[1] Using MINT, we assess the distribution of individual outcomes for retirement, the 'notable advantage' of micro simulation models (Burtless 1996: 255). In so doing, we begin with background information on some of the salient historic trends likely to influence the demographic characteristics and well-being of the future retired population. Next, we discuss previous research, followed by a discussion of methodology for projecting retirement incomes. Our results focus on characteristics of current and future retirees, their projected family incomes and poverty rates, and their relative incomes and replacement rates.

## Cohort Patterns Over Time

Baby Boomers grew up in a very different social and economic environment from that experienced by current retirees, as it was marked by changes in marriage patterns, earnings and work patterns, retirement policy, and

economic fluctuations. Boomers have been more likely to never marry and divorce; women were more likely to work for pay and to have higher earnings when they did. These developments will translate into different Social Security benefits, as these are programmatically linked to marital and earnings histories, and to corporate pension benefits as well. Of course, the retirement income system has also changed in the last twenty years, with the erosion of defined benefit (DB) plans and the emergence of defined contribution (DC) plans, particularly 401(k) s and IRAs. As a result, Boomers will be less likely to have DB pensions and more likely to have contributed to DC plans or IRAs over their working careers, as compared to earlier cohorts. Boomers also face different Social Security regimes, compared to their parents. Currently, many retirees took 'full' or unreduced benefits at age 65, but the age for full benefits is rising to age 67 over time. Finally, compared to previous birth cohorts, Boomers have become accustomed to economic prosperity where real earnings have grown about 2–3 percent per year between 1947 and 1973, less from the mid-1970s to the early 1990s, and then again averaging 2.7 percent per year from 1995 to 2000 (Levy and Murnane 1992; Levy 1998; United States Board of Trustees 2006).

Previous studies have attempted to determine how these factors have influenced Boomers' prospects for retirement. Many of these have focused on the already retired or those on the verge of retirement, rather than Boomers per se (Gustman and Steinmeier 1999; Moore and Mitchell 2000; Haveman et al. 2003). Others compared Boomers in middle age with the situation of their parents at the same age (Easterlin et al. 1990, 1993; Sabelhaus and Manchester 1995). In other words, those studies ask whether Boomers are *on track* to an affordable retirement, but they do not actually analyze their expected retirement incomes. In some related work, Wolff (2002) does project expected retirement income for households with some Boomers; nevertheless, he potentially understates economic well-being at retirement as he excludes several key income sources. These include additional saving from the survey date to retirement, postretirement earnings, and income received from transfer programs (such as SSI, the means-tested Supplemental Security Income program). Work by Munnell et al. (2006) also excludes postretirement earnings from their measures of Boomer income at older ages. This flies in the face of recent evidence indicating that many adults age 65+ continue to work and earn (Butrica et al. 2006). Additionally, Munnell et al. presume that Boomers' lifetime earnings will replicate the age-earnings profiles of persons born much earlier (1931–41). This assumption likely underestimates women's lifetime earnings, as well as their earned pensions and Social Security benefits, since lifetime earnings are quite different for Boomer women than for those born in the Depression (Goldin 1990).

## Methodology

Our analysis addresses the shortcomings of prior studies because we project the economic well-being of the entire Baby Boom cohort (born 1946–64) in retirement, using a comprehensive measure of retirement resources. This allows us to more accurately measure total income at retirement, to examine how each component's share of income changes over time, and to assess the adequacy of retirement resources. In particular, we project retirement income sources using a micro simulation model which takes into account many of the structural changes expected to impact the aged population.

The work draws on projections of the major sources of retirement income from the Social Security Administration's (SSA) (MINT).[2] MINT starts with data from the 1990–93 US Census Bureau's Survey of Income and Program Participation (SIPP), matched to the SSA's earnings and benefit records through the year 2000. For persons born 1926–65, MINT independently projects each person's marital changes, mortality, entry to and exit from Social Security disability insurance (DI) rolls, and age of first receipt of Social Security retirement benefits. It also projects family income to include Social Security benefits, pension income, asset income, earnings, SSI benefits, income from no spouse coresident family members, and imputed rental income.[3] This definition of income differs slightly from that used by other researchers in this volume, due to differences in data sources available to us.

MINT is ideal for this analysis because it directly measures the experiences of survey respondents as of the early 1990s—representing the first third to the first half of the lives of the Boomer cohort—and it statistically projects their income and characteristics into the future, adjusting for expected demographic and socioeconomic changes. The model also accounts for the growth of economywide real earnings, the distribution of earnings between and within birth cohorts, and the composition of the retiree population.[4]

Distinct from other researchers in this volume, we separate our analyses into ten-year birth cohorts representing current retirees (born 1926–35), near retirees (1936–45), leading Boomers (born 1946–55), and trailing Boomers (1956–65).[5] We analyze the characteristics and family income of individuals born in these cohorts when they reach age 67 (the age by which most people will have retired). We also test whether the differences between Baby Boomer retirees and current retirees are statistically significant. Because our sample sizes are large (over 100,000 records), we highlight results only where differences are not statistically significant. All reported income projections are in $2004.

## Characteristics of Current and Future Retirees

Characteristics of projected retirees in each of the ten-year cohorts arepresented in Table 4-1, where it is clear that shifts in the marital status across generations are expected, reflecting the historical marriage trends discussed earlier. Just over one in four current retirees is nonmarried, compared with about one in three Boomers. Not only will the share of nonmarried retirees increase for the Baby Boom cohorts, but their composition will also change dramatically. All Boomer retirees are more

Table 4-1 Projected Characteristics of Individuals at Age 67

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *Total* | 100% | 100% | 100% | 100% |
| *Sex and marital status* | | | | |
| Female: never married | 2 | 3 | 3 | 4 |
| Female: married | 33 | 32 | 31 | 30 |
| Female: widowed | 13 | 10 | 8 | 9 |
| Female: divorced | 6 | 9 | 10 | 10 |
| Male: never married | 2 | 2* | 2 | 3 |
| Male: married | 38 | 36 | 36 | 34 |
| Male: widowed | 2 | 2* | 2* | 2* |
| Male: divorced | 4 | 6 | 7 | 7 |
| *Race/ethnicity* | | | | |
| Non-Hispanic white | 82 | 79 | 76 | 72 |
| Non-Hispanic black | 8 | 8* | 9 | 10 |
| Hispanic | 7 | 8 | 9 | 12 |
| Asian and Native American | 4 | 5* | 6* | 7* |
| *Education* | | | | |
| High school dropout | 28 | 19 | 11 | 12 |
| High school graduate | 54 | 58 | 58 | 60 |
| College graduate | 18 | 24 | 31 | 28 |
| *Mean values* | | | | |
| Years in the labor force | 26 | 29 | 32 | 32 |
| Shared lifetime earnings ($2004) | 24,000 | 33,000 | 42,000 | 46,000 |

*Indicates not significantly different ($p < .01$) from current retirees.

*Source*: Authors' computations of MINT3 (see text for details).

*Notes*: Shared lifetime earnings is the average of wage-indexed shared earnings between ages 22 and 62, where shared earnings are computed by assigning each individual half the total earnings of the couple in the years when the individual is married and his or her own earnings in years when unmarried.

likely than current retirees to never marry or to be divorced, and women in the Baby Boom generation are less likely than current retirees to be widowed.

The differences between men and women are pronounced. Nonmarried men will represent 17 percent of all men in the current retiree population [= (2 + 2 + 4)/(2 + 38 + 2 + 4)] but 22 percent of those in the near retiree population, 23 percent of leading Boomers, and 26 percent of trailing Boomers. While the compositional change between cohorts is much smaller for women, their numbers are much higher: 39 percent of current retirees, 41 percent of near retirees, 40 percent of leading Boomers, and 43 percent of trailing Boomers are projected to be nonmarried at retirement. This is important since among current retirees age 65 or older, the never married have the highest poverty rates, followed by the divorced, widowed, and married. In addition, within marital groups, female poverty rates are significantly higher than for males (Koenig 2002). Since women are more likely than men to be non-married in retirement, and this proportion is projected to increase for Baby Boomers, a larger share of the future retiree population will face the risk of poverty.

The racial and educational composition of retirees will also change. Boomer retirees are significantly more likely than current retirees to be Black and Hispanic; for instance, about one-in-six current retirees are in a racial/ethnic minority, compared with one-in-four Boomer retirees. The shift in minority group representation is also expected to influence the retirement income and economic well-being of future retirees, since among current retirees age 65+, Blacks are 2.5 times more likely to be poor, and Hispanics are about twice as likely to be poor as whites (Koenig 2002). Boomer retirees are about 1.5 times more likely than current retirees to be college educated, and about half as likely to be high school dropouts. Nevertheless, the educational gains between current retirees and leading Boomers dissipate somewhat for trailing Boomers; that is, fewer trailing Boomer retirees will have completed college than leading Boomer retirees.

These projections also indicate rising labor force experience across cohorts, from an average of twenty-six years among current retirees, to twenty-nine years among near retirees, and thirty-two years among Boomers.[6] Increased time spent in the labor force, in turn, leads to higher average lifetime earnings among Baby Boomers. Our measure of 'shared' lifetime earnings is the average of wage-indexed 'shared' earnings between ages 22 and 62, where 'shared' earnings are computed by assigning each individual in a couple half the total earnings of the couple in the years when the individual is married, and his or her own earnings in years when nonmarried. We find that shared lifetime earnings are projected to increase with each successive cohort, though at a decreasing rate.

## Absolute Measures of Well-Being

Next we compare the economic well-being of current and future retirees using two absolute well-being measures: family income and poverty. Poverty is an absolute concept because in the United States, individuals are considered poor if they have family incomes below an absolute minimum level—the official poverty thresholds of the US census bureau.[7]

### Projected Income

Average family income per person is projected to be higher for future retirees than for current retirees. It is worth noting that much of this difference is attributable to large increases in family income between the first three ten-year cohorts (see Table 4-2). That is, comparing current and near retirees, average annual income per person increases 21 percent (from $30,000 to $36,000). Between near retirees and leading Boomers, average income is projected to increase another 26 percent (from $36,000 to $46,000). Finally, between leading and trailing Boomers, average income is again projected to increase but by only 9 percent (from $46,000 to $49,000).[8]

Both earnings and income inequality will likely be higher for Baby Boomer retirees than for current retirees. Thus average income per person at the top of the earnings and income distribution is growing faster than income at the bottom of the distribution. For current retirees, family income in the fifth quintile of the shared lifetime earnings distribution is about three times higher than that in the first quintile. For Baby Boomers, this is projected to increase to more than four times higher. Among current retirees, family income in the fifth quintile of the income distribution is about eight times higher than that in the first quintile; for Boomers, this is projected to increase to ten times higher.[9] Average family income per person is highest for men, those who are widowed, non-Hispanic whites, those who are college educated, those with more work experience, and those with earnings and income in the highest quintile, if we focus on current retirees. These patterns will also hold for future retirees, according to the projections, except that never married Baby Boomer women will have higher incomes than widows.

Our projections also show that most retirees can anticipate income from several sources, including from assets, earnings, SSI benefits, imputed rental income, and coresident income (Table 4-3). Among current retirees, 90 percent have asset income, 29 percent have own earnings, 23 percent have spouse earnings, 5 percent have own SSI benefits, 1 percent have spouse SSI benefits, 80 percent have imputed rent, and 17 percent have coresident income. The prevalence of asset income, earnings, and imputed

TABLE 4-2 Mean Family Income per Person at Age 67 (in thousands, $2004)

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *Total* | $30 | $36 | $46 | $49 |
| *Sex and marital status* | | | | |
| Female: never married | 27 | 36 | 49 | 53 |
| Female: married | 28 | 34 | 43 | 47 |
| Female: widowed | 32 | 38 | 46 | 48 |
| Female: divorced | 28 | 36 | 43 | 47 |
| Male: never married | 30 | 36 | 44 | 53 |
| Male: married | 29 | 35 | 45 | 48 |
| Male: widowed | 39 | 51 | 61 | 68 |
| Male: divorced | 38 | 48 | 53 | 62 |
| *Race/ethnicity* | | | | |
| Non-Hispanic white | 31 | 38 | 49 | 53 |
| Non-Hispanic black | 24 | 27 | 33 | 37 |
| Hispanic | 21 | 27 | 32 | 35 |
| Asian and Native American | 28 | 35 | 43 | 54 |
| *Education* | | | | |
| High school dropout | 20 | 24 | 24 | 27 |
| High school graduate | 29 | 33 | 38 | 40 |
| College graduate | 47 | 54 | 68 | 80 |
| *Labor force experience* | | | | |
| Less than 20 years | 26 | 27 | 28 | 30 |
| 20–29 years | 29 | 35 | 36 | 38 |
| 30 or more year | 32 | 40 | 51 | 55 |
| *Shared lifetime earnings* | | | | |
| 1st quintile | 17 | 20 | 21 | 23 |
| 2nd quintile | 23 | 27 | 29 | 31 |
| 3rd quintile | 27 | 33 | 38 | 39 |
| 4th quintile | 31 | 40 | 51 | 52 |
| 5th quintile | 50 | 61 | 88 | 102 |
| *Income quintile* | | | | |
| 1st quintile | 8 | 10 | 12 | 12 |
| 2nd quintile | 16 | 20 | 23 | 23 |
| 3rd quintile | 23 | 29 | 34 | 35 |
| 4th quintile | 33 | 42 | 51 | 54 |
| 5th quintile | 67 | 81 | 108 | 122 |

*Note*: See Table 4-1.

TABLE 4-3 Percent of Individuals with Family Income at Age 67, by Source

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *Total income* | 100% | 100% | 100% | 100% |
| *Nonretirement income* | 98 | 99 | 99 | 99 |
| Income from assets | 90 | 91 | 93 | 94 |
| Earnings | 29 | 31 | 33 | 33 |
| Spouse earnings | 23 | 25 | 26 | 26 |
| SSI benefits | 5 | 3 | 2 | 2 |
| Spouse SSI benefits | 1 | 1 | 1 | 1 |
| Imputed rental income | 80 | 82 | 85 | 84 |
| Co resident income | 17 | 16 | 14 | 14 |
| *Retirement income* | 95 | 95* | 96 | 97 |
| Social security benefits | 88 | 92 | 93 | 94 |
| Spouse social security benefits | 53 | 53* | 52* | 49 |
| DB pension benefits | 38 | 31 | 31 | 29 |
| Spouse DB pension benefits | 23 | 21 | 20 | 17 |
| Retirement accounts | 38 | 43 | 45 | 46 |
| Spouse retirement accounts | 24 | 29 | 29 | 28 |

*Note*: See Table 4-1.

*Indicates not significantly different ($p < .01$) from current retirees.

rental income is projected to rise for the Baby Boom cohort, while a smaller percent is projected to have SSI benefits and coresident income.

Nearly all retirees will also receive income from retirement income sources, that is Social Security benefits, DB pension benefits, and income from retirement accounts (i.e. DC pensions, and IRA and Keogh plans). Among current retirees, 88 percent will collect own Social Security benefits, 53 percent have spouse Social Security benefits, 38 percent have own DB pension income, 23 percent have spouse DB pension income, 38 percent have own retirement account income, and 24 percent have spouse retirement account income. Reflecting the shift in employer pensions from DB to DC, retirees with retirement accounts are projected to increase and those with DB pensions are projected to fall for Boomers. The share with own Social Security benefits is projected to increase across all cohorts, while the share with spousal benefits will decrease among only the trailing Boomers. The share of retirees with any Social Security benefits is projected to increase from 91 percent among current retirees to 94 percent among Boomers.

Table 4-4 shows each income source's contribution to average family income per person and how these vary by cohort. The top half of the table

TABLE 4-4 Family Income per Person at Age 67, by Source

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *A. Mean family income per person at age 67 (in thousands, $2004)* | | | | |
| Total income | $30 | $36 | $46 | $49 |
| Nonretirement income | 16 | 20 | 25 | 28 |
| Income from assets | 4 | 6 | 9 | 10 |
| Earnings | 4 | 4 | 6 | 6 |
| Spouse earnings | 3 | 3* | 4 | 5 |
| SSI benefits | 0 | 0 | 0 | 0 |
| Spouse SSI benefits | 0 | 0 | 0 | 0 |
| Imputed rental income | 2 | 2 | 3 | 3 |
| Coresident income | 3 | 4 | 3 | 4 |
| Retirement income | 14 | 16 | 20 | 22 |
| Social security benefits | 6 | 8 | 9 | 10 |
| Spouse social security benefits | 3 | 3 | 4 | 4 |
| DB pension benefits | 3 | 2 | 3 | 3 |
| Spouse DB pension benefits | 2 | 1 | 1* | 1 |
| Retirement accounts | 1 | 1 | 2 | 3 |
| Spouse retirement accounts | 0 | 1 | 1 | 1 |
| *B. Share of mean family income per person at age 67* | | | | |
| Total income | 100% | 100% | 100% | 100% |
| Nonretirement income | 53 | 55 | 55 | 56 |
| Income from assets | 14 | 17 | 19 | 20 |
| Earnings | 12 | 12 | 13 | 13 |
| Spouse earnings | 10 | 9* | 9 | 10 |
| SSI benefits | 0 | 0 | 0 | 0 |
| Spouse SSI benefits | 0 | 0 | 0 | 0 |
| Imputed rental income | 6 | 6 | 6 | 5 |
| Coresident income | 10 | 10 | 8 | 8 |
| Retirement income | 47 | 45 | 45 | 44 |
| SS benefits | 19 | 21 | 20 | 20 |
| Spouse SS benefits | 9 | 9 | 8 | 7 |
| DB pension benefits | 11 | 7 | 6 | 6 |
| Spouse DB pension benefits | 5 | 4 | 3* | 3 |
| Retirement accounts | 2 | 3 | 5 | 6 |
| Spouse retirement accounts | 1 | 2 | 2 | 2 |

*Note*: See Table 4-3.

shows average income by source, and the bottom half presents the share of income held by each source. Focusing first on current retirees, some $16,000 (53 % of family income comes from nonretirement income, including $4,000 from asset income (14%), $7,000 from own and spouse earnings

(22%), $2,000 from imputed rental income (6 percent), and $3,000 from coresident income (10%). Own and spouse SSI benefits account for less than $1,000 and less than 1 percent of family income. The remaining $14,000 (47%) of family income is derived from retirement income. Own and spousal Social Security benefits averaging $9,000 make up the bulk of retirement income and constitute 28 percent of family income. The DB pension benefits and retirement accounts average $5,000 and $1,000, respectively, or 16 and 3 percent of family income. Looking ahead, however, there will be an increasing importance of asset income. This is evident in that asset income represents 14 percent of average family income per person for current retirees, 17 percent for near retirees, 19 percent for leading Boomers, and 20 percent for trailing Boomers. The relative role of family earnings, family SSI benefits, and imputed rental income remains fairly constant across cohorts, while the importance of coresident income decreases slightly from 10 percent among current retirees to 8 percent among Boomers.

The declining role of DB pension benefits is clear, in that this income source makes up 16 percent of average family income per person for current retirees, and only 9 percent of average family income per person for trailing Boomers. Although the contribution of retirement accounts to family income nearly triples between cohorts (from 3% among current retirees to 8% among trailing Boomers), the growth is not large enough to completely offset the decreased importance of DB pension benefits.[10] The significance of Social Security benefits, on the other hand, remains largely unchanged across cohorts.

## Projected Poverty

These projected rises in real incomes over time will reduce poverty rates for most future retirees (Table 4-5). As with increases in income, declines in poverty rates are projected to occur largely between the first three ten-year cohorts. Eight percent of current retirees are expected to be poor at age 67, compared with 6 percent of near retirees, and 4 percent of Boomers. This halving of the poverty rate is largely the effect of rising real earnings, translating into higher real Social Security benefits, and other retirement income.

While most demographic and economic subgroups will experience declines in poverty rates over time, Boomers with weak labor force attachment are projected to have higher poverty rates than current retirees. Among Boomers, poverty rates will be highest for never-married men and women, Hispanics, high school dropouts, those with weak labor force attachments, and those with shared lifetime earnings in the lowest quintiles.

TABLE 4-5 Percent of Individuals in Poverty at Age 67

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *Total* | 8% | 6% | 4% | 4% |
| *Sex and marital status* | | | | |
| Female: never married | 25 | 21* | 11 | 10 |
| Female: married | 6 | 3 | 2 | 2 |
| Female: widowed | 10 | 9* | 7 | 6 |
| Female: divorced | 21 | 13 | 10 | 9 |
| Male: never married | 18 | 13* | 15* | 10 |
| Male: married | 5 | 3 | 3 | 3 |
| Male: widowed | 11 | 7 | 6 | 6 |
| Male: divorced | 12 | 6 | 6 | 5 |
| *Race/ethnicity* | | | | |
| Non-Hispanic white | 6 | 4 | 3 | 3 |
| Non-Hispanic black | 14 | 10 | 8 | 8 |
| Hispanic | 20 | 15 | 12 | 9 |
| Asian and native American | 23 | 11 | 8 | 7 |
| *Education* | | | | |
| High school dropout | 17 | 15* | 16* | 14 |
| High school graduate | 5 | 4 | 4 | 4 |
| College graduate | 3 | 2* | 1 | 2 |
| *Labor force experience* | | | | |
| Less than 20 years | 17 | 18 | 22 | 23 |
| 20–29 years | 8 | 5 | 5 | 5 |
| 30 or more years | 2 | 1 | 1 | 1 |
| *Shared lifetime earnings* | | | | |
| 1st quintile | 31 | 25 | 21 | 20 |
| 2nd quintile | 7 | 3 | 1 | 1 |
| 3rd quintile | 2 | 1 | 0 | 0 |
| 4th quintile | 1 | 0 | 0 | 0 |
| 5th quintile | 0 | 0 | 0 | 0 |

*Note*: See Tables 4-1 and 4-3.

In contrast, poverty rates are lowest for married men and women, non-Hispanic whites, those with college educations, those with many years of work experience, and those with shared lifetime earnings in the highest quintiles.

## Relative Measures of Well-Being

While Boomer retirees are projected to enjoy higher incomes and lower poverty rates than current retirees, we next ask whether Baby Boomer

retirees will be *relatively* better off than current retirees. More precisely, we are interested whether Boomers will maintain their relative economic position in retirement, relative to others in their birth cohort and relative to their own pre-retirement standard of living. To do this we examine their relative family incomes and replacement rates.

## Projected Relative Incomes

Although average family income per person is projected to increase across cohorts for all subgroups, not all Boomers will be as well-off. To illustrate the relative economic well-being of various subgroups, we next present the ratio of average income in a subgroup to average income of the entire cohort (see Table 4-6). This gauge of retirement security shows that many Boomers will have lower relative incomes than current retirees. The specific groups in question are widowed women, high school dropouts and graduates, those with less than thirty years of work experience, and those with earnings and income in the lowest quintiles.

As an illustration, a high school dropout who is currently retired has family income per person only 68 percent of the overall average. For leading Boomers, the comparable statistic is only 53 percent, and 55 percent for trailing Boomers. This is because average income is slated to rise by 52 percent over the period, but average income for high school dropouts rises by less, only 20 percent. So even though Boomer high school dropouts have higher family incomes than current retirees, they are relatively worse off compared with others in their cohort. Other subgroups are expected to be relatively better off. For instance, Boomer widowed men, non-Hispanic whites, those with strong labor force attachments, and those with earnings and income in the highest quintiles will have higher relative incomes than do current retirees. Never-married Boomer women will also have higher relative incomes than current retirees. For these women, the growth in average family income per person between current retirees and Baby Boomers (78% for the leading and 89% for the trailing Boomers) far exceeds the growth in overall average income across the generations (66%).

## Projected Replacement Rates

Replacement rates are useful in informing us about retirement well-being relative to well-being during preretirement years. Our replacement rates are computed as the ratio of average family income per person at age 67, to average shared earnings between ages 22 and 62.[11] Not surprisingly, most retirees are not likely to have as much income during retirement as during the working years (Table 4-7). For current retirees, the median replacement rate stands at about 93 percent; replacement rates are anticipated to

TABLE 4-6 Ratio of Subgroup Income to Cohort Mean Family Income at Age 67

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *Total* | 100% | 100% | 100% | 100% |
| *Sex and marital status* | | | | |
| Female: never married | 92 | 99 | 108 | 107 |
| Female: married | 94 | 94 | 95 | 95 |
| Female: widowed | 110 | 105 | 102 | 98 |
| Female: divorced | 94 | 98 | 94 | 96 |
| Male: never married | 102 | 100 | 98 | 107 |
| Male: married | 98 | 97 | 100 | 97 |
| Male: widowed | 132 | 142 | 134 | 138 |
| Male: divorced | 128 | 131 | 116 | 125 |
| *Race/ethnicity* | | | | |
| Non-Hispanic white | 104 | 105 | 107 | 108 |
| Non-Hispanic black | 80 | 75 | 73 | 74 |
| Hispanic | 72 | 75 | 70 | 71 |
| Asian and native American | 96 | 96 | 96 | 109 |
| *Education* | | | | |
| High school dropout | 68 | 65 | 53 | 55 |
| High school graduate | 97 | 91 | 83 | 81 |
| College graduate | 160 | 149 | 149 | 162 |
| *Labor force experience* | | | | |
| Less than 20 years | 87 | 75 | 62 | 60 |
| 20–29 years | 98 | 98 | 79 | 76 |
| 30 or more years | 110 | 110 | 112 | 112 |
| *Shared lifetime earnings* | | | | |
| 1st quintile | 59 | 55 | 46 | 47 |
| 2nd quintile | 77 | 74 | 65 | 62 |
| 3rd quintile | 90 | 91 | 84 | 79 |
| 4th quintile | 105 | 111 | 111 | 106 |
| 5th quintile | 169 | 169 | 194 | 206 |
| *Income quintile* | | | | |
| 1st quintile | 29 | 28 | 26 | 24 |
| 2nd quintile | 55 | 54 | 51 | 47 |
| 3rd quintile | 79 | 79 | 75 | 71 |
| 4th quintile | 111 | 115 | 112 | 109 |
| 5th quintile | 226 | 224 | 238 | 248 |

*Notes*: See Table 4-1. This statistic is the ratio of mean income in a subgroup to mean income of the entire cohort.

TABLE 4-7 Median Replacement Rates at Age 67

| | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| *Total* | 93% | 82% | 81% | 81% |
| *Sex and marital status* | | | | |
| Female: never married | 114 | 96 | 85 | 85 |
| Female: married | 92 | 84 | 80 | 79 |
| Female: widowed | 105 | 89 | 89 | 90 |
| Female: divorced | 87 | 76 | 72 | 75 |
| Male: never married | 97 | 79 | 81 | 78 |
| Male: married | 90 | 78 | 80 | 81 |
| Male: widowed | 109 | 94 | 97 | 102 |
| Male: divorced | 88 | 83 | 80 | 80 |
| *Race/ethnicity* | | | | |
| Non-Hispanic white | 91 | 81 | 80 | 80 |
| Non-Hispanic black | 97 | 76 | 74 | 78 |
| Hispanic | 92 | 91* | 86 | 87 |
| Asian and native American | 90 | 83 | 78 | 85 |
| *Education* | | | | |
| High school dropout | 86 | 86* | 93 | 97 |
| High school graduate | 92 | 79 | 77 | 78 |
| College graduate | 114 | 88 | 85 | 84 |
| *Labor force experience* | | | | |
| Less than 20 years | 115 | 113 | 120 | 122 |
| 20–29 years | 99 | 87 | 81 | 86 |
| 30 or more years | 84 | 75 | 77 | 76 |
| *Shared lifetime earnings* | | | | |
| 1st quintile | 178 | 136 | 115 | 117 |
| 2nd quintile | 97 | 82 | 77 | 78 |
| 3rd quintile | 85 | 76 | 74 | 73 |
| 4th quintile | 81 | 74 | 75 | 73 |
| 5th quintile | 83 | 72 | 78 | 79 |
| *Income quintile* | | | | |
| 1st quintile | 66 | 63 | 64 | 63 |
| 2nd quintile | 73 | 65 | 63 | 65 |
| 3rd quintile | 84 | 75 | 74 | 75 |
| 4th quintile | 106 | 94 | 91 | 94 |
| 5th quintile | 146 | 126 | 128 | 124 |

*Indicates not significantly different ($p < .01$) from current retirees.

*Notes*: See Tables 4-1 and 4-3. Replacement rates refer to ratio of income at age 67 to shared lifetime earnings; income includes SS and DB pension benefits, annuitized income from nonpension, nonhousing assets and retirement accounts, earnings, and SSI income. It excludes coresident and imputed rental income. Median is measured as the mean value between the 45th and 55th percentiles of the distribution.

decrease to 81 percent for future retirees. Indeed, except for high school dropouts and those with less than twenty years of work experience, we find that all subgroups of Baby Boomers will have lower replacement rates than current retirees.

To disaggregate the results somewhat, we find that replacement rates for current retirees are highest for never-married women, widowed men, non-Hispanic blacks, college graduates, those with weak labor force attachment, those in the lowest quintiles of shared lifetime earnings, and those in the highest quintile of total income. Replacement rates are lowest for divorced men and women, non-Hispanic whites, Asians, and Native Americans, high school dropouts, those with many years of work experience, those in the highest quintile of shared lifetime earnings, and those in the lowest quintile of total income. Because of the Social Security progressive payment formula, individuals with low earnings typically have relatively higher replacement rates and those with high earnings typically have relatively lower replacement rates. Looking ahead, therefore, the same patterns will generally hold across all cohorts of retirees, except Boomers will have higher replacement rates for widowed women, Hispanics, and high school dropouts, and lower ones for never married men, non-Hispanic blacks, and high school graduates. Family income replaces less than 25 percent of shared lifetime earnings for 2 percent of current retirees, less than 50 percent of shared lifetime earnings for 12 percent of current retirees, less than 75 percent of shared lifetime earnings for 35 percent of current retirees, and less than 100% of shared lifetime earnings for 55 percent of current retirees (Table 4-8). In other words, only 45 percent (100% − 55% of current retirees will have higher average family incomes at age 67 than average shared earnings between ages 22 and 62. About 15 percent (100% − 85%) of current retirees will have average family incomes at age 67 that are at least twice as high as their average shared earnings between

TABLE 4-8 Percent of Individuals at Age 67, by Replacement Rate

| *Replacement Rate (%)* | *Current Retirees (1926–35)* | *Near Retirees (1936–45)* | *Leading Boomers (1946–55)* | *Trailing Boomers (1956–65)* |
|---|---|---|---|---|
| <25 | 2% | 2%* | 2%* | 2%* |
| <50 | 12 | 17 | 17 | 17 |
| <75 | 35 | 44 | 45 | 44 |
| <100 | 55 | 63 | 65 | 64 |
| <200 | 85 | 89 | 91 | 91 |

*Indicates not significantly different ($p < .01$) from current retirees.

*Note*: See Tables 4-1 and 4-3.

ages 22 and 62. Boomers will be less likely than current retirees to have enough income to maintain their preretirement living standards. That is, only 35–36 percent of Boomer retirees will have more than enough income at age 67 to maintain their preretirement standard of living. Further, only about 9 percent of Boomer retirees will have average family income at age 67 that is at least twice as high as their average shared earnings between ages 22 and 62.

## Conclusions

Many recent analyses predict that future cohorts and Baby Boomer retirees, in particular, confront a markedly unattractive retirement period. Munnell et al. (2006) project that 43 percent of current retirees will have inadequate retirement income even if they retire at age 65 and exhaust all their assets. Wolff (2002) also projects that future retirees face a future with markedly less household income. These prophets of gloom receive a great deal of attention in the popular press. By contrast, our analysis is more nuanced and more balanced. We suggest that Baby Boomers can expect to have higher incomes in retirement than current retirees. As a result, Boomer poverty rates are projected to be much lower than for current retirees. Thus using *absolute* measures of well-being, Boomer retirees will be better off than current retirees.

The story is rather different when we use *relative* well-being measures, because the gains in family income across cohorts are not equally distributed. Many Baby Boom retirees will be worse off than their peers, compared to earlier cohorts, and we anticipate that some subgroups will do better than others. Women's career earnings will rise over time, though their improved earnings often offset rather than add to the couple's Social Security benefit because of the spouse benefit and progressive payment formula in Social Security. Incomes for never-married women will rise by much more than incomes for the overall population, but incomes for high school dropouts will rise much less than the overall population. As a result, never-married Boomer women will be relatively better off, and high school Boomer dropouts will be relatively worse, than current retirees. We also find that many Baby Boomer retirees will be worse off than current retirees, when we compare their relative position—their income versus their own preretirement living standards. This is because postretirement incomes are not predicted to rise as much as preretirement incomes. In particular, Social Security benefits, DB pensions, and retirement accounts are expected to contribute less to Boomers' retirement income than they do for current retirees. Income from DC pensions, IRAs, and Keogh plans will comprise a larger share of family income for future retirees than for

current retirees; their increased importance is not projected to offset the falling importance of DB pensions. Regardless of the measure of well-being, certain Baby Boomer subgroups will remain economically vulnerable, including divorced women, never-married men, Hispanics, high school dropouts, those with weak labor force attachments, and those with the lowest lifetime earnings. While these economically vulnerable subgroups typically have higher than average replacement rates, high replacement rates do not ensure economic well-being.

In sum, our prognosis for future retirees is not as starkly grim as those often reported in the popular press. Our micro simulation results depart from earlier, more ominous, predictions because they are based on the lifetime experiences and earnings of survey respondents, including the entire Baby Boom cohort, and because they use a comprehensive measure of retirement income that includes not only Social Security and private pension income, but also income from earnings and annuitized income from financial assets. Accordingly, our replacement rates are generally higher and do not exhibit the substantial deterioration between leading and trailing Boomers that others have reported using less complete measures. We do acknowledge that our conclusions may be somewhat optimistic as we do not account for the uncertainty of promised Social Security benefits, rising health care costs, and increasing long-term care costs.

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## Notes

[1] Manchester et al. (this volume) also use MINT but they focus on a subset of Baby Boomers between age 62 and 72. By contrast, this analysis focuses on the economic security of the entire Baby Boom cohort at age 67.

[2] This model was developed by SSA's Office of Research, Evaluation, and Statistics, with substantial assistance from the Brookings Institution, the RAND Corporation, and the Urban Institute.

[3] Imputed rental income is 3 percent of the difference between the house value and the remaining mortgage principal. There is debate over whether to include housing in income measures and replacement rates. Proponents argue that homeowners with identical financial resources as renters are better off because they do not have to pay additional income for housing. Critics argue that only actual income flows should be included. Although we include imputed rent in the income measure we use to describe the overall levels and composition of family income, we do not include imputed rent in the income measure we use to determine replacement rates and poverty rates.

[4] The projections in this paper are based on MINT3 (Toder et al. 2002), which uses projections of disability prevalence and mortality through age 65 and of the growth of average economy-wide wages and the consumer price index (CPI). For further detail see the Technical Appendix.

[5] The Baby Boom cohort is typically represented as those born between 1946 through 1964 but for the present discussion, we include in the Boomer cohort all those born 1946–65.

[6] Labor force experience represents the number of years with positive earnings. Historical earnings in MINT come from two administrative data sources: earnings for 1951–81 come from the Summary Earnings Record (SER) and include only Social Security taxable or 'covered' earnings; while earnings between 1982 and 1999 come from the Detailed Earnings Record (DER) and include earnings from both covered and uncovered jobs as well as pay over the taxable maximum. Projected earnings in MINT are based on the DER. We tested the sensitivity of results to different earnings data and conclude they produce similar patterns over time.

[7] Like the US Census Bureau, we do not include imputed rent in the income measure we use to determine poverty rates.

[8] Because average family income can be skewed by high outliers, we also report median family income in Butrica et al. (2003). Although lower than average income, median income exhibits similar patterns across cohorts and within subgroups.

[9] Again, we tested the sensitivity of our results to different sources of earnings data. Because it captures total earnings, not just social security covered earnings; the DER has fewer years of zero earnings and higher earnings on average than the SER. However, SER data sources exhibit similar earnings patterns over time. That is, average SER earnings are projected to increase over time (although earnings growth is higher using DER earnings) and earnings inequality is projected to increase over time (although inequality is somewhat higher using DER earnings). Using either data source, Baby Boomer retirees are projected to have higher lifetime earnings and higher earnings and income inequality than current retirees.

[10] There are statutory limits on the amount individuals can contribute to retirement accounts. MINT assumes these limits remain fixed at current levels.

[11] We exclude imputed rent and coresident income from per capita household income since these income flows, unlike social security and pensions (e.g.), are not derived from preretirement earnings. In Butrica et al. (2003), we test the sensitivity of our replacement rates to alternative measures of pre- and postretirement income, while the specific numbers differ, our general findings hold up to these alternative measures.

## Technical Appendix

MINT projects the wealth and income of individuals born between 1926 and 1965 from the early 1990s until 2032. It was developed by SSA's Office of Research, Evaluation, and Statistics, with substantial assistance from the Brookings Institution, the RAND Corporation, and the Urban Institute (for more information, see Panis and Lillard 1999; Toder et al. 1999; Butrica et al. 2001). The projections in this paper are based on MINT3 (Toder et al. 2002).

For persons born between 1926 and 1965, MINT independently projects each person's marital changes, mortality, entry to and exit from Social Security DI rolls, and age of first receipt of Social Security retirement benefits. It also projects lifetime earnings, Social Security benefits, and other sources of income after age 49 from the early 1990s through the year 2032 or death. These other sources of income include income from pension plans, retirement accounts, no pension, no housing assets, SSI, and income of no spouse coresidents. It also calculates a rate of return on owner-occupied housing to reflect that homeowners are better off than non-homeowners. The base data for these projections are the 1990–93 panels of the SIPP, matched to SSA administrative records through year 2000 on earnings, benefits, and mortality.

MINT projects future marital histories and estimates characteristics of future and former spouses. It estimates marital transitions from the reported marital status in the SIPP panels, using gender-specific continuous time hazard models for marriage and divorce. Explanatory variables that predict marital transitions in the equations are age, education, year's unmarried, whether widowed, and calendar year after 1980. The last variable captures the stabilization of divorce rates at a relatively high level in the early 1980s (Goldstein 1999).

MINT also identifies characteristics of spouses, in particular their earnings histories, for all married individuals. Individuals who were married in the 1990–93 SIPP panels and remain married throughout the projection period are exactly matched with their spouses from the survey. Former and future spouses are statistically assigned from a MINT observation with similar characteristics, or a 'nearest neighbor.' Thus MINT contains observed and estimated marital histories with the linkages to the characteristics of current, former, and future spouses that are necessary for calculation of spousal and survivors benefits.

MINT imputes earnings histories and disability onset through age 67 using a 'nearest neighbor' matching procedure. MINT starts with a person's own SSA-recorded earnings from 1951 through 1999. The nearest neighbor procedure statistically assigns to each 'recipient' worker the next five years of earnings and Social Security DI entitlement status, based on the earnings

and DI status of a 'donor' MINT observation born five years earlier with similar characteristics. The splicing of five-year blocks of earnings from donors to recipients continues until earnings projections reach age 67. A number of criteria are used to match recipients with donors in the same age interval. These criteria include gender, minority group status, education level, DI entitlement status, average earnings over the five-year period, presence of earnings in the fourth and fifth years of the five-year period, and age-gender group quintile of average prematch period earnings. An advantage of this approach is that it preserves the observed heterogeneity in age-earnings profiles for earlier birth cohorts in projecting earnings of later cohorts.

In a subsequent process, for all individuals who never become DI recipients, MINT projects earnings, retirement, and benefit take-up from age 50 until death. These earnings replace the earnings generated from the splicing method after age 50. This postprocess allows the model to project behavioral changes in earnings, retirement, and benefit take-up in response to policy changes. MINT then calculates Social Security benefits based on earnings histories and past DI entitlement status of workers, marital histories, and earnings histories of current and former spouses.

MINT projects DB pension coverage and benefits starting with the self-reported pension coverage information in the SIPP. MINT then links individuals to pension plans and simulates new pension plans along with job changes. Pension accruals depend on the characteristics of individuals' specific pension plan parameters. MINT also projects wealth from retirement accounts (i.e. DC, IRA, and Keogh plans) by accumulating account balances to the retirement date, along with any new contributions and interest earnings.

MINT also projects housing equity and nonpension, no housing wealth (i.e. vehicle, other real estate, farm and business equity, stock, mutual fund and bond values, checking, saving, money market, certificate of deposit account balances, and less unsecured debt). These projections are based on random-effects models estimated from the Panel Survey of Income Dynamics (PSID), Health and Retirement Study (HRS), and the SIPP. Explanatory variables include age, recent earnings and present value of earnings, number of years with earnings above the Social Security taxable maximum, marital status, gender, number and age of children, education, race, health and disability status, pension coverage, self-employment, and last year of life.

In each year from retirement until death, MINT takes the stock of wealth in retirement accounts and nonpension, no housing assets and: (*a*) decays it based on age-wealth patterns in the SIPP to represent the spend-down of assets in retirement; and (*b*) converts it into income by calculating the

fair market annuity a couple or individual could buy if they annuitized 80 percent of their total wealth. Thus asset income is derived from a series of annuity estimates based on a declining stock of wealth in retirement.

MINT also projects living arrangements, SSI income, and income of no spouse coresidents from age 62 until death. Living arrangements depend on the marital status, age, gender, race, ethnicity, nativity, number of children ever born, education, income and assets of the individual, and date of death. For those projected to coreside, MINT uses a 'nearest neighbor' match to assign the income and characteristics of the other family members from a donor file of coresident families from the 1990–93 SIPP panels. After all incomes and assets are calculated, MINT calculates SSI eligibility and projects participation and benefits for eligible participants.

Finally, MINT projects immigration to represent people who immigrated after the SIPP survey and those who will immigrate in future years. Because immigrants have lower average income than native-born Americans, omitting them from the projection period and analyses of well-being would understate true poverty.

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