

This article assesses the role of Social Security and Supplemental Security Income (SSI) in the economic well-being of baby-boomer retirees and their predecessors. The results suggest that, similar to current retirees, Social Security will account for about two-fifths of projected income for baby-boomer retirees. On average, SSI will contribute almost nothing to total income and will be received by fewer baby-boomer retirees than by current retirees. Although baby boomers can expect higher incomes and lower poverty rates at retirement than current retirees have, they can also expect lower replacement rates. The decline in replacement rates is driven, in part, by a decline in Social Security replacement rates.

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The Changing Impact of Social Security on Retirement Income in the United States

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Summary

The economic well-being of future retirees in the baby-boom cohort—those born between 1946 and 1964—is of particular concern to policymakers. Social insurance in the form of Social Security benefits plays a major role of income support for the elderly in the United States. To a much lesser degree, a supplementary welfare program in the form of Supplementary Security Income also plays a role. This analysis assesses the relative contribution of those programs to the expected income of current retirees (those born in 1926 to 1935), near-term retirees (those born in 1936 to 1945), early baby-boomer retirees (those born in 1946 to 1955), and late baby-boomer retirees (those born in 1956 to 1965). Their contribution is contrasted with other pillars of income, including income from nonhousing assets, imputed rent, earnings, nonspouse co-resident family members, defined benefit pensions, and other retirement investment accounts.

This analysis uses projections of the major sources of income at age 67 from the Social Security Administration's Model of Income in the Near Term (MINT) model. MINT starts with data from the U.S. Census Bureau's Survey

of Income and Program Participation (SIPP) for 1990 to 1993 matched to the Social Security Administration's earnings and benefit records through 1999. MINT 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 baby-boom cohort—and statistically projects their income and characteristics into the future, adjusting for expected demographic and socioeconomic changes.

The results suggest that baby boomers can expect higher incomes and lower poverty rates at retirement than current retirees have. Similar to current retirees, Social Security will account for about two-fifths of the projected family income at age 67 and will be received by almost all baby-boomer retirees. Supplemental Security Income will be received by 5 percent of current retirees and only 2 percent of baby-boomer retirees. The projections also suggest that baby boomers are less likely than current retirees to have enough postretirement income to maintain their preretirement living standards. The financial planning literature often recommends having enough postretirement income to replace 70 percent to 80 percent of preretirement income; however, over two-fifths of baby-boomer retirees will replace less

than three-quarters of their preretirement earnings and almost a fifth will replace less than half of their preretirement earnings. The decline in replacement rates for baby-boomer retirees relative to those for current retirees is driven, in part, by a projected decline in Social Security replacement rates.

Introduction

As members of the baby-boom cohort—individuals born in 1946 to 1964—approach retirement age, their economic well-being at retirement is of particular concern to policymakers. Baby boomers grew up in a very different era than did current retirees—one accompanied by considerable changes in marriage patterns, earnings and work patterns, retirement policy, and the economy. Although these changes will undoubtedly affect baby-boomer retirees, it is difficult to know exactly how they will influence their economic well-being.

Historically, social insurance in the form of Social Security benefits has played a major role of income support for the elderly in the United States. However, because Social Security benefits are programmatically linked to marital and earnings histories, they may be especially affected by the social, demographic, and labor market changes that have transformed retirement expectations for the baby-boom cohort. Although it plays a much smaller role of income support, a supplementary welfare program in the form of Supplemental Security Income (SSI) benefits also provides a safety net for elderly individuals who have low incomes and limited assets.

This analysis evaluates the role of these government income programs in protecting the economic security of baby boomers at retirement. Accordingly, it assesses the contribution of these programs to the expected income of current retirees (those born in 1926 to 1935), near-term retirees (those born in 1936 to 1945), early baby-boomer retirees (those born in 1946 to 1955), and late baby-boomer retirees (those born in 1956 to 1965).¹

Supported by employers and tax laws, pensions and retirement accounts are the main alternatives to public programs when it comes to income support for the elderly. In the latter part of the 20th century, the majority of employer-sponsored pension plans switched from defined benefit to defined contribution pensions (Munnell and Sundén 2004). Defined benefit pensions are based on years of service and earnings, usually emphasizing late career earnings. In contrast, defined contribution pensions are based on investment income from the worker's private accounts. Because the essence of defined contribution pension plans is to increase an individual's responsibility for his or her own retirement saving and to shift investment risk from employers to employees, the

trend away from defined benefit plans and toward defined contribution plans may affect the relative importance of government programs such as Social Security and SSI. For that reason, this analysis also compares the proportion of overall income from Social Security and SSI benefits with defined benefit pensions and retirement accounts (including defined contribution pensions, individual retirement accounts, and Keoghs), as well as other income sources.

This analysis uses projections of the major sources of income at age 67 from the Social Security Administration's Model of Income in the Near Term (MINT) model. MINT starts with data from the U.S. Census Bureau's Survey of Income and Program Participation (SIPP) for 1990 to 1993 matched to the Social Security Administration's (SSA's) earnings and benefit records through 1999. MINT 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 baby-boom cohort—and statistically projects their income and characteristics into the future, adjusting for expected demographic and socioeconomic changes.

Results from this analysis suggest that while baby-boomer retirees can expect higher incomes and lower poverty rates than current retirees have, their replacement rates—postretirement income as a share of preretirement income—will be lower. Although the contribution of Social Security and SSI benefits to overall income remains relatively constant across cohorts, the decline in replacement rates is driven, in part, by a decline in Social Security replacement rates.

Social Security Program

When first adopted in 1935, Social Security was designed as a social insurance program whose goal was to provide income security to the aged through retirement benefits. At the time, an individual's retirement benefits were based entirely on his or her own career earnings. Although the primary function of the Social Security program continued to be replacement of income from work due to retirement, over time the program expanded to include benefits for spouses, survivors, and the disabled. These programmatic changes meant that the Social Security benefits were no longer linked just to an individual's own earnings history but also to his or her marriage history and spouse's earnings history.²

While the original Social Security program was designed for the typical family, which included a working husband, a stay-at-home mother, and their children, the average baby-boomer family entering retirement in the 21st century is headed by two working parents or by a single working mother (Steuerle and Bakija 1994). Furthermore, the Social Security provisions for spouses

and survivors were originally intended to provide family benefits to retirees with one lifetime marriage. However, marriage trends in the second half of the 20th century reflect sharply increased divorce rates and multiple marriages (Cherlin 1992; Ruggles 1997). These trends are accompanied by rising life expectancy (Board of Trustees 2004). Accordingly, future retirees are more likely to be never married or divorced and less likely to be married or widowed. Because Social Security benefits are linked, in part, to marriage histories, changes in marriage trends will result in changes in benefit patterns among more recent cohorts.

The pattern of lifetime earnings also changed greatly in the last half of the 20th century. The increased labor force participation of women over the past 30 years (Farley 1996; Levy 1998; Henretta and O’Rand 1999) resulted in more women in the baby-boomer cohort with lifetime earnings and with entitlement to their own retired-worker benefits. In addition, average earnings (adjusted for inflation) grew at an average annual rate of about 2 percent to 3 percent per year between 1947 and 1973. Between the mid-1970s and early 1990s, there was almost no real growth in earnings; however, earnings grew faster for women than men (Levy and Murnane 1992; Levy 1998). Earnings have been growing steadily since the early 1990s, with the largest increases in the late 1990s, but the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance (OASDI or Social Security) Trust Funds is not expecting the high growth rate of the 1990s to be sustained in the future. In fact, the Board reported negative real wage growth between 2001 and 2003 (Board of Trustees 2004, Table V.B1). Because the Social Security benefit base is indexed to wages, continued wage growth will result in increased benefits for future retirees—*ceteris paribus*. However, since benefit reductions for early retirement are scheduled to gradually increase for cohorts born between 1938 and 1960, any increases in benefits over time due to wage growth will be offset for individuals who retire before their full retirement age (Social Security Administration 2001; Butrica, Iams, and Smith 2003).

The lifetime benefits paid by Social Security have been declining relative to the lifetime contributions among more recent birth cohorts entering retirement (Leimer 1995; Smith, Toder, and Iams 2003/2004). Smith, Toder, and Iams (2003/2004) use historical and projected data from the MINT model to estimate the “return” of lifetime benefits relative to lifetime contributions (or Social Security payroll taxes) for individuals born in 1931 to 1960. They find that the overall return declines among more recent cohorts of individuals, from 4.2 percent of contributions for retirees in the 1931–1935 birth cohort to 1.4 percent among those in the 1956–1960 birth cohort.

The decline in returns primarily affects retirees in the second or higher quintile of lifetime earnings; those in the lowest quintile are virtually unaffected (Smith, Toder, and Iams 2003/2004, Table 4, Chart 4). These findings suggest that although Social Security is becoming less generous over time, it is becoming more progressive. Social Security is also projected to become a less important source of income to retirees on a lifetime basis. Net lifetime benefits as a share of permanent income are projected to decline from 7.2 percent for retirees in the 1931–1935 birth cohort to -3.5 percent among those in the 1956–1960 birth cohort (Smith, Toder, and Iams 2003/2004, Table 10, Chart 10).³

Supplemental Security Insurance Program

Established in 1974, the SSI program provides benefits to aged and disabled individuals with very low income and assets (see Social Security Administration 2001). Although SSI indexes the maximum benefit to yearly changes in living costs, the asset level limits have remained constant since 1989. The impact is that as wages and prices increase over time, fewer individuals qualify for the program because their assets are well above the asset level limits.

Methodology

MINT projects the income of individuals born in 1926 to 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 Butrica and others 2001; Panis and Lillard 1999; and Toder and others 1999). This analysis uses projections based on MINT3, the most recent version of MINT (Toder and others 2002; Butrica, Iams, and Smith 2003).

MINT begins with data from the 1990 to 1993 panels of the Survey of Income and Program Participation (SIPP), matched to SSA administrative records on earnings, benefits, and mortality. MINT then projects demographic processes such as marital changes, mortality, entry to and exit from the Social Security Disability Insurance (DI) program rolls, age of first receipt of Social Security retirement benefits, living arrangements, and immigration. It also projects expected income (such as Social Security benefits, defined benefit pension income, asset income,⁴ earnings, SSI, imputed rent,⁵ and income from nonspouse co-resident family members) for individuals and married couples. The results of this paper reflect MINT projections of the future retiree population and its income based on the Census Bureau’s SIPP survey matched to SSA administrative data.

Using projections of these income sources at age 67, this analysis compares baby-boomer cohorts with previous generations on the overall level, distribution, and composition of their income at age 67 and on the adequacy of this income in maintaining their economic well-being. The focus of this analysis is on the changing impact of Social Security and SSI on retirement income. All reported income projections are in 2003 dollars.

Results

The results of this paper reflect MINT projections of the future retiree population. We begin with a description of the projected characteristics of retirees in each of the 10-year birth cohorts. Then we consider their economic well-being based on per capita family income, poverty rates, and replacement rates. Finally, we examine the extent to which Social Security and SSI, as well as other income sources, affect these measures of economic well-being. Since nonmarried women are particularly at risk of poverty in retirement, we analyze their projected economic status separately from the larger retiree population.

Characteristics of Current and Future Retirees

MINT projects that characteristics of retired individuals will change over the next 20 years (Table 1). Compared with current and near-term retirees, baby-boomer retirees are less likely to be married or widowed at age 67 and more likely to be divorced or never married. They are also less likely to be non-Hispanic white and more likely to be minority, especially Hispanic. Baby-boomer retirees are also less likely to be high school dropouts and more likely to be college graduates. MINT projects that baby boomers will spend more years in the labor force and have higher lifetime earnings (both as individuals and together with their spouse(s)). As a result, a higher percentage of baby boomers will be entitled to their own Social Security retired-worker benefits.

Projected Economic Well-Being

In this section, we consider the economic well-being of current and future retirees based on per capita family income, poverty rates, and replacement rates. Our measure of per capita family income includes Social Security benefits, pension income, asset income, earnings, SSI, imputed rental income, and income from nonspouse co-resident family members. Like the U.S. Census Bureau, we do not include imputed rent in the family income measure used to determine poverty rates. Also excluded are imputed rent and co-resident income from the family income measure used to determine replace-

ment rates, since these income flows (unlike Social Security and pensions, for example) are not derived from preretirement earnings.

MINT projects that on average baby-boomer retirees will be economically better off than current or near-term retirees. This is suggested by their per capita income in 2003 dollars and poverty rates (Table 2). First, family income at age 67 is projected to be higher for baby-boomer retirees than for current retirees. Mean per capita family income at age 67 will increase from about \$29,000 for current retirees to \$44,000 for early boomers and \$48,000 for late boomers. More typical is the experience of the median 10 percent of income recipients (those with per capita family income in the 45th–55th percentiles) for whom average per capita income is projected to increase by about 50 percent (from \$23,000 to about \$34,000) between current and baby-boomer retirees.⁶ However, the degree of change varies across subgroups, with minorities, the less educated, and the nonmarried experiencing smaller increases and even decreases in income across cohorts (Butrica, Iams, and Smith 2003, Tables 2 and 3). Second, MINT projects that baby-boomer retirees are less likely than current retirees to be in severe economic need. The poverty rate, a measure of severe economic need, is expected to decrease by half between the current retiree and baby-boom cohorts. This reduction partly reflects the indexing of the poverty rate by prices, which are expected to increase over time at a slower rate than wages (Butrica, Iams, and Smith 2003).

A completely different measure of economic well-being captures the extent to which retirees are able to maintain their preretirement living standards. Replacement rates compare postretirement income with preretirement income. Although the requisite replacement rate depends upon expected needs (TIAA-CREF 2002, Chapter 2), the financial planning literature often recommends having enough postretirement income to be able to replace 70 percent to 80 percent of preretirement income (TIAA-CREF 1994, 12; Hinden 2001, H1).

This analysis computes replacement rates for individuals as the ratio of per capita family income at age 67 to average wage-indexed earnings (both Social Security covered and noncovered earnings) from ages 22 to 62 where couples share their earnings in years of marriage.⁷ Because of intermittent employment over a lifetime and partial or total labor force withdrawal before the take-up of Social Security benefits, lifetime earnings provides a more stable base for estimating preretirement income than does the measure of recent earnings (see Smith 2002). Furthermore, it is reasonable to assume that lifetime earnings are the basis of postretirement income since, in one way or another, most individuals pay for their retirement with wages earned over their lifetimes.⁸

MINT projects that average replacement rates for those with replacement rates in the 45th–55th percentiles will be at least 80 percent. However, while incomes are projected to increase across cohorts, replacement rates are projected to decrease. Replacement rates are

projected to be 93 percent for current retirees but only about 80 percent for baby-boomer retirees.⁹ Because the average does not represent the distribution, this analysis estimated the percentage of individuals at age 67 whose incomes will replace less than three-quarters and

Table 1.
Projected characteristics for individuals at age 67, by birth cohort (in percent)

Characteristic	Current retirees (1926–1935)	Near-term retirees (1936–1945)	Early baby boomers (1946–1955)	Late baby boomers (1956–1965)
Total	100	100	100	100
Sex				
Female	54	54	53	54
Male	46	46	47	46
Marital status				
Never married	4	5	6	8
Married	71	69	67	64
Widowed	16	12	11	11
Divorced	9	15	17	17
Sex and marital status				
Female				
Never married	2	3	3	4
Married	33	32	31	30
Widowed	13	10	8	9
Divorced	6	9	10	10
Male				
Never married	2	2	2	3
Married	38	36	36	34
Widowed	2	2	2	2
Divorced	4	6	7	7
Race and 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
Benefit type				
Nonbeneficiary	12	8	7	7
Auxiliary only	10	6	3	2
Dually entitled	18	19	18	15
Retired worker	60	67	73	76
Mean values				
Years in the labor force	26	29	32	32
Own lifetime earnings (thousands of 2003 dollars) ^a	22	32	41	46
Shared lifetime earnings (thousands of 2003 dollars) ^b	23	32	41	45

SOURCE: Authors' tabulations of MINT (see text for details).

a. Own lifetime earnings is the average of an individual's wage-indexed earnings between ages 22 and 62.

b. 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 not married.

less than half of their lifetime earnings. Based on the financial planning literature, a 50 percent replacement rate represents a shortfall that could create economic challenges and necessitate lifestyle adjustments. MINT projects an increasing proportion of more recent cohorts whose income will replace less than three-quarters of lifetime earnings. A little over a third of current retirees but over two-fifths of near-term and baby-boomer retirees will replace less than three-quarters of their preretirement income. About a tenth of current retirees and almost a fifth of near-term and baby-boomer retirees will replace less than half of their preretirement income.

The retirement experience of nonmarried women is a common focus of policy discussions because older women are more often economically vulnerable. MINT projects that the per capita income of nonmarried women will be similar to that of other retirees.¹⁰ However, their projected poverty rates are about twice as high as those for the total sample, indicating that a much larger proportion of nonmarried women will experience economic stress.¹¹

Nonmarried women are also expected to have similar replacement rates of lifetime earnings as other retirees. A similar proportion is expected to replace less than three-quarters of their income: about a third of current

retirees and about two-fifths of near-term and baby-boomer retirees. The share replacing less than half of their income is also quite similar to the total sample, although slightly higher in the baby-boomer cohorts. However, as indicated by their poverty rates, similar replacement rates do not necessarily mean that nonmarried women are as equally well off as other retirees. A retiree with \$80,000 in postretirement income and \$100,000 in preretirement earnings has the same replacement rate (80 percent) as a retiree with \$8,000 in postretirement income and \$10,000 in preretirement earnings. Yet the former retiree would be considered well off, while the latter would be considered poor.

Composition of Projected Income

The previous results showed that although baby boomers will have higher incomes and lower poverty rates at retirement than current retirees have, they will not have higher replacement rates. Next, this analysis considers the extent to which Social Security and SSI, as well as other income sources, affect these measures of economic well-being. Income sources are grouped into retirement and nonretirement sources. Retirement income sources include Social Security benefits, defined pension benefits, and personal retirement accounts. Nonretirement income

Table 2.
Projected measures of economic well-being at age 67 for all retirees and nonmarried women, by birth cohort

Measure	Current retirees (1926–1935)	Near-term retirees (1936–1945)	Early baby boomers (1946–1955)	Late baby boomers (1956–1965)
All retirees				
Per capita income (thousands of 2003 dollars)				
Average of the overall group	29	35	44	48
Average of the median 10 percent ^a	23	28	33	34
Poverty rate (percent)	8	6	4	4
Average replacement rate of the median 10 percent ^b	93	82	80	81
Percentage below 3/4 replacement	35	44	45	44
Percentage below 1/2 replacement	12	17	17	17
Nonmarried women				
Per capita income (thousands of 2003 dollars)				
Average of the overall group	30	36	44	48
Average of the median 10 percent ^a	22	26	31	33
Poverty rate (percent)	15	12	9	8
Average replacement rate of the median 10 percent ^b	100	84	80	83
Percentage below 3/4 replacement	32	43	46	44
Percentage below 1/2 replacement	13	17	19	19

SOURCE: Authors' tabulations of MINT (see text for details).

a. This measure is computed as the average per capita family income of individuals with per capita family income in the 45th–55th percentiles (the median 10 percent of income recipients).

b. This measure is computed as the average replacement rate of individuals whose replacement rates are in the 45th–55th percentiles (the median 10 percent).

sources include income from nonhousing, nonpension assets, imputed rental income, earnings, SSI, and co-resident income. MINT projects that at age 67 most retirees will live in families receiving income from both retirement and nonretirement sources (Table 3).

Table 3 also shows each income source's contribution to per capita family income for the median 10 percent of

income recipients and how these vary by cohort. The middle panel of Table 3 presents the mean per capita income by source and the bottom panel presents the share of per capita family income held by each source.

Among current retirees, \$14,000 of mean per capita family income comes from retirement income sources and \$8,000 comes from nonretirement income sources

Table 3.
Per capita family income for the median 10 percent of income recipients at age 67, by source

Source	Current retirees (1926–1935)	Near-term retirees (1936–1945)	Early baby boomers (1946–1955)	Late baby boomers (1956–1965)
Percentage with family income				
Total	100	100	100	100
Retirement income	95	95	96	97
Social Security benefits	91	92	94	94
Defined benefit pensions	53	45	43	40
Retirement accounts	46	53	57	59
Nonretirement income	98	99	99	99
Income from assets	90	91	93	94
Earnings	44	47	49	49
Supplemental Security Income	5	3	2	2
Imputed rental income	80	82	85	84
Co-resident income	17	16	14	14
Mean per capita family income (thousands of 2003 dollars)				
Total	23	28	33	34
Retirement income	14	16	19	20
Social Security benefits	9	11	13	14
Defined benefit pensions	5	4	4	3
Retirement accounts	1	1	2	3
Nonretirement income	8	11	14	14
Income from assets	3	3	4	4
Earnings	3	4	6	6
Supplemental Security Income	0	0	0	0
Imputed rental income	2	2	2	2
Co-resident income	1	2	2	2
Share of mean per capita family income (percent)				
Total	100	100	100	100
Retirement income	63	59	57	58
Social Security benefits	40	41	40	41
Defined benefit pensions	20	13	11	9
Retirement accounts	3	5	7	8
Nonretirement income	37	41	43	42
Income from assets	12	12	12	12
Earnings	12	15	18	17
Supplemental Security Income	0	0	0	0
Imputed rental income	7	7	7	6
Co-resident income	6	6	5	6

SOURCE: Authors' tabulations of MINT (see text for details).

NOTE: These are individuals whose per capita family income is in the 45th–55th percentiles.

(Table 3). Although retirement income is projected to increase by more than 40 percent to \$20,000 for late baby-boomer retirees, nonretirement income is expected to increase by 75 percent to \$14,000. Thus, the share of per capita family income from retirement sources is projected to decrease from 63 percent among current retirees to about 58 percent among late baby-boomer retirees.

Social Security is the most important retirement income source for all retirees. About 91 percent of current retirees, 92 percent of near-term retirees, and 94 percent of baby-boomer retirees receive Social Security benefits (either their own or their spouse's). MINT projects that average per capita Social Security benefits for median individuals will increase from \$9,000 for current retirees to about \$14,000 for baby-boomer retirees; however, the share of total family income from Social Security benefits will remain stable at about 40 percent.

MINT projects trends in pension benefits that reflect the well-known shift from defined benefit to defined contribution pension plans (Munnell and Sundén 2004). The percentage of retirees with defined benefit pensions (either their own or their spouse's) is expected to decrease from 53 percent among current retirees to around 40 percent among baby-boomer retirees. At the same time, the percentage with retirement accounts will increase from 46 percent to 59 percent. Although MINT projects that together defined benefit pensions and retirement accounts will provide about \$6,000 of total income for all cohorts, their relative contribution to total family income will change over time. Average defined benefit pensions among the median 10 percent of income recipients represent 20 percent of per capita family income for current retirees but only 9 percent of per capita family income for baby-boomer retirees. Although the contribution of retirement accounts to family income more than doubles between cohorts (from 3 percent among current retirees to 8 percent among late baby boomers), the increase is not large enough to completely offset the decreased importance of defined benefit pensions.¹²

Earnings will be the most important nonretirement income source at age 67. MINT projects that 44 percent of current retirees, 47 percent of near-term retirees, and 49 percent of baby-boomer retirees will have earnings (either their own or their spouse's). Average per capita family earnings for median individuals will double from \$3,000 to \$6,000 between current retiree and baby-boomer cohorts. Social Security program rules encourage beneficiaries to work by allowing unlimited earnings for those at or above the full retirement age (rising from age 65 to age 67 for the late baby-boom cohort).¹³ MINT projects that earnings will be a more important

source of income at age 67 for baby-boomer retirees than for current retirees. Family earnings represent 12 percent of median per capita family income for current retirees, 16 percent for near-term retirees, and about 17 percent for baby-boomer retirees. The relative importance of income from assets, imputed rental income, and co-resident income remains fairly constant across cohorts.

Another nonretirement income source is SSI benefits. SSI, the main public program for the low-income aged and disabled, is expected to provide benefits to about 5 percent of current retirees but only 2 percent of baby-boomer retirees. This decline probably reflects the increasing restrictiveness of SSI limits on resources and income exclusions due to rising wages and prices over time. In contrast to Social Security, SSI on average does not make a noticeable contribution to per capita family income.

Given the high poverty rates of nonmarried women that were reported in Table 2, it is not surprising that these women are less likely than the overall group of retirees to have most income sources (Table 4). The main exception is the higher prevalence of SSI benefit receipt and co-resident income, particularly among current retirees. MINT projects that 10 percent of nonmarried women in this cohort will receive SSI benefits and 24 percent will have co-resident income. In contrast, only 3 percent of nonmarried women in the late baby-boom cohort will receive SSI benefits and only 19 percent will have co-resident income.

Among the median 10 percent of income recipients, however, SSI benefits and co-resident income are no more important to nonmarried women than they are to the larger retiree population. In contrast, Social Security benefits play a larger role in total income for nonmarried women.

Next, this analysis considers the relative contribution of income sources to overall replacement rates (Table 5). For individuals with replacement rates between the 45th and 55th percentiles, we compute the ratio of their mean income to their mean shared lifetime earnings for each income component.¹⁴ As already shown, replacement rates are projected to decline across cohorts. Table 5 shows that the decline is driven by retirement income. Social Security benefits, defined benefit pensions, and retirement accounts replace 63 percent of shared lifetime earnings for current retirees. However, these sources of income replace only 53 percent of shared lifetime earnings for near-term retirees, 50 percent for early baby boomers, and 51 percent for late baby boomers. Social Security benefits replace 38 percent of shared lifetime earnings among current retirees but only 31 percent of shared lifetime earnings among baby-boomer retirees; this may be explained in part by the increasing full

retirement age for beneficiaries born after 1937. Defined benefit pensions are expected to replace about one-fifth of lifetime earnings for current retirees but only about one-tenth for baby-boomer retirees. This decrease will be partially offset by a rise in the proportion of lifetime earnings replaced by retirement accounts: 4 percent for current retirees and 9 percent for baby-boomer retirees.

In all birth cohorts, nonretirement income at age 67 (including income from assets, earnings, and SSI benefits) is expected to replace about 30 percent of preretirement earnings. Not surprising, given that SSI is focused on those with very low income, is that SSI on average does not contribute measurably to the replacement of preretirement income.

Table 4.
Per capita family income for nonmarried women with the median 10 percent of income at age 67, by source

Source	Current retirees (1926–1935)	Near-term retirees (1936–1945)	Early baby boomers (1946–1955)	Late baby boomers (1956–1965)
Percentage with family income				
Total	99	99	99	99
Retirement income	92	92	94	95
Social Security benefits	86	88	91	92
Defined benefit pensions	41	32	32	30
Retirement accounts	32	39	44	45
Nonretirement income	96	96	98	99
Income from assets	81	82	86	89
Earnings	28	29	32	33
Supplemental Security Income	10	7	4	3
Imputed rental income	67	68	73	73
Co-resident income	24	21	19	19
Mean per capita family income (thousands of 2003 dollars)				
Total	22	26	31	33
Retirement income	15	17	19	21
Social Security benefits	10	13	15	16
Defined benefit pensions	4	3	3	3
Retirement accounts	1	1	2	2
Nonretirement income	8	9	11	12
Income from assets	2	3	4	5
Earnings	2	2	4	3
Supplemental Security Income	0	0	0	0
Imputed rental income	2	2	3	3
Co-resident income	2	1	1	1
Share of mean per capita family income (percent)				
Total	100	100	100	100
Retirement income	65	66	63	63
Social Security benefits	46	49	48	48
Defined benefit pensions	16	12	9	9
Retirement accounts	2	5	6	7
Nonretirement income	35	34	37	37
Income from assets	9	11	13	15
Earnings	9	9	12	9
Supplemental Security Income	1	0	0	0
Imputed rental income	9	9	9	8
Co-resident income	7	5	4	5

SOURCE: Authors' tabulations of MINT (see text for details).

NOTE: These are individuals whose per capita family income is in the 45th–55th percentiles.

MINT projects similar patterns for nonmarried women; however, the percentages differ from those for the larger retiree population. In particular, MINT projects that Social Security benefits replace a much larger percentage of preretirement income for nonmarried women: 50 percent for current retirees, decreasing to about 40 percent for baby-boomer retirees.

Conclusion

The Social Security Administration's MINT model projects measures of well-being through 2032 for birth cohorts born between 1926 and 1965. Using projections of income at age 67 from MINT, this analysis assesses the role of major government income programs in the economic well-being of baby-boomer retirees and their predecessors. The analysis focuses on Social Security and SSI benefits and their contribution to overall income

since Social Security, in particular, is likely to be affected by social, demographic, and labor market changes that have transformed retirement expectations for the baby-boom cohort.

The analysis suggests that baby boomers can expect higher incomes and lower poverty rates at retirement than current retirees have. Similar to current retirees, Social Security will account for about two-fifths of projected total income and will be received by almost all baby-boomer retirees. SSI, which on average contributes almost nothing to total income, will be received by 5 percent of current retirees and only 2 percent of baby-boomer retirees. The projections also suggest that baby boomers are less likely than current retirees to have enough postretirement income to maintain their preretirement living standards. The financial planning literature often recommends having enough postretirement income to replace 70 percent to 80

Table 5.
Average replacement rates for individuals with the median 10 percent of replacement rates at age 67, by source (in percent)

Source	Current retirees (1926–1935)	Near-term retirees (1936–1945)	Early baby boomers (1946–1955)	Late baby boomers (1956–1965)
All retirees				
Total	93	82	80	81
Retirement income	63	53	50	51
Social Security benefits	38	34	32	31
Defined benefit pensions	21	14	12	10
Retirement accounts	4	6	7	9
Nonretirement income	30	29	30	30
Income from assets	15	14	15	15
Earnings	15	14	15	15
Supplemental Security Income	0	0	0	0
Nonmarried women				
Total	100	84	80	83
Retirement income	72	62	58	58
Social Security benefits	50	45	41	39
Defined benefit pensions	17	11	11	11
Retirement accounts	4	6	6	7
Nonretirement income	27	23	22	25
Income from assets	15	14	13	15
Earnings	12	8	9	10
Supplemental Security Income	1	0	0	0

SOURCE: Authors' tabulations of MINT (see text for details).

NOTE: Replacement rates are calculated as the ratio of income at age 67 to shared lifetime earnings. 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 not married. Replacement rate income omits imputed rent and co-resident income.

These are individuals whose replacement rates are in the 45th–55th percentiles.

percent of preretirement income; however, over two-fifths of baby-boomer retirees will replace less than three-quarters of their preretirement earnings and almost a fifth will replace less than half of their preretirement earnings. The decline in replacement rates for baby-boomer retirees relative to those for current retirees is driven, in part, by a decline in Social Security replacement rates. On a per capita basis, the experiences of nonmarried women will be similar to those of the larger retiree population, with the exception that nonmarried women are more likely to be economically challenged and in poverty at retirement.

A previous analysis suggested that despite their gains, certain baby-boomer subgroups are expected to remain economically vulnerable at retirement (Butrica, Iams, Smith 2003). These subgroups include divorced women, never married men, Hispanics, high school dropouts, Social Security nonbeneficiaries and auxiliary beneficiaries, those with weak labor force attachments, and those with the lowest lifetime earnings. Although they sometimes have higher than average replacement rates, high replacement rates do not ensure economic well-being.

Notes

¹ The baby-boom cohort is typically represented as those born in 1946 to 1964. For analytical purposes, however, we define the baby-boom cohort as those born in 1946 to 1965.

² Briefly, the aged receive Social Security benefits as retired workers, spouses, divorced spouses, or widow(er)s (Social Security Administration 2001). Retired-worker benefits are computed by wage indexing annual earnings over an individual's work life and then calculating the average indexed monthly earnings (AIME) and primary insurance amount (PIA)—the benefit payable at the full retirement age, currently 65 and 10 months for someone born in 1942. The benefit is weighted to provide a higher proportion of benefits relative to a person's wages for those with low lifetime earnings and a lower proportion of benefits for those with high lifetime earnings. Individuals with 40 or more quarters of coverage over their work lives are considered fully insured and receive retired-worker benefits. Auxiliary benefits are paid to spouses, divorced spouses, and widow(er)s of retired workers. Spouse benefits are effectively one-half of the spouse's PIA, unless reduced for early retirement or a family maximum. Divorced spouse benefits, paid to those with at least 10 years of marriage, are effectively one-half of the ex-spouse's PIA, with a reduction for early retirement. Widow(er) benefits are effectively equal to the deceased spouse's PIA, unless reduced for early retirement. Retired workers are dually entitled if their auxiliary benefits as spouses, divorced spouses, or widow(er)s are larger than their retired-worker benefits. The dually entitled receive only the highest benefit to which they are entitled.

³ Net lifetime benefits are total lifetime benefits after age 61 minus lifetime Social Security taxes. Permanent income reflects income from age 62 until death including covered earnings of

beneficiaries, Social Security retirement benefits, defined benefit pensions, and actuarially fair joint and survivor annuities from wealth at age 62.

⁴ Asset income reflects what economic resources from nonpension, nonhousing assets (including retirement accounts such as defined contribution pensions, individual retirement accounts (IRAs), and Keoghs) could be available as a source of income rather than predicting who actually draws on these resources in the future. In each year from retirement until death, MINT takes the stock of wealth in nonpension, nonhousing assets and: (1) depreciates it based on age-wealth patterns in the SIPP to represent the spend-down of assets in retirement; and (2) converts it into income by calculating the 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.

⁵ MINT estimates imputed rent as 3 percent of projected housing wealth.

⁶ This measure is computed as the average per capita family income of those with per capita family income in the 45th–55th percentiles. Not only does this measure overcome the problem of skewing from high income outliers that is typical of the mean, but it is a more stable statistic than the median because it maintains a distribution of values.

⁷ Income is measured as a proportion of the national average wage at age 67, while earnings are measured as a proportion of the national average wage in each year between ages 22 and 62. This indexes the numerator and denominator to a common metric defined by the national average wage and expected wage growth. Wage-indexed earnings account for both past inflation and real wage growth and measure a family's actual standard of living. In contrast, price-indexed earnings take account of past inflation and measure a family's ability to attain a fixed standard of living. Because replacement rates gauge a family's ability to maintain preretirement living standards, wage-indexed earnings seem more appropriate than price-indexed earnings. Replacement rates would be greater than 100 percent if lifetime wages were instead indexed to annual prices that reflect purchasing power (Butrica, Iams, and Smith 2003, Table 16). Historical earnings in MINT come from two sources of SSA administrative data. Earnings between 1951 and 1981 come from the Summary Earnings Record (SER) and include only Social Security covered earnings. Earnings between 1982 and 1999 come from the Detailed Earnings Record (DER) and include earnings from both Social Security covered and noncovered jobs. The DER also includes earnings over the Social Security taxable maximum. Projected earnings in MINT are based on the DER. 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, these data sources exhibit similar earnings patterns over time.

⁸ In reality, most individuals invest their wages in financial instruments, pensions, or housing. Therefore, it is income from these sources, and not precisely earnings, that is often used to

finance retirement. Also, a number of individuals finance retirement with income generated through inheritances and gifts. However, MINT does not measure these income sources. Finally, some individuals without earnings may actually collect government transfers, such as welfare, unemployment insurance, or Social Security DI benefits. Because this analysis does not account for these transfer payments, it may understate preretirement income and overstate replacement rates. In the case of Social Security DI benefits, it turns out that the impact on overall replacement rates was negligible.

⁹ As discussed in a previous analysis, median replacement rates vary by subgroup (see Butrica, Iams, and Smith 2003, Table 10). These data show that widow(er)s will replace the highest proportion of lifetime earnings of any marital group, while those who are divorced will replace the lowest. Asian and Native Americans will have the highest replacement rates of any racial/ethnic group, fully replacing or replacing more than their lifetime earnings. Except for current retirees, MINT projects that high school graduates will replace a lower percentage of preretirement earnings than either high school dropouts or college graduates. Finally, median replacement rates will be highest for those with lower levels of lifetime labor force attachment and earnings and those with higher levels of total income.

¹⁰ It is important to consider that this analysis focuses on retirement income at age 67. Not only does the proportion of nonmarried women increase at older ages, but their economic well-being tends to worsen.

¹¹ This is because per capita income is based on the assumption that there are no economies of scale for larger families. In other words, those who are married need twice as much income to live equally as well as those who are nonmarried. In contrast, the U.S. poverty thresholds for individuals aged 65 or older assume that those who are married need only 1.26 times more income to live equally as well as those who are nonmarried. Butrica, Iams, and Smith (2003) find that married retirees have less than twice the income of nonmarried retirees. However, they have more than 1.26 times the income of nonmarried retirees.

¹² There are statutory limits on the amount individuals can contribute to retirement accounts. MINT assumes these limits remain fixed at current levels.

¹³ Those who are below the full retirement age face benefit reductions only if their earnings exceed the exempt amount (\$11,604 in 2004).

¹⁴ Again, the replacement rate calculations omit imputed rent and co-resident income from income estimates in the numerator. Neither of these income sources is derived from lifetime preretirement earnings, which is the denominator for replacement rates.

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