

## ***Changing Social Security Benefits to Reflect Child-Care Years: A Policy Proposal Whose Time Has Passed?***

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This article estimates the effects of proposals to increase the retirement benefits of women who reduce their earnings to care for young children. Using the 1990 Survey of Income and Program Participation file—exactly matched to the Social Security Administration's record of lifetime earnings—the authors present the distribution of child-care dropout years by retirement cohort and other demographic characteristics, and estimate the dollar impact of adjustments for caregiving years. The policies examined do increase the retirement benefits of some women, but the increases on average are small, are lowered with each successive retirement cohort, and benefit women from the more privileged socioeconomic groups. Thus, because the policy effects are small and will diminish in the future, the time of efficacy for these proposals has passed. Subsidizing child-care dropout years does not seem to be a well-targeted policy.

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\* The Social Security Administration and Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, respectively. The views in this article are the authors' only and do not reflect the views of any government agency or research organization. The authors had equal responsibility for this work. The order of listing was determined by a flip of a coin. We wish to thank the following persons for comments on drafts: Nora Andrews, Ann Benson, Barry Bye, Karen Holden, Eric Kingson, Michael Leonesio, Jan Olson, Sara Rix, Ralph Smith, Martynas Ycas, David Weaver, and participants of a workshop at the Institute for Research on Poverty, held at the University of Wisconsin.

In 1992, about 16 percent of women aged 65 and over were below the poverty line.<sup>1</sup> The problem of poverty focuses attention on women's Social Security benefits, because Social Security benefits are the most important source of income of the aged. It is well-known that women's monthly benefits are on average lower than men's. This reflects the lower lifetime earnings of women rather than any variation in treatment of men and women by program regulations. In part, these lower averages result from zero or reduced earnings in years when women take care of young children or disabled relatives. Removing the effect of dropping out of the work force to care for children is worth examining for adequacy reasons, as a possibility for reducing poverty among older women (1979 Advisory Council on Social Security; Kingson and O'Grady-LeShane 1993; Sandell and Iams 1994). Moreover, some advocates support this approach for equity reasons, arguing that society should not penalize women who perform unpaid work in the home raising children, by giving them lower Social Security benefits (American Association of Retired Persons (AARP) 1991; Older Women's League 1990).

Child-care proposals would increase retirement benefits for women who had no earnings or very low earnings when they raised young children. Two proposals receiving the most attention are adding a child-care dropout year exclusion to the retired-worker benefit formula and a child-care credit to the formula for calculating the special minimum benefit (SMB), a more generous Social Security benefit given to long-term workers with low earnings.

We review these proposals and assess their effects using an enhanced version of the 1990 Survey of Income and Program Participation (SIPP) file, which includes each respondent's Social Security Administration record of lifetime earnings. We conclude that both proposals have minimal effects and are not targeted to those women in the most economic need. Furthermore, the effect of full-time caregiving is cohort specific. Because most proposals would be implemented only for future retirees, we estimate the effects of these policies for

women born in the 1930's and 1940's. More recent cohorts of working women have fewer years of full-time child care than earlier cohorts, which will diminish the impact of full-time caregiving adjustments to Social Security benefits in the long run.

Some of the public discussion implies that lower income women would benefit the most from excluding caregiving periods from the Social Security benefit computation (AARP 1991). This article examines the target efficiency of the child-care proposals in reducing poverty by estimating their effects for women categorized by economic and demographic characteristics. Income security and alleviating poverty of older citizens are the founding principles for the Social Security Program. Thus, a minimal justification would require that the expenditures from the proposals increase the incomes of poor women more than the incomes of those who are not poor. One's judgment of the proposals should depend in part on who benefits from them. By estimating the dollar impact on benefits from these proposals, we assess their target efficiency.

### ***Women's Retirement Benefit Calculation***

Social Security retired-worker benefits usually are based on the 35 years of highest earnings from age 22 through age 61, after dropping the 5 lowest years (see Social Security Administration 1993b for details). Any years where earnings were higher before reaching age 22 or after reaching age 61 may be substituted. Earnings are wage indexed through age 60, and an average indexed monthly earnings (AIME) is calculated. The wage indexing is used to convert earnings from specific calendar years to a single basis before calculating initial retirement benefits. The basic benefit is calculated giving proportionately more benefits to persons with lower earnings. In 1992, the basic monthly benefit—the primary insurance amount (PIA)—was calculated using 90 percent of the first \$387 in AIME, 32 percent of the next

\$1,946, and 15 percent of the AIME over \$2,333.<sup>2</sup> When the highest 35 years of earnings are used, child-care years with no earnings or low earnings may be included in calculating the monthly average, lowering benefits. The child-care dropout proposal would increase the benefit by reducing the number of years used to compute average earnings. For example, with 5 dropout years, the average Social Security benefit would be based on the highest 30 years rather than 35 years.<sup>3</sup>

The majority of women, however, currently receive benefits as wives or survivors, which are based on their husbands' earnings history. Disregarding adjustments for late or early retirement, a wife is eligible for one-half of her husband's PIA and a widow is eligible for her husband's full benefit. When a woman is entitled to both her own retired-worker and wife/widow benefits, the wife/widow benefit is reduced by an amount equal to the retirement benefit. In essence, the woman receives the higher of her own worker benefit or the wife/widow benefit. Because these women effectively receive benefits based on their husbands' earnings, they would not be affected by adjustments of their retired-worker benefits for child care.

Iams' (1993) estimates of couple earnings patterns suggest that about 90 percent of wives in the 1992–2006 retirement cohort and 85 percent in the 2007–11 retirement cohort will have earnings below their husbands' earnings and would receive a widow benefit upon their husbands' death. About two-thirds of those women in the 1992–2001 retirement cohort and one-half of the women in the 2002–11 retirement cohort would receive at least a partial spouse benefit if when they reached retirement age, their husbands were still alive.

### ***Child-Care Proposals***

Although several variations have been proposed, excluding caregiving years from the computation of benefits is one main thrust (1979 Advisory Council on Social Security; AARP 1991).

For example, H.R. 865 of the 102nd Congress proposed to disregard up to 5 years with no paid work "occasioned by a need to provide child care or care to a chronically dependent relative" in addition to the 5 years of lowest earnings currently excluded from the benefit calculation. By reducing the averaging period, this disregard raises the average lifetime earnings per month and the Social Security benefits based on the average.

Proponents claim their proposals improve equity by removing the penalty for caregiving (that is, the penalty for including years of zero earnings in the benefit formula). The retired-worker benefit would be the same for a woman who earned \$15,000 a year for 35 years as it would be for one who earned \$15,000 a year for 30 years while providing 5 years of full-time care for young children. Implicitly, this values full-time caregiving for Social Security purposes as the average earnings in years where there had been no caregiving. It is designed to improve adequacy by raising benefits of women workers, which often are low, particularly among mothers of many children (Kingson and O'Grady-LeShane 1993).

The special minimum benefit is awarded only if it is higher than the Social Security benefit calculated in the usual way. Another policy to subsidize child care is to count caregiving years toward the SMB. The SMB is a guarantee based on *years with covered earnings* rather than the level of earnings. Consequently, it helps persons with a long history of limited earnings. An individual is credited with a year toward the SMB if in a given year earnings exceed a threshold.<sup>4</sup> The SMB is first payable with 11 credited years and increases with additional credit years up to a maximum of 30 years. In December 1992, the SMB was \$24.50 at 11 years of credit and increased \$24.50 for each additional credit year. Under the caregiving proposal, a year with no earnings or earnings below the SMB threshold while providing care would be credited. Thus, a year of caregiving could establish eligibility for the SMB or increase the SMB of eligibles by \$24.50.

## ***Cohort Changes in Labor-Force Participation***

Because the impact of child-care dropout proposals substantially depends on the extent of full-time caregiving, it is sensitive to secular changes in labor-force participation of women.

Women's labor-force participation has dramatically increased in the 20th century (Goldin 1990; Levine and Mitchell 1991). Gunderson (1989, p. 46) called women's increased labor-force participation "the single most important development in the labor market in the past 40 years." The labor-force participation rate of adult women increased from 29 percent in 1950 to 59 percent by 1992 (Goldin 1990; Bureau of the Census 1993, table 622).

Perhaps the biggest change was the increasing labor-force participation of mothers of young children. Oppenheimer (1970, p. 10) concluded from 1940 Census data that "if a woman worked, it usually was before marriage; if she worked after marriage, it was most likely before the advent of children." By the 1950's, mothers of young children still did not often work but many women entered the labor force in their late thirties when their children were school aged (Oppenheimer 1970; Bowen and Finegan 1969). Subsequently, labor-force participation rates of wives with young children markedly increased from 19 percent in 1960 to 60 percent in 1992 (Bureau of the Census 1993, table 633). Part of this shift results from a tendency for first-time mothers to work longer into pregnancy and to return to work sooner after childbirth (O'Connell 1990). Juhn and Murphy (1992) show that the dramatic increase in women's labor-force participation rates in the 1980's has been concentrated among women married to men with high earnings.

As a result, more recent birth cohorts of married women have had more years of Social Security covered earnings and higher levels of average indexed earnings (Iams 1993). Furthermore, in more recent cohorts, the earnings of wives are higher relative to their husbands' earnings (Iams 1993). Earned benefits will increase among future women retirees.

Dropout estimates must therefore be cohort specific. We cannot estimate future dropout effects based on current beneficiaries because these women were mothers when most mothers did not work. Women born in the 1930's are still of working age but were mothers in the 1950's and 1960's when, again, most mothers of young children did not work. However, women born in the 1940's were mothers in the late 1960's and 1970's when more women with young children worked.

## ***Empirical Results***

Again, this analysis is conducted using the 1990 Survey of Income and Program Participation of the Bureau of the Census, with information appended from the respondents' Social Security records of annual Social Security covered earnings from 1951 through 1990.<sup>5</sup> These records are the basis for computing Social Security retirement benefits. SIPP Wave II interviews collected marital and fertility histories, which permits identification of the birth year of the youngest and oldest child. Wave VI provides the work history and reason for being out of the labor force for at least 6 months. The main reasons listed include caring for minor children, caring for elderly relatives, and caring for disabled relatives. Using these SIPP reports, we also construct a variable measuring the period of labor-force withdrawal to care for elderly or disabled relatives.

A child-care dropout year is defined as a year with no recorded Social Security covered earnings when SIPP histories indicate the presence of a child under age 6.<sup>6</sup> A caregiving credit year for the purposes of the special minimum benefit is a year with no earnings or earnings below the required minimum level for a woman with a child under age 6.

Women born in the 1930's and the 1940's form the focus of this article; they reach eligibility for early Social Security retirement benefits (age 62) in the years between 1992 and 2001, and between 2002 and 2011, respectively. We ana-

lyze child-care dropout and credit years between ages 22 and 41 for both retirement cohorts.<sup>7</sup> Our general analysis includes (1) samples of all women, (2) women we estimate to be future retired-worker beneficiaries, and (3) mothers whom we expect to receive benefits based on their own earnings only. The first group of women is used to facilitate comparison with the literature, and the latter two groups are used for policy analysis.

Our estimate of future retired-worker beneficiaries is obviously imperfect. Future retired-worker women beneficiaries are defined as women with at least 5 years of covered earnings while aged 22-41. The Social Security Act requires 40 quarters of coverage, the equivalent of a quarter each year between ages 22 and 61, in order to be permanently insured for retired-worker benefits (Social Security Administration 1993b, paragraph 203). In 1992, a quarter of coverage was credited for each \$570 of covered earnings to a maximum of 4 quarters earned for the year. The shortest working career that could yield 40 quarters would be 10 years. Because 10 years of earnings are one-fourth of the Social Security computation period of 40 years, 5 years of earnings are the equivalent being one-fourth of the 20 years used in our study. Because individual women's labor-force participation patterns may be very different after age 41 than before, work patterns in the first 20 years cannot precisely estimate retired-worker status at retirement age.

Some women will be dually entitled to retired-worker and to wife/widow benefits, and therefore will receive benefit amounts based solely on their husbands' earnings. Whether they will be in dual status partly depends on whether their husbands are still alive and partly depends on the size of their husbands' lifetime earnings relative to their own earnings. Under present law, a few women who would have received benefits based (*de facto*) on their husbands' earnings will receive benefits based on their own earnings if caregiving years are dropped from the benefit computation. To estimate which women could be affected by the caregiving policy, we

exclude nonmothers, wives with average indexed monthly earnings below 30 percent of their husbands' earnings from the year in which these women were age 22 through 1990, and widows in the 1990 SIPP. Women who are not mothers cannot care for their own children by definition. Wives with monthly earnings below 30 percent of their husbands' earnings usually receive spouse benefits at retirement age. Widows are excluded because most of them receive benefits based on their husbands' earnings (see Iams 1993).

### Caregiving Levels

About 79 percent of the entire 1992–2001 women's cohort and 67 percent of the 2002–11 cohort have countable child-care dropout years in the period when the women in these groups were aged 22–41 (table 1). This table shows the percentage of women who had any dropout years, more than 5 dropout years, and more than 10 dropout years by cohort and reason. Dropout years are mainly attributable to care of minor children. More recent cohorts have

fewer dropout years. This is consistent with the recent trend toward mothers of young children remaining in the labor force.

The earlier cohort (1992–2001) spent proportionately more time in full-time child care. At comparable ages, this cohort averages 5.1 dropout years and the later cohort (2002–11) averages 3.8 dropout years (table 2). On average, the earlier cohort spent 7.7 years, and the later cohort spent 7 years with a child under age 6. Virtually all child-care dropout years occur before women reach age 41. (The mean increases by only 0.2 years when the period is extended to ages 22–51.)<sup>8</sup>

All of our samples of women (all women, future retiree women, future retired-only mothers) had similar percentages with caregiving years (table 1). The retirement sub-samples averaged about 1 less caregiving dropout year than all women (table 2).

Tables 1 and 2 also estimate the years of child caregiving with no or low earnings (low-care years) relevant to the special minimum benefit. These average about 2 years higher than the dropout

years. At ages 22–41, the earlier cohort of women averaged 6.4 low-care years, while the later cohort averaged 5.3 years. Similarly, the percentages of women with any or more than 5 of these years were higher among the earlier cohort.

Because the proposals only affect women who will receive retirement benefits, it is instructive to examine caregiving years for a sample restricted to expected retirees.<sup>9</sup> The relationships remain similar but the level of caregiving decreases. Compared with all women, future retiree women and future retired-only mothers averaged about 1 less dropout year in the earlier cohort (4.0 versus 5.1) and 0.7 years less in the later cohort (2.7–3.1 versus 3.8). Future retiree women and future retired-only mothers averaged about 5.7 low-caregiving years in the earlier cohort and about 4.7 years in the later cohort.

### The Distribution of Caregiving

It is instructive to determine how dropout years and low-care years are distributed among various segments of the population. Policy decisions are

Table 1. —Percentage of women with caregiving dropout years and estimates of child caregiving with no or low earnings, based on earnings at ages 22–41 for those born 1930–49<sup>1</sup>

Type of year	All women		Future retiree women		Future retired-only mothers	
	1992–2001 retirement cohort	2002–11 retirement cohort	1992–2001 retirement cohort	2002–11 retirement cohort	1992–2001 retirement cohort	2002–11 retirement cohort
Total number (in thousands).....	10,176	14,477	7,186	11,896	3,689	6,374
Caregiving-dropout year with child under age 6:						
Any years.....	79.4	67.1	74.2	62.8	79.4	65.2
More than 5 years.....	51.3	34.8	37.3	25.9	33.7	19.6
More than 10 years.....	8.5	4.8	2.4	1.5	1.8	.7
Additional elder/disability care:						
Any years.....	.8	.5	.6	.4	.7	.4
More than 5 years.....	.4	.1	.2	0	.3	0
More than 10 years.....	.3	.1	.1	0	.1	0
Care with no or low earnings with child under age 6:						
Any years.....	84.6	77.5	81.6	75.4	89.8	84.6
More than 5 years.....	65.7	52.6	56.9	47.0	56.5	42.0
More than 10 years.....	16.2	10.7	10.8	7.5	7.7	4.5

<sup>1</sup> See text for definition of variables. A caregiving dropout year is a year when a woman has no earnings and her child is under age 6. Elder/disability care is a year with no earnings for women reported out of the labor force to care for elderly or disabled relatives. Care with no or low earnings is a year with no earnings or earnings below the special minimum benefit threshold for women with a child under age 6. Retirees have 5 years of earnings at ages 22–41, and retired-only mothers include those whose own retirement benefits exceed their spouse or widow benefits at retirement age.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records. Matches were found for 90 percent of the adults.

Table 2.—Average caregiving dropout years and special minimum benefit credit years for women, based on earnings at ages 22–41 for those born 1930–49<sup>1</sup>

Type of year	All women		Future retiree women		Future retired-only mothers	
	1992–2001 retirement cohort	2002–11 retirement cohort	1992–2001 retirement cohort	2002–11 retirement cohort	1992–2001 retirement	1992–2001 retirement
Child-care dropout year with child under age 6.....	5.1	3.8	4.0	3.1	4.0	2.7
Additional elder/disability care.....	.1	0	0	0	0	0
Care with no or low earnings with child under age 6....	6.4	5.3	5.7	4.8	5.8	4.6

<sup>1</sup> See text for definition of variables. A caregiving dropout year is a year when a woman has no earnings and her child is under age 6. Elder/disability care is a year with no earnings for women reported out of the labor force to care for elderly or disabled relatives. Care with no or low earnings or earnings below the special minimum benefit threshold for women with a child under age 6. Retirees have 5 years of earnings at ages 22–41, and retired-only mothers include those whose own retirement benefits exceed their spouse or widow benefits at retirement age.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration’s administrative earnings records. Matches were found for 90 percent of the adults.

often influenced by their impact on persons with particular characteristics. Our interest is economic status in old age, but we cannot predict it with confidence. Consequently, we use education level, current family income, and level of husband’s covered earnings (up to the Social Security taxable maximum) as a proxy for economic status. Although education is relatively stable across the life cycle as a measure of economic status, measures of current income and covered earnings can change. Table 3 presents the dropout and low-care years for women with specific demographic, minority status, and socioeconomic characteristics. Socioeconomic status is identified by a woman’s education (0–11 years, 12 years, 13 or more years), her husband’s education (0–11 years, 12 years, 13 or more years), her annual family income relative to poverty (poverty or below, 1–2 times poverty, over 2 times poverty), and her husband’s covered earnings level when she was between the ages of 22 and 41 (median or below, third quartile, upper quartile). The demographic characteristics include retirement cohort (1992–96, 1997–2001, 2002–06, and 2007–11),<sup>10</sup> current marital status (married, widowed, divorced or separated, and never married), and number of children ever born. Minority status includes race (black, white and other) and ethnicity (Hispanic, non-Hispanic).

We focus upon child-care years for future retiree women and future retired-only mothers. Average dropout and low-care year levels vary by the selected characteristics (table 3). While Hispanic and non-Hispanic women had similar dropout levels, black women averaged about 1 year less. Among future retiree women and future retired-only mothers, black women on average had 2.3 dropout years, while white and other women had 3.3 to 3.6 dropout years. The respective figures for low-care years were about 4.2 and 5.4.

The relationships among socioeconomic status measures and caregiving years are not entirely consistent. Dropout and low-care years are higher among wives with more educated husbands. For example, among future retiree women, wives averaged 3.5 dropout years, when husbands had 0–11 years of education in contrast to 4.1 years, when husbands had 13 or more years of education. However, dropout and low-care years increased with husbands’ earnings among all women and future retiree women, but not among future retired-only mothers.

Dropout and low-care years were slightly higher among retiree women with 12 years of education than for those women in the other two educational groups, and were also higher among women in poverty. The differences associated with socioeconomic status of husbands indicate that separate

analyses of marital status groups may be appropriate.

Table 4 presents dropout and credit years for subgroups of retired-only mothers, adjusting for the effects of other characteristics. The adjusted averages were calculated separately for married and nonmarried women using Multiple Classification Analysis (Andrews et. al. 1973).<sup>11</sup> The adjusted averages in columns (3) and (4) of table 4 show differences associated with a particular characteristic for persons who were average in all other characteristics. For example, the 1.9 for black married women indicates that a black married, retired-only mother would have 1.9 dropout years if she had average characteristics for the other variables. (In table 3, the unadjusted average is 2.3 dropout years. This suggests that the observed 2.3 years reflects the influence of other variables, such as less education.)

Black women had significantly fewer dropout years at the 0.05 level of statistical confidence. Controlling for other characteristics, black wives had about 1-1/2 fewer dropout years than white and other wives, and black nonmarried women had about a year less than white and other nonmarried women. This is consistent with observed labor-force participation in the 1950’s and 1960’s. Bowen and Finegan (1969), for example, found that nonwhite mothers were less likely than white mothers to be out of the

labor force when they had young children. Dropout levels were quite similar between Hispanic and non-Hispanic women; Hispanic status had no significant effect.

The adjusted comparisons in table 4 show that removing child-care dropout years from benefit calculations would help white and other women more than black women, and this result is statisti-

cally significant. A policy implicitly subsidizing child-care years would also generally benefit economically advantaged women more than disadvantaged women. These findings are not

Table 3.—Average caregiving dropout years and years with no or low earnings for women, based on earnings at ages 22–41, by selected characteristics for those born 1939–49<sup>1</sup>

Characteristic	All women		Future retiree women		Future retired-only mothers	
	Dropout year	Low-care year	Dropout year	Low-care year	Dropout year	Low-care year
Total.....	4.4	5.8	3.5	5.2	3.2	5.1
<b>Demographic</b>						
Retirement cohort:						
1992–96.....	5.5	6.6	4.1	5.8	4.1	5.9
1997–2001.....	4.9	6.2	3.9	5.6	3.8	5.5
2002–06.....	4.3	5.8	3.5	5.3	3.2	5.3
2007–11.....	3.5	5.1	2.9	4.7	2.4	4.3
Marital status:						
Currently married.....	4.9	6.3	3.9	5.7	3.1	4.9
Widowed.....	4.4	5.8	3.2	5.1	...	...
Divorced/separated.....	3.6	5.3	3.0	4.9	3.3	5.4
Never married.....	1.2	1.6	0.8	1.2	2.7	4.3
Number of children:						
None.....	0	0	0	0	...	...
One.....	2.2	3.1	1.8	2.8	1.5	2.5
Two.....	4.7	6.3	3.9	5.8	3.1	4.9
Three.....	5.8	7.6	4.7	7.0	3.8	6.0
Four or more.....	6.0	7.9	4.7	7.2	4.2	6.6
<b>Minority status</b>						
Race:						
Black.....	3.1	4.8	2.3	4.2	2.3	4.3
White and other.....	4.6	6.0	3.6	5.4	3.3	5.2
Ethnicity:						
Hispanic.....	4.4	5.9	2.3	5.2	3.4	5.2
Non-Hispanic.....	4.4	5.8	3.5	5.2	3.2	5.1
<b>Socioeconomic status</b>						
Annual family income relative to poverty:						
In poverty.....	4.7	6.1	3.5	5.5	3.9	6.1
1–2 times poverty.....	4.3	5.9	3.2	5.3	3.0	5.4
Over 2 times poverty.....	4.4	5.8	3.5	5.2	3.1	4.9
Education (in years):						
0–11.....	4.4	5.9	3.3	5.3	3.0	5.1
12.....	4.7	6.1	3.7	5.5	3.3	5.3
13 or more.....	4.1	5.5	3.3	5.0	3.1	4.9
Husband's average covered earnings:						
Median or below.....	4.6	6.1	3.6	5.3	3.3	4.1
Third quartile.....	5.1	6.5	4.0	5.7	3.0	3.7
Upper quartile.....	5.1	6.7	4.4	6.3	2.8	3.6
Husband's education (in years):						
0–11.....	4.7	6.2	3.5	5.5	2.6	3.4
12.....	4.8	6.3	3.8	5.7	2.9	3.6
13 or more.....	5.0	6.4	4.1	5.7	3.4	4.2

<sup>1</sup> See text for definition of variables. A caregiving dropout year is a year when a woman has no earnings and her child is under age 6. Care with no or low earnings is a year with no earnings or earnings below the special minimum benefit threshold for women with a child under age 6. Retirees have 5 years of earnings at ages 22–41, and retired-only mothers include those whose own retirement benefits exceed their spouse or widow benefits at retirement age.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records. Matches were found for 90 percent of the adults.

surprising because the literature on labor supply for these cohorts has consistently shown that married women in less favorable economic circumstances are more likely to work.

The positive relationship between dropout years and socioeconomic circumstances is documented using several measures of socioeconomic status for retired-only mothers (columns (3) and (4) of table 4). Wives with higher levels of education, wives with college educated husbands, and wives with annual family incomes over twice the poverty level averaged a fraction of one year

more than other wives. However, dropout years were slightly higher among wives whose husbands' earnings were below the median. Statistically significant relationships to education and husband's earnings appear in the regression equations at the end of the article (table I and table II, pp. 23–24, respectively). In contrast, poor nonmarried women averaged about one dropout year more (a significant difference) than other nonmarried women. Differences related to the levels of education of nonmarried women fail to be significant.

In the first two columns of table 4,

we show the net results of allocating the zero child-care credit years for all women—the entire cohort—including those women who would be unaffected by the policy. This includes women who did not raise any children, those who would not qualify for retirement benefits because of insufficient lifetime earnings, and those women who are expected to receive spouse or widow benefits rather than their own retirement benefits. This adjustment affects the specific categories differently depending on the proportion of women with zero child-care credit years within the category. For example, averaging in all zero child-care years for women with husbands that have less than a high school education reduces the mean adjusted child-care years for this group from 2.5 for qualifying women to 1.4 for all (married) women. The drop is more dramatic for women with husbands that have 13 or more years of education, decreasing from 3.5 to 1.7 years.

The main effect of applying the analysis to the sample of all women is to dramatically weaken the apparent impact of caregiving adjustments. Patterns in the all-women sample (columns (1) and (2)) are similar to those for retired-only mothers (columns (3) and (4)). An exception is the relationship between husband's earnings and child-care dropout years. When zeros are included in the entire-cohort sample, wives whose husbands' earnings were in the upper quartile had slightly lower caregiving years than other women.

Our data suggest that a policy subsidizing child-care years would tend to benefit wives in more financially advantaged families. However, because wives of higher educated men are much more likely to work in cohorts younger than those analyzed here, the bias in favor of more advantaged families will diminish in the years after 2011.

### ***Removing Dropout Years from Benefit Computation***

Compensating for child-care dropout years increases retirement benefits for women by increasing the average indexed monthly earnings used as the basis for calculating their retirement benefits.

Table 4.—Adjusted caregiving dropout years for women at ages 22–41, by selected characteristics, for the entire cohort and retired-only mothers born 1930–49<sup>1</sup>

Characteristic	Entire cohort		Retired-only mothers	
	Married	Nonmarried	Married	Nonmarried
<b>Minority status</b>				
Race: <sup>2</sup>				
Black.....	0.7	1.3	1.9	2.4
White and other.....	1.7	1.5	3.2	3.5
Ethnicity: <sup>3</sup>				
Hispanic.....	1.4	1.7	3.4	3.2
Non-Hispanic.....	1.7	1.7	3.0	3.3
<b>Socioeconomic status</b>				
Annual family income relative to poverty: <sup>4</sup>				
Under poverty.....	.7	1.8	2.9	4.3
1–2 times poverty.....	.9	1.9	2.7	3.4
Over 2 time poverty.....	1.2	1.5	3.1	3.0
Education (in years): <sup>5</sup>				
0–11.....	.8	1.6	2.5	3.4
12.....	1.0	1.5	3.2	3.2
13 or more.....	1.5	1.6	3.1	3.0
Husband's education (in years): <sup>6</sup>				
0–11.....	1.4	...	2.5	...
12.....	1.5	...	2.8	...
13 or more.....	1.7	...	3.5	...
Husband's earnings at ages 22–41: <sup>7</sup>				
Below median.....	1.8	...	3.3	...
Third quartile.....	1.5	...	2.8	...
Upper quartile.....	1.3	...	3.0	...

<sup>1</sup> All effects adjusted for retirement cohort. Effects for nonmarried women also adjusted for being never married.

<sup>2</sup> Also adjusted for education and hispanic effects.

<sup>3</sup> Also adjusted for education and race effects.

<sup>4</sup> Also adjusted for race and hispanic effects.

<sup>5</sup> Also adjusted for race and hispanic effects.

<sup>6</sup> Also adjusted for race, hispanic and education effects.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records. Matches were found for 90 percent of the adults. Adjusted for average effects of other model variables using Multiple Classification Analysis (Andrews et al 1973) with regression models in tables I and II on pp. 23–24. Most variables were significant at the .05 level in the models (t ratio of 1.96 or greater).

The AIME for the years when women were ages 22 through 41 increases 14 percent (from \$705 to \$807) if full-time caregiving years are excluded from calculations (table 5). Among retiree women and retired-only mothers, the increase would be \$97 (14 percent) and \$135 (25 percent), respectively.<sup>12</sup>

The impact on benefits would be less dramatic. Earnings do not translate directly into benefits. First, the final basic benefit is based on the highest 35 years of earnings rather than the 20-year span between ages 22 and 41 analyzed here. Second, the benefit formula does not convert average earnings to benefits on a dollar-for-dollar basis. A dollar increase in average earnings for most persons (those with an AIME above \$387 but below \$2,333) would increase the monthly benefit by \$0.32. Thus, because of these two factors, we project that for the years observed, an increase in the AIME of \$1 will increase the retirement benefit by \$0.18. We estimate that the average effect of the child-care dropout year adjustment on benefits is about \$17 for retiree women and \$24 for retired-only mothers.

The average lifetime increase in Social Security for women who would benefit from the child-care dropout years would be about \$4,200. This estimate is based on the observation that the typical married woman in the 1992–2011 cohort has a husband who is 3 years older than her. The typical woman begins receiving Social Security benefits at age 62. The life expectancy of a 65-year-old man is about 14 years. Thus, on average, a married woman who begins to receive Social Security benefits will live 14 years before she becomes a widow.

Table 6 shows the increase in the AIME for future retired women with varying demographic and socioeconomic characteristics. Among future retired-only mothers, the average AIME increases less for black women than for white and other women (\$62 compared with \$127), and less for Hispanic women (\$89 compared with \$120).

These race/ethnic group differences among retired-only mothers remain after statistical adjustment for other characteristics (see columns (3) and (4)

in table 7). For example, the average earnings of married black women would increase \$73 compared with \$137 for white and other women. These black/white and other differences are always statistically significant, but the differences due to Hispanic origin are small enough that they may reflect sampling error (table II).

Women of higher socioeconomic status would benefit more. This partly reflects their higher number of child-care dropout years, and partly reflects their greater earnings level. Thus, socioeconomic bias appears for both policies examined, and when using several different measures of socioeconomic status (for example, the woman's education, the annual family income relative to the poverty level, and the husband's education). Retired-only mothers with 13 or more years of education gained \$149 compared with \$127 for those mothers with 12 years of education and \$75 for those with 11 or fewer years of education. Retired-only mothers in families with an annual income over twice the poverty level gained \$135 compared with \$73 for those mothers in poverty and \$88 for those just above the poverty line. These disparities remain significant even after statistical adjustment for other characteristics.

As in table 4, the first two columns of table 7 show the adjusted effects for

all women—the entire cohort—including those who would not be eligible for child-care credits. Although the estimated effect on the AIME is markedly lower when zero years are included in the average, in most cases the relative ordering remains the same. For example, married black women had a smaller average augmentation than married white and other women, although it diminished from \$73 to \$27 and \$137 to \$71, respectively, among married retired-benefit recipients and all married women in both race categories. When classified by husbands' earnings, differences were more dramatic and the ordering was changed. Married retired-only mothers with husbands in the highest quartile experienced an increase in AIME of \$165, the largest for any group. However, the average for all women was \$45, approximately equal to the average for other women as the highest quartile husbands. This reflects the fact that most married women with high-earner husbands will receive spouse benefits and not receive any child-care adjustments in their benefit amounts. Although adjusting the Social Security benefit formula for child-care years would raise the average earnings and subsequent benefits of many women, our analysis indicates that it would particularly help women who are more educated than others.

Table 5.—Average indexed monthly earnings for women at ages 22–41, with and without adjustment for caregiving dropout years for future retiree women and retired-only mothers born 1930–49<sup>1</sup>

Type of wage	Wage	Dollar increase in monthly—		
		Percent increase	Average earnings	Retirement benefits
Retiree women without adjustment.....	\$705	...	...	...
With full-time child-care adjustment.....	807	14	\$102	\$18
Retired-only mothers without adjustment.....	713	...	...	...
With adjustment.....	811	14	97	17
Retired-only mothers with dropout years without adjustment.....	543	...	...	...
With adjustment.....	678	25	135	24

<sup>1</sup> See text for definition of variables. A caregiving dropout year is a year when a woman has no earnings and her child is under age 6. Retirees have 5 years of earnings at ages 22–41, and retired-only mothers include those whose own retirement benefits exceed their spouse or widow benefits at retirement age.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records. Matches were found for 90 percent of the adults.

**Potential Effects from the SMB Caregiving Credit**

A caregiving credit to the special minimum benefit will effect only a trivial proportion of women (in the order of 1 percent), and, even for them, the effects will be small. At the end of 1992, only 1 percent (131,000 out of 12,272,000) retired women received a benefit based on the special minimum (Social Security Administration 1993a, tables 5.A.1 and 5.A.8). The largest SMB benefit in December 1992 was \$492.50 with 30 years of credit. We infer that most women who received the SMB had substantial work histories (an average of 27 years of earnings above the SMB threshold). These women would have received an average basic benefit (PIA) of \$436.45 but were granted an average special minimum benefit of \$467.26. The average increase is therefore only about \$31 over the benefit that they would have received in the conventional benefit calculation (that is, \$467.26 compared to \$436.45).

The SMB effectively requires a long history of low earnings above a minimum amount.<sup>13</sup> Women with more SMB credit years, measured both at the mean and the lowest quartile, also had higher AIME's when they were aged 22-41 (table 8, columns (1), (3), and (4)). These women reported higher 1990 weekly earnings and more weeks worked (table 8, columns (5) and (6)). Paradoxically, women with higher earnings have more credit toward the SMB, though this benefit was intended to help long-term, low-earning workers.

Crediting caregiving years when calculating the SMB has a minimal effect. We augmented earned credit years (table 9 column (1)) with the caregiving years if covered earnings were below the threshold. For example, women with 10 credit years earned at ages 22-41 would have 15 years if SMB credits included child-care years with no or low earnings. This procedure increased the SMB credits only slightly for most women (column (2)).

Table 6.—Average dollar increment from adjusting the AIME for caregiving dropout years for women at ages 22-41, by selected characteristics for those born 1930-49<sup>1</sup>

Characteristic	Total	Future retiree women	Future retired-only mothers
Total.....	\$87	\$102	\$118
<b>Demographic</b>			
Retirement cohort:			
1992-96.....	87	110	121
1997-2001.....	94	115	138
2002-06.....	88	102	121
2007-11.....	81	91	102
Marital status:			
Currently married.....	95	114	129
Widowed.....	74	90	...
Divorced/separated.....	82	92	101
Never married.....	13	15	54
Number of children:			
None.....	0	0	...
One.....	48	55	56
Two.....	113	131	131
Three.....	117	139	142
Four or more.....	87	112	124
<b>Minority status</b>			
Race:			
Black.....	49	56	62
White and other.....	91	108	127
Ethnicity:			
Hispanic.....	60	76	89
Non-Hispanic.....	89	104	120
<b>Socioeconomic status</b>			
Annual family income relative to poverty:			
In poverty.....	42	61	69
1-2 times poverty.....	56	71	81
Over 2 times poverty.....	96	110	128
Education (in years):			
0-11.....	47	62	70
12.....	89	106	118
13 or more.....	103	115	136
Husband's average covered earnings:			
Median or below.....	84	102	119
Third quartile.....	98	114	129
Upper quartile.....	120	141	160
Husband's education (in years):			
0-11.....	62	75	82
12.....	87	106	119
13 or more.....	117	137	161

<sup>1</sup> See text for definition of variables. A caregiving dropout year is a year when a women has no earnings and her child is under age 6. Retirees have 5 years of earnings at ages 22-41, and retired-only mothers include those whose own retirement benefits exceed their spouse or widow benefits at retirement age.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records. Matches were found for 90 percent of the adults.

To evaluate this policy more thoroughly, final benefits and SMB credits should be projected to retirement, which we cannot do with much confidence. A rough estimate is obtained by doubling the earned credit years to reflect work after age 41 and adding to this the number of caregiving credit years observed at ages 22–41 (column (3)). Under this hypothetical scenario, the SMB guarantee would usually remain substantially lower than the basic earned benefit (table 9, columns (4) and (5) compared to column (6)). Thus, on average, a woman with 10 earned SMB credit years could be expected to have 25 credit years at retirement including child-care years. The 25 credit years guarantee a SMB benefit of only \$369 compared to \$464 or \$424 at the mean and lowest quartile, when calculated the usual way. We expect that even if caregiving years are credited, very few women would benefit. Most future retired women will have had earnings that qualify them for benefits that exceed the SMB.

### Conclusion

The results raise serious doubts about the efficacy of policies proposed to increase the retirement benefits of women who reduce their earnings to care for children. The policies examined do increase the retirement benefits of some women. However, the increases on average are small, decline with each successive retirement cohort, and disproportionately aid women from more privileged socioeconomic groups more than other women. As a rough estimate, we expect that the average lifetime benefit increase for a woman receiving increased benefits would be about \$4,200. The benefit increase is received over an average of 14 years, until widow benefits begin. Thus, because the benefit is low and will be diminishing in the future, the time that this policy would have been effective has passed. Full-time mothers have been eclipsed by mothers who have combined paid work with their caregiving. From an adequacy perspective, subsidizing child-care dropout years in the foreseeable future does not seem to be a well-targeted policy.

Table 7.—Adjusted average monthly earnings increase from adjustment for caregiving dropout years for women at ages 22–41, by selected characteristics for the entire cohort and retired-only mothers born 1930–49<sup>1</sup>

Characteristic	Entire cohort		Retired-only mothers	
	Married	Nonmarried	Married	Nonmarried
<b>Minority status</b>				
Race: <sup>2</sup>				
Black.....	27.50	40.97	73.15	71.01
White and other.....	71.50	45.89	137.50	108.49
Hispanic: <sup>3</sup>				
Hispanic.....	50.99	42.37	119.97	80.71
Non-Hispanic	75.23	51.42	130.83	102.03
<b>Socioeconomic status</b>				
Annual family income relative to the poverty level—				
Under poverty.....	16.75	35.23	72.51	82.70
1–2 times poverty.....	28.72	47.50	87.89	85.27
Over 2 times poverty.....	53.74	55.61	134.69	108.82
Education (in years): <sup>5</sup>				
0–11.....	23.68	37.20	74.69	77.49
12.....	46.65	48.33	127.10	98.63
13 or more.....	64.80	60.00	148.62	111.94
Husband's education (in years): <sup>6</sup>				
0–11.....	34.55	...	93.20	...
12.....	44.11	...	119.29	...
13 or more.....	57.70	...	152.15	...
Husband's earnings at ages 22–41: <sup>5</sup>				
Below median.....	55.78	...	115.41	...
Third quartile.....	43.21	...	120.89	...
Upper quartile.....	45.06	...	164.83	...

<sup>1</sup> All effects adjusted for retirement cohort. Effects for nonmarried women adjusted for being never married.

<sup>2</sup> Also adjusted for education and Hispanic effects.

<sup>3</sup> Also adjusted for education and race effects.

<sup>4</sup> Also adjusted for race and Hispanic effects. Effects for nonmarried women also adjusted for education effects.

<sup>5</sup> Also adjusted for race and Hispanic effects.

<sup>6</sup> Also adjusted for race, Hispanic, and education effects.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records. Matches were found for 90 percent of the adults.

Our examination of proposals to provide SMB credit years based on child caregiving reveals the ineffectiveness of the special minimum benefit itself. Because of the relatively high earnings requirement for SMB credit years, and the relationship between the number of creditable years and the AIME, very few women benefit. Those few women who receive an SMB are granted very small increments in their retirement benefits.

There may also be problems with both types of proposals from an equity perspective. For example, the dropout proposal credits women who are out of the labor force but not mothers who work while providing care. Years of zero earnings (or years with low earnings) when a young child is present are not necessarily the best measure of the child-rearing contribution. Many women work in the paid labor market and raise young

children at the same time. The growth over time in the labor-force participation rates of women with young children indicates that this phenomenon is becoming more common. These women are more likely to be in families with husbands that are in poorer economic circumstances. It is not equitable social policy to subsidize only the child rearing of women who do not work or who limit their hours of work or earnings.

The caregiving proposals primarily benefit older married women, but the poverty problem is concentrated among single women (Committee on Ways and Means 1994). Only 6 percent of married women aged 65 and over were below the poverty line in 1992 compared with 22 percent of widows and 26 percent of divorced, separated, and never married women. Poverty is concentrated among women aged 75 and over in part because the probability of becoming a widow increases with age. In 1992, 36 percent of women aged 65 to 74 were widows compared with 65 percent of women aged 75 and over (Bureau of the Census 1993, table 61). Most widows will not benefit from caregiving proposals because their Social Security benefits are based on their husbands' earnings.

In the future, although the average number of child-caregiving years will diminish, older women's poverty is likely to remain a problem. Poor women are not well-targeted by the child-care dropout and credit-year proposals. Most widows receive Social Security benefits based on their husbands' earnings, not earnings of their own. Policies to help poor older women might include increasing the size of Supplementary Security Income benefits and/or survivors' benefits in Social Security. Based on our analysis, subsidizing child-caregiving years is not an effective way to reduce poverty.

## Notes

<sup>1</sup> Based on the 1993 Current Population Survey and reported by the U. S. House of Representatives, Committee on Ways and Means 1994.

Table 8.—Percentage distribution and earnings levels for women at ages 22–41, by number of current special monthly benefit (SMB) credit years for future retired-worker beneficiaries born 1930–49<sup>1</sup>

Current SMB-credit year (1)	Percentage distribution (2)	Average indexed monthly earnings		1990 SIPP earnings per week (5)	Current weeks worked (6)
		Mean (3)	Lowest quartile (4)		
0.....	9	96	53	208	29
1.....	5	148	106	234	33
2.....	6	190	139	262	34
3.....	6	243	191	272	35
4.....	7	312	255	303	35
5.....	7	370	304	293	36
6.....	5	451	370	344	37
7.....	6	511	436	324	36
8.....	5	586	486	389	40
9.....	5	663	560	357	39
10.....	4	750	626	341	42
11.....	4	842	678	370	41
12.....	4	883	738	385	44
13.....	3	1,030	819	429	39
14.....	3	1,141	932	416	46
15.....	3	1,188	992	408	43
16.....	3	1,322	1,064	454	46
17.....	3	1,444	1,225	469	45
18.....	3	1,578	1,236	445	47
19.....	3	1,757	1,385	524	46
20.....	6	1,900	1,581	527	45

<sup>1</sup> See text for description of estimation method.

Source: 1990 SIPP file exactly matched to the Social Security Administration's administrative earnings records.

<sup>2</sup> The bend points for the 1994 PIA were 90 percent of the first \$422 of the AIME, 32 percent of the AIME over \$422 through \$2,534, plus 15 percent for the AIME over \$2,545. We use the 1992 PIA because the 1992 formula indexes earnings through 1990 and our file appends earnings from 1951 through 1990.

<sup>3</sup> This implies that a woman could drop a total of 10 years from the 40 years of potential earnings used as the computation period.

<sup>4</sup> The threshold is discussed in the Social Security Handbook 1993 (Social Security Administration 1993b). The requirement level is 25 percent of the maximum earnings subject to Social Security taxes in 1951-78. After this period, the threshold is calculated as if the increase in the taxable maximum mandated by the 1977

Social Security Act Amendments had not been enacted. Beginning in 1991, the law was changed to require 15 percent of the pre-1977-law maximum for a credit year.

<sup>5</sup> Social Security covered earnings are earnings subject to Social Security withholding taxes up to the maximum subject to Social Security taxes.

<sup>6</sup> The proposals analyzed in this article count and adjust the benefit formula based on the total number of years a mother has a child under age 6. The age of the child is based on the reported birth years of the first and last child. The data do not include birth years for middle children born between the first born and the last born child. Caregiving for middle children is not measured when the last child is born more than 6 years after the first child. We believe that this will have

Table 9.— Effects of caregiving-credit years on the special monthly benefit (SMB) credit years and benefits for future retired-worker beneficiary women born 1930–49<sup>1</sup>

Current SMB-credit year (1)	Credit years with caregiving (2)	Hypothetical—		Average basic benefit estimated on 1992 using—	
		Age 62 SMB credit (1)+(2) (max .30) (3)	Age 62 SMB benefit (4)	Mean AIME (5)	Lowest quartile AIME (6)
0.....	8	8	0	87	47
1.....	9	10	0	133	96
2.....	9	11	24	171	126
3.....	11	14	98	217	172
4.....	11	15	123	276	229
5.....	12	17	172	317	273
6.....	13	19	222	360	233
7.....	13	20	246	386	364
8.....	14	22	295	411	380
9.....	14	23	320	436	403
10.....	15	25	369	464	424
11.....	15	26	394	493	441
12.....	16	28	443	506	460
13.....	17	30	492	554	486
14.....	17	30	492	590	522
15.....	17	30	492	605	541
16.....	18	30	492	649	565
17.....	18	30	492	688	616
18.....	19	30	492	733	620
19.....	19	30	492	797	667
20.....	20	30	492	845	730

<sup>1</sup> See text for description of estimation method.

Column 1 is credit years based on earnings of women at ages 22–41.

Column 2 is credit years and dropout years for women at ages 22–41.

Columns 3 and 4 are based on doubling the experience for women at ages 22–41.

Columns 5 and 6 are based on the average indexed monthly earnings (AIME) for women at ages 22–41.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records.

measured when older women were mothers of young children. We do not include more recent birth cohorts because women in these groups did not have 20 years of observed earnings by 1990 and do not have a complete measure of caregiving.

<sup>8</sup> Extending the dropout period from ages 22–41 to ages 22–51 increased the special-credit years 0.2 years but did not change the number of years of elder/disability care.

<sup>9</sup> For future retiree women and future retired-only mothers, we are looking at the estimated effects on the amount of these women's own retired-worker benefit received. For retiree women, we ignore dual entitlement, and we do not distinguish between the part of the benefit earned by the women and the part of the benefit received because of their marital status. Our retired-only mothers analyses more precisely focus upon women affected by the proposal because these women are not expected to receive spouse benefits at retirement.

<sup>10</sup> The 1992–96 retirement cohort was born in 1930–34; the 1997–2001 retirement cohort was born in 1935–59; the 2002–06 retirement cohort was born in the 1940–44 retirement cohort; and, the 2007–11 retirement cohort was born in 1945–49.

<sup>11</sup> For the Multiple Classification Analysis (MCA), we estimated a series of unweighted ordinary least squares multiple regression equations predicting the number of dropout years with no earnings. There were 12,386 married women and 1,017 nonmarried women in the equations for retired-only mothers. The equations are presented in table 1, p. 23. The simple regression t-test statistics for significance are in parentheses. Many coefficients in the models were statistically significant at the 0.05 level. The exceptions for dropout years in this table were Hispanic status, education levels, and never married (for nonmarried women); and Hispanic status, and husbands' fourth quartile of earnings (for married women).

For ease of presentation in table 4, we estimated adjusted coefficients for selected characteristics using the MCA (Andrews et. al. 1973). The adjusted coefficients take into account the average affects from other variables in the equations.

We also estimate MCA equations using caregiving years with no or low earnings below the threshold of the special minimum benefit as the dependent variable. The pattern of relationships was similar to the data presented in table 4. These calculations are available upon request.

minimal bias because about three-fourths of the mothers had one to three children. The child-care dropout exclusion would remove periods of full-time child care and no earnings from the computation of Social Security benefits. All child-care dropout years would be excluded from the highest 35 years of earnings in the benefit formula. The special minimum benefit caregiving proposal counts and provides credit years of low (below the SMB threshold) or no earnings if a mother has a child under age 6.

Other specific child-care policies have been proposed but are not simulated in this article (see AARP 1991; Older Women's

League 1990; 1979 Advisory Council on Social Security). However, our analysis provides a basis for estimating the distributional effects of these policy proposals.

<sup>7</sup> Full-time elder/disability care is negligible; about 1 percent of the sample report leaving the labor force to provide this type of care (table 1). Because these dropout years are negligible when a woman is aged 22 through 51, and we cannot measure part-time care with our data, we focus upon child-care years. The study sample does not include women born before the 1930's because the SSA record of annual earnings begins in 1951. This means yearly earnings were not

<sup>12</sup> Before adjustment, the AIME of the projected retired-only mothers with dropout years is \$543, lower than all retired-only mothers and all retiree women. This is not surprising because women with dropout years have, by definition, years with zero covered earnings averaged in their first 20 years of working age (which the other women did not) when children were in the household. Because women with no child-care dropout years are likely to have a strong commitment to the labor market and few gaps in their earnings records, they would have high AIME's. In fact, more than 60 percent of retired-only mothers without child-care dropout years had no other dropout years. The total dropout years for this group was between 1 and 2 years, compared with no more than 7 years for retired-only mothers with child-care years. Furthermore, these women's AIME's are not good measures of economic well-being because the measures ignore their husbands' income (Sandell and Iams 1994). To determine the distributional consequences of removing dropout years from the benefit computation, it is instructive to look at total family income and other measures of socioeconomic status.

<sup>13</sup> The required level for a credit varied from almost one-fourth of the national average earnings in 1965 to almost one-half in the 1970's. By 1990, for example, the minimum earnings required for a SMB credit year was \$9,250 compared to a national average of \$21,028. In 1965, the SMB-required level of minimum earnings had been \$1,200 compared to a national average of \$4,659.

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Table I.—Relationship of caregiving dropout years for women at ages 22–41, by selected variables for retired-only mothers born 1930–49<sup>1</sup>

Independent variable	Married women			Nonmarried women		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept.....	2.04 (8.50)	1.76 (6.73)	2.72 (25.64)	2.91 (20.68)	3.57 (13.61)	3.14 (21.99)
Black.....	- 1.31 (-5.46)	- 1.10 (-4.52)	- 1.30 (-5.38)	- 1.40 (-5.81)	- 1.11 (-4.73)	- 1.26 (-5.47)
Hispanic.....	.40 (1.44)	.50 (1.80)	.25 (.94)	.10 (.37)	-.10 (-.35)	-.16 (-.53)
Retirement cohort 1992–2001.....	1.44 (8.91)	1.49 (9.22)	1.42 (8.55)	1.42 (8.65)	.50 (2.50)	.53 (2.65)
Woman's education (in years):						
13 or more.....	.69 (2.75)	.13 (.46)	... ...	... ...	-.24 (-.90)	... ...
12.....	.75 (3.04)	.51 (1.97)	... ...	... ...	-.25 (-.95)	... ...
Husband's education (in years):						
13 or more.....	... ...	.31 (1.34)	... ...	... ...	... ...	... ...
12.....	... ...	1.01 (4.09)	... ...	... ...	... ...	... ...
Annual family income relative to poverty:						
Poverty or below.....	... ...	... ...	-.18 (-.30)	... ...	... ...	1.31 (4.79)
1–2 times poverty.....	... ...	... ...	-.44 (-1.54)	... ...	... ...	.39 (1.65)
Husband's average earnings:						
Third quartile.....	... ...	... ...	... ...	-.50 (-2.60)	... ...	... ...
Upper quartile.....	... ...	... ...	... ...	-.30 (-1.54)	... ...	... ...
Never married.....	... ...	... ...	... ...	... ...	-.21 (-.61)	-.31 (-.92)
Adjusted explained variance.....	.08	.09	.07	.07	.03	.05

<sup>1</sup> t-test statistics are in parentheses.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration's administrative earnings records.

Table II.—Relationship of average earnings change from caregiving dropout years for women at ages 22–41, by selected variables for retired-only mothers born 1930–49<sup>1</sup>

Independent variable	Married women			Nonmarried women		
	(1)	(2)	(3)	(4)	(5)	(6)
Intercept.....	72.40 (5.71)	53.66 (3.89)	135.03 (23.96)	112.61 (15.08)	89.85 (8.61)	123.70 (21.55)
Black.....	- 64.35 (-5.08)	- 52.99 (-4.13)	- 63.12 (-4.92)	- 62.21 (-4.87)	- 37.48 (-4.01)	- 39.04 (-4.21)
Hispanic.....	- 10.85 (-0.74)	- 4.96 (-0.34)	- 22.48 (-1.55)	- 22.00 (-1.52)	- 21.31 (-1.73)	- 26.75 (-2.21)
Retirement cohort 1992–2001.....	29.60 (3.46)	32.69 (3.82)	24.95 (2.92)	33.04 (.54)	3.28 (.41)	-1.00 (-.13)
Woman’s education (in years):						
13 or more.....	73.93 (5.58)	41.89 (2.82)	... ...	... ...	34.45 (3.24)	... ...
12.....	52.41 (3.97)	36.87 (2.68)	... ...	... ...	21.14 (1.99)	... ...
Husband’s education (in years):						
13 or more.....	... ...	58.96 (4.51)	... ...	... ...	... ...	... ...
12.....	... ...	26.09 (2.11)	... ...	... ...	... ...	... ...
Annual family income relative to poverty:						
Poverty or below.....	... ...	... ...	-62.18 (-1.91)	... ...	... ...	-26.12 (-2.38)
1–2 times poverty.....	... ...	... ...	- 46.80 (-3.06)	... ...	... ...	-23.55 (-2.50)
Husband’s average earnings:						
Third quartile.....	... ...	... ...	... ...	5.48 (.54)	... ...	... ...
Upper quartile.....	... ...	... ...	... ...	49.42 (4.81)	... ...	... ...
Never married.....	... ...	... ...	... ...	... ...	-25.37 (-1.87)	-26.82 (-1.98)
Adjusted explained variance.....	.05	.06	.03	.04	.04	.05

<sup>1</sup> t-tests statistics are in parentheses.

Source: 1990 Survey of Income and Program Participation exactly matched to the Social Security Administration’s administrative earnings records.