Economic Status in Later Life Among Women Who Raised Children Outside of Marriage

Richard W. Johnson and Melissa M. Favreault

Income and Benefits Policy Center, Urban Institute, Washington, D.C.

Objectives. Many single mothers are likely to face special economic challenges in old age, because they often have limited employment histories and cannot rely on husbands for financial support. This article examines the economic status of these women in later life.

Methods. The analysis uses nationally representative data from the Health and Retirement Study to estimate multivariate models of income, assets, and poverty rates for women aged 65–75 in 1999.

Results. Controlling for education, current marital status, and race and ethnicity, the models indicate that women who spent ≥ 10 years raising dependent children outside of marriage are 55% more likely to live in poverty at ages 65–75 than women who were always married when their children were young.

Discussion. The financial difficulties confronting single mothers raising children persist into later life. Social Security reforms, especially those that are not tied to the current system of spousal and survivor benefits, could improve retirement security for these vulnerable women, whose numbers will begin to soar when the many women who raised children outside of marriage in the 1970s retire in coming years.

T HE ECONOMIC hardships that confront single mothers are well known. Female-headed households with children receive less income and accumulate fewer assets than households with children headed by married couples (McLanahan & Sandefur, 1994; Ribar, 1999; Waite & Gallagher, 2000). But little is known about how single mothers fare in later life, when their children are grown. This article addresses this issue by examining the economic status of older women who raised children outside of marriage earlier in life.

The number of single mothers has increased sharply over the last generation. In 2002, 26% of families with children under age 18 consisted of a single mother and an absent father, up from 12% in 1970 (U.S. Census Bureau, 2003a). Single motherhood grew rapidly during the 1970s, when the number of families with children headed by single mothers increased 83%. The growth rate slowed to 35% in the 1980s and to 15% in the 1990s. Once the women who raised children outside of marriage in the 1970s begin to reach old age in coming years, the number of elderly women who spent time as single mothers earlier in their lives will soar.

The principal factor behind the rise in single motherhood is the surge in nonmarital births, which increased as a share of total births from 11% in 1970 to 33% in 2001 (Martin, Park, & Sutton, 2002b; Ventura & Bachrach, 2000). In 2002, 10% of all children lived in single-parent households with their nevermarried mothers, up from 0.8% in 1970 (U.S. Census Bureau, 2003a). In addition, between 1970 and 2002, the number of children under age 18 living with divorced or separated mothers increased by 56%, although the divorce rate declined in the late 1980s and has been relatively stable since then (Clarke, 1995).

Rates of single motherhood, especially for never-married women, are quite high among African Americans. In 2002, 54% of African American families with children under age 18 were headed by single mothers, and 31% of African American

children under age 18 lived in single-parents homes with their never-married mothers (U.S. Census Bureau, 2003b). More than two thirds (69%) of births to African American women were nonmarital in 2000 compared with 43% of births for Hispanic women and 22% of births for non-Hispanic White women (Martin, Hamilton, Ventura, Menacker, & Park, 2002a).

Economic Status of Single-Parent Households

Much of the concern about the growth in female-headed households stems from their high poverty rates. Table 1 compares the economic status of unmarried women and married couples, for households with children under 18, headed by adults aged 18-54. The differences are striking. In 2001, mean income for female-headed households with dependent children was \$36,300 compared with \$82,000 for married couple households with dependent children, according to data from the March 2002 Current Population Survey. In addition, 27% of households headed by unmarried women were poor (with incomes below the federal poverty level), and more than one third were poor or near poor (with incomes <125% of the poverty level). By comparison, only 6% of married couple households with dependent children were poor, and only 9% were poor or near poor. The economic situation was even grimmer for single mothers who never married than for those who had been married in the past. In 2001, 32% of nevermarried mothers were poor, and 42% were poor or near poor.

Single mothers also tend to have limited assets. In 1987, for example, mean net worth (defined as total assets minus total liabilities, but excluding Social Security and employer-sponsored pension wealth) for single-mother families with children aged 18 and younger was \$12,700 compared with \$67,800 for two-parent families with children (Hao, 1996). In addition, slightly more than half of single-mother families

Table 1. Economic Status of Households Headed by Adults Aged

18-54 by Household Structure 2001

18–34, by Household Structure, 2001				
	Share of HHs (%)	Mean HH Income (\$)	Share of HHs in Poverty (%)	Share of HHs in Poverty or Near Poverty (%)
All households	100.0	64,518	10.1	13.5
Households with dependent children Headed by married	50.6	66,937	12.2	16.7
couples Headed by unmarried	31.8	82,015	6.1	9.3
women Never married	12.2 5.7	36,252* 32,640*	26.9* 32.2*	35.1* 42.0*
Divorced or		,		
separated Widowed	5.9 0.5	39,470* 38,951*	22.0* 25.5*	28.7* 32.0*

Note: The analysis classifies households (HH) as being in poverty or near poverty if total household income falls below 125% of the federal poverty level.

*Significant differences (p < .01) between the given group of femaleheaded households and households headed by married couples in mean income and the share in poverty or near poverty.

Source: Authors' estimates from the March 2002 Current Population Survey.

reported zero or negative net worth. Families headed by nevermarried single mothers fared even worse, with mean net worth of just \$1,600.

Conceptual Framework

According to standard economic theory, people make labor supply decisions by comparing the costs and benefits of paid work (e.g., Polachek & Siebert, 1993). The costs of working are high for single mothers, because employment limits the amount of time they can devote to childcare. And before welfare reform began in the 1990s, the existence of welfare benefits reduced the benefits of work. Single women with dependent children could qualify for public support if they were not employed, and they would lose their benefits if they did work and earned much income. As a result, employment rates among single mothers were low. Those who do work tend to earn low wages, because they generally have little education and limited experience. In addition, they lack significant financial support from the fathers of their children. In 1997, only 37% of custodial mothers received child support from nonresident fathers, and the amounts they received were small, averaging only \$1,331 for the entire year (Lerman & Sorensen, 2001). Many noncustodial fathers are poor themselves and therefore unable to pay much child support, and enforcement of child support awards is often lax (Miller, Garfinkel, & McLanahan, 1997).

The economic challenges that confront single women with dependent children are likely to persist into later life. Women with little work experience and limited earnings do not accumulate many Social Security rights, which depend on lifetime earnings. Even though the share of preretirement earnings that Social Security replaces falls with income, highwage workers receive higher retirement benefits than low-wage workers. Women who never marry are not eligible for spousal or survivor benefits from Social Security, and women must remain married to the same man for at least 10 years to qualify for divorced spouse benefits. Traditional employer-sponsored pension benefits also depend on career earnings and years of service, and women with little schooling are unlikely to work at jobs that offer retirement benefits (Johnson, Sambamoorthi, & Crystal, 1999). In addition, those with limited incomes are generally not able to save much for retirement, either on their own or through employer-sponsored plans such as 401(k) plans.

Little is known about economic outcomes in later life for women who raised children outside of marriage. Much of the research on vulnerable older populations has focused on the financial difficulties of unmarried women (e.g., Burkhauser, Butler, & Holden, 1991; Butrica & Iams, 2000). In 2000, for example, 17% of widows and 20% of divorced women aged 65 and older lived in poverty compared with only 4% of married women (Social Security Administration, 2000b). But there has been almost no research examining the special economic challenges that women who raised children outside of marriage face in old age.

METHODS

This study measures the economic well-being of women aged 65–75 in 1999 who were single mothers of dependent children (under age 18) earlier in their lives. Because women with substantial experience as single mothers are likely to fare worse in retirement than those with more limited experience, we examine outcomes separately for women who spent at least 10 years raising dependent children outside of marriage (whom we label *long-term* single mothers) and those who spent some time but <10 years as single mothers (*short-term* single mothers). We compare these women with mothers who were always married while they were raising dependent children (continuously married mothers) and women who never had children.

For each group, we measure average income and assets. We examine income from Social Security, employer-sponsored pensions, earnings, assets, and other sources, and we distinguish earnings and benefits received by the woman's husband from those that she receives herself. We also compute the share of women who receive Supplemental Security Income (SSI) or other types of public assistance, which are indicators of economic hardship because only households with limited income and assets qualify for benefits. In addition, we compute mean income-to-needs ratios, calculated by dividing the income received by the woman and her husband (if married) by the federal poverty level, and the share of women with incomes below the poverty level. Unlike average income, these measures recognize that married couples have higher combined consumption needs than single adults. In 1999, the federal poverty level for adults aged 65 and older was \$7,990 for single individuals and \$10,070 for married couples (Social Security Administration, 2002a).

We also examine four alternative measures of wealth: total net wealth (defined as total household assets [including the value of future Social Security and employer-sponsored pension benefits] minus total liabilities), net wealth excluding future Social Security and pension benefits, net wealth excluding both future retirement benefits and net housing wealth (defined as the value of the primary and secondary homes net of mortgage liabilities), and total financial assets. Because most financial assets such as stocks, bonds, and bank accounts are easy to liquidate, older adults may be better able to use them to finance consumption than housing and other types of wealth. We measure Social Security and pension wealth as the present discounted value of the stream of future benefits, based on current benefit income (or expected values for those not yet collecting), cohort sex-specific mortality rates, and an annual real discount rate of 3%.

The analysis examines how economic outcomes for single mothers and other women vary by race, education, and current marital status. We also examine outcomes for women who were never married when they became single mothers and who did not complete high school, because they may be at special risk of economic hardship in retirement. We use *t* tests to measure whether the differences in mean outcomes we observe are statistically significant and χ^2 tests to measure whether the differences in median outcomes are significant.

At least some of the differences in economic status between women who raised children outside of marriage and other women may be attributable to the educational and demographic characteristics of single mothers. We use multivariate models to examine this possibility. We estimate an ordinary least-squares regression model of the income-to-needs ratio, a logit model of the likelihood of living in poverty, and a median regression model of total net wealth. Because income is highly skewed, we use the natural logarithm of the income-to-needs ratio as a dependent variable, not the simple level. We cannot transform wealth in this way, however, because some respondents report negative wealth. Instead, we use median regression to limit the impact on our estimates of cases with unusually large values of wealth.

Each model includes indicators identifying long-term single mothers, short-term single mothers, and women who never had children, with whom we compare continuously married mothers. The models control for education, marital status, and race and ethnicity. They also include an indicator identifying women with imputed measures of income and assets, because respondents with missing data may differ systematically from those who provide complete information.

Data

Our data come from the Health and Retirement Study (HRS), a nationally representative survey of older Americans conducted by the University of Michigan for the National Institute on Aging. The survey began in 1992 with interviews of 9,761 Americans born between 1931 and 1941, plus their spouses. Respondents are reinterviewed every 2 years. The survey was expanded in 1998 to include 2,303 people in the 1924-1930 birth cohort, plus their spouses. When we completed our study, data were available through 2000, when respondents ranged in age from 59 to 76. The survey oversamples African Americans, Hispanics, and Florida residents but includes sample weights that we use to adjust our estimates so that they represent the underlying national population. After we eliminate nonelderly respondents and a few respondents with missing data, our sample consists of 2,611 women born between 1924 and 1934, who were aged 65-75 in 1999.

The survey collects detailed marital and fertility histories from respondents. At the initial survey, respondents report their current marital status and the beginning and end dates for up to four marriages. At each subsequent wave, the survey asks about changes in marital status since the previous interview and when a marriage began or ended. Respondents also report the ages of all of their children. We use this information to compute the number of years that women in our sample spent raising children under 18 outside of marriage. (Because we do not have information about children who died before the survey began, our analysis may miss some spells of single motherhood.) We also distinguish women who were never married when they became single mothers from those who became single mothers through divorce or widowhood.

We measure income, wealth, and current marital status in the 2000 survey. The income data refer to 1999, the previous calendar year, but all other data are contemporaneous. When respondents are unable to provide precise estimates of their income or asset holdings, the survey asks whether the amounts are within certain bounds. These bracketing techniques reduce missing data problems and appear to improve the quality of the financial information in the HRS (Hurd, Juster, & Smith, 2003). HRS staff imputed income and asset data when respondents failed to provide complete information, and we include these cases in our analysis. At least one component of net worth is completely missing for 26% of the respondents in our sample, and at least one component of income is completely missing for 31% of respondents.

RESULTS

Table 2 reports the demographic characteristics of older women who raised children outside of marriage earlier in their lives. In 1999, the majority of women aged 65–75 (58%) raised children and were always married when their children were under age 18. But 14% spent at least 10 years as single mothers when they were younger, and another 19% had some experience as single mothers, but <10 years. Most women in our sample who raised children outside of marriage became single mothers through widowhood or divorce, because most of their children were born before the growth in nonmarital fertility that occurred in the 1970s and 1980s. Nonetheless, more than one in four long-term single mothers (29%) and one in six short-term single mothers (18%) had never been married when they first gave birth. Only 9% of women in our sample had no children.

The likelihood that older women had been single mothers earlier in their lives varied significantly (p < .01) by race and ethnicity, current marital status, and education. Older African American women were especially likely to have raised children outside of marriage, accounting for 26% of the long-term single mothers in our sample. By contrast, only 5% of continuously married mothers were African American. Women who spent at least 10 years raising children outside of marriage were much less likely to be married at ages 65-75 than continuously married mothers (16% vs 64%) and were more likely to be divorced or widowed. Almost all of the long-term single mothers in our sample had been married at some point in their lives; only 5% had never been married. As expected, women who raised children outside of marriage had significantly less education than other women. Fully 13% of long-term single mothers did not complete high school and became single mothers before they ever married. These women, who never benefited from the economic resources of a strong education or

Table 2. Demographic Characteristics of Women Age	ed 65–75, by
History of Single Motherhood, 1999	

	Continuously Married	Long-Term Single	Short-Term Single	Never Had
	Mothers	Mothers ^a	Mothers ^b	Children
Race and Ethnicity (%)				
Hispanic	5.1	10.8	4.4	7.5
African American	5.1	26.4	11.6	10.1
Non-Hispanic				
White or other	89.9	62.8	84.0	82.4
Education (%)				
Did not complete				
high school	23.6	41.2	29.6	25.3
High school graduate	41.6	34.0	38.8	37.4
<4 yr of college	19.9	13.2	20.0	18.2
\geq 4 yr-of college	15.0	11.6	11.6	19.2
Current martial status (%)				
Married	64.4	15.7	32.7	26.2
Divorced or separated	4.4	29.9	27.2	12.7
Widowed	31.2	49.8	40.1	27.0
Never married	NA	4.6	NA	34.2
Never married when first b	ecame single n	nothers (%)		
All	NA	28.8	18.1	NA
High school				
dropouts	NA	13.2	6.2	NA
N (unweighted)	1,570	355	480	206
Weighted share of				
sample (%)	58.4	14.0	19.1	8.5

Notes: Estimates are weighted to account for the sampling design of the Health and Retirement Study. Race and ethnicity, education, and current marital status vary significantly (p < .01) by history of single motherhood.

^aLong-term single mothers are women who spent ≥ 10 yr outside of marriage raising children under age 18.

 $^{\rm b}$ Short-term single mothers are women who spent some time but <10 yr as single mothers.

Source: Authors' estimates from the Health and Retirement Study.

a husband when they became mothers, may be especially vulnerable in retirement.

Income of Older Women Who Raised Children Outside of Marriage

Table 3 reports mean 1999 family income for women aged 65-75. Asterisks denote statistically significant differences between continuously married mothers and other women. Mean family income was 90% higher for continuously married mothers than long-term single mothers (\$43,500 vs \$22,900). The gap was due primarily to shortfalls in spousal income for single mothers, many of whom were unmarried in retirement or were married to low-income husbands. For example, mean own Social Security income was virtually identical for the two groups, but mean spousal Social Security income was almost five times as high for married mothers as for long-term single mothers. Similar patterns held for employer-sponsored pension income and earnings. Shortfalls in capital income also contributed to the economic hardship of long-term single mothers, who received only about one third as much income from assets as continuously married mothers. Mean family income for short-term single mothers and women who never

	Continuously Married Mothers	Long-Term Single Mothers ^a	Short-Term Single Mothers ^b	Never Had Children
Total (\$)	43,491	22,876***	30,847***	36,818
Social Security	13,613	8,323***	10,398***	9,666**
Own	6,914	6,937	7,486***	7,277
Husband	6,699	1,387***	2,912***	2,389**
Employer-sponsor	ed			
pension	8,781	4,354***	5,148***	7,509
Own	3,194	3,391	3,276	5,798**
Husband	5,587	963***	1,872***	1,711**
Earnings	7,763	5,086**	8,260	10,135
Own	2,376	2,691	4,442***	4,278
Husband	5,387	2,395***	3,818	5,857
SSI or Welfare	94	412***	150	116
From assets	11,950	3,696***	6,187***	7,805**
Other	1,291	1,005	703***	1,588
Share with any SSI or other welfare				
income (%)	2.6	14.5***	5.5**	5.7*
Ν	1,570	355	480	206

Table 3. Mean Family Income of Women Aged 65–75, by History of Single Motherhood, 1999

Notes: Family income includes income from the women and her husband, if married, but excludes income from other household members. The reported mean income for husbands is the mean value across all women in the group, including unmarried women. Estimates are weighted to account for the sampling design of the Health and Retirement Study. SSI = Supplemental Security Income.

^aLong-term single mothers are women who spent ≥ 10 yr outside of marriage raising children under age 18.

^bShort-term single mothers are women who spent some time but <10 yr as single mothers.

Significant differences between the given group of women and continuously married mothers in mean income and the share with SSI or other welfare income: *significant at 10% level; **significant at 5% level; ***significant at 1% level.

Source: Authors' estimates from the Health and Retirement Study.

had children fell between the mean levels for long-term single mothers and continuously married mothers.

Because many older women who raised children outside of marriage had limited incomes, they were much more likely than other women to receive SSI or other welfare benefits. About 15% of long-term single mothers received SSI or other welfare benefits compared with only 3% of older women who were always married when they were raising children.

Median income levels were substantially lower than mean income levels, because the distribution of income was highly skewed. However, observed income patterns were similar when we examined median levels instead of mean levels (and thus we report only means in the table). For example, median family income was \$14,500 for long-term single mothers and \$31,000 for continuously married mothers.

Comparing average family income levels may be misleading, in that continuously married mothers were more likely than single mothers to be married in retirement and thus tended to have greater consumption needs. To account for differences in family size, Table 4 reports mean income-to-needs ratios, by demographic characteristics and history of single motherhood.

	5			
	Continuously Married Mothers	Long-Term Single Mothers ^a	Short-Term Single Mothers ^b	Never Had Children
All	4.6	2.7***	3.4***	4.2
Race and ethnicity				
Hispanic	2.5	1.5**	1.7*	1.6*
African American	2.6	1.7***	2.3	2.0
Non-Hispanic				
White or other	4.8	3.3***	3.7***	4.7
Education				
Did not complete				
high school	2.4	1.6***	2.1	2.1
High school graduate	4.0	3.2**	3.1***	3.1**
<4 yr of college	5.6	3.5***	3.8***	4.9
\geq 4 yr of college	8.0	4.3***	7.5	8.2
Current marital status				
Married	5.3	4.4**	4.9	6.5
Divorced or separated	2.9	2.4	3.0	4.9
Widowed	3.3	2.3***	2.5**	3.1
Never Married	NA	2.1	NA	2.9
Never married when first b	became single n	nothers		
All	NA	2.3	4.2	NA
High school dropouts	NA	1.5	2.6	NA

Table 4. Mean Income-to-Needs Ratios for Women Aged 65–75, by History of Single Motherhood, 1999

Notes: The income-to-needs ratio is computed by dividing family income by the federal poverty level. Estimates are weighted to account for the sampling design of the Health and Retirement Study.

355

480

206

1,570

Ν

^aLong-term single mothers are women who spent ≥ 10 yr outside of marriage raising children under age 18.

 $^{\rm b}{\rm Short-term}$ single mothers are women who spent some time but ${<}10$ yr as single mothers.

Significant differences between the given group of women and continuously married mothers in mean income-to-needs ratios: *significant at 10% level; **significant at 5% level; ***significant at 1% level.

Source: Authors' estimates from the Health and Retirement Study.

Among all women aged 65–75 in 1999, the mean income-toneeds ratio for long-term single mothers was only 2.7 compared with 4.6 for continuously married mothers, 4.2 for women who never had children, and 3.4 for short-term single mothers.

As expected, the mean income-to-needs ratio increased with education and was higher for currently married women than widows and divorcees. It was also higher for non-Hispanic White women than Hispanics and African Americans. Among all demographic groups, however, the average excess of income over consumption needs was higher for continuously married mothers than long-term single mothers. The differences were statistically significant for all groups except divorced women. Long-term single mothers who did not complete high school and had never been married when their children were born were especially vulnerable in retirement. On average, their family income was equal to only 150% of the poverty level.

Table 5 shows poverty rates in 1999 for women aged 65–75, by demographic characteristics and history of single motherhood. Overall, 26% of long-term single mothers aged 65–75 reported family income below the poverty level compared with 5% of continuously married mothers. Poverty rates were lower for short-term single mothers and women who never had children than for long-term single mothers, but they were still

Table 5. Poverty Rates for Women Aged 65-75, by History of
Single Motherhood, 1999

	ingle Moulen	1000, 1777		
	Continuously Married Mothers	Long-Term Single Mothers ^a	Short-Term Single Mothers ^b	Never Had Children
All	5.0	26.1***	12.3***	18.4***
Race and ethnicity				
Hispanic	25.3	54.1***	42.2	59.9**
African American	19.5	37.6***	23.9	27.4
Non-Hispanic				
White or other	3.1	16.5***	9.1***	13.6***
Education				
Did not complete				
high school	16.2	47.6***	26.5**	42.6***
High school graduate	2.7	11.4***	7.5**	10.2*
<4 yr of college	0.5	9.3*	4.5*	19.2***
\geq 4 yr of college	0.0	12.1**	5.3	1.8
Current marital status				
Married	1.5	0.9	1.4	2.3
Divorced or separated	22.1	33.8	18.5	23.4
Widowed	10.0	28.7***	17.0**	23.5**
Never married	NA	34.0	NA	24.9
Never married when first b	became single n	nothers		
All	NA	28.9	19.6	NA
High school dropouts	NA	52.9	40.2	NA
Ν	1,570	355	480	206

Notes: Estimates are weighted to account for the sampling design of the Health and Retirement Study.

^aLong-term single mothers are women who spent ≥ 10 yr outside of marriage raising children under age 18.

 $^{\rm b}{\rm Short-term}$ single mothers are women who spent some time but ${<}10$ yr as single mothers.

Significant differences between the given group of women and continuously married mothers in poverty rates: *significant at 10% level; **significant at 5% level; ***significant at 1% level.

Source: Authors' estimates from the Health and Retirement Study.

high. In fact, women who never had children were more than three times as likely to be impoverished than continuously married mothers, even though the average income-to-needs ratio was only slightly lower for childless women than continuously married mothers (as reported in Table 4).

Demographic differences in poverty rates followed the pattern observed earlier for income-to-needs ratios. Poverty rates were highest among Hispanics, African Americans, high school dropouts, widows, and divorced and separated women. Among widows and all racial and educational groups, poverty rates at ages 65-75 were significantly higher for long-term single mothers than for continuously married mothers. Poverty rates were especially high among Hispanic long-term single mothers and long-term single mothers who were never married when they had children and failed to complete high school, more than half of whom had family incomes below the poverty level. Interestingly, poverty rates did not differ significantly by history of single motherhood among currently married women and among currently divorced or separated women, underlining the important role played by husbands in keeping women out of poverty. Nonetheless, the poverty rate among currently divorced or separated women was almost 12 percentage points higher for long-term single mothers than continuously married

	Continuously Married Mothers	Long-Term Single Mothers ^a	Short-Term Single Mothers ^b	Never Had Children
Mean (\$)				
Net wealth				
Total ^c	682,500	275,900***	398,000***	458,800***
Excluding Social Security and pension wealth	452,500	141,800***	229,200***	282,000***
Excluding Social Security, pension, and housing wealth	323,600	74,800***	146,400***	195,600***
Financial assets ^d	196,900	53,700***	100,000***	155,900
Median (\$)				
Net wealth				
Total ^c	445,900	183,900***	273,500***	293,700***
Excluding Social Security and pension wealth	208,000	50,000***	106,000***	124,500***
Excluding Social Security, pension and housing wealth	86,500	5,700***	30,000***	46,000***
Financial assets ^d	53,700	1,000***	12,000***	25,800***
Ν	1,570	355	480	206

Table 6. Household Wealth of Women Aged 66-76, by History of Single Motherhood	d, 2000
--	---------

Notes: Estimates are rounded to the nearest \$100 and weighted to account for the sampling design of the Health and Retirement Study.

^aLong-term single mothers are women who spent ≥ 10 yr outside of marriage raising children under age 18.

^bShort-term single mothers are women who spent some time but <10 yr as single mothers.

"Total net wealth is defined as total household assets (including future Social Security and pension benefits) minus total liabilities.

^dFinancial assets is defined as the value of stocks, bonds, savings, checking, and money market accounts, certificates of deposit, and individual retirement accounts.

Significant differences between the given group of women and continuously married mothers in mean and median wealth: *significant at 10% level; **significant at 5% level; ***significant at 1% level.

Source: Authors' estimates from the Health and Retirement Study.

mothers, even though the limited sample size rendered the difference statistically insignificant.

Wealth of Older Women Who Raised Children Outside of Marriage

Wealth is an important indicator of economic well-being, particularly at older ages when many adults use the savings they have accumulated over their lifetimes to supplement retirement benefits. Table 6 reports mean and median levels of net wealth, net wealth excluding the value of future Social Security and pension benefits, net wealth excluding Social Security, pension, and housing wealth, and financial assets in 2000, when the women in our sample were between the ages of 66 and 76. Mean total net wealth for long-term single mothers was only \$275,900 compared with \$682,500 for continuously married mothers, \$458,800 for women who never had children, and \$398,000 for short-term single mothers.

Future retirement benefits and housing equity made up a relatively large share of total wealth for long-term single mothers. Nearly three fourths of their wealth was tied up in their pensions, Social Security, or homes compared with about one half of the wealth for continuously married mothers. As elderly adults cannot borrow against future retirement income and few liquidate their housing equity as they age (Venti & Wise, 2001), older women who raised children alone earlier in life had few available assets to finance unexpected consumption needs. In fact, mean financial assets, which families can easily liquidate to supplement income, amounted to only \$53,700 for long-term single mothers. By contrast, mean financial assets for continuously married mothers totaled \$196,900.

The economic hardships confronting women in later life who raised children outside of marriage appear even more daunting when we estimate median levels of wealth. Because the wealth distribution was highly skewed, mean wealth was much higher than median wealth, the level held by the typical woman in our sample. Median total net wealth for long-term single mothers equaled \$183,900, almost all of which was devoted to future retirement benefits and housing equity. Median financial assets for long-term single mothers was only \$1,000. For continuously married mothers, median financial assets was \$53,700, leaving many with large financial cushions that they can use to meet unexpected spending needs.

Multivariate Estimates of Economic Well-Being in Later Life

Table 7 reports the results of our multivariate models. The first data column shows estimates for the income-to-needs ratio. Because the dependent variable is expressed as a natural logarithm, the marginal effect of each binary independent variable on the income-to-needs ratio, relative to the omitted reference group, is equal to $e^{\beta} - 1$, where β is the coefficient reported in the table. The second column reports odds ratios of the likelihood of having income below the poverty level; an odds ratio of <1 indicates that women with the given characteristic are less likely to live in poverty than members of the reference group. The third column reports the effect of each independent variable on median total net wealth, expressed in thousands of dollars. Standard errors are reported in parentheses.

Controlling for education, current marital status, and race and ethnicity, we find that women who spent at least 10 years raising children outside of marriage reported significantly worse economic outcomes in later life than mothers who were always married when their children were young. The models show that income-to-needs ratios were 11% lower for long-term single mothers than continuously married mothers, and median total net wealth was \$44,000 lower. Long-term single mothers Table 7. Multivariate Estimates of Economic Status for Women in Later Life

	Income-to-Needs Ratio ^a	Poverty ^b	Total Net Wealth ^c
History of single motherhood			
Long-term single mothers ^d	-0.103** (.043)	1.545** (.323)	-43.5*** (13.9)
Short-term single mothers ^e	-0.036 (.036)	1.147 (.243)	-57.1*** (11.7)
Never had children	-0.050 (.056)	2.018** (.601)	-41.4*** (18.0)
[Ref: Continuously Married Mothers]			
Race and Ethnicity			
Hispanic	-0.379*** (.054)	3.958*** (.923)	-92.9*** (17.2)
African American	-0.353*** (.041)	3.273*** (.600)	-98.8*** (13.2)
[Ref: Non-Hispanic White or other]			
Education			
Did not complete high school	-0.366*** (.033)	4.285*** (.774)	-89.7*** (10.8)
[Ref: High School Graduate]	•••	•••	
<4 yr of college	0.266*** (.036)	0.518** (.161)	127.5*** (11.7)
\geq 4 yr of college	0.617*** (.040)	0.288*** (.122)	296.6*** (13.0)
Current marital status			
[Ref: Married]			
Divorced or separated	-0.574^{***} (.045)	17.848*** (4.773)	-230.0*** (14.4)
Widowed	-0.479*** (.030)	8.358*** (1.945)	-195.6*** (9.9)
Never married	-0.570*** (.085)	13.540*** (5.414)	-198.7*** (26.9)
Any imputed income or assets	0.166*** (.028)	0.305*** (.070)	82.6*** (9.2)
Adjusted R^2	0.387		
Pseudo-R ²		0.363	0.196

^aThe column reports coefficients (*SE*) from an ordinary least-squares regression of the natural logarithm of the income-to-needs ratio in 1999. The sample consists of 2.611 women aged 65–75.

^bThe column reports odds ratios (SE) from a logit model of the likelihood of living in poverty in 1999, for 2,611 women aged 65–75.

^cThe column reports coefficients (*SE*) from a median regression model of total net wealth in 2000, for 2,611 women aged 66–76. Total net wealth, expressed here in thousands of dollars, is defined as total household assets (including future Social Security and pension benefits) minus total liabilities.

^dLong-term single mothers are women who spent ≥ 10 yr outside of marriage raising children under age 18.

^eShort-term single mothers are women who spent some time but <10 yr as single mothers.

*Significant at 10% level; **significant at 5% level; ***significant at 1% level.

Source: Authors' estimates from the Health and Retirement Study.

were also 55% more likely than continuously married mothers to live in poverty at ages 65–75. Poverty rates were especially high for women who never had children, controlling for other factors, but childless women did not report significantly less income (relative to need) than continuously married mothers. Thus, the distribution of economic outcomes appears to be highly skewed for childless women born in the 1920s and early 1930s, with most faring well in later life but a substantial minority mired in poverty.

Limited education, single marital status, and membership in a racial or ethnic minority group appear to be even more important determinants of economic deprivation in later life than a history of single motherhood. For example, controlling for other factors, the likelihood of living in poverty was four times as high for Hispanic women as White women, more than four times as high for high school dropouts as high school graduates, and almost 18 times as high for divorced or separated women as married women. Because respondents with multiple sources of income and wealth were more likely than those with limited resources to provide incomplete information about at least one type of resource, women with imputed income or assets tended to have better economic outcomes than women with complete data.

DISCUSSION

Our results show that the well-documented financial difficulties confronting women raising children outside of marriage persist into later life. Slightly more than one fourth of women aged 65–75 who spent ≥ 10 years as single mothers of dependent children lived in poverty in 1999, approximately equal to the share of female-headed households with dependent children in poverty in 2001. By contrast, only 5% of mothers aged 65–75 who were always married when their children were young were impoverished in 1999. Even after controlling for education, current marital status, and race and ethnicity, we find that women who spent considerable amounts of time raising children outside of marriage were more than 50% more likely to report incomes below the poverty level than continuously married mothers.

Compounding their financial difficulties, women who were single mothers when young generally have not accumulated much wealth when they reach retirement. By her mid-60s and 70s, the typical long-term single mother managed to amass less than one half as much wealth as the typical mother who was always married when raising her children. And median financial assets held by long-term single mothers at ages 66–76 amounted to only \$1,000. The limited wealth held by single mothers in later life, especially in the form of financial assets that can be liquidated easily, leaves them financially vulnerable if their expenses rise unexpectedly. The onset of health problems at older ages, for example, often leads to large out-of-pocket payments to health care providers, particularly for those who lack private health insurance to supplement Medicare (Crystal, Johnson, Harman, Sambamoorthi, & Kumar, 2000). With no financial safety net of their own, many long-term single mothers are forced to rely on family, friends, or public support if they should face large uncovered health expenses or other consumption needs.

Shortfalls in spousal support appear to be the primary reason for poor outcomes in later life. Because retirement income is tied to labor market experience, single mothers with limited employment and earnings tend to fare poorly at older ages. Although they receive on average as much income at older ages in their own names as continuously married mothers, women who raised children outside of marriage are less likely to receive spousal support. Despite the leveling effects of the Social Security system, which replaces higher shares of preretirement earnings for low-wage workers than for highwage workers, many women who raised children alone receive little income at older ages.

The number of elderly women who raised children outside of marriage is about to soar, as the single mothers of the 1970s begin to reach old age in coming years. These women will differ in important ways from those of the current generation. Like other groups, they will be better educated than earlier cohorts. For example, only 21% of single mothers with dependent children failed to complete high school in 1996 (Meyer & Rosenbaum, 2001) compared with 41% of women aged 65-75 in 1999 who spent at least 10 years raising children outside of marriage. Future generations of women who raised children outside of marriage could also reach old age with longer employment histories than the current generation. Employment rates for single mothers rose rapidly in the late 1990s, as expansions in the earned income tax credit increased the returns to work for those with limited skills and welfare reform reduced the availability and generosity of public support for those with limited incomes (Blank & Schmidt, 2001). Higher levels of education and employment enable single mothers to accumulate more Social Security credits and save more, both on their own and through employer-sponsored retirement plans. As a result, single mothers raising children today may fare better in old age than the current generation of elderly women who raised children outside of marriage in the past. It is too early, however, to predict how their later life outcomes will compare with future outcomes for women who did not raise children outside of marriage.

But given the rise in single motherhood, policymakers should consider expanding protections in Social Security for low-income women with limited marital histories. Protections for women in the current Social Security system work primarily through marriage. Married, divorced, and widowed women can qualify for spousal and survivor benefits that are tied to the earnings histories of their current or former husbands. Women who never married or who divorced before their marriages lasted 10 years are forced to rely on their own Social Security credits or SSI, which pays benefits that are not typically generous enough to lift recipients out of poverty. Policymakers could target retirement benefits to women who reach old age with limited means by raising the minimum benefits that Social Security pays or by introducing childcare credits for women who dropped out of the labor force to raise their families (Favreault & Sammartino, 2002). These reforms could also help women who raised children outside of marriage.

ACKNOWLEDGMENTS

The research reported herein was supported by the Center for Retirement Research at Boston College pursuant to a grant from the U.S. Social Security Administration funded as part of the Retirement Research Consortium. The opinions and conclusions are solely those of the authors and should not be construed as representing the opinions or policy of the Social Security Administration or any agency of the federal government, the Center for Retirement Research at Boston College, or the Urban Institute, its boards, or its funders.

The authors gratefully acknowledge outstanding research assistance from Joshua Goldwyn.

Address correspondence to Dr. Richard W. Johnson, Income and Benefits Policy Center, Urban Institute, 2100 M Street, NW, Washington, D.C. 20037. E-mail: rjohnson@ui.urban.org

REFERENCES

- Blank, R. M., & Schmidt, L. (2001). Work, wages, and welfare. In R. M. Blank & R. Haskins (Eds.), *The new world of welfare* (pp. 70–102). Washington, D.C.: The Brookings Institution Press.
- Burkhauser, R. V., Butler, J. S., & Holden, K. C. (1991). How the death of a spouse affects economic well-being after retirement: A hazard model approach. *Social Science Quarterly*, 72, 504–519.
- Butrica, B. A., & Iams, H. M. (2000). Divorced women at retirement: Projections of economic well-being in the near future. *Social Security Bulletin*, 63, 3–12.
- Clarke, S. C. (1995). Advance report of final divorce statistics, 1989 and 1990. *Monthly Vital Statistics Report*, 43, 1–32.
- Crystal, S., Johnson, R. W., Harman, J., Sambamoorthi, U., & Kumar, R. (2000). Out-of-pocket health care costs among older Americans. *Journal of Gerontology: Social Sciences*, 55B, S51–S62.
- Favreault, M. M., & Sammartino, F. J. (2002). Impact of Social Security reform on low-income and older women (AARP Public Policy Institute report no. 2002-11). Washington, D.C.: AARP (http://research.aarp.org/ econ/2002_11_ssreform.html); retrieved September 2, 2003.
- Hao, L. (1996). Family structure, private transfers, and the economic wellbeing of families with children. *Social Forces*, 75, 269–292.
- Hurd, M. F., Juster, F. T., & Smith, J. P. (2003). Enhancing the quality of data on income: Innovations from the HRS. *Journal of Human Resources*, 38, 758–772.
- Johnson, R. W., Sambamoorthi, U., & Crystal, S. (1999). Gender differences in pension wealth: Estimates using provider data. *The Gerontologist*, 39, 320–333.
- Lerman, R. I., & Sorensen, E. (2001). Child support: Interactions between private and public transfers (NBER working paper no. 8199). Cambridge, MA: National Bureau of Economic Research.
- Martin, J. A., Hamilton, B. E, Ventura, S. J., Menacker, F., & Park, M. M. (2002a). Births: Final data for 2000. *National Vital Statistics Report*, 50, 1–104.
- Martin, J. A., Park, M. M., & Sutton, P. D. (2002b). Births: Preliminary data for 2001. National Vital Statistics Report, 50, 1–20.
- McLanahan, S., & Sandefur, G. (1994). *Growing up with a single parent: What hurts, what helps.* Cambridge, MA: Harvard University Press.
- Meyer, B. D., & Rosenbaum, D. T. (2001). Welfare, the earned income tax credit, and the labor supply of single mothers. *Quarterly Journal of Economics*, 116, 1063–1114.
- Miller, C., Garfinkel, I., & McLanahan, S. (1997). Child support in the U.S.: Can fathers afford to pay more? *Review of Income and Wealth*, 43, 261–281.
- Polachek, S. W., & Siebert, W. S. (1993). *The economics of earnings*. New York: Cambridge University Press.
- Ribar, D. C. (1999). The socioeconomic consequences of young women's childbearing: Reconciling disparate evidence. *Journal of Population Economics*, 12, 547–565.
- Social Security Administration. (2002a). Annual statistical supplement, 2002. Washington, D.C.: Social Security Administration.
- Social Security Administration. (2002b). Income of the population 55 or older, 2000 (SSA publication no. 13-11871). Washington, D.C.: Social Security Administration.
- U.S. Census Bureau. (2003a). Children's living arrangements and characteristics: March 2002, and earlier reports (Current Population

Reports, series P20-547) (http://www.census.gov/population/www/ socdemo/hh-fam.html); retrieved September 2, 2003.

- U.S. Census Bureau. (2003b). Living arrangements of children under 18 years and marital status of parents, by age, gender, race, and Hispanic origin of the child for all children: March 2002 (http://www.census.gov/population/socdemo/hh-fam/cps2002/tabC3-black.xls); retrieved September 2, 2003.
- Venti, S. F., & Wise, D. A. (2001). Aging and housing equity: Another look (NBER working paper no. 8608). Cambridge, MA: National Bureau of Economic Research.
- Ventura, S. J., & Bachrach, C. A. (2000). Nonmarital childbearing in the United States, 1940–99. *National Vital Statistics Report*, 48, 1–39.
- Waite, L. J., & Gallagher, M. (2000). The case for marriage: Why married people are happier, healthier, and better off financially. New York: Doubleday.

Received September 3, 2003 Accepted January 15, 2004 Decision Editor: Charles F. Longino, Jr., PhD

