# The Economic Consequences of a Husband's Death:

## **Evidence from the HRS and AHEAD**

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#### INTRODUCTION

High rates of poverty among widows, especially those living alone, remain a primary concern of policies for the elderly (Burkhauser, 1994; Sandell and Iams, 1997). It is important to establish how a relatively low rate of poverty among married couples just before or after retirement yields such high rates for widows. The evolution of the economic status of widows can be decomposed into three major components: 1) potential resources for widowhood inherent in the financial situation of intact married couples, 2) effects associated with the event of husband 's death, and 3) declining status associated with duration of widowhood. A similar classification was used by Zick and Smith (1991) in an analysis of transitions into widowhood using the Panel Survey of Income Dynamics (PSID).

This paper addresses the question of the origins of widow poverty by making use of both the cross-sectional and the longitudinal aspects of the Health and Retirement Study (HRS), part of which was formerly the study of Asset and Health Dynamics Among the Oldest Old (AHEAD). In 1998, the two original studies were combined and two new cohorts were added to produce a cross-section sample that is representative of the US population born in years up to 1947 (51 and over in 1998). For longitudinal analyses, we use 1998 plus the first two waves (1992 and 1994) of the original HRS (persons born 1931-41), and the first two waves (1993 and 1995) of the AHEAD (persons born before 1924).

The HRS and AHEAD surveys elicit detailed information on assets, pensions, housing, insurance, and Social Security eligibility in addition to information about income. Other studies of widowhood have had to focus more narrowly on current income, neglecting the full potential to support lifetime consumption and often producing the appearance of volatile movements into and out of poverty (Bound, 1991; McGarry, 1995). The HRS can be used to replicate conventional income-based definitions of poverty but we are also able to study the long-term implications for consumption of changes in wealth associated with changes in marital status.

Table 1 compares CPS poverty rates for women with estimates from HRS and AHEAD for the same years of observation. Overall, estimates from the HRS are slightly lower than CPS figures. This could reflect more complete income reporting in HRS, or a selection bias due to lower participation rates of poor women. We do not detect the trend toward widening disparities with CPS that one would expect if panel attrition were biased against the poor. Both data sources show the enormous differential in poverty rates between married women and those who

are not. In recent years, the economic status of widows has improved relative to other non-married women, as shown in their lower poverty rates in most of our comparison periods.

Table 1 also shows the familiar pattern of poverty rates increasing with age. This can be seen by comparing early waves of HRS with AHEAD, and in the age categories for 1998. Looking within marital status categories, however, there is not a consistent age pattern. Most of the overall trend with age is due to the fact that the percentage of women with living husbands declines as they age.

Although the HRS was not designed to collect extensive retrospective data on events prior to entry into the study, it does include questions about the timing of marriages. From this, we can calculate for all widows present in 1998 the date at which they most recently became widowed, and thus the length of time they have been widowed. Table 2 shows how poverty rates vary by age and by duration of widowhood. With respect to age, there is a U-shaped pattern, with poverty rates higher for women under 65, substantially lower from 65 to about 80, and then rising among the oldest-old. Duration effects are more of a J-shaped pattern: high at very short durations, lower for the next ten years, and then rising rapidly at longer durations. The short durations are problematical. By the nature of the HRS interview, no income earned by the deceased husband will be reported, even if he was alive for part of the preceding calendar year. Some of these women may not yet have received the increments to Social Security or pension survivor benefits that will eventually raise their incomes.

If we exclude short durations, the statistical association between poverty and duration of widowhood is clear. In an analysis of variance, the duration categories explain about twice as much of the variance as do the age categories. Regression analysis can be used to generate synthetic profiles of the risk of poverty as a function of age and duration. These profiles are shown in Figure 1. Bearing in mind that these are synthetic profiles estimated from a single cross-section, and not true longitudinal observations, the data suggest that women who lose their husbands at age 55 have a higher initial poverty rate than women widowed later in life. There is some initial decline in poverty up to about age 65, probably because of the take-up of Social Security benefits, and then a systematic increase in poverty as they age. Women widowed at 65 or 75 have lower initial poverty rates, but their economic position deteriorates steadily. At any given age, the women who had been widowed longest (youngest) had higher poverty rates.

The strong statistical association between poverty and duration of widowhood could

reflect any number of causal influences. Because we hold current age constant in the analyses, duration of widowhood is equivalent to age at widowhood. Because we are working with a single cross-section, duration of widowhood is also equivalent to date of widowhood. Age at widowhood is likely to be important because of the life-cycle pattern of saving and dissaving for retirement. Losing a husband before retirement incurs a loss of potential future private saving, pension accrual, and Social Security benefit levels. Consumption must be supported for several years before pension or Social Security benefits begin. Death is often associated with high medical expenses, more of which may be out-of-pocket expenses when death occurs before Medicare eligibility at age 65. For these cohorts, date of widowhood may also matter. Women who lost their husbands more than twenty years before the baseline interviews were widowed before the ERISA reforms of 1974 improved the rights of women in their husband's private pensions.

Duration of widowhood also proxies for the effects of several selection mechanisms that operate over time. We would expect that mortality rates are higher for poor women, leaving a smaller proportion of poor women as duration increases—just the opposite of what we observe. That does not mean that mortality selection does not operate, only that it is dominated by something else. If better-off widows are more likely to remarry, then we would expect to find increasing poverty with duration of widowhood. It is unlikely, however, that remarriage selection could dominate the mortality selection because remarriage is too rare. Among HRS widows at wave 1, 17 died and 6 remarried by wave 2. Among AHEAD widows, 286 died and 8 remarried.

Duration of widowhood could also have a direct effect on income. Social Security, which is adjusted for inflation at the same rate as the poverty thresholds, should not be much affected by duration of widowhood. Private pensions are not always indexed and survivor benefits may not always be for the life of the widow, so it is possible that income from private pensions decreases with duration of widowhood. Finally, if private savings are consumed at too high a rate early in widowhood there will be less asset income available at later durations.

#### **Program Benefits by Duration of Widowhood**

Figures 2 and 3 show how the average benefits received by widows (over age 62) varies by duration of widowhood, holding age constant. Social Security benefits decline with duration

(except at the shortest durations, where some women have probably not had their benefits adjusted yet). The drop is about 1600 dollars from durations 2-7 to 20+. Because we know that Social Security benefits for an individual do not decline over time, this pattern suggests that women who were widowed at younger ages had lower couple lifetime earnings, either because of lower incomes or shorter working lives. Figure 3 shows that benefits from SSI increase with duration, as one would expect from a means-tested program given the increase in poverty rates with duration. Note, too, that SSI benefits are higher at very short durations, indicating that the higher poverty rates observed there may not be entirely an artifact.

#### **Transitions**

Tables 3 and 4 examine transitions into widowhood, and transitions into poverty. Table 3 splits the samples into 4 categories: widows throughout, new widows at each wave, and married throughout. Married women have low poverty rates and show slight improvement over time. HRS widows at baseline have lower poverty rates by 1998, probably mainly due to becoming eligible for Social Security benefits. AHEAD widows at baseline get slightly worse off. The new widows had higher poverty rates at baseline, when they were still married, than did the married women who did not become widowed. Their poverty rates were higher immediately after their husbands' deaths, but they appear to recover partially at subsequent waves.

Table 4 compares our study with the Retirement History Survey of 20 years earlier. The transition rates into poverty have generally declined, especially for new widows. For women who have been widowed for some time, there is much less evidence of change.

The final table in this summary is Table 5, showing net worth in constant dollars for women in the same format as the poverty data in Table 3. Baseline widows in both HRS and AHEAD had median wealth of about 72 thousand dollars, and by 1998 this had changed little, despite the unprecedented boom in equity values. At the 25th percentile, which is close to the poverty margin, net worth of widows hovered around ten thousand dollars. Married women (and their husbands) have considerably more than twice the wealth of widows at baseline, and their wealth increased by 1998. Women who became widows during the survey period began with less wealth than other married women. In the HRS cohort, their wealth tended to decline after their husbands' deaths. In the AHEAD cohort, there was less evidence of loss of wealth. One source of this difference which we can document in our data is that average out-of-pocket

medical expenditures associated with a husband's death were much higher in the HRS group than in the AHEAD cohort, most of whom were covered by Medicare.

#### **CONCLUSIONS**

The HRS and AHEAD surveys hold great promise for understanding the dynamics of widow poverty as additional waves of data are collected. Based on this limited assessment of the first two waves of interviews, we have found that an important part of the poverty of today's elderly widows is comprised of women who were widowed relatively long ago, and the association of poverty with duration of widowhood is likely to continue. Poverty rates of newly-widowed women over the Social Security retirement age are relatively low, compared with their already-widowed contemporaries, and especially when compared with new widows in the younger age groups surveyed by HRS. That suggests that early widowhood continues to be an important determinant of lifetime poverty risk. Continued progress against high male mortality rates may help to alleviate that risk, but it will remain a policy concern for some time to come.

Although women widowed early tend to have lower initial marital financial resources, and to experience greater loss of resources at the time of husband's death, these effects cannot fully account for the strong association between poverty and duration of widowhood. We suspect that consumption patterns of younger widows, particularly those facing losses relative to their consumption in marriage, may leave them with inadequate resources in old age. The evidence from the first few waves of HRS and AHEAD shows that the wealth of widows, when compared with married women, did decline in relative terms. In a less favorable economic climate than the mid-1990s, their status might have declined in absolute terms.

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Table 1. Poverty Rates of Women by Age, Marital Status, and Survey Year: HRS/AHEAD Compared with CPS.

	HRS and AHEAD				HEAD	Current Population Survey			
Age	Year	Married	Div/Sep	Widowed	Never Mar	All	Married Div/Sep Widowed Never Mar All		
51-61	1992	4.9	21.6	21.5	21.1	10.3	6.1 21.9 25.3 19.9 11.2		
53-63	1994	4.8	23.6	26.5	26.5	11.6	6.4 21.7 24.8 22.0 11.7		
57-67	1998	3.7	20.4	19.5	28.3	10.9	6.4 23.1 21.6 25.5 12.2		
70+	1993	6.1	29.3	20.1	24.2	15.8	7.6 27.6 22.0 26.3 17.5		
72+	1995	4.0	26.4	17.9	22.1	13.8	7.3 29.1 20.3 29.7 17.0		
75+	1998	2.9	22.6	17.7	29.0	14.6	6.1 25.0 18.3 20.2 15.0		
51-64	1998	4.8	16.9	19.7	22.9	10.2	5.5 21.5 21.4 22.8 11.0		
65-79	1998	3.0	24.2	14.4	28.5	10.7	5.5 23.9 17.2 21.5 12.2		
80+	1998	4.5	27.5	20.6	32.6	19.1	7.5 21.0 19.1 16.2 16.6		
All	1998	4.2	19.2	17.3	25.9	11.4	5.6 22.1 18.6 21.4 12.2		

Source: Authors' calculations from HRS 1992, 1994, and 1998, and AHEAD 1993, 1995, and Current Population Survey 1992-98. HRS/AHEAD income data refer to the calendar year preceding the date of survey, as do the March CPS data. All percentages based on weighted data.

10000 8000 6000 2000 0-1 2-7 7-12 12-20 20+ Duration of Widowhood

Figure 2. Social Security Benefits by Duration of Widowhood, Holding Age Constant

Source: Authors' calculations from HRS 1998 Preliminary.

300 250 200 150 50 0-1 2-7 7-12 12-20 20+ Duration of Widowhood

Figure 3. Supplemental Security Income Benefits by Duration of Widowhood, Holding Age Constant

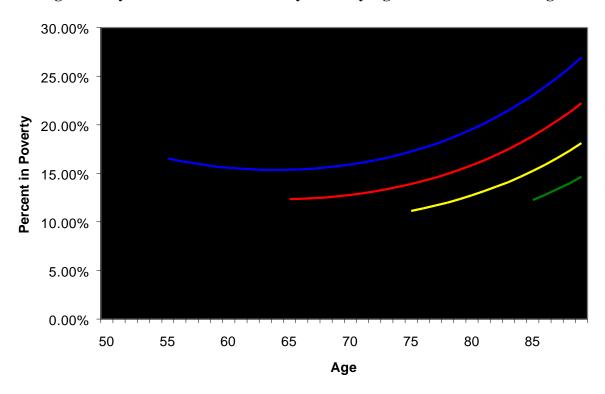
Source: Authors' calculations from HRS 1998 Preliminary.

Table 2. Poverty Rates for Widows by Age and Duration of Widowhood

	Duration of Widowhood							
Age	0-1	2-6	7-11	12-20	20+	All		
55-59	27.8	19.2	17.2	24.7		19.4		
60-64	23.8	16.9	17.0	26.3	25.6	21.1		
65-69	16.5	14.4	12.9	21.3	20.0	16.5		
70-74	17.2	11.1	8.6	11.5	18.2	13.2		
75-79	17.6	7.0	10.7	15.4	20.5	14.2		
80-84	26.5	11.6	13.7	19.3	25.5	19.4		
85+	38.0	16.8	16.6	20.8	25.3	22.4		
All	21.1	12.7	13.0	18.7	22.0	17.3		

Source: Authors' calculations from HRS 1998 Preliminary.

Figure 1. Synthetic Profiles of Poverty Rates by Age at Widowhood and Age



Source: Authors' calculations based on logistic regression estimates of current poverty rates on current age, age squared, and duration of widowhood in HRS 1998.

Table 3. Poverty Rates of Married Women and Widows, By Date of Widowhood and Interview Year.

HRS	n	1992	1994	1998
Before 1992	367	19.6	22.7	14.7
1992-1994	63	10.5	30.0	13.7
1994-1998	176	6.6	8.5	17.1
Married in All	2454	4.1	4.2	4.0
AHEAD	n	1993	1995	1998
AHEAD Before 1993	n 1609	1993 18.7	1995 16.5	1998 19.7
Before 1993	1609	18.7	16.5	19.7

Source: Authors' calculations from HRS and AHEAD.

Table 4. Transition Rates into Poverty by Marital Status at Beginning and End of Period: HRS and AHEAD Compared With RHS (percent).

	Married in Both		New V	Vidows	Widow	Widow in Both	
Survey and	Poor	Not Poor	Poor	Not Poor	Poor	Not Poor	
Transition Interval	at Start	at Start	at Start	at Start	at Start	at Start	
RHS 1973-75	49	4	85	37	50	11	
HRS 1992-94	39	3	82	30	59	14	
HRS 1994-98	30	3	43	15	44	7	
AHEAD 1993-95	31	2	58	10	54	9	
AHEAD 1995-98	44	2	58	12	63	10	

Sources: Authors' calculations from HRS 1992, 1994, 1998, and AHEAD 1992, 1995; RHS data from Hurd and Wise (1989, Table 6.3).

Table 5. Net Worth of Married Women and Widows, by Date of Widowhood and Interview Date (thousands of 1998 dollars).

Date Widowed		Median Wealth					
HRS	n	1992	1994	1998			
Before 1992	367	72.4	66.3	72.0			
1992-1994	63	117.6	111.3	80.0			
1994-1998	176	130.6	122.5	123.0			
Married in All	2454	194.7 206.8		218.0			
AHEAD	n	1993	1995	1998			
Before 1993	1609	71.5	88.5	71.0			
1993-1995	138	118.8	141.0	124.0			
1995-1998	171	123.4	146.5	150.0			
Married in All	864	178.7	229.6	216.0			
Date Widowed		25th pe	rcentile of We	ealth			
HRS	n	1992	1994	1998			
Before 1992	367	9.5	7.9	11.0			
1992-1994	63	41.6	48.3	15.0			
1994-1998	176	48.7	32.6	45.0			
Married in All	2454	86.7	89.9	95.0			
AHEAD	n	1993	1995	1998			
Before 1993	1609	11.5	25.1	11.0			
1993-1995	138	46.1	51.4	45.0			
1995-1998	171	48.4	64.5	64.0			
Married in All	864	86.5	110.4	93.0			

Source: Authors' calculations from HRS 1992, 1994, 1998 and AHEAD 1993, 1995. The sample is limited to women interviewed at all three waves. The estimates were weighted using baseline person weights.