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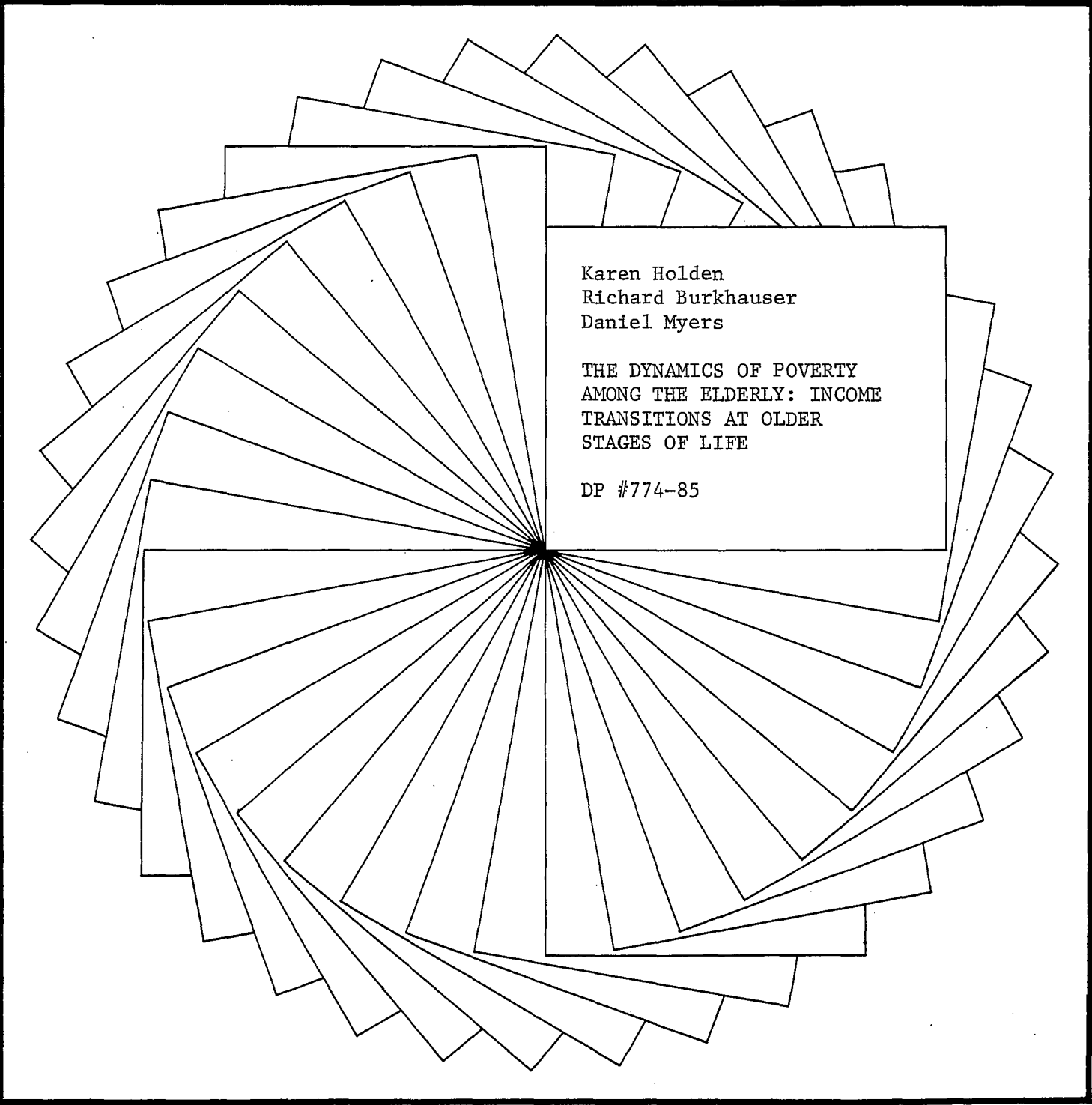
IRP Discussion Papers

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THE DYNAMICS OF POVERTY
AMONG THE ELDERLY: INCOME
TRANSITIONS AT OLDER
STAGES OF LIFE

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The Dynamics of Poverty Among the Elderly:
Income Transitions at Older Stages of Life

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Abstract

This paper examines the risk of poverty among a sample of couples and widows interviewed in the Retirement History Survey over a ten-year period. The longitudinal nature of the data allows us to look at the dynamics of poverty among older married women as they age and become widowed. We arrange the data to simulate a cross-section and then compare this method of calculating poverty rates with a longitudinal analysis of the actual pattern of poverty among the households in our sample. Cross-sectional data can only identify net changes in poverty--whether a household is or is not poor in any particular year. When individual movements into and out of poverty over a period of time are identified, the risk of becoming poor during that time period is more than double the highest annual risk among elderly persons who stay married, and is raised by 25 percent for widows.

Both couples and widows move into and out of poverty over the ten-year period, indicating that our stereotype of the static nature of poverty among the elderly must be altered. We also calculate exit and reentry rates for poor elderly households. Surprisingly, those rates among couples are not significantly different from the rates among widows. Over 80 percent of both widows and couples exit poverty after three (two-year) periods, and just over one-third reenter after the same number of periods.

We also look at the relationship between widowhood and poverty. We find that when their husbands were alive, those women who subsequently became widows were more likely to be poor than were couples in which the husband remained alive throughout the survey period. Hence the importance of widowhood as an explanation of poverty is somewhat overstated by simply comparing married and widowed groups.

The Dynamics of Poverty Among the Elderly:
Income Transitions at Older Stages of Life

A major accomplishment of federal policy over the last two decades has been to increase the well-being of the aged. Despite this overall improvement, poverty continues to afflict some elderly persons. That the fastest-growing population of poor households consists of those headed by women is well documented (Bane, 1984). Older widows make up a large subgroup in this category. According to the Current Population Survey, in 1980 over 32 percent of all women aged 65 and older who were living alone were poor, a poverty rate more than twice that for the aged in general (U.S. Bureau of the Census, 1982). And widowed, divorced and single women account for over 50 percent of all aged poor. Though poverty rates have fallen for older women over recent decades, women are less likely to have their incomes raised by economic growth or by the public and private income transfer programs that have moved couples out of poverty (Ross, 1984). The risk of poverty among couples and single men has sharply fallen, leaving poverty in old age a characteristic primarily of older women.

Despite the greater risk of being poor that is faced by older widows, we know surprisingly little about the timing, duration and causes of poverty among this group. Single-year, cross-sectional income data provide information on the percentage of the population that is in the midst of a spell of poverty at that moment, but can provide only a crude approximation of the total risk of poverty as people age. Such data provide no information on the timing or the length of a poverty spell beyond what can be inferred from the poverty rates that prevail among different age groups, a crude method that assumes constant age-related poverty changes across cohorts.

A more sophisticated method is to compare cross-sectional data over different periods, charting changes in the risk of poverty as cohorts age over time (Bridges and Packard, 1981). While this is a clear improvement and provides a more accurate picture of the age-related changes in poverty experienced by actual cohorts, those data can measure net changes only. Even if poverty rates are stable for a cohort over a given time period, there may be substantial movements into and out of poverty by members of that cohort that cannot be captured by this kind of data.

For two reasons, the use of cross-sectional or age cohort data over time to approximate the risk of poverty that individuals face as they age obscures the true risk of poverty in old age and the characteristics of the aged poor. First, if there is considerable movement into and out of poverty, these data underestimate the number of individuals who fall into poverty at some time during retirement. Second, if a large fraction of those who are poor at a point in time move out of poverty, cross-sectional comparisons will overestimate the duration of poverty and the number of permanently poor at older ages.

The complexity of the dynamics of poverty has been demonstrated by studies that look at total spells of poverty among particular population groups (Bane and Ellwood, 1983; Duncan, 1984). These studies typically exclude the retirement-age population, in part because of the belief that the fixed nature of nonwage income sources and the lack of work opportunities after retirement make poverty in old age a more permanent state than is true at younger ages.

In this paper we use a longitudinal data set to look at the dynamic nature of poverty among a group of persons moving into retirement and widowhood over a ten-year period. We first use a traditional cross-

sectional comparison to estimate poverty among this group, and then take full advantage of the data's longitudinal nature to look at movements into and out of poverty and the timing and length of poverty spells. We argue that this longitudinal perspective provides a substantially different view of the risk of poverty in old age from that inferred from cross-sectional data, and that the experiences of poverty among aged couples and widows are more complex than has been thought.

DATA

The Retirement History Survey (RHS), conducted by the Social Security Administration, interviewed households headed by a person aged 58 to 63 in 1969 and repeated the interviews at two-year intervals over the following ten years (Irelan, 1976). In 1969, single men and women and husbands of couples were interviewed as primary respondents. When a spouse died, the survivor became the primary respondent and was followed during the remainder of the survey period.

Because older women living alone have been found to be at considerable risk of poverty, we were particularly interested in following the transition to poverty status of women who were widowed during the survey period and in comparing their experience with women who remained married. To do so we started our study in a period prior to the death of the husband. Hence our sample consisted only of households in which both husband and wife were alive in 1969. All widows in our sample became so between 1969 and 1979. Households in which both members died simultaneously, or dropped out of the survey at the same time, were eliminated, as were the small number of households in which the husband lived but the wife died.

In each survey year information was collected on income in the pre-
vious year. Income sources for each household were summed and compared
to the official poverty threshold in that year. As under the official
measure, income was defined as pretax income, including cash transfers,
but excluding capital gains and in-kind transfers. In many cases amounts
of income received from particular sources were reported as missing
values. We estimated these values from information on the same respon-
dent in other years, taking the average of values reported in a preceding
and subsequent year, adjusted for price changes. Thus we forced stabi-
lity in reporting values, a procedure that we suspect biased income
upward.

TRENDS IN POVERTY: 1968 to 1978

The typical snapshot view of poverty is presented in Table 1. We
show the rate of poverty in 1968 for our sample of couples. As the
sample ages, some husbands die. Over subsequent years we provide annual
poverty rates for both-intact couples and for surviving widows of 1969
couples. Poverty rates are based on income data for the year prior to
each survey year, whereas age and marital status refer to the survey
year. This is the procedure followed in the Census Bureau's Current
Population Survey (CPS), which provides the most frequently used data on
poverty.

Yearly measures of poverty and net changes between any two years vary
owing to aging of the sample, changes in marital status, and changes in
personal and general economic conditions that affect the movement into
and out of poverty by our sample members. These rates differ from CPS

Table 1

Poverty Rates by Marital Status, 1968-78

Income Year	Total[a]		Couples		Widows	
	Poverty Rate	Number[b]	Poverty Rate	Number[b]	Poverty Rate	Number[b]
1968	6.0%	4,744	6.0%	4,744	n.a.	n.a.
1970	12.9	4,740	10.8	4,496	52.0%	244
1972	14.1	4,708	11.8	4,216	33.7	492
1974	14.8	4,656	11.9	3,935	30.8	721
1976	15.0	4,581	11.0	3,673	30.9	908
1978	17.1	4,481	12.5	3,406	31.7	1,075

Source: Retirement History Survey of the Social Security
Administration.

[a]See text for description of sample. All widows were married in
the baseline survey year, 1969 (income year 1968).

[b]Number of poor plus non-poor in group.

group-specific poverty rates because we define our sample to exclude couples who dropped out of the survey, never-married persons, widowers, and women who were widows at the beginning of the survey. This is not a serious problem, because we are interested in showing differences between cross-sectional and dynamic views of poverty, rather than in discussing the characteristics óf the entire poor population.

As can be seen in the first column of Table 1, 6 percent of our sample had incomes below the poverty threshold in 1968. As this group aged, retired, and became widowed, poverty rates rose to over 17 percent in 1978. By the end of the survey period, 30 percent of the husbands in our original sample of couples had died. Subsequent columns show the yearly poverty rates of intact couples and widows in the year preceding each survey.

Comparisons between years give net changes in poverty experienced over time by our sample, in a way equivalent to information provided by birth-cohort comparisons over different years of the CPS or decennial census. As with any cross-sectional study, couples for a given year in Table 1 include those who will remain in that state as well as those whose marriage will end shortly with the husband's death. Similarly, widows include those whose husbands were alive in the preceding survey period as well as those already widowed. Thus, the poverty pattern over time shown in Table 1 only approximates that experienced by a group of elderly passing through these ages and marital statuses. It is not possible from such data either to distinguish flows into and out of poverty or to estimate the total time spent in poverty over the period.

Table 2 begins to unravel these issues by defining intact couples as those who are married throughout the survey period. The widows are

Table 2

Poverty Rates of Couples and Widows, 1968-78

Income Year	Intact Couples 1969-79	First Widowed[a]				
		1969-71	1971-73	1973-75	1975-77	1977-79
1968	5.1%	12.3%	7.3%	9.6%	7.3%	6.2%
1970	10.0	52.0*	12.0	16.9	13.0	11.3
1972	11.3	30.0	36.7*	17.2	11.8	12.8
1974	11.7	30.6	21.4	39.0*	12.8	12.9
1976	11.0	33.7	22.4	21.8	45.0*	12.0
1978	12.5	34.6	28.6	28.6	32.0	34.5*

[a]Starred year marks poverty rate calculated from data for the first survey year of widowhood.

disaggregated by year of widowhood, allowing us to chart the pattern of poverty for a given group of widows from the onset of widowhood. Separating intact couples from those in which the husband died lowers the initial 1968 poverty rate for couples from 6.0 in Table 1 to 5.1, a difference of over 15 percent. This lower rate continues in subsequent years, but with a narrowing difference as intact couples account for a growing proportion of all couples. The reason for the lower rate for intact couples is shown in the succeeding columns, which give poverty rates over the years for the remainder of the households in our sample. Each column disaggregates 1969 couples and their subsequent poverty status by the year of widowhood of the wife. In all years the poverty rates of these households as couples were higher than rates of continuously intact couples. In 1968 all households which subsequently experienced the death of the husband during the period of our sample had higher rates of poverty as a couple (12.3 to 6.2 percent) than the 5.1 percent for intact couples. Hence, even before widowhood, these women were on average members of households with higher yearly rates of poverty than was true among continuously intact couples.

Following each widowed cohort over time, we show the changes in poverty associated with the transition from marriage to widowhood. For all widowed cohorts, poverty rates appear to rise sharply with widowhood. Among women widowed between 1969 and the 1971 survey, for example, 12.3 percent were in poverty in 1968; two years later, 52 percent were poor. For all widowed cohorts, poverty rates fell substantially after the initial rise, but still remained higher than in any period before widowhood.

A note of caution is advised in the interpretation of this large increase in poverty in the year preceding the first survey year in

which a woman was identified as a widow. Because of the nature of our

data we do not know, for instance, if in the case of a new 1971 widow the

income reported in 1970 reflects income that may have been received by

the husband in the calendar year of his death. The RHS followed CPS pro-

cedure and collected income data for current household members, ignoring

the income of deceased husbands who died before the survey date but who

may have contributed income to the household in the reference (i.e.,

income-data) year. Hence, the large blip in our poverty rates may be

caused by an artifact of traditional survey techniques. What is certain

is that in subsequent years average poverty rates of widows remain above

the averages of years before widowhood.

The disaggregation of poverty rates among elderly couples and widows

in Table 2 suggests a different pattern of poverty from the typical

cross-sectional comparison provided in Table 1. First, because widows in

our sample were more likely to be poor when they were married than were

continuously married women and men, the actual increase in poverty among

those who remain married over time is underestimated by cross-sectional

data, since poorer couples systematically leave this state and enter

widowhood. Intact couples in our sample experienced a 145 percent rise

in poverty (from 5.1 to 12.5 percent) over the ten-year period of

our analysis. This compares to an increase of 108 percent (from 6.0 to

12.5) using the more typical measure over all couples in Table 1.

Second, for the same reason, the simple comparison of poverty rates

of couples and widows in a given year must be modified when it is

realized that widows are more likely to have originated in poorer

couples. Although the first year of widowhood is associated with a large

increase in poverty for every cohort, the actual increase experienced by

the first group of widows, for example, is from 12.3 to 52.0, not from a
base of 6.0, as Table 1 would imply.

Third, poverty rates calculated in the first survey after the hus-
band's death are much higher than in all subsequent years. In cross-
sectional samples of widows this difference in poverty rates associated
with duration of widowhood is obscured. However, the degree to which
this is an artifact of data collection methodology or a real change in
the risk of poverty is unclear.

Table 2 gives a more accurate picture of the risk of being poor faced
by a given cohort of couples and widows over time than does Table 1, but
these data still only provide information on net cohort changes. It can-
not be shown with this table whether those who were poor at a moment in
time were the same households poor in other periods. If, in fact, turn-
over is common, then a much higher percentage of households will
experience poverty at some time in old age than would be inferred from
either Tables 1 or 2.

TOTAL RISK OF POVERTY

In this section we make full use of the longitudinal nature of our
data. We look at households over the entire ten years of our sample and
trace their movements into and out of poverty as they age and enter
widowhood. We are not limited to following them only as couples or as
widows. We look at their income across both marital statuses. We con-
sider a year in which income for a household (either as a couple or as a
widow) fell below the official poverty threshold for that year as the
beginning of a spell of poverty. We then trace an event history for each

household from 1969 to 1979. In Table 3 we show the percentage of households that ever experienced a spell of poverty, identifying them according to whether or not the husband died between 1969 and 1979, and if so, the year of widowhood. Over this period, 36.2 percent of all households experienced at least one spell of poverty, compared to the peak yearly poverty rate of 17.1 shown in column 1 of Table 1. For continuously married couples, 28.4 percent experienced at least one spell of poverty during the survey period. This compares with the peak annual poverty rate of 12.5 reported in Table 2 for this group.

The remaining rows of Table 3 show the ever-poor rates for women who were married at the beginning of the survey period and became widowed thereafter. These ever-poor rates should be compared with the peak rates shown in Table 2 for each cohort of widows. For the cohort widowed between 1969 and 1971, the ever-poor rate is 66.8 percent, compared to 52.0 when first widowed. Similar comparisons can be made for subsequent cohorts of widows. In every case the ever-poor percentage is higher than the peak annual percentage poor for widows.

The differences between ever-poor and annual poverty rates indicate that for both intact couples and widows the risk of experiencing at least one spell of poverty over the ten years of our analysis is far higher than is suggested by single-period rates. Indeed, women face a greater risk of becoming poor when they are widows than is indicated by net annual data. However, the risk of poverty among couples is also seriously underestimated by typical poverty figures. Falling into poverty at some time is a substantial risk for elderly men and women even if they remain married.

Table 3

Percentage of Households Ever Poor, 1968–78

Household Type	Percentage Ever Poor	Number[a]
All households	36.2	4,744
Intact couples 1969–1979	28.4	3,406
All widowed households	56.2	1,338
First widowed:		
1969–71	66.8	244
1971–73	52.0	275
1973–75	55.0	282
1975–77	58.0	262
1977–79	50.5	275

[a]Number of poor plus non-poor in group.

The large difference found between annual poverty and ever-poor rates shows that the risk of being poor at some time is not well measured by snapshot pictures of poverty taken at one moment in time. Even net cohort flows, as measured in Table 2, do not portray movements into and out of poverty within the age cohorts. The dynamic nature of poverty is more accurately revealed by tracking income status over time. Doing so provides important information for those interested in social policy. Programs to help the poor should take into account the varied nature of poverty, since measures to assist a small group of the permanently poor will differ from those aimed at the relatively short spells of poverty experienced by a much larger group.

MOVEMENTS INTO AND OUT OF POVERTY

The previous section described ever-poor rates among married and widowed households. Those data suggested that there is considerable movement into and out of poverty, that the risk of ever falling into poverty among intact couples is more than double that indicated by the annual poverty rates of Table 2, and that the risk for our first cohort of widows is almost 30 percent above their peak annual rate. We discuss these two components of the ever-poor rates in turn.

Exit Rates

Table 4 reports exit rates from first poverty spells for couples and widows by length of spell in poverty. Because the RHS reports income in every other year, we are unable to pinpoint the exact beginning and end of a spell of poverty. Households that are first poor in 1970 and not

Table 4

Rates of Exit from First Spells of
Poverty, by Period Since First Entry

Survey Period Since First Entry	Intact Couples			Widowed Households		
	Cumulative	Marginal[a]	Number[b]	Cumulative	Marginal[a]	Number[b]
1	62.3%	62.3%	655	60.5%	60.5%	473
2	78.6	45.0	538	76.1	36.0	372
3	85.6	37.6	403	80.8	23.2	276

[a]Marginal rates show percentage of those in poverty at end of previous period who exit poverty in the current period. Marginal rates cannot be calculated from the cumulative rate which measures percent of initial poverty group who exit poverty over all relavent periods.

[b]Number of persons are those who enter poverty and whom we observe over the specified number of periods. The 1971 and 1973 first poor are observed over three periods; 1977 poor are observed over one period.

poor in 1972 experience one period of poverty, although actual spell lengths could have varied from one to three years (i.e., poor only in 1970, or poor in 1969 through 1971).

We again distinguish households by whether or not they became widowed over the survey period. For intact couples, all spells of poverty of course began and ended as a couple. Most widowed women who experienced poverty during this period did so while widowed, although some spells may have spanned those years when their husbands were still alive. We exclude households in which first spells of poverty began in 1979, since we lack information thereafter. Our exit rates do not include those owing to death; only households which escaped poverty because their income rose or poverty threshold fell were considered to have exited. Finally, because we do not know the duration of poverty for those who are poor in 1968, we only look at those who were not poor in the first reporting period. Thus, because only a small group of respondents could be poor for four consecutive income reporting periods, we do not report exits beyond three periods.

We define the percentage of households leaving poverty over a number of periods as the percentage of all persons for whom we had that number of periods of data. Thus, those who first entered poverty in 1971 are included in exit rates for the first through third two-year periods. Those who first entered poverty in 1977 are included in the exit rates for the first period only.

Over 80 percent of households escape poverty after three periods. There is surprisingly little difference in cumulative exit rates for intact couples and widows; that is, the percentage of those who leave poverty after a given number of periods is the same for both groups. A

Table 5

Rates of Reentry into Poverty, by
Period Since First Exit

Survey Period Since First Exit	Intact Couples			Widowed Households		
	Cumulative	Marginal[a]	Number[b]	Cumulative	Marginal[a]	Number[b]
1	21.9	21.9	544	24.2	24.2	356
2	28.0	7.5	361	31.5	12.1	254
3	35.4	12.3	198	38.4	13.9	151

[a]See Note a, Table 4.

[b]The number of poor households that exit poverty and whom we can observe for the specified number of periods after exit. Those who exit prior to 1973 are observed over three periods; those who exit in 1977 over only one period.

chi-square test shows no significant difference at the 5 percent level. The marginal exit rate, that is, the percentage of those exiting poverty in the next period given that they had not exited in the prior period, is over 60 percent in the first (two-year) period after entry into poverty for both intact couples and individual households. For both, marginal exit rates decline after that period. Again, the difference between widows and couples is not significant at the 5 percent level.

Reentering Poverty

Although exit from poverty is likely for members of our sample after short periods, in Table 5 we show that for many households the escape from poverty is temporary. Once again, we include in our reentry calculation only those households for whom another period of information is available following transition into a given state--in this case, leaving poverty. Reentry rates do not include those who first exit poverty in 1979 or those widows who die or leave the sample after leaving the first poverty spell but prior to falling back into poverty. Since we are able to determine the date of exit from poverty, those who were poor in 1968, while excluded from Table 4, are included in reentry rates.

Of couples who exited poverty, 22 percent reentered during the following period, and just over one-third reentered over the whole survey period. The pattern for widows shows no significant difference. About a third of both groups reenter poverty over the period of our sample.

CONCLUSIONS

In agreement with cross-sectional data from the Current Population Survey and decennial census, the sources most frequently used to measure

the experience of poverty, our data show that widows are at far higher
risk of being poor at any particular time than are couples. But the
longitudinal nature of our data enables us to follow more closely the
pattern of poverty among women at older ages and across marital states.
We find that even before the death of their husbands, widows are more
likely to have been poor than couples in which the husband remained alive
throughout the survey period. Hence the importance of widowhood as an
explanation for poverty is to some extent overstated by simple com-
parisons of marital status groups.

More important, the use of longitudinal data shows clearly that the
older population undergoes substantial movement into and out of poverty.
We found that among elderly couples in which the husband remained alive,
the risk of being poor at some time over a ten-year period was twice as
high as their peak annual poverty rate, and for widows, that risk was
almost 30 percent greater than their highest annual poverty rate. This
difference means that both couples and widows move into and out of
poverty, and hence our stereotypes must be changed: poverty is a much
less permanent state for either married or widowed elderly persons than
cross-sectional information would suggest.

Because our data describe a particular cohort of the elderly, and
were selected according to marital status over the ten-year period of the
RHS, our poverty rates do not conform exactly to rates based on CPS data.
This disparity does not, however, diminish the basic point of our paper,
for when we arrange our own data to simulate a cross-section and then
compare those results with a longitudinal view, substantial differences
are revealed concerning the true nature of poverty dynamics. It is evi-
dent from our analysis that a far larger percentage of the elderly popu-

lation is subject to the risk of poverty over the lifetime than cross-sectional data suggest.

When we separated households into those widowed during the survey period and those that stayed married, we were better able to examine the impact of widowhood on poverty. Widowed households were much more likely to become poor than were married households, but were also more likely to have been poor before the husband's death. And even though widowhood plunged many women into poverty, in subsequent periods few of them remained poor. Surprisingly, poor widows were no less likely to exit or more likely to reenter poverty than were poor couples.

Our sample is a relatively young one. At their oldest, in 1979, the men in this sample were 68 to 73 years old. Our ever-poor rates therefore reflect the risk of poverty during only the early portion of retired life. If the movements into and out of poverty that we have observed just after retirement continue as couples age and become widowed, ever-poor rates may continue to rise for this cohort even if annual rates of poverty by age and marital status are stable over time. If this is true for the older population in general, policy makers may be unjustifiably sanguine about relatively low poverty rates among the elderly. Ever-poor rates tell a different story.

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