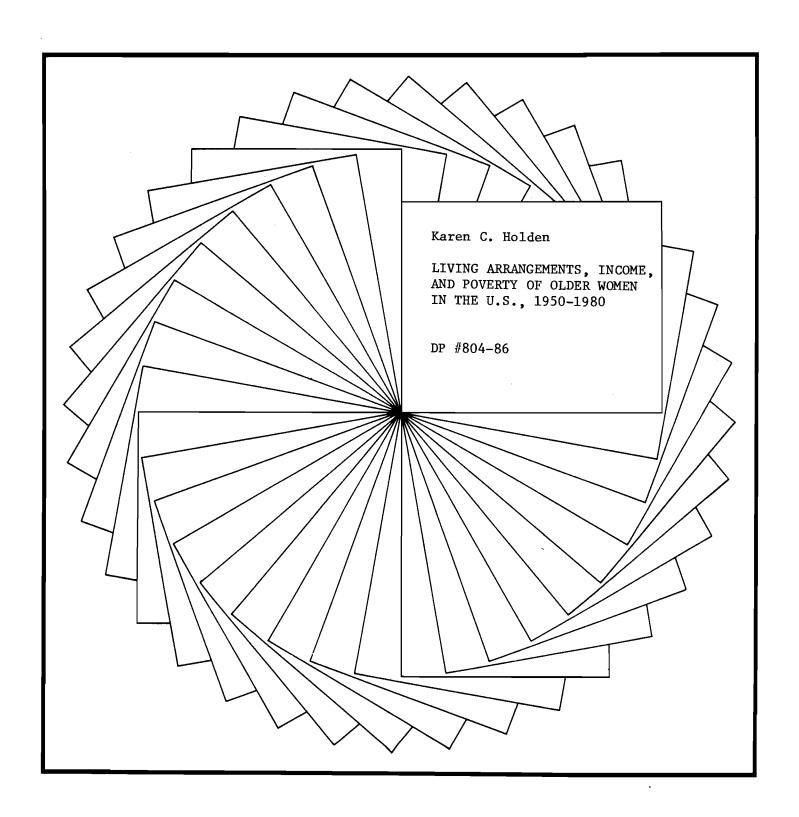
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Living Arrangements, Income, and Poverty of Older Women in the U.S., 1950-1980

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ABSTRACT

This paper examines the changes in the incomes of elderly women from 1950 to 1980 and explores whether the growing propensity to live alone explains the slower poverty reductions among older women compared to couples.

We conclude that changes in living arrangement had no dramatic effect on the poverty rate of elderly women. Poor women who live in the households of other relatives are better off than those who live alone. But because some poor women in 1950 lived alone, holding living arrangements unchanged over the 30 year period would not have reduced poverty by a large amount. Poverty would have fallen by an additional 4.2 percentage points (or by another 8 percent) between 1950 and 1980 if living arrangements and the age composition of women 60 years of age and older had not changed, and by only an additional 2.2 percentage points if propensities of the poor and nonpoor to live alone had remained unchanged. Personal incomes of women grew rapidly over this period, but their initially low incomes rather than changes in household composition modified the effect of this growth on poverty rates.

I. INTRODUCTION

Over the 1950-1980 period the percentage of older women living alone rose. While this change may testify to the increasing ability of older women to realize long-professed preferences for living independently rather than with younger family members (McAuley and Blieszner, 1985; Troll, 1971), their increasing economic independence, ironically, may also have contributed to the deterioration over this period in their relative economic status compared to that of older couples (Warlick, 1983). Increases in their own incomes may have allowed poor women who would otherwise have lived in nonpoor households to live alone. This shift would have modified poverty rate declines, masking gains in income comparable to those of other elderly groups.

Changes in official poverty rates are a result of changes in the incomes of individuals, changes in household composition, and changes in the incomes of other family members. Offsetting changes in these components could account for slower poverty rate reductions among elderly women. In this paper we examine changes in incomes of elderly females and changes in the propensities to live alone across age and income groups between 1950 and 1980. The availability of the 1950 census public use file allows us to look at these changes over a longer period than has been possible heretofore. The question we explore is whether, as their incomes grew, women with relatively low personal income chose to live alone, counteracting the fall in poverty rates that would have occurred if household preferences had not changed.

After a description in the next section of the data used, the third section of this paper outlines changes in poverty rates among older women between 1950 and 1980. The fourth section looks at how living arrangements of older women changed between 1950 and 1980. In the fifth section we disaggregate income change over this period by living-arrangement group, and in the final section we draw conclusions about how changes in the types of households in which older women live may have influenced measured changes in poverty. 1

II. DATA AND DEFINITIONS

We use the public use samples of the 1950 and 1980 decennial censuses to examine characteristics of households and their members in each census year and to chart how the types of households in which elderly women live has changed over this period. Although a public use file is also available for the 1940 census, we do not use it because the only income reported in that census is wage and salary income, and only a small minority of older women reported earnings. Earnings data alone cannot provide a complete picture of the income of women or of the households in which they lived. Thus, the 1950-1980 period is the longest one over which we have the necessary income data to analyze the issue addressed in this paper. The unit of analysis is the individual woman; we classify each by household type (living arrangement) and look at the personal and household income of women in each living arrangement.

<u>Living Arrangements</u>: Each census classifies each person in a household by relationship to the household head (or "householder" in

- 1980).² Using this relationship we defined six types of living arrangements into which each woman is categorized. These are
 - 1. Living alone
 - 2. Living with a spouse in their own household
 - Living in a household in which the head or spouse of the head is a relative
 - 4. Heading a household shared with a nonspouse relative
 - 5. Living with nonrelatives only
 - 6. Institution inmate.

The first group includes only individuals who live alone. Our numbers may be somewhat different from other studies of living arrangements because we separate unrelated persons living only with a nonrelative from women living alone (see Kobrin, 1976). We do this in order to distinguish women who live alone from those who do not. There seems to be no a priori reason to classify one of two (or more) women living together as living alone when headship in such a household is likely to be a random assignment.

Category (2) includes women living with a spouse, but only if the husband is the head of the primary family. Female householders in 1980 who lived with a spouse were counted in this group; only female

householders with no spouse living in the household were identified as household heads (category 4).

The third group includes women who live in a household headed by a relative other than their spouse; the fourth category are heads of households residing with relatives other than their spouse. Although some of these women may live together (e.g. two sisters, one of whom is classified as the family head, the other as living with a relative), we distinguish these two groups because they are considered differently in poverty counts. The fifth group includes all women living only with nonrelatives. We do not differentiate between household heads and nonheads. The final category identifies inmates of institutions (i.e., persons requiring custodial care in an institution). We identify persons living in other types of group quarters as living with nonrelatives (category 5). Again, our reported rates of institutionalization may be different from rates reported when all persons in group quarters are combined.

Income: Information on all sources of income was collected in both the 1950 and 1980 censuses. In 1950, income questions were asked of sampled persons only. For each of these individuals we have personal income data. Only if the sampled person was also the head of the household was total household income asked. In 1980 data on both the personal and household income of all sampled individuals were gathered.

The 1950 income data present a problem in that only for household heads do we have data on both personal income and that of all

household members. Yet we wanted to use income data from this year for two reasons. First, 1950 is a point in time prior to the rapid rise in social security coverage and benefits and, thus, that year's census provides information about living arrangements of the elderly population before the increase in social security benefits and other public income programs gave them greater independence in housing.

Second, one of the goals of this project was to use the recently available 1950 public use sample; rejecting that year's census would have limited our analysis to the 1960-1980 period, for which public use samples have long been available to researchers.

For these reasons we constructed two samples of women (aged 60 and older) in 1950: a household sample and all sampled women. Our household sample contains information on all older women who were in sampled households. Not all of these women were themselves sampled individuals; therefore we do not have data on their personal incomes. With this sample of households we can examine characteristics of older women and their well-being based on the income of the households in which they live. For the second sample, all sampled older women, we have personal income for all individuals in 1949. Only if they themselves were a household head will there also be data on household income. These two samples are not exclusive, since household heads will be in both samples. Therefore we do not combine these samples but use them separately depending on whether we are interested in personal income or household income.

In each census year money income is reported. This is compared with the appropriate poverty threshold. The 1979 official poverty thresholds are, of course, readily available. The 1949 thresholds were estimated by adjusting for price changes between these two years. We use two definitions of poverty. First we compare household income to the threshold for the appropriate year and household characteristics. This allows us to calculate poverty rates based on household income. In addition we calculate poverty rates based on the income of the individual woman. This gives us an estimate of what poverty rates would have been if all women had lived alone (assuming no change in behavior or substitution for the lost intrahousehold transfers).

We report income for inmates of institutions, but we caution that it is not known how accurate this information is. Reporting errors may be more serious among this group. Guardianship arrangements may specify that income be paid to other family members or to the care institution. This would lead to underreporting of income by the individual if he or she is not aware of the actual amount. In addition, the majority of the institutional population at any time has been in the institution for less than one year with these short stays ending with death or discharge (McConnel, 1984). Income reported for the prior year, therefore, will be income received while institutionalized for some, for others it will be income received prior to institutionalization.

III. CHANGES IN POVERTY RATES: 1949-1979

In 1949 52.4 percent of all women aged 60 or older lived in a household with total income below the poverty threshold (Table 1). By 1979, poverty among women of this age had fallen to 15.5 percent, or to 29.6 percent of the 1949 level. One component of this decline was the rise in personal incomes of these women. If they had to depend upon their income alone in 1949, almost 88 percent would have been poor. In 1979 only 51 percent had personal incomes below the poverty threshold for a single-person household headed by a woman of their age (\$3479).

In the two census years, the incidence of both personal and household poverty differed by the type of household in which women lived. Ignoring institutionalized women for the moment, poverty was highest for elderly women living alone (29.7 percent were poor in 1979) or with nonrelatives (43.8 percent were poor in 1979). For both these groups of women poverty status is determined by their income alone. It is possible that women living with nonrelatives shared the income of other household members and therefore their economic status may be underestimated. Because the 1950 census did not collect information on household income for unrelated persons we are forced to consider only the personal income of these women when evaluating their poverty status, as is done in official poverty counts.

Women living with relatives (including those living with a spouse) were more likely to be poor if only their own income is

Table 1
Household and Personal Poverty Rates of Women 60+,
by Living Arrangement Group: 1949-1979^a

| | Percentage i | in Poverty | Ratio 1979/1949 | |
|------------------------------|--------------|------------|--------------------|--|
| Household Type and Income | 1949 | 1979 | | |
| All women 60+ | | | | |
| Household income | 52.4% | 15.5% | . 296* | |
| Personal income | 87.7 | 50.7 | .578* | |
| Household type | | | | |
| (1)Living alone | 76.6 | 29.7 | .388* | |
| (2)With spouse | | | | |
| Household income | 46.3 | 6.9 | .148* | |
| Personal income | 93.8 | 65.4 | .698* | |
| (3)Head/with relative | | | | |
| Household income | 55.9 | 12.9 | . 230* | |
| Personal income | 82.5 | 34.8 | .421* | |
| (4)In relative's house | ; | | | |
| Household income | 41.0 | 7.2 | .175* | |
| Personal Income | 92.5 | 55.6 | .601* | |
| (5)With nonrelative | 71.0 | 43.8 | .616* | |
| (6)Institutionalized | | | | |
| All women 60+ | 87.6 | 85.6 | . 977 | |
| With income | 66.7 | 78.3 | 1.174** | |

a Income data is for the year preceding the census date.

^{*} Difference between 1940 and 1980 census is significant at less than .001 level.

^{**} Difference is significant at .10 level only.

counted, but the income of other family members was sufficient to raise the majority of the households out of poverty. In 1979 less than 10 percent of the older women who lived in a household headed by a husband or other relative were poor.

The last column of Table 1 gives the ratio of poverty rates in these two years by household type. The fall in poverty, measured by household income, was greatest for women living with a spouse or in a household headed by another relative (to 14.8 and 17.5 percent, of the 1949 level for categories (2) and (4), respectively). The more rapid fall in household poverty than in personal income poverty (to 69.8 and 60.1 percent, respectively, of the 1949 level) suggests that growth in the incomes of other family members or declining family size was an important factor in the declines in poverty for these women. Poverty rates for households headed by older women (group 3) fell more slowly than did poverty among women living in other family households. but for these women as well household poverty fell further than did poverty measured by their income alone. In contrast, women who were dependent on their income alone (categories 1 and 5) experienced a fall in poverty that was less than that of other households in which women lived, but was greater than the fall in personal income poverty of other women.

Poverty rates for the institutionalized population, curiously, saw no decline over the 30-year period. As is the case for women living with nonrelatives, only the poverty rate based on personal income can be calculated, even though this income may not accurately

indicate the income constraints on their well-being. The incidence of poverty is high and is unchanged between the two years. When we compared the income of only those who reported a positive amount, the poverty rate actually rose, though the difference between 1949 and 1979 was significant only at the 10 percent level. As indicated above, however, income of institutionalized women may be understated in both years.

The poverty rates reported in Table 1 are not new findings. They confirm findings reported elsewhere that although older women who live with other family members have relatively low personal income, they are less likely to be poor when household income is considered than are elderly women who head their own households (Moon, 1977). In addition, however, Table 1 shows that when household income is compared in the two census years, women who shared a household experienced a greater improvement in economic status over time than did women living alone.

The poverty rate measures the percentage of persons with incomes above or below an absolute income threshold. It is an imperfect measure of changes in real incomes, since substantial changes in income can occur without comparably large changes in poverty, if those income changes caused only a few individuals to cross the poverty threshold. Likewise, poverty rates may change dramatically as a result of small changes in income. To indicate the extent to which differences in poverty rate changes reflect similar differences in income change across groups of women, Table 2 repeats Table 1 but with

mean incomes as the variable of interest. Rather than considering the effect of household type at the lower end of the income distribution, here we are able to observe differences in average levels of income received by women.

The contrast between household heads and women who do not head their own households is even more striking in this table but the relative changes among household groups in income are almost always the reverse of that in poverty rates. This can be seen immediately by comparing changes in household and personal income of all women 60 and older; household income doubled over this period while the personal income of these women more than tripled. In contrast, poverty among all older women fell more slowly when measured by personal income alone than it did when the income of all household members is considered (Table 1). The contrast between Tables 1 and 2 is evident for all household groups; those women and households that experienced the most rapid income growth registered the smallest change in poverty. For example, ignoring institutionalized women, women whose own-income poverty rate fell the least--category 2--recorded the most rapid income growth. Yet, as Table 2 shows, their personal incomes, despite the growth remained low. The mean income in 1979 was only slightly over the poverty line.

Household income reported in Table 2 includes the income of older female members. When their income is excluded, we find that the income of other household members grew about 10 percent less than did total household income. This slower growth of other members' incomes

Table 2
Personal and Household Income of Women 60+,
by Living Arrangement Group: 1949-1979^a

| | Mean Income | | |
|---|---------------|--------------------------|------------------------|
| lousehold Type and Income ^b | 1949 | 1979 | Ratio 1979/1949 |
| all women 60+ | - | | |
| Household income | \$6673 | \$ 13 7 15 | 2.055* |
| Personal income | 1421 | 5182 | 3.647* |
| ousehold type | | | |
| (1)Living alone | 2611 | 7013 | 2.686* |
| (2)With spouse | | | |
| Household income | 7659 | 18060 | 2.358* |
| Personal income | 742 | 4034 | 5.437* |
| (3)Head/with relative | e | | |
| Household income | 5994 | 15640 | 2.609* |
| Personal income | 2227 | 6528 | 2.931* |
| (4)In relative's hou | se | | |
| Household income | 9677 | 24165 | 2.497* |
| Personal income | 975 | 4144 | 4.250* |
| (5)With nonrelative | 2797 | 6192 | 2.214* |
| (6)Institutionalized | | | |
| All women 60+ | 1476 | 1958 | 1.327 |
| With income | 3970 | 2945 | .742 |

Income data is for the year preceding the census date; household composition is that at the time of the census.

^{*} Difference between 1950 and 1980 census is significant at less than .001 level.

meant that the share of household income contributed by elderly females increased. Between 1949 and 1979 the share of total household income contributed by women in categories 2, 3, and 4 increased from 9.7, 37.2, and 10.1 percent to 22.3, 41.7, and 17.1 percent respectively. Despite income gains by other persons in the household, older women's roles in determining the well-being of the household grew and their dependence on the income of other members diminished (Sørensen and McLanahan, 1985).

The relatively slow income growth of female household heads compared to income growth of nonheads is curious. On the other hand, the absolute gain in average personal income across each group of older women was more uniform, varying between the rather narrow range of \$3200 and \$4400; for those groups whose income was lowest in 1949 the additional income meant a larger percentage gain. In addition, however, it may be that more and more poor women are choosing to live alone, whereas, in the past, a household of one's own was a luxury for the well-to-do elderly. This trend would have depressed average income growth among female household heads even as women with extremely low income experienced high percentage gains in their incomes.

Tables 1 and 2 present apparently contradictory views of relative gains in well-being across household type, an indication that the measure of well-being used affects the conclusions drawn. If personal income changes are used to measure changes in well-being, it is women who do not head households who appear to have gained most rapidly,

though the growth in their income was not sufficient to raise their average incomes above the poverty threshold for single household heads. Thus, calculating poverty rates based on their personal income suggests that the gains for these women were smaller than for those living alone.

Using household income as a measure of well-being tells a different story of relative gains in well-being. By this measure women who live with a relative (categories 2, 3, and 4) gained less in terms of household income but gained more when poverty rates for 1949 and 1979 are compared. The combined growth in the incomes of dependent elderly women plus that of other household members was sufficient to move all but a small percentage of the households in categories 2 and 4 out of poverty. That poverty declined more slowly for older women living alone suggests a threshold effect (i.e., comparable income gains resulted in smaller changes in poverty because initial levels of income were well below the poverty threshold). Conversely, small income gains by households in categories 2 and 4 caused sharp declines in poverty because of higher incomes (of other household members) in 1949.

The mean personal income of all groups of women in 1979 was above the 1949 income (in constant dollars) of women living alone.

If women required a critical level of real income to live alone, many more had clearly achieved that level by 1979. How the probabilities of living alone changed over the 30-year period is discussed in section V. Before relating trends in mean income and poverty rates to

these changes in household choice, we examine in the next section what changes occurred between 1950 and 1980 in the type of households in which older women lived.

IV. LIVING ARRANGEMENTS OF OLDER WOMEN: 1950-1980

Table 3 shows the change between 1950 and 1980 in the distribution of women 60 years of age and older across categories of living arrangements. In this 30-year span, the percentage of women living alone rose from 13.7 to 33.4. Although decreases in probability of widowhood at younger ages would alone have reduced the percentage of women living alone, the proportion of women living with their husbands rose by only 4.2 percentage points. Lowered mortality among married men had a small effect in reducing the proportion of women who were single female household heads, but this effect was more than offset by the sharp reductions in the probability of women living with other relatives, either as a head of their own household or in the household of a relative. All changes in the probability of living in a particular household type are significant at the .001 level, with the exception of becoming an inmate in an institution, the probability for which remained virtually unchanged.

Aggregate data tell us little about how the age-specific patterns of living arrangement changed over time. Change observed among all elderly women combined may occur because of large changes in particular age groups or because all age groups underwent similar changes. For example, younger widows over time may have been more likely to remain in their own households, only moving in with other

Table 3 Living Arrangements of Women 60+ 1950-1980

| Household | Percentage | in Category | y Ratio 1980/ 1950 | |
|---------------------------|------------|-------------|--------------------------|--|
| Type | 1950 | 1980 | | |
| (1) Alone | 13.7% | 33.4% | 2.43* | |
| (2) With spouse | 38.0 | 42.2 | 1.11* | |
| (3) Head with relative | 12.5 | 7.7 | . 62* | |
| (4) With relative head | 23.9 | 9.5 | .40* | |
| (5) With nonrelatives | 7.6 | 2.4 | . 32* | |
| (6) Inmate of institution | 4.3 | 4.8 | 1.16 | |

^{*} Difference between 1950 and 1980 is significant at the .001 level.

family members at older ages. Yet at these older ages women may be equally likely in each year to share a household with a relative. On the other hand, if a greater propensity to live alone at younger ages increased the probability of women at all ages of doing so, similar changes in living patterns would be observed across all ages.

Table 4 disaggregates changes in living arrangements into fiveyear age groups. With the exception of institutionalization rates,
the aggregate changes also occurred in each age group; women were more
likely to live alone or with a spouse at all ages and less likely to
share a house with a nonspouse relative or with nonrelatives. The
1980 numbers are starred if the difference between them and the
corresponding rate for 1950 is significant at the .01 level. In some
age-household groups the 1950 numbers are small, so seemingly large
absolute differences are not significant.

Several features of the changes in living arrangements over the 30 years should be noted. First, the pattern of household change across age groups remained virtually the same. As women aged they were more likely to live alone than they were at younger ages, with a peak in the probability of living alone between 80 and 84 years of age. Because women are more likely to be widowed as they age and remarriage rates are low for older women, the percentage of women living with a spouse falls steadily with age. In each year the percentage of women living with relatives rose with age. The percentage in institutions rose with age in each year. Not surprisingly the peak rate of institutionalization occurred among the

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Table 4 Living Arrangements by Age Group

| Living Arrangement Group and Census Year | % in Categories by Age Group | | | | | | |
|--|------------------------------|-----------|-----------|-----------|-----------|-----------|---------|
| | 60 -64 | 65 -69 | 70 -74 | 75 -79 | 80 -84 | 85 -89 | 90+ |
| Living alone | | | | | | _ | |
| 1950 | 10.8% | 11.7% | 16.9% | 19.0% | 20.0% | 9.2% | 8.0% |
| 1980 | 22.1* | 30.5* | 37.8* | 44.5* | 44.7* | 39.4* | 24.5*** |
| With spouse | | | | | | | |
| 1950 | 55.0 | 43.1 | 33.3 | 15.6 | 9.4 | a | a |
| 1980 | 61.9* | 52.2* | 41.5* | 26.9* | 13.7 | 8.9 | 1.7 |
| Head w/relatives | | | | | | | |
| 1950 | 10.7 | 12.5 | 13.2 | 15.3 | 17.2 | 9.2 | 8.0 |
| 1980 | 7.8* | 7.0* | 7.5* | 8.1* | 8.7* | 7.6 | 8.8 |
| In relatives' house | | | | | | | |
| 1950 | 14.0 | 22.0 | 25.0 | 36.1 | 39.4 | 51.3 | 52.0 |
| 1980 | 5.7* | 7.1* | 8.4* | 12.5* | 16.9* | 17.2* | 23.6* |
| With nonrelatives | | | | | | | |
| 1950 | 6.6 | 8.2 | 7.6 | 7.3 | 6.1 | 14.5 | 12.0 |
| 1980 | 1.6* | 2.3* | 2.3* | 2.4* | 4.1 | 3.1* | 4.6** |
| In institutions | | | | | | | |
| 1950 | 3.0 | 2.5 | 4.0 | 6.7 | 7.8 | 15.8 | 20.0 |
| 1980 | 0.8* | 0.9* | 2.4** | 5.6 | 11.8 | 23.8 | 36.8** |
| All sample women | | | | | | | |
| 1950 | 30.8 | 28.1 | 19.6 | 11.6 | 6.4 | 2.7 | 0.9 |
| 1980 | 26.3 | 23.5 | 19.4 | 14.4 | 9.0 | 5.0 | 2.3 |

a No sample persons in this category.
 * difference between 1950 and 1980 is significant at the .001 level.

^{**} difference is significant at the .05 level.

^{***} difference is significant at the .10 level.

oldest age group; one-fifth were institutionalized at this age in 1950 and somewhat more than one-third of women 90 and older were in institutions in 1980.

But several important differences should also be noted. By 1980, even the oldest age group was more likely to be living alone than was any age group in 1950. It is interesting to note that in 1980, 24.9 percent of women 90+ who were not in their own husband-wife household lived alone. In 1950 these women were 60-64 years of age. While just over half were married at that time, among those who were not living with their husband in their own household, 24 percent lived alone. This group, as they aged, shared in the growing acceptance or expectation of independent living, and rather than moving in with relatives as had their parents in 1950, chose to maintain separate households.

At younger ages this trend in favor of separate living by nonmarried women was accompanied by a decline in all other living situations—including institutionalization. Only after age 80 does the percentage of women in institutions rise above the percentage in 1950. Note however, that even in 1950, institutions were important in the care of the elderly. Institutions were second only to the family as a place of residence after age 85.

Tables 3 and 4 show that general patterns of change across age groups were the net result of similar changes occurring at all ages. In 1980 women in each age group were more likely to live alone than were women of the same age in 1950, less likely to live in the

household of a relative, and less likely to have relatives in their own home or live with nonrelatives. The probability of living with a spouse rose the most for the 75-79 age group (by 72.4 percent); at younger and older ages by a smaller amount. The rate of institutionalization, which was virtually unchanged between these two years, was the result of two offsetting trends—a large increase in the rate among women 80+ and a fall in the rate at younger ages.

This analysis of changes in household type is interesting, but more important for the purposes of this paper is the way these changes affected net changes in poverty rates over time. The next section combines the discussion of poverty rate changes in section III and of living arrangements in section IV to estimate the net effect of changes in living arrangements on measured changes in poverty rates between 1950 and 1980. In analyzing this change we also estimate the effect of the changing age distribution of older women. The last two rows of Table 4 show the how the distribution of women 60 and older changed between 1950 and 1980. The percentage of the young elderly fell and the percentage 75 and older rose. Because the "old-old" are known to be poorer than the younger elderly, age composition may also be a factor in poverty rate change.

V. THE RELATIONSHIP BETWEEN HOUSEHOLD COMPOSITION AND POVERTY

The previous two sections outlined changes in income and poverty rates by household type and the changing distribution of women by the type of household in which they lived between 1950 and 1980. In this

section we control for changes in the distribution of women by age and living arrangement in order to draw some conclusion about how poverty might have changed if only incomes of women rose. Of course, it is impossible to know what the poverty rate would, in fact, have been if neither of these changes occurred. This is because we do not know the characteristics of households in which women would otherwise live if they were not living alone or in institutions. Likewise, for women now living with their husbands, it is impossible to say who would have been widowed under early mortality regimes. Thus, while we standardize poverty rates for age and housing characteristics in a base year, the procedure implicitly assumes that changes in probability of being in any living-arrangement group would be equal for all women. In other words, the differential selection of particular income groups out of one or more living arrangement groups is not adjusted for. We discuss this issue more fully below and present some evidence on whether changes in living arrangements were different for poor and nonpoor women.

We use a simple standardization technique, estimating what the poverty rate would have been in 1949 and 1979 if only the incidence of poverty for each age group and household type had changed between those two years. To do this the number of women in each age and household group in the base year is multiplied by the poverty rate for each group in the two years. This procedure is actually carried out only for 1980, since we use 1950 as the base year. Table 5 presents our results for the noninstitutionalized population. We exclude

institutionalized women, since the number reporting income in 1979 in the oldest age group is very small. Even so, some of the cells are rather thin and we caution readers about making inferences over small differences.

The actual fall in the poverty rate for noninstitutionalized women between 1949 and 1979, from 52.2 to 16.3, would have been somewhat larger (to 12.3) if living arrangements had not changed within age-specific groups. If we standardize by the age distribution in 1950 (last row in Table 5), the decline in poverty would have been only slightly greater (to 12.1). The effect of changes in living arrangements on poverty rates was greatest at older ages. At these ages the increase in the percentage of women living in husband-wife households was smaller, and the shift between 1950 and 1980 from the relatively high-income households headed by other relatives to single-person households more important. If the same percentage in 1980 had lived with other relatives as had in 1950, poverty would have fallen more for those of advanced age, for whom living with relatives had been a likely choice. Among younger elderly women, the effect on poverty of changes in living arrangement was small. At these ages, the rise in the percentage married and the decline in the percentage living with nonrelatives probably balanced the increase in poverty resulting from increases in single-person households.

As stated earlier, standardization assumes that all women were equally likely to change the types of households in which they lived.

On the other hand, the change in poverty due to household composition

Table 5
Age and Living Arrangement Standardized
Poverty Rates: 1950 and 1980^a
(Noninstitutionalized Population)

| | Actual Pove | rty Rates | Poverty Standardized by 1950 Living Arrangements 1979 | |
|-------------------|-------------|-----------|---|--|
| Age Group | 1949 | 1979 | | |
| In all households | 52.2% | 16.3% | 12.3% | |
| 60-64 | 43.3 | 12.3 | 12.3 | |
| 65-69 | 51.5 | 13.3 | 12.0 | |
| 70-74 | 57.6 | 17.3 | 12.0 | |
| 75-79 | 61.2 | 20.4 | 10.0 | |
| 80-84 | 62.2 | 22.0 | 13.8 | |
| 85-89 | 61.1 | 26.7 | 14.9 | |
| 90+ | 70.0 | 26.2 | 17.5 | |
| Age-standardized | | | 12.1 | |

Income data is for the year preceding the census date (1949 and 1979); household composition is that at the time of the census (1950 and 1980).

may be exaggerated or underestimated if the not-poor or the poor, respectively, disproportionately changed the type of households in which they live. For example, if poor women more often than the not-poor chose to live alone (possible if not-poor women who lived with relatives did so for noneconomic reasons) the effect of changes in household composition would, in fact, have been greater (because standardized rates would be lower) than is suggested in Table 5.

Conversely, if the poor more often chose to remain in multigenerational households, while women whose incomes were above the poverty threshold sought independent living situations, the actual effect of changes in living arrangements would have been smaller than indicated in Table 5.

Table 6 provides some insight in the relative shifts by poor and nonpoor women from households headed by nonspouse relatives. Because married women are constrained in their household choice by their marital status, we look in this table only at the propensity of women who do not live in a husband-wife household to head their own household or move in with another family member. For expositional ease we lump together all households headed by women and those of unrelated individuals, although we will comment on this grouping below.

In 1950, 59 percent of these women headed their own households; in 1980 over 80 percent did so. In earlier tables we reported on the incidence of poverty among women in each household group. Here we look at the type of households in which the nonpoor and poor lived in

Table 6 Propensities of Poor and Nonpoor Women 60+ to Head Their Own households: 1950-1980^a

| | Percentage He | ading Househo | ld |
|------------------------|---------------|---------------|-------|
| Poverty | | | Ratio |
| Status | 1950 | 1980 | 80/50 |
| All women ^b | 58.5% | 82.0% | 1.23* |
| Household sta | tus | | |
| Not poor | 55.3 | 78.1 | 1.41* |
| Poor | 75.5 | 94.6 | 1.25* |
| Own income st | atus | | |
| Not poor | 80.8 | 87.6 | 1.09* |
| Poor | 54.2 | 72.0 | 1.33* |

Income data is for the year preceding the census date (1949 and 1979); household composition is that at the time of the b census (1950 and 1980).
Women neither living with a spouse or in an institution.

^{*} Difference is significant at .01 level or less.

1950 and 1980. This table confirms what was reported earlier; women who were not poor based on their own incomes alone were more likely to head their own households in 1950 (80.8 percent did so) than were women who were poor according to this criterion (54.2 percent headed their own household). On the other hand, women who were not poor based on total household income were less likely to be female household heads (55.3 percent were) than were women who lived in poor households (75.5 percent). Ironically, relatively high-income women were more likely to be poor in 1949 than were low-income women, since the latter moved in with better-off relatives.

This situation had not changed in 1980. Relatively high-income women were still more likely to live alone than were poor women, and, therefore, more likely to be living in a household classified as in poverty. But the difference in the housing choice of poor and nonpoor women had narrowed. In that year over 80 percent headed their own household. Among women who were own-income poor, the percentage heading their own households rose from 54.2 to 72 percent. In 1980 88 percent of women who were not poor (based on their personal income) headed their own households, a rise of only 6.8 percentage points from 1950. Virtually all poor women lived in their own households—95 percent of the household-income poor in 1980 compared to 76 percent in 1950.

The degree to which the relatively small increase in rates of independent living among the nonpoor may have balanced the effect on overall poverty of the large rise in independent living among poor

women depends on the percentage of women in each group and the relative decline in household poverty over this period for both.

Whereas in 1949, 84 percent of all unmarried and noninstitutionalized women (the sample included in Table 6) were own-income poor, only 36 percent of these women were poor in 1979. Thus, the effect on the poverty rate of an increasing proportion of poor women heading their own households was diminished by the rapid decline in the proportion of women who were poor.

In order to calculate the effect of these two components of the overall change in poverty, we calculate a standardized poverty rate for 1949 and 1979 assuming that for unmarried women in these two years the probability of living alone remained unchanged at the 1950 rate for the poor and nonpoor, but that the probability of being poor changed as it did. We make the additional simplifying assumption that when poor women lived in a relative's household, poverty for those households conform to the rate reported in Table 1 for each year but that all households in which nonpoor women lived had household income above the poverty threshold. This assumption is necessary since the 1950 census data do not allow us to classify own-income poverty status of nonheads by the poverty status of the households.

Based on these assumptions we calculate a household poverty rate of all unmarried women in 1949 of 61.3 percent. In 1979 poverty among this same group of women had fallen to 26.4 percent. Standardizing by the probability of the poor and not poor living alone, 20.7 percent would have been poor in 1979. Because these rates are calculated for

unmarried women only, we calculate unstandardized and standardized poverty rates allowing both the percentage of married women and their level of well-being (measured by household poverty) to be the same as they were in 1979. These rates are lower than those for unmarried women, since for 1979 the number of women living with a spouse was almost equal to the number of unmarried women (excluding the institutionalized), and household poverty rates of married women were far lower. The standardized and unstandardized rates for all noninstitutionalized women in 1979 are 14.6 and 16.9 percent respectively. The unstandardized rate is somewhat higher than the actual poverty rate of 16.3 percent because of the standardization procedure used and assumptions made about poverty rates of households in which poor and nonpoor women live.

As was found when we standardized by the distribution of women by living arrangements, poverty would have fallen further but only by a small amount (another 2.3 percentage points) if the household choices of poor and nonpoor women had remained the same in 1980 as in 1950. Although poverty rates would have been lower in 1979 if the own-income poor had not changed their propensity to head their own households, the large decline in the percentage of women who were poor based on their income alone and the same tendency towards independent living among the growing proportion of nonpoor women counteracted this effect.

Before drawing the three parts of this analysis together, a comment on the grouping of household heads is appropriate. Through most of the analysis single-person households, unrelated persons

living together, and other households headed by an elderly woman were separated. In 1949 there was no significant difference in poverty rates, mean incomes, or the ages of women in these households. On that basis one could argue that treating all female household heads together was appropriate. On the other hand, in 1979 this was not true. Women living in single-person households were significantly (at the .02 level) less likely to be poor and had significantly higher incomes than did the other two household groups. They were also significantly older than the other elderly female family heads. It may be that economic independence for elderly women allowed them to eschew all types of shared living arrangements—only younger women with dependents and relatively poor women were forced to share their households.

VI. SUMMING UP

Despite rapid rises in personal incomes among older women (by 365 percent between 1949 and 1979) poverty rates fell more slowly among women in other living arrangements than among married couples. By 1979 poverty in old age was a risk faced primarily by women. Tables 1 and 2 suggest that this is partly a result of poverty being defined by an absolute income threshold. Income of women in both groups grew, but from a very low base, which meant that even in 1979, many had incomes below the poverty threshold.

That income growth of other family members was also a major factor in poverty declines over this period is shown by the rapid fall in poverty in households that women shared with other family members.

In part because of the income gains by other family members, only a small fraction of women living with relatives were poor in 1979.

In 1979, poverty was not a risk faced by all older women; it was concentrated among women living alone. Ninety-five percent of the noninstitutionalized population of unmarried women who were poor headed their own household. This was true despite the high personal incomes of women heading their own households compared to women who were not household heads.

The increasing propensity of elderly women to live alone is evident. Despite reductions in the probability of widowhood (see Sweet and Bumpass, 1984, for a discussion of the change in the risk of widowhood over this period) older women of all ages were increasingly likely to live alone. In 1980 the probability of living alone had risen, even for the oldest group, above the rate for the youngest elderly in 1950. Likewise, the probability of living in a family member's household had sunk to levels well below those in 1950.

Rates of institutionalization fell at younger ages, but rose at older ages. Unfortunately, the small cell size in some age groups for the institutionalized population makes it difficult to draw strong conclusions about the differences over time in the characteristics of this group. However, the relatively low and constant personal incomes of the institutionalized population is interesting and deserves further study. The stability of personal incomes may merely indicate persistent biases in income reporting by inmates in institutions; it

may be that inmates do not know the size of their incomes. On the other hand, it may be that the institutionalized population has always been drawn from the poor, and that Medicaid rules have increased this tendency. If the income of inmates of institutions is correctly reported, the exclusion of this population from official poverty counts underestimates the incidence of poverty among the elderly. Likewise, their exclusion will overestimate income gains, since this group has become relatively poorer over this period.

It is difficult to estimate precisely how changes in household type affect poverty rates. There is no way to know what the living alternatives would be for women now living alone. A simple standardization by age and living arrangement indicated that changes in the choice of household had only a small effect on poverty rates. We estimate that if household composition had remained the same within each age group, poverty rates for noninstitutionalized women would have fallen by an additional 4.2 percentage points. A constant age distribution would have resulted in an additional 0.2 percentage point decline. Clearly the major component of poverty reductions has been real income growth; 92 percent of the change in poverty rates can be attributed to that component alone.

Because the standardization procedure assumes that women at all income levels are equally likely to alter their household choice, we looked at changes in the probability of living alone among the poor and not poor. We assume no change between 1950 and 1980 in the propensity of these two income groups to head a household or live in a

relative's home and estimate a standardized poverty rate. While the rate of household headship increased more among the poor than among not-poor women, the reduction over time in the proportion of poor women and the growing propensity of not-poor women (based on their own income alone) to live alone, meant that the net change in poverty due to the propensity of the poor to live alone was small. Poverty was 2.3 percentage points higher among older noninstitutionalized women because of this shift.

We conclude that differential changes across income groups in living arrangements had no major effect on poverty rates. If one is concerned about relative income gains by elderly women, they did well over the period from 1949 to 1979 as their incomes rose faster than did incomes of all households (Ross, Danziger, and Smolensky, 1985). On the other hand, if the concern is about the adequacy of these income gains, our results suggest that even relatively large percentage gains were insufficient to reduce poverty among older women living alone to the degree experienced by other elderly groups.

Notes

1 The focus is on elderly women, rather than all older persons, since the most dramatic change in the propensity of the elderly to live alone has occurred for this group. Although the household composition of both men and women changed in important ways over this 30-year period, patterns and components of this change differed between the genders. Among men the major factor in this change has been population composition (age and marital status); but it is among younger, not older men that the propensity to live alone has risen most rapidly, such that by 1970 a higher proportion of younger than older males lived alone (Sweet and Bumpass, 1984). In contrast, among women, both the prevalence and increases in the rate of living alone was highest for women 55 and older (Kobrin, 1976). In 1980, 80 percent of all individuals 65 and older who were living alone were women (U.S.Bureau of the Census, 1984).

The contrast between elderly men and women in the incidence of living alone is related to male-female differences in mortality.

Because men tend to die younger than women and also tend to marry women somewhat younger than themselves, far more elderly men are married at each age than are elderly women, and widowerhood is a relatively rare state for men. Couples have always been expected to maintain independent households (Laslett, 1973). As a consequence, compared to women, men are less likely to face the decision of how to structure their households upon the death of a spouse. In looking at changes in the living arrangements of women, we examine that group

which has always accounted for the largest percentage of elderly living alone.

- In each census, individuals living in the same household are enumerated together and classified by relationship to household head. Whether a housing unit constitutes a separate household depends on its privacy, use, and the number of unrelated individuals in it (see Kobrin, 1976). A household has generally been defined as a separate physical unit whose inhabitants share cooking facilities and entryway. Over time, what qualifies as separate facilities has changed, though the Bureau of the Census argues that these have made only minor changes in the number of living units enumerated as separate households (U.S. Bureau of the Census, 1983).
- household but not related to the household head) have been identified with less precision. In 1950 secondary families are separately identified by their relationship to their own family head. Subsequent censuses gathered increasingly less information on the relationship between household head and members of a family other than the primary and subfamily. In 1980 the relationship among secondary family members is not specified and each is identified only by his/her relationship to the household head. Thus, consistency between these censuses requires that secondary family members in 1950 be included in category (5). Women living with a relative but who are not related to the household head or the spouse of the head will not be identified as living with a relative. Because of the small number of secondary families

in both years, the exclusion of secondary families as a specific family identifier introduces little error in aggregate trends over time (U.S. Bureau of the Census, 1984). Whether the error is important in identifying the number of women in any particular age group who live with nonrelatives is not known.

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