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DETERMINANTS OF HOUSEHOLD HEADSHIP

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## ABSTRACT

This paper examines the factors which determine whether or not married couples or unmarried adult heads have their own households. It also discusses changes in headship rates since 1940.

By 1970, only 1.6 percent of all married couples were not household heads. Many of these nonheads were poor, many were young, and a disproportionate number were nonwhite. However, a considerable fraction of the small number of married nonheads could certainly have afforded their own household had they wanted to. In 1940, 6.8 percent of married couples did not have their own homes. The increase since then has been due almost completely to rising incomes. It seems likely that in the future, increasing incomes will continue to increase married headship slightly, but that fairly soon a maximum married headship rate of about 99 percent will be reached.

Headship rates among unmarried adults are determined primarily by demographic factors. Widowed, divorced, and separated women are more likely than previously married men to be household heads, and these men are more likely to be heads than never married people of either sex. Headship rates for previously married women reach a peak during middle age, but rates for the other three unmarried groups increase monotonically with age. Once other factors are held constant, headship among the unmarried is not affected by color. Unmarried adults in the South and in rural areas are less likely to be heads than northerners and city dwellers, but the size of the city does not matter. Having children to care for increases the likelihood of headship, especially for younger women.

The probability of an unmarried person heading a household seems to increase by 2.2 percentage points for each \$1,000 increase in earnings. Unfortunately, data limitations prevented measuring of the effect of unearned

income. The rise in headship rates among the unmarried has also been the result of increased income. Increased labor force participation among unmarried women and increases in coverage and levels of pension and welfare incomes have been especially important. Rising incomes and changing tastes should continue to increase headship among the unmarried for some time to come.

## DETERMINANTS OF HOUSEHOLD HEADSHIP

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### I. Introduction

During the last thirty years, the percentage of married couples with their own households has fallen from under 94 percent to over 98 percent. The rate of household headship has also risen among the unmarried, though not to such high levels. This paper tries to answer several questions about headship at present and about changes since 1940. How important is low income in keeping married couples from being household heads? How much does income effect headship among the unmarried? What effect do demographic factors such as age, race, location, sex and marital status have on unmarried headship rates?<sup>1</sup> Have increased incomes along been responsible for the increased headship of the last thirty years, or have demographic shifts also contributed to the rise?

Among the previous works on household headship are those by Glick (1966), Jacobson (1959), Bogue (1959), Glick, Hur, and Beresford, and Beresford and Rivlin (1966). These authors have not had information on income, or at least have not presented tables on it along with classification by region, race, marital status, or age. Furthermore, these studies have usually been more concerned with family composition in general, rather than headship of unmarried adults in particular. Beresford and Rivlin did analyze headship rates among unmarried adults. Although they found a strong cross section relation between income and headship, they were hesitant to conclude that rising incomes resulted in rising headship rates between 1940 and 1960.

The next section briefly explains the technique and the data used in this analysis. The third section discusses the characteristics of those 1.4 percent of married couples who did not have their own households in 1970.<sup>2</sup> The rest of the paper will analyze the factors affecting headship among unmarried adults. The effects of marital status and sex, age, color, motherhood, location, and income are discussed in separate sections. Changes in headship rates between 1940 and 1970 are discussed in the following section, and a summary concludes the paper.

## II. Estimation Technique and Data

To estimate the effects of age, marital status, sex, color, motherhood, location, and income on the probability of headship of unmarried adults, I ran a regression with a dummy dependent variable, and except for income, dummy independent variables. A person either is the head of a household or is not; is either white or nonwhite; never married or previously married. Thus the variable is either one if the person has that characteristic, or zero if he or she does not. Using this functional form, an ordinary least squares regression was run.<sup>3</sup>

The coefficients from this regression allow us to see, for instance, the effect of marital status on headship after other differences between marital groups are taken into account. Previously married women (PMW; women widowed, divorced, or married, spouse absent) are usually older than never married women (NMW). Older people are more likely to be household heads than younger ones. To isolate the effect of marital status from the effects of age, and the other determinants of headship, it is often necessary to examine the coefficients and "adjusted" headship rates derived from them. In the discussion below, unadjusted headship rates are the actual percentages of each category

that are household heads. The adjusted rates follow a method set forth in Bowen and Finegan (1969). They are the rates that each marital category, for instance, would have had if it had the average distribution of the entire sample with respect to age, color, motherhood, location, and income.

The data used in this study come from Census Bureau sources. The regression of unmarried adults relies on the Survey of Economic Opportunity (SEO). This survey was conducted in 1967 among 30,000 households selected at random throughout the country, but with greater frequency from poor areas.<sup>4</sup> The SEO contains extensive information on income, age, race, marital history, location, and family structure. Other information comes from the decennial Censuses since 1940, and from Current Population Reports, Series P-20 and P-60.

### III. Married Couples

Most adults are married and almost all married couples are the heads and wives of heads of their own households. Over 71 percent of men and women 20 years old and over were married, spouse present, in March 1970. Of these, 98.6 percent had their own households. By contrast, in 1940, 93.2 percent of married couples had their own households.<sup>5</sup> Even for the youngest couples in 1970, headship was higher than for any unmarried group. The headship rate for married couples, spouse present, head under the age of 25, was 92.5 percent, whereas the rate for widows between 35 and 54 was 87 percent in 1970. For all widows the headship rate drops to 75 percent.

Table 1 shows headship rates and percent of all households by marital status and sex:

TABLE 1  
 UNADJUSTED HEADSHIP RATES BY MARITAL STATUS  
 (Americans 14 years and over.)

Marital Status	Headship rates	Percent of All Households
Married, spouse present	98.6%	72%
Men		
Widowed	65.6	2
Divorced	58.9	1
Married, spouse absent	42.0	1
Never married	10.8	3
(25+)	41.0	
Women		
Widowed	75.0	12
Divorced	76.3	3
Married, spouse absent	65.8	3
Never married	12.8	3.5
(25+)	48.3	

Source: C.P.R., Series P-20, No. 212, Table 6.

We should expect that most nonheadship among married couples can be explained by ill health, recent marriage, migration, or extremely low income. Older couples may no longer be able to care for themselves in their own homes and may choose to move in with their adult children. Recently married young couples may not have had the time to find an apartment for themselves or the money to set up independent housekeeping. And recent migrants from one area to another may live with friends or relatives while they find jobs and housing. Finally, some married couples may not have enough money to afford the privacy of their own home, either because of low wages, unemployment, or incapacity to work.

Indeed, headship rates among the very young, the old, the migrants, and the poor are lower than for other married couples. Couples with the husband under 25 years old were not heads 7.4 percent of the time. The percentage of nonheads among young black couples was 13 percent. By contrast; only 0.6 percent of white couples between 45 and 64 years old were not heads. Thus, youth does account for much of the lack of headship among married couples. Couples under 25 constituted 38 percent of all married couples without households.

Old age, at first glance, does not seem to result in decreased headship. The 1.2 percent of couples 65 years old and over without their own households was only slightly above the prime age rate. However, as couples grow too old and infirm to maintain separate households, they often enter nursing homes or other institutions rather than the households of their children. Even if they both enter the same home, they are listed in government statistics as married, spouse absent, rather than spouse present, and therefore are not counted as married nonheads. People who are married, spouse absent, living in

institutions, rise from 0.3 percent of all married people 45 to 54, to 3.8 percent for married people 75 and over. Thus youth and old age do account for a large percentage of married couples without households.

Migration, on the other hand, accounts for only a small number of married couples without households. Headship rates for couples under 25 are actually higher for those who moved from one state to another than for nonmigrating couples. And such a small percentage of older families migrated, that even slightly lower headship rates only produced 33,000 nonheads.<sup>6</sup>

It is true that married couples without households have lower incomes than do other households. But most nonheads are certainly rich enough to afford their own homes. Eleven percent of married white subfamilies and 16 percent of married black subfamilies had incomes in 1970 under \$1500.<sup>7</sup> However, median incomes for the two groups were \$5700 and \$4800 respectively. And an incredible 19 percent of white nonheads and 22 percent of black nonheads had incomes over \$10,000.

Perhaps the only thing that can be said about this is that there is simply no accounting for tastes: a small percentage of the married population actually seems to like their relatives well enough to live with them. Although a large fraction of the 647,000 married couples who lived in the households of others were young, recently married or moved, or poor, most were not. Perhaps even more surprising, 45 percent of married subfamilies included children. Not only are married couples willing to live with their relatives, but the relatives are willing to live with the couple's children!

#### IV. Marital Status and Sex

Once adults move away from their parents' homes to set up their own households, they are likely not to return even though their family situation may change. Having once made the break, having once acquired the tastes

and possessions that come from having one's own household, many people are more reluctant to live in someone else's home than they would have been if they had never been heads. For most people, this break comes earliest and easiest with marriage. Only 6 percent of never married people between 18 and 24 have their own households, but 93 percent of married couples between those ages do.<sup>8</sup> And once people have married, they are more likely to continue heading households when their marriages end than never married people are to do so without the stimulus of marriage. Headship rates should therefore be significantly higher for previously married than for never married people.

Other things equal, we should expect higher headship rates for women than for men. Moreover, the difference between previously married men and women should be much larger than the difference between the never married. Sex roles with respect to the housework are not clearly defined until marriage. Women who have never had to keep house for husband and children will be no more likely than men to prefer doing so to working.

Furthermore, this greater knowledge of housekeeping may be outweighed by the greater difficulty that single women may have in leaving home. Parents may feel more concerned about the safety and morals of their daughters than of their sons, at least for younger never married people, may discourage headship among never married women more than among never married men. This factor is not likely to be important among the previously married or among older never married men and women.

Marital status and age are highly correlated, as are age and headship. So are sex and income, and income and headship. The unadjusted headship rate for previously married people 25 and over was 70 percent in 1970, and 39 percent for never married people 25 and over. However, the latter were much

younger than the former. Obviously age differences between marital groups and sexes must be held constant to see the effect of marital status alone. Differences in income, location, color, and the existence of children must also be accounted for.

To estimate the effect of marital status and sex alone, I ran a headship regression for all unmarried people 18 and over, and calculated adjusted headship rates for the four sex/marital groups. Equation (1) presents the regression results:

$$\begin{aligned}
 (1) \text{ Headship} = & .645 - .387 (18-21) - .082 (PMM) - .032 \text{ Rural} \\
 & - .297 (22-24) - .253 (NMM) - .032 \text{ South} \\
 & - .164 (25-34) \quad R (PMW) + .001 \text{ Nonwhite} \\
 & \quad R (35-44) - .230 (NMW) + .022 \text{ Earnings} \\
 & + .087 (45-54) \quad \quad \quad + .219 \text{ Kids} \\
 & + .117 (55-64) \\
 & + .097 (65+) .
 \end{aligned}$$

These coefficients represent the difference in headship rates between the dummy group and the omitted group. Headship rates are 100 times the coefficients. For instance, rural headship is 3.2 percentage points lower than nonrural headship. Headship among previously married men (PMM) is 8.2 percentage points below headship of previously married women (PMW). Other variables will be explained in their own sections below. Tables of "t" statistics are presented in the Appendix.

Adjusted headship rates by marital status and sex were calculated from these coefficients. The results presented in Table 2 confirm the hypotheses. Headship rates for previously married people are substantially higher than never married headship rates even after taking into account differences in age, income, color, location, and motherhood. The differences by marital

status are significant at the 1 percent level for both sexes. For women, the difference between marital groups is 23 percentage points, for men 17 points.

TABLE 2

## ADJUSTED HEADSHIP RATES BY MARITAL STATUS AND SEX

	Men	Women
Never married	38.1 percent	40.5 percent
Previously married	55.2 percent	63.4 percent

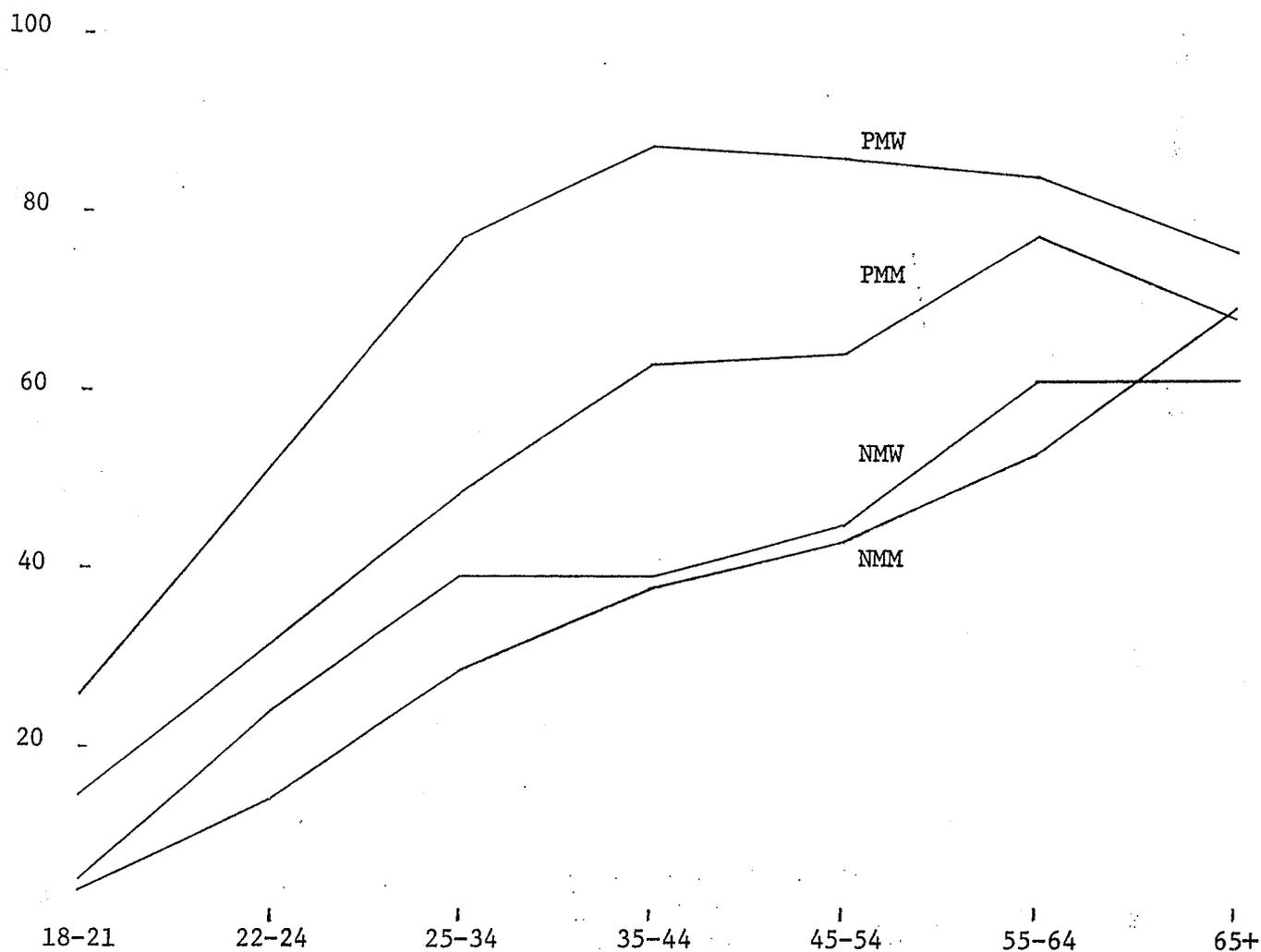
Note: These rates have been adjusted for differences among sex-marital groups in age, color, location, motherhood, and income.

Although both previously married and never married women had their own households more often than men of similar marital status, only the difference between the previously married was statistically significant. This would seem to indicate that the sex differences in the taste for privacy and housework that go along with being a head are quite small, or perhaps offset by parental pressures. Only the differences that may arise after marriage when the man works outside the home while the woman does the housework are significant.

#### V. Age

Unadjusted headship rates for unmarried people taken as a group increase dramatically until middle age, then level off, and finally decline slightly for the oldest age groups. One important reason for this is the shift in marital status. Unmarried people between 18 and 35 are more often never married than previously married. And never married people, especially young ones, have very low headship rates. Therefore, as age increases and a greater percentage of the unmarried population becomes previously married, headship rates rise dramatically. Figure 1 presents unadjusted headship rates by age, sex, and marital status.

Figure 1.  
Unadjusted Headship Rates by Age, Sex, and Marital Status



These rates indicate similar rapid increases in headship for each group of younger people, but different patterns emerging after age 35. It is not surprising that both men and women, whether previously married or single, should find living with their parents less attractive as they grow older. As never married people finish school, start stable jobs with steady income, and become full adults, they start to leave home whether or not they marry.

Similarly for the previously married, living with parents becomes less attractive the farther a person gets from adolescence. The longer an adult is married, the more deeply his habits are formed, and the more difficult it becomes to surrender privacy when the marriage ends. A 25 year old divorcée will find it easier to move back into her parents' home than will a 40 year old divorcée. In addition, the parents of 25 year olds are more likely to be alive and maintaining their own households. Furthermore, the older a previously married woman is, up to middle age, the more likely she is to have dependent children. Sixty three percent of such women between 18 and 21 years old had children, compared with 88 percent of women between 25 and 34.<sup>9</sup> And having children to care for greatly increases the likelihood that an unmarried woman will head her own household.

After age 44, the unadjusted headship rate for previously married women gradually begins to decline. As these women grow older, as their children leave to marry and set up households of their own, they become more likely to give up their homes to live with others. They may not wish to live alone, or they may become too infirm to do so. Since they have only a small chance of remarrying, if they do not wish to live alone, they usually must live in the households of relatives. Therefore the headship rates of older previously married women decline.

On the other hand, headship rates continue to rise with age for never married men and women. They too may prefer not to live alone as they grow old, but since they have no children, as their parents die they have no close relatives to live with. Nor after middle age do they find it easy to marry, even though for the men at least there are many willing brides.<sup>10</sup> Among unmarried people over 45 in 1970, there were 2.2 women for every man. Therefore, not having the choices of previously married people who have

adult children, the never married live alone more often as they grow old rather than less.

Previously married men have a choice not available to the other groups, a choice which probably accounts for the rise in unadjusted headship rates until age 65. They can remarry. For younger people, rates of remarriage are about even for men and for women. However, for people whose marriages ended when they were 45 years old or over, almost 60 percent of the men had remarried within five years, compared to only 11 percent of the women.<sup>11</sup>

This means two things for headship. First, those men who dislike living alone need not give up their headship by moving in with their children. They can move in with a wife. The men who do not remarry, therefore, will probably not mind living alone as much as the women who do not remarry, and therefore will be more likely to continue as heads. Second, it means that, on average, older previously married men will have been widowed or divorced for fewer years than older previously married women. Because they remarry faster, fewer will be left unmarried many years after their first marriage ended. And the longer the time since the end of the marriage, the less likely the person is to be a head. An older widowed or divorced person may maintain his or her household for a few years, but once he moves in with his children, he is unlikely ever to move to his own household again.

Thus, because they have more choice about remarriage, and because they usually will have been unmarried for less time, headship rates rise for previously married men beyond the age that they rise for previously married women. And because never married men and women do not have the choice of living with their married children, their headship rates also rise between middle age and old age. This does not argue that older previously married women have lower headship rates than the other groups, merely that their rates decline relatively with age.

VI. Color

In recent years there has been much discussion of the high percentage of black families headed by women. In 1970, 28 percent of black families had women for heads, compared with 9 percent of white families.<sup>12</sup> Within the context of my analysis, most of this difference can be explained by differences in marital status between the two races. When differences in income, age, sex, marital status, and motherhood are taken into account, most of the reasons for differences in headship rates between blacks and whites disappear.

Table 3 shows unadjusted headship rates by marital status and sex for blacks and whites. Both types of white men are heads more often than black men primarily because they have higher incomes. On the other hand, never married black women are heads more often than never married white women because they are much more likely to have children to care for, either their own or others.<sup>13</sup> Among previously married women, both blacks and whites usually have children. The greater income from earnings, property, pensions, and alimony of the whites is probably offset by the greater frequency with which black women seek welfare.<sup>14</sup>

TABLE 3

## UNADJUSTED HEADSHIP RATES BY MARITAL STATUS, SEX, AND RACE, 1970

	Men		Women	
	Never Married (25+)	Previously married (14+)	N.M.	P.M.
White	36 percent	58 percent	44 percent	73 percent
Black	26 percent	52 percent	51 percent	74 percent

Even after taking account of differences in income, marital status, and the existence of children, one might expect blacks to be heads less often than whites. If housing discrimination makes the price of a dwelling of given size and quality higher for blacks than for whites, blacks may consume not only units that are smaller and of lower quality, but also fewer units altogether.<sup>15</sup> Consuming fewer units will result in fewer households for the same number of adults, and will therefore mean lower headship rates. To test the hypothesis that blacks have lower headship rates than whites, holding income, age, marital status, location, and motherhood constant, a dummy variable for nonwhites was included in the headship regression. The coefficient for this dummy was insignificant in equation (1) and very close to zero.

#### VII. Existence of Children

Having children to care for increases the likelihood that an unmarried person will head a household. A young divorcée is much less likely to return to her parents' home when her marriage ends if she has children. And an older widow will almost always remain the head of her household while her children are unmarried and living with her. After they marry, as she grows older she may go to live with them, but usually in that case it is the children's household, not the mother's.

Having the children of others to care for is more the result of headship than the cause of it. A woman may send her child to live with the child's grandmother because the grandmother has more time, a larger house, and perhaps a healthier community. The grandmother does not maintain a separate household because of her grandchild. Responsibility for the child must be independent of having a household if the child's existence can be said to influence the likelihood of headship. The grandmother is responsible for the child because she heads a household not vice versa.

This responsibility does not fall equally on both parents. Over 90 percent of the children under 18 years old who lived with only one parent in 1970 lived with their mother. The best measure of having primary responsibility for a child is being the mother of someone below a certain age. Above that age, children become more likely to live in households of their own. Therefore, to measure the effect of having children, a dummy variable for mothers of children under 21 was included. The coefficient on Kids in equation (1) was .219, indicating a headship rate for mothers 21.9 percentage points above the rate for nonmothers, including men. In regressions for never married women and previously married women alone (not shown), the differences between mothers and nonmothers were 25 points and 9.3 points respectively.

#### VIII. Location

My initial hypothesis about the effect of differences in location on the headship rates of unmarried people was that it would be similar to racial differences. The effects of price and family patterns tend to offset each other. On the one hand, the relative price of housing is lower in smaller communities than in large cities. If the demand for privacy is price elastic, then this might result in higher headship rates the smaller the community. On the other hand, small towns, rural areas, and perhaps the South in general might have different customs from Northern cities, customs which discourage unmarried people from living in separate households. Thus the effect of size and region on headship could be either negative or positive.

To test these hypotheses, a dummy variable for people living in the South, and dummies for four size categories were included in the headship regressions. These were rural areas, nonmetropolitan urban areas, smaller SMSA's, and SMSA's with over 750,000 people. The results indicate that the relative price of housing has little effect on the headship rate. The coefficients for the

three urban categories were small and insignificant. However, coefficients for both South and rural were negative and significant. Evidently southern and rural families are more hospitable to their unmarried kin. Or perhaps rural and Southern unmarried people have more kin with whom they can live. In any event, only these two location variables were included in the final headship regressions. The adjusted headship rates for both rural people and for Southerners were 3.2 percentage points below the nonrural and nonSouthern rates. Both differences were significant at the 1 percent level.

#### IX. Income

As income rises, the likelihood of headship for unmarried people should increase. A young man with no job has little choice but to live with his parents. With a low paying job, he can rent an apartment, but he might prefer to own a fancy car. If his income were still higher, he would be able to afford both car and apartment. Similarly for people at the other end of the life cycle, income keeps the choice of headship available. A well off widow may prefer living with her grown children to the loneliness of her own home, but a poor widow has little choice but to give up her privacy.

The effect of income on the likelihood of headship has important policy implications. What increases in headship rates can be expected among different groups of unmarried adults if the incomes of these groups rise? Answering this question with SEO data involved several difficulties. First was the definition of income. Ideally, revenue from all sources not dependent on the headship of the person should be included. Earnings, and property and pension income generally meet this criterion. However, welfare does not. An elderly widow who lives with her prosperous children will not be able to get welfare, but if she decides to live alone, she may. Receiving welfare is

more dependent on being a household head than being a head is on receiving welfare. Looking only at the second relation will lead to overestimating the effect of this type of income on headship.

To see this, suppose we had a group of women with no income other than welfare. Those who disliked living alone would live with their children, and those who wanted privacy would receive welfare. The correlation between headship and receipt of welfare would be one. If we assumed that welfare determined headship, then we would infer from this result that increases in the number of people receiving welfare would increase headship. Yet if money were also given to the women who lived with their children, headship would not increase. This circular relationship between headship and welfare is also a problem for groups in which not all heads receive welfare and not all welfare recipients are heads. As long as headship is more important in determining welfare than welfare is in determining headship, it is probably better to exclude this source of money from income entirely.

Using SEO data to measure the effect of income on headship presents another problem. The Survey specifies how much each person earned, but it only gives pension and property income for the entire household. There is no way of telling if the pension income of the household belongs to an elderly widowed grandfather or his college age grandson, or whether the property income is at the disposal of the grandmother, her married middle aged son, or his young working daughter. In fact, unmarried pensioners often live with married or unmarried brothers and sisters who also have pensions. Thus regressions including unearned income gave spurious results.<sup>16</sup>

This serious shortcoming notwithstanding, the results of measuring the effect of earnings alone on headship were encouraging. In every regression, the earnings coefficient was positive and highly significant. For the entire

sample of unmarried people, each \$1000 of earnings increased the probability of headship by 2.2 percentage points.<sup>17</sup> This elasticity of demand for privacy indicates substantial differences in headship rates between rich and poor people. For instance, people with incomes of \$11,000 will have headship rates 21 points higher than people with only \$1000 of income. However, most unmarried people in the SEO sample had very low incomes. The average was \$1786, for women only \$1360. Government transfer programs, whether pensions or negative income taxes, are unlikely to increase the incomes of these poor people by more than \$1000 or \$2000 per year. The resulting increase in headship is thus unlikely to exceed five percentage points.

To see if the effect of earnings on headship varied for different types of unmarried people, separate regressions for the four marital-sex categories were also run. The coefficients for the nonearning variables from these regressions were substantially the same as the coefficients for the total sample, presented in equation (1). They are presented in the Appendix. However, the earnings coefficients, presented in Table 4 with their standard errors in parentheses, showed considerable variation.

TABLE 4

INCREASE IN PROBABILITY OF HEADSHIP PER \$1,000 EARNINGS,  
BY MARITAL STATUS, AND SEX

	Men	Women
Never Married	2.39 (0.22)	3.18 (0.31)
Previously Married	2.81 (0.30)	1.65 (0.30)

The effect of a \$1,000 increase in earnings was almost twice as large for never married women as for previously married women, 3.18 percentage

points versus 1.65 points. The difference between never married and previously married men was much smaller. The effect of earnings does not seem to differ by age. The earnings coefficient from headship regressions of all unmarried people under 35 and all such people 35 and over were 2.09 and 2.25 respectively.

Once again I would like to stress that these results may seriously underestimate the effect of income on headship. Many unmarried people have no earnings, but do have pension or property income. Excluding these types of income from the regressions almost certainly biased my results downwards. In addition, the earnings data were for one year only. Measured income elasticities are considerably lower than permanent income elasticities for other goods. There is every reason to expect that this is the case with headship as well. However, the results that I was able to obtain do indicate that headship will be only slightly increased by transfer programs at levels usually discussed. Larger increases in income, by increasing employment among the unmarried poor, would produce correspondingly larger increases in headship.

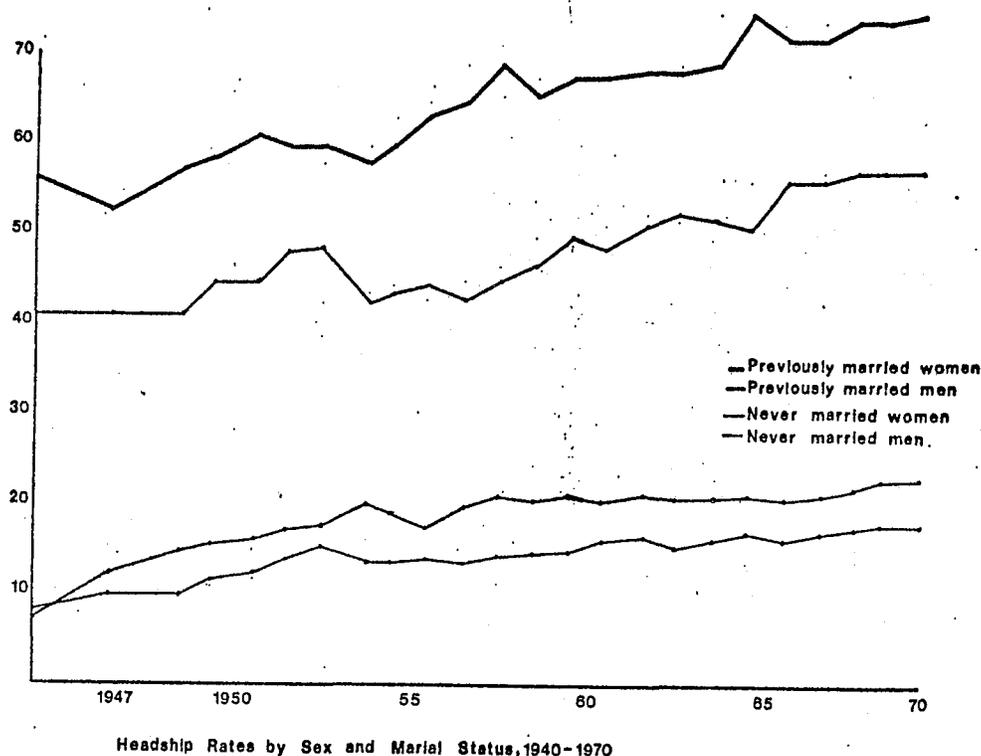
X. Changes in Headship Rates, 1940-1970

Since 1940 headship rates among married and unmarried adults have increased considerably. Income has probably been the most important factor for both groups. Demographic factors, including color, urban-rural location, and region, have generally not been important, though a decline in average age has depressed headship among the never married. For married couples, headship rates cannot climb much further. For the unmarried, especially for the never married who presently have low rates, increases in income and changes in taste can be expected to produce continued, and perhaps more rapid, rises in the future.

The percentage of married couples without their own households in 1940 was 6.8 percent.<sup>18</sup> By 1947, as a result of the dislocations of the war, this percentage had climbed to 8.7 percent. However, as the housing shortage eased, this fell to 5.6 percent in 1950 and 3.5 percent by 1955. Since then the general rise in income has resulted in a low but steady fall in the percentage, to 1.4 percent in 1970. Changes in the composition of the married population by age, location, and race have had either minimal or negative effects on headship rates. Increasing income has been responsible for increasing headship during the past thirty years, and should result in small further increases in the future. However, the rate is already so high that it cannot rise much more. As Section III pointed out, there are already significant numbers of married couples without households who could well afford privacy if they desired it. Thus in the near future the percentage of such married couples may become stable at perhaps 0.5 percent or 1 percent of all married couples.

Figure 2 presents headship rates for four groups of unmarried adults for 1940 and 1947 to 1970.<sup>19</sup> Year to year changes have been somewhat erratic, the result of temporary wartime housing shortages, unusually high or low marriage rates, or fluctuations in income and employment. However, the overall trend has been distinctly upward for all four sex and marital groups.

Figure 2.



This increase in headship rates has definitely not been the result of changes in the demographic composition of the unmarried population. Changes in age distribution have been toward those age groups with the lowest headship rates. The postwar baby boom together with the rise in the marriage rate of middle aged people has produced a substantial decline in the ages of the never married. Among women, this has been somewhat offset by longer life expectancy and higher percentages among the oldest group. If 1970 age specific headship rates had existed in 1940, and if nothing had changed in those thirty years by the age distribution, this decline would have produced a fall in headship rates of 6.8 percentage points for never married women and 12.9 percentage points for never married men.

The effects of changes in age have been much smaller for the previously married. As life expectancy has increased, the percentage of previously

married men in the oldest age groups has gone up. However, divorce rates have also increased, so that the percentage in young age groups has also increased. Since rates for these men increase with age, these two trends have almost balanced each other, with the net result that age changes have produced an increase of half a percentage point in headship rates among previously married men since 1940. The same trends have changed the age distribution of previously married women. However, their headship rates peak in middle years, and the result has been a decline in their rates due to age of 2.7 percentage points.

Since 1940 there has been a slight increase in the percentage of nonwhites among the unmarried. However, because of the small effect of color on headship this change did not change headship rates. The decline in the rural population produced an increase of one percentage point in headship rates of never married people, but no increase in rates of the previously married. Finally, shifts between regions since 1940 have also been too small to account for any of the increase in headship rates. The increase in the headship rates of the unmarried must come from increases in their incomes or from changes in their tastes.

The median income of unmarried people has probably increased by about \$1500 since 1940.<sup>20</sup> The cross section results of Section IX imply that this would increase headship by about three percentage points. However, several factors indicate that the rise in income has been greatest for those at the very bottom of the income distribution--those with no income at all. First, labor force participation has increased among previously married women. In 1940, 34 percent of them were in the labor force, but by 1970 the proportion had risen to 40 percent.<sup>21</sup>

Labor force participation rates for other groups of unmarried people have not increased in the last thirty years. However, the dramatic rise in the number of people receiving pensions and the amounts they receive has undoubtedly sharply increased the incomes of all older people, again especially those who in 1940 would have had no income. Many widows who in 1940 had no choice but to live with relatives can now afford their own households, thanks to Social Security or a private pension.<sup>22</sup>

Finally, for younger unmarried women, increased welfare coverage and payments have greatly increased income. The number of families receiving benefits under AFDC increased from 372,000 in 1940 to 1.9 million in 1969, while the average payment per family increased from \$854 to \$1725.<sup>23</sup> Almost all of these families were headed by unmarried women. Thus increases in labor force participation among middle aged previously married women, in pensions among all older people, and in welfare for younger mothers, have benefited those unmarried adults with the lowest incomes. The percentage of unmarried people with no income at all has probably decreased more than the simple rise in per capita income might indicate. Therefore the simple estimate of a three percentage point rise in headship rates due to increased income is certainly far too low. Unfortunately, it is not possible to say by how much.

The relative price of housing, on the other hand, did not change enough between 1940 and 1970 to affect headship rates one way or the other. Between 1940 and 1947, the ratio of the Consumer Price Index for housing to the CPI for all items fell from 1.25 to 0.97, because of rent controls.<sup>24</sup> However, the extremely tight housing market of the latter year resulted in dramatically lower headship rates. Since 1947, the housing/total ratio has remained remarkably constant, and in 1970 it was 1.02. Thus, except for the unusual situation during and just after World War II, the relative price of housing has been too stable to affect headship rates.

## XI. Summary

The main conclusions of this paper are that marital status, age, and sex are far and away the most important determinants of headship. In America in 1970, almost all married couples have their own households. Widowed, divorced, and separated women are more likely than previously married men to be household heads, and these men are more likely to be heads than never married people of either sex. Headship rates for previously married women reach a peak during middle age, but rates for the other three unmarried groups increase monotonically with age. Having children to care for also increases the likelihood of headship, especially for younger women.

Perhaps the most surprising result of the analysis is that once other factors are taken into consideration, color does not matter. Adjusted headship rates for unmarried whites and nonwhites were in general not significantly different. Differences in headship rates that do exist are primarily the result of differences in marital status and income. Likewise, difference in city size does not affect headship rates, though unmarried rural people and southerners are less likely to head their own households than others. Finally, although income is important, its effect on headship is not so great that proposed government transfer programs will be likely to change headship rates substantially.

My analysis of changes in headship over the last thirty years is too uncertain for me to make predictions of the future with any confidence. Changes in age have had depressing effect on the headship rates of the never married, but rising incomes have tended to increase the rates of all unmarried adults. However, how much of the increase should be attributed to income and how much to changes in tastes is not clear. It does seem likely that increases in income and changes in tastes will have even greater effects on headship in the future, though I hesitate to make firm predictions.

In this study of the determinants of headship, I have assumed that increases in income among the unmarried have been responsible for changes in headship. However, increases in headship over time have in turn caused increased incomes. Elderly widows and young divorcées with children formerly lived with relatives when they were too poor to maintain separate households. With the change in society's attitudes toward privacy, these women are now likely to demand pensions or welfare support high enough to live alone, if they are unable to work. Surely a considerable percentage of the increase in welfare recipients during recent years occurred because young mothers with children no longer return to their parents' home if their husband leaves them.

The other side of this development is that the households in which unmarried adults formerly lived no longer have access to their labor. When the grandmother lived with the family, she could care for the children while the wife worked. Now, if the wife wants to work, she must buy day care outside the home. The disappearance from the home of the grandmother and the maiden aunt have similarly contributed to the increased demand for home appliances and convenience foods. Other factors have perhaps been more important, but increased headship of the unmarried has also had this result.

The increase in unmarried headship, again along with other factors, has also resulted in demand for new types of housing. The development of retirement communities for the old and "single only" apartments for the young depend primarily on adequate incomes. But the increased tendency of both young and old unmarried people to live apart from their families has surely been important.

The policy implications of this analysis of the determinants of headship are not clear. There seems to be broad agreement that the society in general and perhaps the government in particular has an interest in husbands and wives, or at least, fathers and mothers, continuing to live with their minor children. However, it is not obvious that society has any interest in adult unmarried children living with their parents, or in widowed parents living with their children. Perhaps government policy in this area should simply try to be as neutral as possible. Just as badly designed welfare programs can encourage husbands and wives to live apart, such programs can also affect the living patterns of other relatives. Suggesting appropriate designs for neutral transfer programs, is, however, beyond the scope of this study.

## APPENDIX

The tables below indicate the level at which the coefficients in equation (1) are significantly different from the other variables in their group. For instance, the age table shows that the coefficient for 18 to 21 year olds was significantly different from the coefficient for 22 to 24 year olds, at the 1 percent level.

Age	21-24	25-34	35-44	45-54	55-65	65+
18-21	*	*	*	*	*	*
21-24		*	*	*	*	*
25-34			*	*	*	*
35-44				*	*	*
45-54					X	X
55-64						X

Marital Status	NMM	PMW	NMW
PMM	*	*	*
NMM		*	X
PMW			*

Rural	*
South	*
Non-White	X
Earnings	*
Kids	*

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10 percent level

X = not statistically significant

PMM = previously married men

NMM = never married men

PMW = previously married women

NMW = never married women

TABLE A.1  
PREVIOUSLY MARRIED MEN

Dependent Variable	Sets of independent variables					
	Constant	Age	Rural	South	Non-White	Earnings
Headship	.484	-.399 (18-21) -.250 (22-24) -.162 (25-34) R (35-44) .064 (45-54) .187 (55-64) .223 (65+ )	.055	-.046	-.003	.281
Age	22-24	25-34	35-44	45-54	55-64	65+
18-21	X	**	*	*	*	*
22-24		X	*	*	*	*
25-34			*	*	*	*
35-44				**	*	*
45-54					*	*
55-64						X
Rural	**					
South	**					
Non-White	X					
Earnings	*					

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10-percent level

X = not statistically significant

TABLE A.2

## NEVER MARRIED MEN

Dependent Variable	Sets of independent variables						
	Constant	Age		Rural	South	Non-White	Earnings
Headship	.345	-.330 (18-21)		-.043	.013	-.017	.239
		-.272 (22-24)					
		-.164 (25-34)					
		R (35-44)					
		.068 (45-54)					
		.264 (55-64)					
		.269 (65+ )					
Age	22-24	25-34	35-44	45-54	55-64	65+	
18-21	**	*	*	*	*	*	
22-24		*	*	*	*	*	
25-34			*	*	*	*	
35-44				**	*	*	
45-54					*	*	
55-64						X	
Rural	*						
South	X						
Non-White	X						
Earnings	*						

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10 percent level

X = not statistically significant

TABLE A.3

PREVIOUSLY MARRIED WOMEN

Dependent Variable	Sets of independent variables							
	Constant	Age		Rural	South	Non-White	Earnings	Kids
Headship	.788	-.573 (18-21)	-.378 (22-24)	-.021	-.025	-.019	.165	.093
		-.114 (25-34)	R (35-44)					
		.031 (45-54)						
		.024 (55-64)						
		-.086 (65+ )						
Age	22-24	25-34	35-44	45-54	55-64	65+		
18-21	*	*	*	*	*	*		
22-24		*	*	*	*	*		
25-34			*	*	*	X		
35-44				X	X	*		
45-54					***	*		
55-64						**		
Rural	X							
South	**							
Non-White	***							
Earnings	*							
Kids	*							

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10 percent level

X = not statistically significant

TABLE A.4

## NEVER MARRIED WOMEN

Dependent Variable	Sets of independent variables							
	Headship	Constant	Age	Rural	South	Non-White	Earnings	Kids
	.307		-.291 (18-21)	-.078	-.050	.047	.318	.247
			-.188 (22-24)					
			-.105 (25-34)					
			R (35-44)					
			.119 (45-54)					
			.138 (55-64)					
			.318 (65+ )					
Age	22-24	25-34	35-44	45-54	55-64	65+		
18-21	*	*	*	*	*	*		
22-24		**	*	*	*	*		
25-34			*	*	*	*		
35-44				*	*	*		
45-54					X	*		
55-64						*		
Rural	*							
South	*							
Non-White	*							
Earnings	*							
Kids	*							

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10 percent level

X = not statistically significant

TABLE A.5

## HEADSHIP OF ALL YOUNG PEOPLE

Dependent Variable	Sets of independent variables							
	Constant	Age	Marital Status	Rural	South	Non-white	Earnings	Kids
Headship	.469	-.221 (18-21) -.135 (22-24) R (25-34)	-.102 (PMM) -.234 (NMM) R (PMW) -.207 (NMW)	-.069	-.034	-.001	.209	.258
Age		22-24	25-34					
18-21		*	*					
22-24			*					
Marital Status		NMM	PMW	NMW				
PMM		*	*	*				
NMM			*	X				
PMW				*				
Rural		*						
South		*						
Non-White		X						
Earnings		*						
Kids		*						

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10 percent level

X = not statistically significant

PMM = previously married men

NMM = never married men

PMW = previously married women

NMW = never married women

TABLE A-6

## HEADSHIP OF ALL OLD PEOPLE

Dependent variable	Sets of independent variables									
	Constant	Age			Marital Status		Rural	South	Non-White	Earnings
Headship	.657	R	(35-44)	-.082	(PMM)	-.004	.030	-.001	.225	.165
		.075	(45-54)	-.025	(NMM)					
		.101	(55-64)	R	(PMW)					
		.080	(65+ )	-.249	(NMW)					
Age	45-54	55-64	65+							
35-44	*	*	*							
45-54		X	X							
55-64			X							
Marital Status		NMM	PMW	NMW						
PMM		*	*	*						
NMM			*	X						
PMW				*						
Rural	X									
South	*									
Non-White	X									
Earnings	*									
Kids	*									

R = reference group

\* = statistically significant at the 1 percent level

\*\* = statistically significant at the 5 percent level

\*\*\* = statistically significant at the 10 percent level

X = not statistically significant

PMM = previously married men

NMM = never married men

PMW = previously married women

NMW = never married women

## FOOTNOTES

<sup>1</sup>A headship rate is the percentage of people within a specified group who are heads or wives of heads of households. It can also be considered the probability that an individual with given characteristics will have his own household. A household consists of all persons living in a dwelling unit. The head is usually the chief breadwinner or her husband, though the response of the household member being interviewed to the question, "Who is the head of this household?", is usually respected.

<sup>2</sup>Current Population Reports (CPR), Series P-20, No. 212, Table 6. Unless otherwise stated, all figures in this paper come from this publication.

<sup>3</sup>Using ordinary least squares to estimate equations with dummy dependent variables is not the theoretically optimal estimation technique, since the error terms are not homoscedastic. However, the estimated coefficients are unbiased, and the fact that they are not minimum variance makes little difference with samples as large as the ones used here. The estimated standard errors are biased. But Ashenfelter, in Bowen and Finegan ( ), compared standard errors estimated by a two step generalized least squares method suggested by Goldberger ( ) with those estimated by ordinary least squares. The two estimates were extremely close.

<sup>4</sup>For a full discussion of the sampling technique used in the SEO, see Census Bureau Technical Paper No. 7, "The Current Population Survey--A Report on Methodology," and "Survey of Economic Opportunity: Sample Design and Weighting."

<sup>5</sup>CPR, Series P-20, No. 218, Table 20.

<sup>6</sup>Data on migration are from CPR, Series P-20, No. 210, Tables 5-7. Nonmigrants include families that did not move at all between April 1969 and March 1970, and those who moved within a state.

<sup>7</sup>CPR, Series P-60, No. 80, Table 23. Subfamilies live with relatives, secondary families live with nonrelatives. Of the 646,000 married nonheads, 618,000, or 95.7 percent, were living with relatives, and 28,000, or 4.3 percent, were not.

<sup>8</sup>CPR, Series P-20, No. 212, Tables 1 and 8.

<sup>9</sup>From the SEO sample.

<sup>10</sup>The chances that a never married man between 35 and 49 would marry during any one year between 1960 and 1966 was 4.0 percent, for never married men between 50 and 69, only 1.1 percent. For never married women in the same age categories, the probabilities of marriage were 2.6 percent and 0.6 percent respectively. See Current Population Reports, Series P-20, No. 223, Table 1.

<sup>11</sup>The annual probabilities of remarrying during the first five years after the end of a first marriage, for men and women whose first marriages ended when they were 45 or over, was 11.7 percent for men and 2.2 percent for women. Ibid., Table 8.

<sup>12</sup>CPR, Series P-20, No. 218, Table 1.

<sup>13</sup>In the SEO sample, 21 percent of nonwhite never married women under 35 were mothers, compared with 1.6 percent of white never married women under 35.

<sup>14</sup>Forty six percent of the nonwhite families headed by women under 65 that were poor before receiving public assistance did receive money from this source. Only 26 percent of similar white families received such aid. This information comes from a count of families in the SEO sample done by Irene Lurie of the President's Commission on Income Maintenance Programs.

<sup>15</sup>This will be true whether or not blacks also pay higher prices for other goods as well. If they do not, then the higher price of housing decreases consumption of it primarily by the substitution effect, and blacks will buy more of the other goods. If prices for other goods are also higher for blacks than for whites, then black real income will be lower than white real income, for given measured incomes, and blacks will be able to consume less of everything.

<sup>16</sup>Households with high pension income probably contain two or more pensioners. Since at most one of these people can be the head of the household, but the unusually high combined pension income is attributed to both of them, the result will be a negative correlation between unearned income and headship. To narrow the misallocation problem, I tried running separate regressions for people above and below 35, including dummies for labor force participation, ran older workers separately from older nonworkers, and tried running pension income, property income, and earned income separately. None of these attempts worked.

<sup>17</sup>When a dummy for nonworkers was included in the regression, the coefficient on earnings fell to 1.6. That is, among people with nonzero earnings, an increase of \$1000 resulted in an increase in the probability of headship of 1.6 percentage points.

<sup>18</sup>CPR, Series P-20, No. 218, Table 20.

<sup>19</sup>CPR, Series P-20, Nos. 10-218, various numbers.

<sup>20</sup>Data on income and earning for 1940 are not available for unmarried people alone, but in the last thirty years real per capita income has more than doubled. Data from the SEO and CPR, Series P-60, No. 80 suggest that median income of unmarried people is currently somewhat over \$2000, though this varies widely with age and sex. If the relative incomes of married and unmarried adults has remained unchanged, this implies an increase of more than \$1000 but less than \$2000.

<sup>21</sup>1940 Census of Population, Vol. III, Part 1, Table 6, and "Employment and Earnings," Vol. 17, No. 7, January 1971, Table A-9.

<sup>22</sup>The number of unmarried Social Security beneficiaries is not published, but the number of widows, widowers, and widowed mothers of beneficiaries rose from 24,000 in 1940 to 3.6 million in 1969. The average monthly payment in 1969 dollars went from \$54 to \$87 during the same period. Recipients of private pensions, married and unmarried, increased from 160,000 in 1940 to 3.8 million in 1968. See Statistical Abstract of the U.S., 1970, pp. 283 and 290, and Historical Statistics of the U.S., p. 678.

<sup>23</sup>Social Security Bulletin, Annual Statistical Supplement, 1969, p. 132. In 1967 dollars.

<sup>24</sup>Economic Report of the President, 1970, p. 249. Base year was 1967.

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