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# Money Incomes of Aged and Nonaged Family Units, 1967-84

by Daniel B. Radner\*

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This article provides a detailed examination of changes in the income of the aged and of other age groups from 1967 to 1984. Levels of income, income inequality, the relative importance of selected types of income, and the poverty rates of various age groups are also analyzed. The data are from the Bureau of the Census Current Population Survey and annual money income before taxes is the measure of income.

The relative income gains of the aged, compared with the nonaged, in 1967-84 reversed an earlier pattern in the post-World-War-II period: From 1947 to 1967, the incomes of the nonaged rose at a faster pace than those of the aged. Differences in their income growth were greater in 1979-84 than in 1967-79.

Despite the substantial difference in the rates of income growth for the aged and nonaged units in 1967-84, the relationship between age and median income was altered only slightly. In 1984, aged family units continued to have relatively low median income, especially compared with the incomes of those in middle age.

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This article examines changes in the income of the aged and of other age groups from 1967 to 1984.<sup>1</sup> The levels of income of various age groups are also analyzed. Currently, the most widely accepted view is that the economic status of the aged has improved relative to that of the nonaged and that perhaps the economic status of the two groups is not very different. The economic status of both groups is examined and compared, using more detailed estimates than are ordinarily used. Most of the estimates in this article were made using computer microdata files from the Bureau of the Census.

The most significant findings are:

- The incomes of the aged as a group and of both the "young old" and "old old" rose relative to the incomes of all the nonaged groups during the 1967-84 period.

- Despite substantial difference in the rates of income growth among aged and nonaged units, the relationship between age and median income altered only slightly from 1967 to 1984. In 1984, aged units continued to have relatively low median incomes, particularly compared with the incomes of middle-age units.

The income data in this article are from the Current Population Survey (CPS) of the Bureau of the Census. The income recipient units are "family units." A family unit is defined in one of two ways: (1) family—a unit of two or more persons and (2) unrelated individual—a unit of one person.<sup>2</sup>

The detailed estimates in this article begin with 1967 because that is the first year for which a CPS computer microdata file was available. The most recent data available were for 1984. The choice of 1979 as an intermediate year resulted from an examination of annual published data that showed a rapid rise in

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<sup>1</sup> This article is a condensed and revised version of **Changes in the Money Income of the Aged and Nonaged, 1967-83**, by Daniel B. Radner (Studies in Income Distribution, No. 14), Office of Research and Statistics, Office of Policy, Social Security Administration, September 1986. Some additional material has been included.

<sup>2</sup> For definitions of families and unrelated individuals, see Bureau of the Census, **Money Income of Households, Families, and Persons in the United States: 1984** (Current Population Reports, Series P-60, No. 151), April 1986. It should be noted that these units differ from those used in the Social Security Administration's biennial reports on the income of the aged.

the aged-nonaged income ratio beginning in 1980. Thus, 1979 was selected as the last year before that rise began.

The definition of economic status used to assess the economic well-being of the aged is very important and can have a significant impact on that assessment. Different definitions can produce different changes over time and different relative levels of economic status. Annual money income before taxes is the measure of economic resources used here. This measure is less than ideal. Taxes and noncash income are omitted, and wealth is not considered. However, the only detailed data available for this time period are for annual money income before taxes. Also, it is important to understand what has happened to this imperfect, but relatively objective, measure of economic status before examining more comprehensive measures that require controversial valuations or imputations.

The CPS data used in this article are known to suffer from underreporting that can be substantial for some income types—particularly for property income.<sup>3</sup> Past research has shown that differences in underreporting of total income by age affect the relative positions of aged and nonaged units.<sup>4</sup> Specifically, after the adjustment for underreporting, the relative position of aged units is improved somewhat. Although adjustments for underreporting could not be incorporated into the estimates in this article, the problem is discussed in the Technical Note on page 22.<sup>5</sup>

The incomes of the aged and nonaged have been examined by several other researchers.<sup>6</sup> In general, they have reported that the income of the aged has increased relative to the income of the nonaged over roughly the time period examined here. Grad<sup>7</sup> found that the income of the aged improved relative to that of the nonaged during the 1970's, but in 1950-82 the aged-nonaged income ratio fluctuated. Bridges and

Three points in connection with the assessment of the income of the aged are emphasized in this article. First, the dispersion in the incomes of aged (and nonaged) units must be recognized. Some have very large incomes, some have moderate incomes, and some have very small incomes. No measure of central tendency in a distribution (mean or median) can show this dispersion. Thus, all parts of the distribution are examined. A related issue is that subgroups of aged units can differ greatly in their average incomes, along with having substantial dispersion in income within the subgroups. For example, the average income of aged unrelated individuals is substantially below that of aged families.

Second, it is not sufficient merely to separate family units into aged (65 or older) and nonaged (under 65) groups and compare those two groups. Neither group is homogeneous. For example, family units headed by a 65-year-old typically differ in many ways from those headed by an 85-year-old and from family units headed by persons aged 25, 40, or 55. Relative income levels differ among more detailed age groups, and rates of income growth may also differ. Thus the data for detailed age groups are examined in this article. Of course, at any age circumstances may vary greatly.

Third, some adjustment for differences in the size of family unit and the age of the unit head is appropriate. Such adjustment takes into account differences in needs. In general, aged units are smaller than nonaged units and the adjustments eliminate that source of noncomparability. The particular adjustment used in this article is based on the U.S. poverty thresholds (discussed on page 15). This adjustment assumes that small aged units need slightly less than nonaged units of equal size.

<sup>3</sup> Bureau of the Census, Current Population Reports, Series P-60, No. 151, April 1986, *op. cit.*, table A-2.

<sup>4</sup> Daniel B. Radner, "Distribution of Family Income: Improved Estimates," *Social Security Bulletin*, July 1982, pages 13-21.

<sup>5</sup> Another problem is that several changes occurred in 1967-84 in the way in which the income data are collected, and the procedure for imputing income amounts to nonrespondents has been revised. (See Technical Note on page 22.) Although such changes can affect the comparability of the estimates over time, in general they should not have an important effect on the estimates shown in this article.

<sup>6</sup> See Robert Clark, Juanita Kreps, and Joseph Spengler, "Economics of Aging: A Survey," *Journal of Economic Literature*, Vol. XVI, No. 3, 1978, pages 919-62, for a comprehensive survey of earlier research on the aged. See Robert L. Clark, George L. Maddox, Ronald A. Schrimper, and Daniel A. Sumner, *Inflation and the Economic Well-Being of the Elderly*, Johns Hopkins University Press, 1984, for a recent overview of the economic status of the aged.

<sup>7</sup> Susan Grad, "Incomes of the Aged and Nonaged, 1950-82," *Social Security Bulletin*, June 1984, pages 3-17.

Packard,<sup>8</sup> Projector and Roen,<sup>9</sup> and Hurd and Shoven<sup>10</sup> also found increases in the aged-nonaged

<sup>8</sup> Benjamin Bridges and Michael D. Packard, "Price and Income Changes for the Elderly," *Social Security Bulletin*, January 1981, pages 3-15.

<sup>9</sup> Dorothy S. Projector and Mary P. Roen, "Family Demography and Transfer Payments During the 1970's" (Studies in Income Distribution, No. 12) September 1982, Office of Research and Statistics, Social Security Administration.

<sup>10</sup> Michael Hurd and John B. Shoven, "Real Income and Wealth of the Elderly," *American Economic Review*, May 1982, pages 314-318; and Michael D. Hurd and John B. Shoven, "The Economic Status of the Elderly," *Financial Aspects of the United States Pension System*, Zvi Bodie and John B. Shoven, editors, National Bureau of Economic Research, 1983.

income ratio during the 1970's. The analysis presented here is more detailed in many respects than these earlier analyses and updates the comparisons to 1984 data.

### Dispersion in the Income of the Aged

Although this article focuses on the relative incomes of groups—particularly age groups—it is important to keep in mind that the incomes within each of those groups cover a substantial range. The dispersion in income among the aged is illustrated in tables 1 and 2. (No adjustment for size of family unit was made in tables 1 and 2.) The data in table 1 show that in 1984, although 28 percent of the aged family units received \$5,000–\$10,000 in income, 21 percent had income of at least \$25,000, and 14 percent had income below \$5,000. When the aged group is divided into two age groups, substantial dispersion is still present within each group. Median income is quite different in the two detailed aged groups—the median for the group aged 75 or older is only 69 percent of the median for the group aged 65–74.

The income distributions by the type of family unit among the aged (aged 65 or older) are shown in table 2. Substantial dispersion is present within each of the groups. Among the income classes shown, income is more closely clustered around the median for unrelated individuals than it is for families, but substantial dispersion in the incomes of unrelated individuals, both men and women, still is present. About 40 percent of these unrelated individuals have incomes of \$5,000 to \$10,000; about 10 percent have \$20,000 or more; and 25 percent have less than \$5,000. The medians for unrelated individuals are far below those for families.

**Table 1.**—Percentage distribution of family units, by total money income and age of unit head, 1984

Family unit income	Age of unit head			
	All ages	65 or older		
		Total	65–74	75 or older
Under \$2,500 . . . . .	4	2	1	2
\$2,500–\$4,999 . . . . .	6	12	9	15
\$5,000–\$9,999 . . . . .	14	28	24	33
\$10,000–\$14,999 . . . . .	13	18	18	18
\$15,000–\$19,999 . . . . .	11	13	14	11
\$20,000–\$24,999 . . . . .	10	8	9	7
\$25,000–\$49,999 . . . . .	30	16	19	11
\$50,000 or more . . . . .	11	5	6	3
Total percent . . . . .	100	100	100	100
Median income . . . . .	\$20,295	\$12,407	\$14,350	\$9,929
Mean income . . . . .	25,724	17,895	20,098	14,626
Family units (numbers in thousands) . . . . .	92,975	18,569	11,091	7,478

Source: Tabulations from the March 1985 Current Population Survey files.

**Table 2.**—Percentage distribution of aged family units, by total money income and type of family unit, 1984

Family unit income	Type of unit						
	Families				Unrelated individuals		
	Total	Householder married, spouse present	Other male householder	Other female householder	Total	Men	Women
Under \$2,500 . . . . .	1	1	1	1	3	3	3
\$2,500–\$4,999 . . . . .	2	2	4	6	22	18	23
\$5,000–\$9,999 . . . . .	16	15	18	22	41	40	41
\$10,000–\$14,999 . . . . .	20	21	15	18	15	17	15
\$15,000–\$19,999 . . . . .	16	17	13	14	8	9	8
\$20,000–\$24,999 . . . . .	11	11	15	9	4	5	4
\$25,000–\$49,999 . . . . .	25	25	25	25	6	7	5
\$50,000 or more . . . . .	8	9	9	5	1	2	1
Total percent . . . . .	100	100	100	100	100	100	100
Median income . . . . .	\$18,115	\$18,500	\$19,711	\$15,793	\$7,286	\$7,943	\$7,104
Mean income . . . . .	24,226	24,828	23,530	21,035	10,810	11,837	10,520
Family units (numbers in thousands) . . . . .	9,806	8,057	295	1,454	8,763	1,931	6,832

Source: Tabulations from the March 1985 Current Population Survey files.

### Historical Perspective, 1947–84

In assessing the incomes of age groups in the 1967–84 period, it is important to understand the relationship between that period and the earlier part of the postwar period. Increases in the income of the aged relative to the income of the nonaged during the 1967–84 period might be subject to a different interpretation depending on whether the income of the aged or nonaged rose more rapidly during the earlier postwar period. That is, it makes a difference whether the increases after 1967 reinforced changes in the earlier period or offset those changes.

Constant dollar mean income of both aged and nonaged family units (unadjusted for the size of the unit) rose at an average annual rate of 1.6 percent from 1947 to 1984 (table 3).<sup>11,12</sup> These estimates are rounded; when more detailed estimates are used and the rates are compounded over the 37-year period,

<sup>11</sup> The Personal Consumption Expenditure (PCE) implicit price deflator from the National Income and Product Accounts is used to compute estimates of constant dollar income in this article. This deflator was used instead of the Consumer Price Index (CPI) because the CPI contained a treatment of housing costs that produced excessive increases in the index according to many analysts. For a discussion of the choice of the deflator, see Daniel B. Radner, *Studies in Income Distribution*, No. 14, 1986, *op. cit.* The version of the PCE implicit price deflator used in this article differs slightly from the version used in the cited report. The new version used 1982 as the base year for the index; thus, all dollar amounts in this article are shown in 1982 dollars.

<sup>12</sup> Although median incomes would have been preferable, mean incomes are used here because medians for families and unrelated individuals combined are not available from the published data.

**Table 3.—Average annual percentage change in real mean income of family units, by age of unit head, 1947–84**

Time period	Age of unit head		
	Under 65	65 or older	All ages
1947–52.....	1.5	0.1	1.2
1952–57.....	2.6	-1.0	2.1
1957–62.....	2.7	3.4	2.6
1962–67.....	3.5	2.0	3.3
1967–72.....	2.0	2.5	2.0
1972–77.....	-.4	.7	-.3
1977–82.....	-.4	2.6	-.1
1982–84.....	1.7	3.1	1.9
1947–84.....	1.6	1.6	1.6
1947–67.....	2.6	1.1	2.3
1967–84.....	.6	2.1	.7
1967–79.....	1.0	1.5	1.0
1979–84.....	-.4	3.4	0

Source: Derived from published Current Population Survey estimates in various **Current Population Reports**, Series P-60.

the increase in the real mean is 83 percent for nonaged units and 78 percent for aged units. Thus, by this measure the income of aged units did not quite keep pace with that of nonaged units during the 1947–84 period.

If that 37-year period is divided into two subperiods—1947–67 and 1967–84—different results are found in each of them. From 1947 to 1967, the income growth was much faster for nonaged units than for aged units—2.6 percent per year, compared with 1.1 percent per year. However, in the 1967–84 period, the income growth pattern was reversed and the income growth among the aged (2.1 percent per year) outpaced that of the nonaged (0.6 percent per year).

The difference in 1979–84 was particularly large: The income of the aged showed an average annual increase of 3.4 percent, compared with a decline of 0.4 percent per year for the nonaged. In 1967–79, however, the difference between the income growth rates for aged and nonaged units was much smaller: 1.5 percent per year among the aged, compared with 1.0 percent per year for the nonaged. Because of these very different results, the 1967–79 and 1979–84

**Table 4.—Ratio of mean incomes, family units with unit head aged 65 or older relative to family units with unit head of age shown, selected years 1947–84**

Age of unit head	1947	1952	1957	1962	1967	1972	1977	1979	1982	1984
Under 25 .....	1.11	1.02	0.81	0.94	0.88	0.95	1.07	1.03	1.28	1.45
25–34.....	.73	.64	.53	.59	.53	.55	.60	.60	.73	.75
35–44.....	.61	.58	.47	.48	.45	.45	.47	.46	.55	.56
45–54.....	.60	.56	.47	.48	.43	.43	.44	.43	.51	.51
55–64.....	.67	.63	.58	.57	.54	.53	.54	.51	.59	.60
Under 65 .....	.67	.62	.52	.54	.50	.51	.54	.54	.63	.65

Source: Derived from published Current Population Survey estimates in various **Current Population Reports**, Series P-60.

periods are treated separately in the detailed estimates discussed below.

As would be expected, the different rates of income growth produced changes in the relative positions of different age groups in 1947–84. The ratio of the aged to the nonaged family unit mean income (unadjusted for size of unit) fell from 0.67 in 1947 to 0.50 in 1967, then rose to 0.65 in 1984 (table 4). After remaining in the 0.53–0.55 range each year from 1974 through 1979, the aged-nonaged ratio of mean incomes rose to 0.57 in 1980, 0.60 in 1981, and 0.63 in 1982 (not shown).

The aged mean fell, then rose, relative to the mean for each of the other age groups shown in table 4. The 1984 ratio is below the 1947 ratio for the aged, compared with that of the groups aged 35–44, 45–54, and 55–64. The 1984 ratio is substantially higher than the 1947 ratio when the aged are compared with the youngest age group, and is slightly higher when the aged are compared with the group aged 25–34.

Thus, income growth in the 1967–84 period was not typical of the entire postwar era. Although these income estimates based on published data are useful for identifying broad trends, they suffer from several flaws (for example, the lack of adjustment for size of family unit). More appropriate estimates are presented in the following section.

## The 1967–84 Period

Before examining the detailed income estimates, it is useful to discuss several general characteristics of the period.

### Overall Economic Conditions

Overall economic conditions can affect aged-nonaged income comparisons. In general, the income of the aged is more strongly influenced by past factors than is the income of the nonaged. Retirement income is determined primarily by past earnings, and property income is determined to a great extent by past saving. In contrast, earnings are more sensitive to present conditions. Thus, the income of

the nonaged is more sensitive to current economic conditions. For example, slackness in the labor market would be expected to affect younger units more than the aged because wages are a more important income source for the nonaged than for the aged. For this reason, comparisons of boom years with recession years should be interpreted with caution.<sup>13</sup>

In 1967–84, the real gross national product (GNP) increased at an average annual rate of 2.6 percent. This rate was substantially less than the 3.9 percent annual rate of increase in 1947–67. The increase was 2.9 percent per year from 1967 to 1979, and only 1.8 percent per year from 1979 to 1984. The overall (civilian) unemployment rate showed some fluctuations but was rising during most of this period—from 3.8 percent in 1967 to 5.8 percent in 1979 and 7.5 percent in 1984. The rate peaked at 9.7 percent in 1982. Inflation was relatively low at the beginning of the period: The personal consumption expenditure (PCE) implicit price deflator rose only 2.5 percent in 1967. However, sharp rises followed: In 1979, it rose 9.2 percent. The increases have become smaller throughout the 1980's: In 1984, it rose 3.8 percent.<sup>14</sup>

None of the 3 years selected for analysis was a recession year. Low unemployment and low inflation characterized 1967; 1979 saw higher unemployment and high inflation; in 1984, unemployment was still higher but inflation had fallen. The results shown are affected by the different economic conditions present in these 3 years.

## Demographic Conditions

Three important demographic changes that occurred in the 1967–84 period affect the income comparisons: changes in the age distribution, the average size of family units, and the labor-force participation of women. They are discussed before the detailed income estimates are examined.

First, **the age distribution of family units changed substantially** in these 17 years as many members of the baby boom generation became heads of family units. The proportion of family units headed by an individual aged 20–39 rose from 33 percent in 1967 to 42 percent in 1984. For those aged 40–64, a corresponding decline lowered the proportion from 47 percent to 37 percent. The percentage of aged units rose only slightly, from 19 percent to 20 percent. Among those in the aged group, the relative share of units aged 80 or older increased, and the share of those

aged 65–69 showed the largest relative decline. These changes would be expected to have a slight negative effect on increases in income for summary age groups over time because the age groups that grew rapidly tend to have relatively low incomes.<sup>15</sup>

Second, **the average size of a unit declined from 1967 to 1984**. This decline can be separated into two parts: the increase in the number of unrelated individuals relative to families and the decrease in average family size. For all age groups, the proportion of unrelated individuals rose from 21 percent of family units to 33 percent. The increase was greater among nonaged units (from 16 percent to 29 percent) than among aged units (from 42 percent to 47 percent). Such shifts toward separate living can produce an increase in the number of low-income units, despite the fact that increases in the standard of living permitted the formation of separate living units. Mean family size also decreased, from 3.66 persons to 3.19 for all ages, from 3.86 persons to 3.36 for nonaged families, and from 2.42 persons to 2.31 for aged families. The decline was greater for nonaged families than for aged families.

Perhaps the most relevant measure of unit size for the estimates presented in this article is that of standard persons per unit, which is derived from the equivalence scale used (see discussion on page 22). Mean standard persons per family unit decreased from 1.79 to 1.55 (13 percent) for nonaged units and from 1.18 to 1.14 (3 percent) for aged units. Because the decrease in the average size of unit was greater among nonaged units than among aged units, rates of income growth are relatively higher for nonaged units after the adjustment for unit size.

Third, **the labor-force participation of women** (aged 20 or older) increased substantially—from 41 percent in 1967 to 54 percent in 1984. The proportion of married-couple families in which the wife was in the paid labor force rose from 37 percent in 1967 to 54 percent in 1984. Thus, the family members earning income changed in many instances.

## Income in 1967, 1979, and 1984

The estimates discussed in this section were obtained using the computer microdata files from the CPS. Adjustments to the data in these files allowed the production of more appropriate estimates than

<sup>13</sup> The relative importance of various types of income can also be affected by overall economic conditions. For example, poor labor-market conditions can produce a decline in the relative importance of wage income.

<sup>14</sup> Council of Economic Advisors, **Economic Report of the President**, U.S. Government Printing Office, Washington, D.C., 1986.

<sup>15</sup> In a recent report, income changes from 1967 to 1983 were examined, holding the age distribution constant. That adjustment produced only small differences in the growth rates of income of the aged and nonaged. See Daniel B. Radner, *Studies in Income Distribution*, No. 14, 1986, **op cit**.

those shown in the overview. The estimates in this section have been improved in several ways:

- (1) More information about the distribution of income is shown in this section. In addition to the mean amounts shown above, the median, the mean of the second income decile (to show the bottom part of the income distribution), and the mean of the ninth income decile (to show the top part of the income distribution) are shown.<sup>16</sup> Relative income shares also are shown so that income inequality can be examined.
- (2) Very detailed age groups for head of unit are presented in this section. Both the aged and nonaged summary groups discussed above contain broad age ranges that need to be examined in more detail.
- (3) The estimates in the remainder of this article have been adjusted for differences in the size of family unit (and, in some cases, for the age of the unit head) using an equivalence scale based on the U.S. poverty thresholds. The earlier estimates were not adjusted for these differences.

Constant (1982) dollar estimates of medians, means, the mean of the second income decile, and the mean of the ninth decile are shown for family units by detailed age groups (table 5). The personal consumption expenditure (PCE) implicit price deflator from the National Income and Product Accounts

<sup>16</sup> The bottom decile is not used because negative incomes cause distortion. The top decile is not used because sampling error is relatively high and distortion is caused by changes in top-coding of high amounts over time.

(NIPA) was used to compute the constant dollar estimates.<sup>17</sup>

These estimates have been adjusted for the size of family unit (and the age of the unit head) using the equivalence scale based on the U.S. poverty thresholds. Family unit income estimates are frequently shown with no adjustment for the size of the unit. However, family units of different sizes are usually thought to have different needs. One frequent adjustment for the size of unit is the per capita adjustment, in which the unit's income is divided by the total number of persons in the unit to obtain an adjusted income figure. However, the per capita adjustment does not take into account economies of scale—many expenses, such as rent, do not increase proportionally as family size increases. Also, the per capita adjustment assumes that adults and children of all ages have equal needs. Compared with other adjustments for the size of unit, the per capita adjustment tends to make the aged appear relatively better off than the nonaged. An adjustment for unit size based on equivalences implicit in the U.S. poverty thresholds is used in this analysis. That adjustment allows for both economies of scale and differences in the ages of family members.

The equivalence scale used in this article is shown in table 6. The scale is obtained by dividing the

<sup>17</sup> An entirely satisfactory method for adjusting income amounts or changes in the price level is not available. In this article, the same deflator was applied to all income and socioeconomic groups, even though price changes might not be uniform across those groups. See Benjamin Bridges and Michael D. Packard, "Price and Income Changes for the Elderly," *Social Security Bulletin*, January 1981, pages 3-15, for a description of a consumers' price index with more appropriate expenditure weights for the aged. Over the 1967-79 period, that index grew slightly faster than the economy-wide index (119.9 percent, compared with 117.7 percent).

**Table 5.—Median and mean amounts of family unit income, by age of unit head, adjusted for size of unit, 1967, 1979, and 1984**

[Amounts in 1982 dollars]

Age of unit head	Median			Mean			Mean, 2nd decile			Mean, 9th decile		
	1967	1979	1984	1967	1979	1984	1967	1979	1984	1967	1979	1984
20-24.....	\$9,292	\$10,313	\$8,494	\$10,037	\$11,471	\$9,819	\$3,625	\$4,019	\$2,729	\$16,150	\$18,810	\$16,682
25-29.....	11,069	13,626	13,106	12,453	14,985	14,765	5,610	5,790	4,620	19,658	23,947	24,923
30-34.....	10,454	14,385	13,879	11,955	16,071	15,958	5,082	6,327	5,343	18,907	25,620	26,370
35-39.....	10,504	14,441	15,079	12,169	16,457	17,343	5,364	6,446	5,942	18,898	26,097	28,152
40-44.....	11,572	15,156	15,763	13,310	17,003	18,166	5,542	6,785	6,071	20,488	26,883	29,680
45-49.....	13,085	16,875	17,254	14,795	18,265	19,757	6,036	6,829	6,390	22,987	28,826	32,485
50-54.....	13,896	17,283	17,640	15,841	19,331	20,273	5,959	6,850	6,138	24,922	31,339	33,987
55-59.....	13,216	17,439	16,805	15,148	19,681	20,302	4,965	6,430	5,626	24,256	32,143	33,670
60-64.....	11,611	14,160	14,076	13,845	17,330	18,124	3,692	4,996	5,131	23,366	29,375	29,936
65-69.....	7,810	10,631	12,492	11,095	13,703	16,496	3,176	4,617	5,525	19,099	22,739	26,474
70-74.....	6,372	9,032	10,552	9,127	11,727	14,401	3,108	4,521	4,991	14,851	18,930	23,549
75-79.....	5,088	7,807	9,192	7,640	10,847	12,617	2,604	4,168	4,695	12,455	17,423	20,364
80-84.....	4,540	7,092	7,843	6,927	9,752	11,469	2,422	3,975	4,369	11,900	15,330	18,732
85 or older.....	4,040	6,427	7,445	6,571	9,064	11,825	2,013	3,822	4,064	10,316	13,959	20,506
Under 65 <sup>1</sup> .....	11,495	14,364	14,098	13,322	16,393	16,825	4,982	5,672	4,913	21,271	26,743	28,202
65 or older.....	6,046	8,683	10,243	9,134	11,813	14,160	2,814	4,301	4,830	15,639	19,298	23,190
All ages <sup>2</sup> .....	10,543	13,125	13,307	12,512	15,496	16,293	4,057	5,122	4,883	20,505	25,792	27,411

<sup>1</sup> Aged 15-64.

<sup>2</sup> Aged 15 or older.

Source: Tabulations from March Current Population Survey files.

**Table 6.—Equivalence scale based on U.S. poverty thresholds**

Size of family unit and age of unit head	Number of standard persons in family unit <sup>1</sup>
1 person .....	<sup>2</sup> 1.000
Under 65 .....	1.024
65 or older .....	.943
2 persons:	
Under 65 .....	1.322
65 or older .....	1.190
3 persons .....	1.568
4 persons .....	2.009
5 persons .....	2.379
6 persons .....	2.687
7 persons or more.....	3.329

<sup>1</sup> These values were derived from column 2 of table A-3 in **Characteristics of the Population Below the Poverty Level: 1979** (Current Population Reports, Series P-60, No. 130), U.S. Bureau of the Census, December 1981. Nonfarm total poverty thresholds were used. These values were derived by dividing the threshold for each size of family unit (and age of head) by the threshold for one-person units of all ages. These values change very little from year to year.

<sup>2</sup> The weighted average of one-person units had this implied value. This value was not applied to any unit's income.

weighted average threshold for each size of family unit (and the age of the unit's head, where applicable) by the weighted average threshold for one-person units of all ages.

The equivalence scale is applied by dividing each family unit's income amount by the appropriate scale value from table 6. For example, if a four-person family unit had \$10,000 in income, the adjusted income would be \$4,978 (\$10,000/2.009). In almost all cases the adjusted amounts are less than the unadjusted amounts. The primary impact of the equivalence scale adjustment is to increase the income level of aged units relative to that of nonaged units because, in general, aged units are smaller than nonaged units. Also, for one- and two-person units, aged

units are assumed to need somewhat less income than nonaged units: An aged unit is assumed to need about 8 percent less for a one-person unit and 10 percent less for a two-person unit.<sup>18</sup>

## Income Growth

Average annual percentage changes in real income for each of the periods 1967-84, 1967-79, and 1979-84 are shown in table 7. For all four measures, in 1967-84 the increases in real income for the group aged 65 or older are higher than for the under-age-65 group. The difference is largest for the mean of the second decile—an increase of 3.2 percent per year (72 percent over the period) for the aged and a decrease of 0.1 percent per year (1 percent over the period) for the nonaged. The difference is smallest for the mean of the ninth decile—an increase of 2.3 percent per year (48 percent) for the aged and an increase of 1.7 percent per year (33 percent) for the nonaged.

Using median income, mean income, or the mean of the second decile, the increase for each detailed aged group exceeds the increase for each detailed nonaged group. For the mean of the ninth decile, that statement is true for all but one of the age groups. The most striking differences are between the aged and the youngest age groups, with the results for the mean of the second decile the most extreme.

<sup>18</sup> Extensive literature on equivalence scales is available. For example, see J. L. Nicholson, "Appraisal of Different Methods of Estimating Equivalence Scales and their Results," **Review of Income and Wealth**, Series 22, No. 1, 1976, pages 1-11, for a general discussion of equivalence scales, and Jacques van der Gaag and Eugene Smolensky, "True Household Equivalence Scales and Characteristics of the Poor in the United States," **Review of Income and Wealth**, Series 28, No. 1, 1982, pages 17-28, for a recent estimate of a scale for the United States.

**Table 7.—Average annual percentage change in real income of family units, by age of unit head, adjusted for size of unit, 1967-84, 1967-79, and 1979-84**

Age of unit head	Median			Mean			Mean, 2nd decile			Mean, 9th decile		
	1967-84	1967-79	1979-84	1967-84	1967-79	1979-84	1967-84	1967-79	1979-84	1967-84	1967-79	1979-84
20-24.....	-0.5	0.9	-3.8	-0.1	1.1	-3.1	-1.7	0.9	-7.4	0.2	1.3	-2.4
25-29.....	1.0	1.7	-.8	1.0	1.6	-.3	-1.1	.3	-4.4	1.4	1.7	.8
30-34.....	1.7	2.7	-.7	1.7	2.5	-.1	.3	1.8	-3.3	2.0	2.6	.6
35-39.....	2.2	2.7	.9	2.1	2.5	1.1	.6	1.5	-1.6	2.4	2.7	1.5
40-44.....	1.8	2.3	.8	1.8	2.1	1.3	.5	1.7	-2.2	2.2	2.3	2.0
45-49.....	1.6	2.1	.4	1.7	1.8	1.6	.3	1.0	-1.3	2.1	1.9	2.4
50-54.....	1.4	1.8	.4	1.5	1.7	1.0	.2	1.2	-2.2	1.8	1.9	1.6
55-59.....	1.4	2.3	-.7	1.7	2.2	.6	.7	2.2	-2.6	1.9	2.4	.9
60-64.....	1.1	1.7	-.1	1.6	1.9	.9	2.0	2.5	.5	1.5	1.9	.4
65-69.....	2.8	2.6	3.3	2.4	1.8	3.8	3.3	3.2	3.7	1.9	1.5	3.1
70-74.....	3.0	2.9	3.2	2.7	2.1	4.2	2.8	3.2	2.0	2.8	2.0	4.5
75-79.....	3.5	3.6	3.3	3.0	3.0	3.1	3.5	4.0	2.4	2.9	2.8	3.2
80-84.....	3.3	3.8	2.0	3.0	2.9	3.3	3.5	4.2	1.9	2.7	2.1	4.1
85 or older.....	3.7	3.9	3.0	3.5	2.7	5.5	4.2	5.5	1.2	4.1	2.5	8.0
Under 65 <sup>1</sup> .....	1.2	1.9	-.4	1.4	1.7	.5	-.1	1.1	-2.8	1.7	1.9	1.1
65 or older.....	3.2	3.1	3.4	2.6	2.2	3.7	3.2	3.6	2.3	2.3	1.8	3.7
All ages <sup>2</sup> .....	1.4	1.8	.3	1.6	1.8	1.0	1.1	2.0	-1.0	1.7	1.9	1.2

<sup>1</sup> Aged 15-64.

<sup>2</sup> Aged 15 or older.

Source: Tabulations from March Current Population Survey files.

Although not as large, the differences between the young and aged groups are substantial when the other estimates are used. For medians, those aged 20–24 experienced a decline of 0.5 percent per year (9 percent) and those aged 25–29 had an increase of 1.0 percent per year (18 percent). In contrast, the groups aged 75–79, 80–84, and 85 or older all had increases of at least 3.3 percent per year (72 percent).

When the period is subdivided—1967–79 and 1979–84—the results differ substantially. The differences between the aged group and the nonaged are much greater for 1979–84 than for 1967–79.

The increase in median income for each nonaged age group dropped substantially (some became decreases) between the two periods. For the nonaged as a group, the median rose 1.9 percent per year during 1967–79 but fell 0.4 percent per year during 1979–84. In contrast, for the aged as a whole, the median rose 3.1 percent per year during 1967–79 and rose 3.4 percent per year during 1979–84. Thus, as the rate per year for the aged increased, the rate for the nonaged went from a smaller rise to a decline.

Two factors significantly affected the growth in the real income of the aged. Increases in Social Security benefits played an important role in raising the real income of the aged in 1967–84. Average real monthly benefits of retired workers rose 87 percent during this period. Statutory increases raised real Social Security benefits substantially.<sup>19</sup>

<sup>19</sup> The PCE implicit price deflator was used to deflate current dollar amounts to constant dollars. Because the price index actually used for automatic adjustment of benefits (CPI-W) increased more than the PCE implicit price deflator in 1967–84, the deflating method used here produced a small increase in real benefits. The current dollar amounts were taken from the *Annual Statistical Supplement to the Social Security Bulletin, 1984–85*, tables 86 and J.

A change in interest rates was also an important factor in the income increases of the aged. Interest rates were relatively low at the beginning of the period, then rose sharply before falling somewhat. The 6-month U.S. Treasury bill rate, for example, was 4.6 percent in 1967, rose to 10.0 percent in 1979, peaked at 13.8 percent in 1981, and dropped back to 9.8 percent in 1984.

The poor performance of real wages was an important factor in inhibiting the income growth of the nonaged, particularly in 1979–84. Real wages (average private nonagricultural gross weekly earnings) were about the same in 1984 as they had been in 1967. In contrast, real wages rose 1.9 percent per year from 1947 to 1967.<sup>20</sup> Real wages peaked in 1972 and dropped sharply in 1974 and 1980. From 1980 to 1984, no change occurred.

## Relative Values

The relative values of the four estimates for 1967, 1979, and 1984 are shown in table 8. For each estimate, the all-ages value is used as the base for these relative values.

Looking at the summary ratio of aged to nonaged, the ratio for median income rose 38 percent from 1967 to 1984, but was still only 0.73 in 1984. The ratio of mean incomes did not increase as much (22 percent), but had reached a higher level—0.84—in 1984. The ratio using the mean of the ninth decile rose only 11 percent, to 0.82 in 1984. The ratio using the mean of the second decile rose 75 percent, to

<sup>20</sup> The PCE implicit price deflator was used to deflate current dollar amounts to constant dollars in this estimate.

**Table 8.—Relative amounts of family unit income, by age of unit head, adjusted for size of unit, 1967, 1979, and 1984**

Age of unit head	Median			Mean			Mean, 2nd decile			Mean, 9th decile		
	1967	1979	1984	1967	1979	1984	1967	1979	1984	1967	1979	1984
20–24.....	0.88	0.79	0.64	0.80	0.74	0.60	0.89	0.78	0.56	0.79	0.73	0.61
25–29.....	1.05	1.04	.98	1.00	.97	.91	1.38	1.13	.95	.96	.93	.91
30–34.....	.99	1.10	1.04	.96	1.04	.98	1.25	1.24	1.09	.92	.99	.96
35–39.....	1.00	1.10	1.13	.97	1.06	1.06	1.32	1.26	1.22	.92	1.01	1.03
40–44.....	1.10	1.15	1.18	1.06	1.10	1.11	1.37	1.32	1.24	1.00	1.04	1.08
45–49.....	1.24	1.29	1.30	1.18	1.18	1.21	1.49	1.33	1.31	1.12	1.12	1.19
50–54.....	1.32	1.32	1.33	1.27	1.25	1.24	1.47	1.34	1.26	1.22	1.22	1.24
55–59.....	1.25	1.33	1.26	1.21	1.27	1.25	1.22	1.26	1.15	1.18	1.25	1.23
60–64.....	1.10	1.08	1.06	1.11	1.12	1.11	.91	.98	1.05	1.14	1.14	1.09
65–69.....	.74	.81	.94	.89	.88	1.01	.78	.90	1.13	.93	.88	.97
70–74.....	.60	.69	.79	.73	.76	.88	.77	.88	1.02	.72	.73	.86
75–79.....	.48	.59	.69	.61	.70	.77	.64	.81	.96	.61	.68	.74
80–84.....	.43	.54	.59	.55	.63	.70	.60	.78	.89	.58	.59	.68
85 or older.....	.38	.49	.56	.53	.58	.73	.50	.75	.83	.50	.54	.75
Under 65 <sup>1</sup> .....	1.09	1.09	1.06	1.06	1.06	1.03	1.23	1.11	1.01	1.04	1.04	1.03
65 or older.....	.57	.66	.77	.73	.76	.87	.69	.84	.99	.76	.75	.85
All ages <sup>2</sup> .....	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ratio of 65 or older to under 65.....	.53	.60	.73	.69	.72	.84	.56	.76	.98	.74	.72	.82

<sup>1</sup> Aged 15–64.

<sup>2</sup> Aged 15 or older. The all-ages group is the group with which other age

groups are compared.

Source: Tabulations from March Current Population Survey files.



0.98, but the level of that ratio requires some explanation. The mean of the second decile for the under-age-65 group is affected greatly by the youngest age groups because younger units tend to be concentrated near the bottom of the income distribution. The lower portions of the youngest groups suffered substantial income losses, leading to a small decline in the mean of the second decile for the group younger than age 65. Thus, for the aged, the large relative increase in the mean of the second decile and the high ratio using that measure reflect the extreme difference in the results for aged units and young units.

A substantial portion of the rise in the relative income of the aged occurred in 1979-84. The ratio of median income of the aged to that of the nonaged rose 13 percent in the 12 years from 1967 to 1979 and 22 percent in the next 5 years. Among those aged 65-69, the increase in relative median income was substantially larger in the later period than in the earlier period. Among the two youngest age groups, relative median income declined more in 1979-84 than in 1967-79.

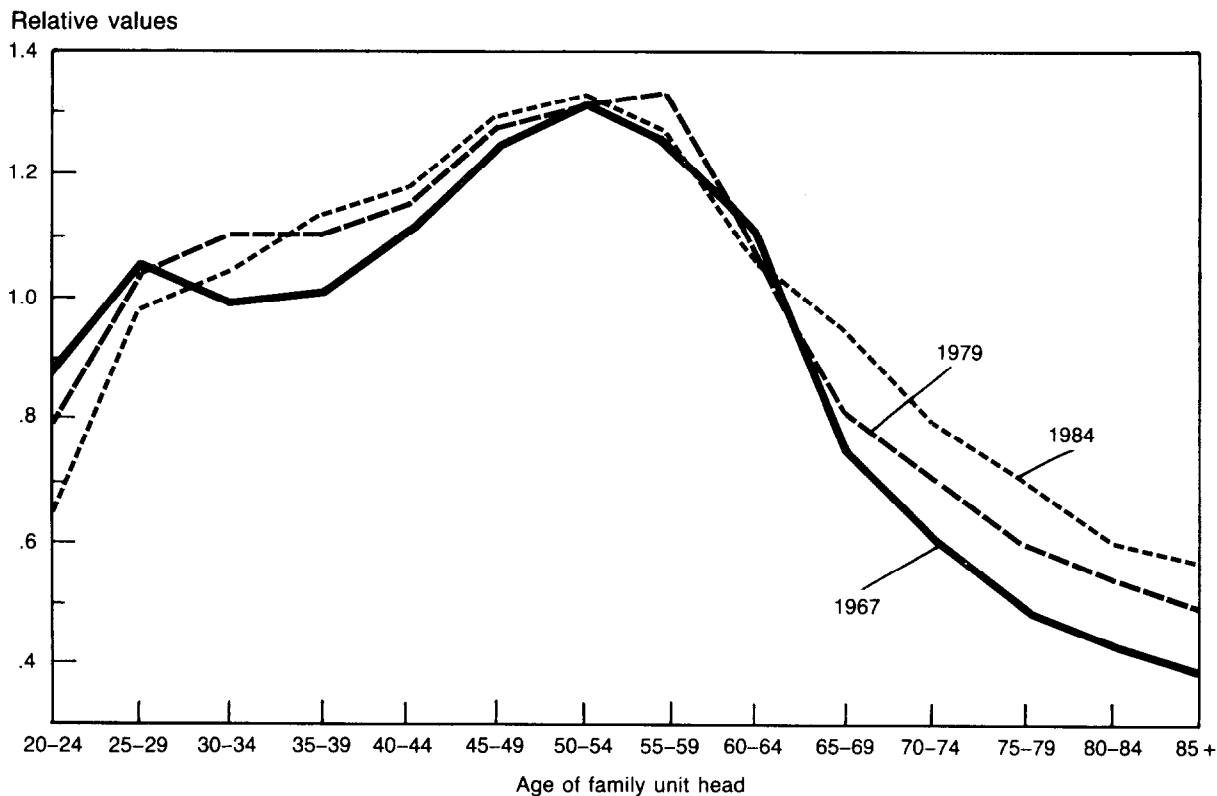
The relative medians for 1967, 1979, and 1984 are shown in chart 1. It can be seen that, despite the substantial differences in income growth experienced by detailed age groups, the general pattern of the age-income (cross-section) relationship remains in 1984: As age increases, relative median income rises, then

falls substantially. For the aged groups, median incomes remain relatively low, compared with those of the middle-aged groups and in general are below the median amounts of all but the youngest age groups. The two oldest age groups have the lowest medians. The shape of the curve has changed somewhat—the median incomes of the aged group rose (and that of the youngest group has fallen). However, that rise has not been large enough to change the basic pattern.

It is important to note that the relative median incomes of the older aged groups are quite low compared with those of the groups in middle age. For example, in 1984 the relative median for the group aged 85 or older (0.56) was less than half of the relative median for each group in the 35-59 age range; those relative medians ranged from 1.13 to 1.33. The relative medians for those aged 80-84 and 75-79 were far below the relative medians of the younger groups. The level for the group aged 65-69 is substantially above the levels for older aged groups.

Small shifts in the relative positions of the detailed aged groups have occurred. In general, the percentage increases in relative medians are larger for those aged 75 or older than for the groups aged 65-74. Because the older age groups have lower incomes, income differences among these age groups decreased. For all four measures, the ratio for the group aged 85 or older to that of the group aged 65-69 increased.

**Chart 1.—Relative median income values**



## Changes in Income Inequality

Another important aspect of the distribution of income is the degree of inequality present. Inequality and changes in inequality can be examined using relative income shares. In table 9, those shares and the Gini concentration ratios are shown for the aged, nonaged, and all ages groups.<sup>21</sup>

Relative income shares show the percentage of the group's total income that is received by a specific portion of the income distribution (for example, a 20-percentile group or quintile). A Lorenz curve relates cumulated relative income shares and cumulated percentages of units, when the units are ranked by size of income. (For a more detailed discussion of this concept and the Gini ratio, see the Technical Note, page 22.) The Gini concentration ratio is a measure of inequality that can be interpreted as being based on a Lorenz curve. The lower the ratio, the more equal the distribution; zero is complete equality and one is complete inequality. Some comparisons of inequality are ambiguous even though differences between Gini concentration ratios exist.<sup>22</sup> In this article, a distribution is considered to be more (less) equal than a second distribution if the Lorenz curve for the first distribution lies above (below) the Lorenz curve for the second distribution, with no intersection. If two Lorenz curves intersect, the comparison is considered to be ambiguous.

In the 1967-84 period, the aged and nonaged groups experienced changes in income inequality that were quite different. Among the aged, the share of the bottom quintile rose from 4.6 percent to 5.6 percent; the share of the top quintile fell from 51.6 percent to 48.1 percent. Among the nonaged, the income inequality increased. The share of the bottom quintile

fell from 5.2 percent to 3.9 percent and the share of the top quintile rose from 41.6 percent to 44.2 percent. In 1967, the income of the aged was substantially more unequal than the income of the nonaged, but for 1984 the comparison is ambiguous (the two Lorenz curves cross but the Gini ratio for the aged remains higher).

From 1967 to 1979, a substantial decline in income inequality occurred for the aged, but the nonaged experienced no substantial change. From 1979 to 1984, inequality for both the aged and nonaged groups increased, but the increase for the nonaged was larger.

In most cases, changes in inequality within the detailed age groups were consistent with changes shown for the summary age groups. For example in 1967-84, each detailed aged group experienced a decline in inequality (not shown). Each detailed group under age 60 had an increase in inequality in that same period. The group aged 60-64 was a minor exception to the pattern: It showed an ambiguous change.

Changes in income inequality can also be analyzed by focusing on percentage changes in the mean incomes of income deciles. These changes are closely related to changes in relative income shares.<sup>23</sup> In general, if the highest income deciles have the largest (smallest) increases and the lowest deciles have the smallest (largest) increases, then it is likely that inequality has increased (decreased).

Average annual percentage changes in mean income are shown in table 10 for each income decile for the aged, nonaged, and all units for 1967-84, 1967-79, and 1979-84.<sup>24</sup> In the 1967-84 period, a strong pat-

<sup>21</sup> These estimates are affected by changes in the characteristics of the CPS data over time. Gini concentration ratios and the share of the top quintile are affected the most.

<sup>22</sup> For a discussion of Gini concentration ratios, Lorenz curves, and the measurement of inequality, see Anthony B. Atkinson, "On the Measurement of Inequality," *Journal of Economic Theory*, Vol. 2, September 1970, pages 244-63.

<sup>23</sup> A quintile's relative income share is equal to the quintile's mean income divided by the mean for all units (relative mean income) times 20 percent (the quintile's share of all units).

<sup>24</sup> Some of these estimates are affected by changes over time in the characteristics of the CPS data. Of particular importance was the new interest income imputation begun in 1984, which would tend to raise the income of the top decile. Changes in top-coding of amounts can also affect the share of that decile. See the Technical Note on page 22 for further details.

**Table 9.**—Relative income shares of quintiles of family units, by age of unit head, adjusted for size of unit, 1967, 1979, and 1984

Income quintile	[In percents]								
	Under age 65			Aged 65 or older			All ages		
	1967	1979	1984	1967	1979	1984	1967	1979	1984
1.....	5.2	4.8	3.9	4.6	5.9	5.6	4.6	4.8	4.2
2.....	12.0	11.8	10.7	8.8	10.1	9.5	11.0	11.0	10.3
3.....	17.3	17.6	16.8	13.3	14.8	14.5	16.9	17.0	16.4
4.....	23.9	24.6	24.4	21.6	22.1	22.2	24.1	24.5	24.1
5.....	41.6	41.3	44.2	51.6	47.1	48.1	43.5	42.7	45.1
Total percent.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gini ratio.....	.358	.362	.398	.457	.402	.417	.384	.376	.404

Source: Tabulations from March Current Population Survey files.

**Table 10.**—Average annual percentage change in real mean incomes of income deciles of family units, by age of unit head, adjusted for size of unit, 1967–84, 1967–79, and 1979–84

Income decile	Under age 65			Aged 65 or older			All ages		
	1967–84	1967–79	1979–84	1967–84	1967–79	1979–84	1967–84	1967–79	1979–84
1.....	-0.7	1.0	-4.7	4.8	5.4	3.3	0.8	2.3	-2.8
2.....	-.1	1.1	-2.8	3.2	3.6	2.3	1.1	2.0	-1.0
3.....	.5	1.5	-1.8	3.1	3.4	2.4	1.1	1.8	-.6
4.....	.9	1.7	-1.1	3.1	3.3	2.7	1.2	1.8	-.3
5.....	1.1	1.8	-.5	3.2	3.2	3.1	1.3	1.9	0
6.....	1.3	1.9	-.1	3.1	3.0	3.4	1.4	1.9	.4
7.....	1.4	2.0	.1	2.9	2.6	3.6	1.5	1.9	.5
8.....	1.6	2.0	.6	2.6	2.1	3.8	1.6	1.9	.8
9.....	1.7	1.9	1.1	2.3	1.8	3.7	1.7	1.9	1.2
10.....	1.8	1.5	2.4	2.1	1.2	4.4	1.8	1.5	2.7
Total.....	1.4	1.7	.5	2.6	2.2	3.7	1.6	1.8	1.0

Source: Tabulations from March Current Population Survey files.

tern appears. For the nonaged (and for all ages), the higher the income level (decile), the larger the increase (or the smaller the decrease). However, for the aged, the opposite is true—in general the higher the income level, the smaller the increase.

For the nonaged group, the patterns for the 1979–84 period and for the entire period are the same: the higher the income level, the larger the increase. For the aged, during that 5-year period, a general pattern of higher increases for higher income levels is seen; however, the bottom decile is a notable exception.

In 1967–79, the aged show a strong pattern of lower increases at higher incomes: The rise for the bottom decile is more than four times the rise for the top decile. Among the nonaged, higher increases accompany higher incomes, but the top decile is an exception.

## Poverty Rates

Most of the estimates discussed above are for income deciles or quintiles. Poverty rates show the percentage of units (persons, in this case) below an income threshold. These thresholds are adjusted for inflation over time.<sup>25</sup>

Based on the data in table 11, the dramatic drop in the poverty rate for the aged<sup>26</sup> is the most important

<sup>25</sup> The CPI, rather than the PCE implicit price deflator, is used to adjust the poverty thresholds for inflation.

<sup>26</sup> As is customary, these poverty rates are based on the income of the family unit to which the person belongs. The 1967 poverty rates shown here are based on poverty lines that did not reflect revisions made in 1969 and 1981. The 1979 rates shown here are based on lines that did not reflect the 1981 revisions. The 1969 revisions changed the annual adjustment of levels from food prices to the overall CPI and raised farm thresholds from 70 percent to 85 percent of nonfarm thresholds. The 1981 revisions eliminated separate farm thresholds, eliminated distinctions by sex of household, and extended the matrix to families with 9 persons or more. These revisions would not be expected to have a large impact on the pattern of rates by age shown here. See Bureau of the Census, **Characteristics of the Population Below the Poverty Level: 1984** (Current Population Reports, Series P-60, No. 152), June 1986.

change that occurred from 1967 to 1984. For the aged group as a whole, the rate fell from 28.1 percent in 1967 to 12.4 percent in 1984. (It should be noted that the 1984 estimates are affected by a technical change in the CPS estimates; see the Technical Note (page 22) for a description of that change.) The 1979 rate was 15.1 percent; thus, most of the large decline occurred by 1979. Each of the detailed aged groups experienced a large decline in poverty.

On the other hand, young persons showed an increase in poverty from 1967 to 1984. The largest increases were for groups under age 30, although all groups under age 55 showed an increase. Most of the increase for young persons occurred from 1979 to 1984. For most groups aged 30–64, poverty rates declined in 1967–79 and increased in 1979–84. Despite the very different changes for the aged and nonaged groups, in 1984 most of the aged groups continued to have poverty rates that were high compared with

**Table 11.**—Percent of persons below poverty threshold, by age, 1967, 1979, and 1984<sup>1</sup>

Age	1967	1979	1984
Under 20 .....	15.2	15.8	20.8
20–24.....	10.6	10.8	15.8
25–29.....	8.0	8.5	12.3
30–34.....	9.0	7.6	11.2
35–39.....	8.2	7.6	9.9
40–44.....	8.0	7.1	9.5
45–49.....	7.0	7.1	9.3
50–54.....	7.6	7.5	9.4
55–59.....	11.1	8.3	9.9
60–64.....	15.4	10.8	10.9
65–69.....	21.9	12.2	9.4
70–74.....	25.8	13.4	11.5
75–79.....	33.8	17.9	13.7
80–84.....	38.2	19.4	17.7
85 or older.....	38.9	22.7	18.5
Under 65 .....	11.8	11.1	14.5
65 or older.....	28.1	15.1	12.4
All ages.....	13.3	11.5	14.2

<sup>1</sup> Estimates exclude members of secondary families. Family sample weights were used.

Source: Tabulations from March Current Population Survey files.

those of other adults. Of the age groups shown in table 11, persons under age 20 had the highest rate (20.8 percent), but those aged 85 or older and 80-84 had the next highest rates (18.5 percent and 17.7 percent, respectively). Among the detailed aged groups, only the group aged 65-69 had a rate comparable to the rates for the middle age groups.

### Changes in Income Types

This section is an examination of how variations in different types of income affected changes in the total income of each age group and in the total income of the middle (third) income quintile of each age group. The estimates for the entire age group are sensitive to the changes for the high income units in the age group; the estimates for the middle quintile are more representative of the typical unit in the age group. The focus is on the middle income quintile. The mean incomes for selected types of income for all units and for the middle quintile for each age group are shown in table 12; these means are for all units in the group, not just for recipients of incomes from a specific source. Changes in those means in the

1967-79, 1979-84, and 1967-84 periods are shown in table 13.<sup>27</sup>

For the groups aged 65-74 and 75 or older, during the 1967-84 period, Social Security benefit income increased the most for the middle quintile, accounting for 58 percent of the increase for those aged 65-74 and 72 percent of the increase for those aged 75 or older.<sup>28</sup> Property income also increased substantially for both of these aged age groups, accounting for 23 percent of the rise among 65-74-year-olds and 24 percent for those aged 75 or older. The data for other income (primarily pensions) show a large increase for those aged 65-74 but only a small increase for the group aged 75 or older. In 1979-84, that rise in other

<sup>27</sup> "Earnings" consists of wages and salaries and net income from nonfarm and farm self-employment. "Social Security" consists of OASDI and Railroad Retirement benefits. "Property" includes interest, dividends, rent, royalties, and income from estates and trusts. "Other" includes Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), General Assistance, private and government pensions, annuities, unemployment and Workers' Compensation, veterans' payments, alimony, regular contributions from persons not living in the household, and other regularly received money income.

<sup>28</sup> The percentage of the increase in total income accounted for by a specific income type should be interpreted with caution because the percentages will sum to more than 100 percent if at least one income type showed a decrease.

**Table 12.—Mean incomes of family units, by age of head and type of income, adjusted for size of unit**

[Amounts in 1982 dollars]

Age of unit head	Year	All income quintiles					Middle income quintile				
		Total income	Earnings	Social Security benefits	Property	Other	Total income	Earnings	Social Security benefits	Property	Other
Under 25	1967	\$9,338	\$8,957	\$35	\$74	\$273	\$8,662	\$8,414	\$27	\$18	\$203
	1979	10,790	9,864	70	143	713	9,658	8,810	105	73	670
	1984	9,264	8,267	35	181	781	7,856	6,949	24	79	804
25-34	1967	12,208	11,797	51	114	246	10,795	10,539	49	42	165
	1979	15,517	14,603	64	269	581	14,014	13,344	49	144	478
	1984	15,366	14,381	56	340	589	13,498	12,826	56	168	448
35-44	1967	12,770	12,169	120	199	282	11,083	10,614	135	94	240
	1979	16,705	15,446	163	508	587	14,767	13,872	149	259	488
	1984	17,711	16,332	133	648	598	15,348	14,455	142	298	453
45-54	1967	15,305	14,246	196	463	401	13,474	12,794	171	194	315
	1979	18,818	16,741	324	854	899	17,085	15,558	231	412	883
	1984	20,011	17,591	274	1,154	992	17,451	15,711	252	618	870
55-64	1967	14,541	12,781	419	784	558	12,484	11,326	328	388	442
	1979	18,585	14,285	949	1,632	1,719	15,973	12,334	940	981	1,717
	1984	19,220	13,769	1,043	2,445	1,964	15,509	11,033	1,101	1,251	2,124
65-74	1967	10,219	5,033	2,547	1,351	1,288	7,103	1,995	3,196	633	1,280
	1979	12,816	3,762	4,478	2,417	2,160	9,843	1,739	5,206	1,292	1,606
	1984	15,541	3,796	5,161	3,886	2,696	11,638	1,904	5,835	1,689	2,206
75 or older	1967	7,279	2,099	2,624	1,449	1,108	4,815	360	3,072	415	968
	1979	10,202	1,411	4,542	2,567	1,681	7,312	284	4,984	1,004	1,039
	1984	12,113	1,270	5,129	3,910	1,803	8,520	367	5,730	1,311	1,112
Under 65	1967	13,322	12,428	178	356	360	11,542	11,010	145	143	244
	1979	16,392	14,552	300	670	871	14,384	13,035	273	326	750
	1984	16,825	14,686	289	922	929	14,154	12,685	286	388	795
65 or older	1967	9,134	3,950	2,575	1,387	1,221	6,090	1,088	3,219	580	1,203
	1979	11,813	2,860	4,502	2,474	1,976	8,752	973	5,181	1,195	1,403
	1984	14,160	2,779	5,148	3,896	2,337	10,286	1,149	5,813	1,602	1,722
All ages	1967	12,513	10,790	641	555	526	10,556	9,289	533	280	454
	1979	15,496	12,263	1,123	1,023	1,087	13,188	10,285	1,198	666	1,040
	1984	16,293	12,308	1,259	1,516	1,210	13,321	10,014	1,388	818	1,101

Source: Tabulations from March Current Population Survey files.

**Table 13.—Changes in mean incomes of family units, by age of unit head and type of income, adjusted for size of unit**

[Amounts in 1982 dollars]

Age of unit head	Time period	All income quintiles					Middle income quintile				
		Total income	Earnings	Social Security benefits	Property	Other	Total income	Earnings	Social Security benefits	Property	Other
Under 25 .....	1967-79	\$1,452	\$907	\$35	\$69	\$440	\$996	\$396	\$78	\$55	\$467
	1979-84	-1,526	-1,597	-35	38	68	-1,802	-1,861	-81	6	134
	1967-84	-74	-690	0	107	508	-806	-1,465	-3	61	601
25-34 .....	1967-79	3,309	2,806	13	155	335	3,219	2,805	0	102	313
	1979-84	-151	-222	-8	71	8	-516	-518	7	24	-30
	1967-84	3,158	2,584	5	226	343	2,703	2,287	7	126	283
35-44 .....	1967-79	3,935	3,277	43	309	305	3,684	3,258	14	165	248
	1979-84	1,006	886	-30	140	11	581	583	-7	39	-35
	1967-84	4,941	4,163	13	449	316	4,265	3,841	7	204	213
45-54 .....	1967-79	3,513	2,495	128	391	498	3,611	2,764	60	218	568
	1979-84	1,193	850	-50	300	93	366	153	21	206	-13
	1967-84	4,706	3,345	78	691	591	3,977	2,917	81	424	555
55-64 .....	1967-79	4,044	1,504	530	848	1,161	3,489	1,008	612	593	1,275
	1979-84	635	-516	94	813	245	-464	-1,301	161	270	407
	1967-84	4,679	988	624	1,661	1,406	3,025	-293	773	863	1,682
65-74 .....	1967-79	2,597	-1,271	1,931	1,066	872	2,740	-256	2,010	659	326
	1979-84	2,725	34	683	1,469	536	1,793	165	629	397	600
	1967-84	5,322	-1,237	2,614	2,535	1,408	4,533	-91	2,639	1,056	926
75 or older .....	1967-79	2,923	-688	1,918	1,118	573	2,497	-76	1,912	589	71
	1979-84	1,911	-141	587	1,343	122	1,208	83	746	307	73
	1967-84	4,834	-829	2,505	2,461	695	3,705	7	2,658	896	144
Under 65 .....	1967-79	3,070	2,124	122	314	511	2,842	2,025	128	183	506
	1979-84	433	134	-11	252	58	-230	-350	13	62	45
	1967-84	3,503	2,258	111	566	569	2,612	1,675	141	245	551
65 or older .....	1967-79	2,679	-1,090	1,927	1,087	755	2,662	-115	1,962	615	200
	1979-84	2,347	-81	646	1,422	361	1,534	176	632	407	319
	1967-84	5,026	-1,171	2,573	2,509	1,116	4,196	61	2,594	1,022	519
All ages .....	1967-79	2,983	1,473	482	468	561	2,632	996	665	386	586
	1979-84	797	45	136	493	123	133	-271	190	152	61
	1967-84	3,780	1,518	618	961	684	2,765	725	855	538	647

Source: Tabulations from March Current Population Survey files.

income was almost as significant as the rise in Social Security benefit income and more important than the rise in property income for those aged 65-74. Earnings also rose for that age group in that subperiod.

In 1979-84, the youngest age group experienced a large decline in earnings. An earlier increase in other income, primarily during 1967-79, did not offset that decline. Total income fell during the 1979-84 subperiod after a rise during the earlier subperiod.

For the early subperiod and the total period, the group aged 25-34 had increases in other income and property income, but the largest increase by far was in earnings. In 1979-84, however, earnings and total income fell. Among those aged 35-44 and 45-54, large increases in earnings and smaller increases in property income and other income occurred. The vast majority of the increase occurred by 1979 (with the exception of property income for those aged 45-54).

Income from all sources except earnings increased substantially among the group aged 55-64. Earnings fell substantially in 1979-84, following a substantial rise in 1967-79. The decline in earnings caused a decline in total income for 1979-84.

For the income quintiles of the aged group, the patterns are somewhat different (tables 14 and 15).

**Table 14.—Mean incomes of aged family units, by type of income, adjusted for size of unit**

[Amounts in 1982 dollars]

Income quintile	Year	Type of income				
		Total income	Earnings	Social Security benefits	Property	Other
1 .....	1967	\$2,116	\$54	\$1,589	\$107	\$366
	1979	3,484	65	2,694	142	583
	1984	3,986	73	3,102	168	643
2 .....	1967	4,007	351	2,672	249	735
	1979	5,954	326	4,325	498	805
	1984	6,761	345	4,975	590	851
3 .....	1967	6,090	1,088	3,219	580	1,203
	1979	8,752	973	5,181	1,195	1,403
	1984	10,286	1,149	5,813	1,602	1,722
4 .....	1967	9,872	3,898	3,054	1,194	1,726
	1979	13,074	2,555	5,501	2,489	2,529
	1984	15,702	2,878	5,951	3,827	3,046
5 .....	1967	23,572	14,352	2,344	4,801	2,076
	1979	27,798	10,379	4,811	8,047	4,561
	1984	34,061	9,450	5,901	13,289	5,421

Source: Tabulations from March Current Population Survey files.

The top two quintiles had substantial declines in earnings, particularly the top quintile in 1967-84. For the remaining three quintiles, earnings did not change much. For all five quintiles, Social Security benefit income increased, with most of the increase occurring by 1979. Property income rose substantially for the

top four quintiles, mostly since 1979 for the top two quintiles. Increases in interest income were a major factor in that rise. The top three quintiles also had substantial increases in other income.

### Composition of Total Income

Variations by type of income produced changes in the composition of total income (tables 16 and 17).

**Table 15.**—Changes in mean incomes of aged family units, by type of income, adjusted for size of unit  
[Amounts in 1982 dollars]

Income quintile	Time period	Type of income				
		Total income	Earnings	Social Security benefits	Property	Other
1.....	1967-79	\$1,368	\$11	\$1,105	\$35	\$217
	1979-84	502	8	408	26	60
	1967-84	1,870	19	1,513	61	277
2.....	1967-79	1,947	-25	1,653	249	70
	1979-84	807	19	650	92	46
	1967-84	2,754	-6	2,303	341	116
3.....	1967-79	2,662	-115	1,962	615	200
	1979-84	1,534	176	632	407	319
	1967-84	4,196	61	2,594	1,022	519
4.....	1967-79	3,202	-1,343	2,447	1,295	803
	1979-84	2,628	323	450	1,338	517
	1967-84	5,830	-1,020	2,897	2,633	1,320
5.....	1967-79	4,226	-3,973	2,467	3,246	2,485
	1979-84	6,263	-929	1,090	5,242	860
	1967-84	10,489	-4,902	3,557	8,488	3,345

Source: Tabulations from March Current Population Survey files.

For the aged, the estimates for all units in the age group and for the middle quintile are quite different. This analysis is restricted to the middle quintile estimates.

For the middle income quintile, earnings as a percent of total income fell for each age group in 1967-84. The decline was particularly large for the groups aged 55-64 and 65-74, and it is associated with their withdrawal from the labor force. Among those aged 55-64, the proportion of units with earnings dropped from 98 percent to 88 percent; for the group aged 65-74, the drop was from 52 percent to 39 percent. For the age groups whose earnings loss was large, most of the decline occurred in 1967-79. In each aged quintile, earnings also declined as a share of total income. The declines were substantial in the fourth and fifth quintiles, where earnings were a very important income source. Again, most of the decline occurred by 1979.

Social Security benefit income increased slightly as a share of total income in 1967-84 for the middle income quintiles aged 55-64, 65-74, and 75 or older. The percentage of units receiving Social Security benefits rose substantially for the group aged 55-64 (from 16 percent to 30 percent) and slightly for the two older age groups. For the latter two groups, the share of total income derived from Social Security

**Table 16.**—Percentage composition of total income of family units, by age of unit head, adjusted for size of unit

Age of unit head	Year	All income quintiles				Middle income quintile			
		Earnings	Social Security benefits	Property	Other	Earnings	Social Security benefits	Property	Other
Under 25 .....	1967	96	0	1	3	97	0	0	2
	1979	91	1	1	7	91	1	1	7
	1984	89	0	2	8	88	0	1	10
25-34.....	1967	97	0	1	2	98	0	0	2
	1979	94	0	2	4	95	0	1	3
	1984	94	0	2	4	95	0	1	3
35-44.....	1967	95	1	2	2	96	1	1	2
	1979	92	1	3	4	94	1	2	3
	1984	92	1	4	3	94	1	2	3
45-54.....	1967	93	1	3	3	95	1	1	2
	1979	89	2	5	5	91	1	2	5
	1984	88	1	6	5	90	1	4	5
55-64.....	1967	88	3	5	4	91	3	3	4
	1979	77	5	9	9	77	6	6	11
	1984	72	5	13	10	71	7	8	14
65-74.....	1967	49	25	13	13	28	45	9	18
	1979	29	35	19	17	18	53	13	16
	1984	24	33	25	17	16	50	15	19
75 or older.....	1967	29	36	20	15	7	64	9	20
	1979	14	45	25	16	4	68	14	14
	1984	10	42	32	15	4	67	15	13
Under 65 .....	1967	93	1	3	3	95	1	1	2
	1979	89	2	4	5	91	2	2	5
	1984	87	2	5	6	90	2	3	6
65 or older.....	1967	43	28	15	13	18	53	10	20
	1979	24	38	21	17	11	59	14	16
	1984	20	36	28	17	11	57	16	17
All ages.....	1967	86	5	4	4	88	5	3	3
	1979	79	7	7	7	78	9	5	8
	1984	76	8	9	7	75	10	6	8

Source: Tabulations from March Current Population Survey files.

benefits fell in 1979-84; thus the entire increase had occurred by 1979.

In each age group, property income increased as a share of total income in the full period. The increases for the aged groups were substantial. Here, too, most of the increase had occurred by 1979. Some rise in 1979-84 would be expected as a result of technical

**Table 17.**—Percentage composition of total income of aged family units, adjusted for size of unit

Income quintile	Year	Type of income			
		Earnings	Social Security benefits	Property	Other
1.....	1967	3	75	5	17
	1979	2	77	4	17
	1984	2	78	4	16
2.....	1967	9	67	6	18
	1979	5	73	8	14
	1984	5	74	9	13
3.....	1967	18	53	10	20
	1979	11	59	14	16
	1984	11	57	16	17
4.....	1967	39	31	12	17
	1979	20	42	19	19
	1984	18	38	24	19
5.....	1967	61	10	20	9
	1979	37	17	29	16
	1984	28	17	39	16

Source: Tabulations from March Current Population Survey files.

changes in the CPS estimates (see the Technical Note, page 22). For the top three aged quintiles, substantial increases in the proportion of property income occurred during both subperiods.

Other income increased substantially as a share of total income from 1967 to 1984 for the groups under age 25 and aged 55-64. For the latter group, pensions were an important factor in that rise. The group aged 65-74 had no substantial change, and for the group aged 75 or older the share of income from this source dropped sharply. In each age group, the proportion of persons with other income increased. Most of the changes occurred by 1979, although for those under age 25, a substantial rise occurred in 1979-84.

### Total Income of Socioeconomic Groups

This section focuses on whether or not different types of family unit shared equally in the income changes within the various age groups. Table 18 shows the real median incomes for different family units in 1967, 1979, and 1984. Average annual percentage changes in those medians are shown in table 19, and relative medians for those groups appear in table 20.

**Table 18.**—Median incomes of family units, by age of head and type of unit, adjusted for size of unit

[Amounts in 1982 dollars]

Age of unit head	Year	Type of unit							
		All units	Families			Unrelated individuals			
			Total	Unit head married, spouse present	Other male unit head	Other female unit head	Total	Men	Women
Under 25.....	1967	\$8,645	\$9,798	\$10,205	\$8,048	\$3,940	\$5,712	\$5,453	\$5,731
	1979	9,674	10,896	12,724	11,608	3,653	8,836	9,991	7,740
	1984	7,852	8,305	10,419	8,719	3,020	7,625	8,382	6,952
25-34.....	1967	10,711	10,462	10,993	13,572	4,359	14,284	15,596	12,535
	1979	13,966	13,581	15,095	14,514	5,716	14,984	16,226	13,501
	1984	13,526	12,887	14,536	14,990	5,077	14,446	15,284	13,779
35-44.....	1967	11,080	10,953	11,427	12,841	6,434	12,982	15,318	10,325
	1979	14,777	14,561	15,750	16,421	8,036	15,964	17,985	13,738
	1984	15,381	15,130	16,522	16,102	8,020	16,688	18,019	15,331
45-54.....	1967	13,460	13,891	14,485	13,608	8,253	10,228	11,680	9,351
	1979	17,078	17,987	19,211	16,258	10,653	12,483	15,168	9,666
	1984	17,487	18,354	20,033	18,854	10,907	13,138	16,308	10,918
55-64.....	1967	12,479	14,068	14,488	13,474	9,598	7,582	9,868	6,970
	1979	15,835	18,698	19,541	16,681	11,913	8,744	10,469	7,847
	1984	15,418	17,827	19,122	13,084	10,632	9,360	10,652	8,660
65-74.....	1967	7,023	8,930	8,880	8,647	9,749	4,574	5,332	4,378
	1979	9,840	12,087	12,288	10,852	10,645	6,575	7,263	6,447
	1984	11,654	14,332	14,816	13,653	10,940	7,705	8,232	7,537
75 or older.....	1967	4,780	6,311	6,010	7,620	7,562	3,653	4,531	3,386
	1979	7,288	9,734	9,561	13,397	10,867	5,845	6,687	5,686
	1984	8,463	11,238	11,248	12,487	11,106	6,613	7,207	6,408
Under 65.....	1967	11,514	11,877	12,304	12,896	6,608	9,111	11,463	7,910
	1979	14,362	15,268	16,571	15,458	7,479	11,933	13,762	9,879
	1984	14,093	14,955	16,614	15,000	7,064	11,905	13,445	10,782
65 or older.....	1967	6,045	7,947	7,871	7,976	8,382	4,130	4,981	3,891
	1979	8,669	11,327	11,450	11,181	10,674	6,146	6,993	5,998
	1984	10,248	13,295	13,747	13,051	10,965	7,139	7,783	6,960
All ages.....	1967	10,473	11,294	11,883	11,554	6,902	6,298	8,592	5,200
	1979	13,114	14,621	15,800	14,522	8,008	9,553	12,555	7,749
	1984	13,309	14,703	16,113	14,788	7,687	10,207	12,400	8,825

Source: Tabulations from March Current Population Survey files.

**Table 19.**—Average annual percentage change in real median incomes of family units, by age of unit head and type of unit, adjusted for size of unit, 1967–79, 1979–84, and 1967–84

Age of unit head	Time Period	Type of unit							
		All units	Families				Unrelated individuals		
			Total	Unit head married, spouse present	Other male unit head	Other female unit head	Total	Men	Women
Under 25 .....	1967-79	0.9	0.9	1.9	3.1	-0.6	3.7	5.2	2.5
	1979-84	-4.1	-5.3	-3.9	-5.6	-3.7	-2.9	-3.5	-2.1
	1967-84	-.6	-1.0	.1	.5	-1.6	1.7	2.6	1.1
25-34.....	1967-79	2.2	2.2	2.7	.6	2.3	.4	.3	.6
	1979-84	-.6	-1.0	-.8	.6	-2.3	-.7	-1.2	.4
	1967-84	1.4	1.2	1.7	.6	.9	.1	-.1	.6
35-44.....	1967-79	2.4	2.4	2.7	2.1	1.9	1.7	1.3	2.4
	1979-84	.8	.8	1.0	-.4	0	.9	0	2.2
	1967-84	1.9	1.9	2.2	1.3	1.3	1.5	1.0	2.4
45-54.....	1967-79	2.0	2.2	2.4	1.5	2.1	1.7	2.2	.3
	1979-84	.5	.4	.8	3.0	.5	1.0	1.5	2.5
	1967-84	1.6	1.7	1.9	1.9	1.7	1.5	2.0	.9
55-64.....	1967-79	2.0	2.4	2.5	1.8	1.8	1.2	.5	1.0
	1979-84	-.5	-.9	-.4	-4.7	-2.2	1.4	.3	2.0
	1967-84	1.3	1.4	1.6	-.2	.6	1.2	.5	1.3
65-74.....	1967-79	2.8	2.5	2.7	1.9	.7	3.1	2.6	3.3
	1979-84	3.4	3.5	3.8	4.7	.5	3.2	2.5	3.2
	1967-84	3.0	2.8	3.1	2.7	.7	3.1	2.6	3.3
75 or older .....	1967-79	3.6	3.7	3.9	4.8	3.1	4.0	3.3	4.4
	1979-84	3.0	2.9	3.3	-1.4	.4	2.5	1.5	2.4
	1967-84	3.4	3.5	3.8	-3.0	2.3	3.6	2.8	3.8
Under 65 .....	1967-79	1.9	2.1	2.5	1.5	1.0	2.3	1.5	1.9
	1979-84	-.4	-.4	.1	-.6	-1.1	0	-.5	1.8
	1967-84	1.2	1.4	1.8	.9	.4	1.6	.9	1.8
65 or older .....	1967-79	3.0	3.0	3.2	2.8	2.0	3.4	2.9	3.7
	1979-84	3.4	3.3	3.7	3.1	.5	3.0	2.2	3.0
	1967-84	3.2	3.1	3.3	2.9	1.6	3.3	2.7	3.5
All ages.....	1967-79	1.9	2.2	2.4	1.9	1.2	3.5	3.2	3.4
	1979-84	.3	.1	.4	.4	-.8	1.3	.2	2.6
	1967-84	1.4	1.6	1.8	1.5	.6	2.9	2.2	3.2

Source: Tabulations from March Current Population Survey files.

For units of all ages, female unrelated individuals had the highest rate of growth in real median income during the 1967–84 period (3.2 percent per year). Families headed by other females experienced the least growth (0.6 percent per year). These rankings were the same during both subperiods.

For the entire period, among those aged 65–74 or 75 or older, all unit types except families headed by other females had relatively high income growth—at least 2.6 percent per year. For those aged 65–74, female unrelated individuals had the highest growth (3.3 percent per year); in the age 75-or-older group, female unrelated individuals and families headed by husband-wife couples were highest (3.8 percent per year). However, between the two subperiods, results varied substantially.

Illustrative of the pervasiveness of the high increases for aged family units is the fact that for the entire period each family unit type in the group aged 75 or older had a higher percentage growth than each type in each age group in the 25–64 age range and a higher percentage growth than all types except one in the group under age 25. Each family unit type except one in the group aged 65–74 had a rate of growth at least as high as each type in each age group under

age 65. Thus, those relatively high percentage increases were widespread among family unit types. These patterns did not hold during each of the subperiods.

For the entire period, for both families and unrelated individuals, the group aged 65–74 or 75 or older had the highest rates of growth in real median income. For families, this pattern applied to each subperiod. For unrelated individuals, it was true for both subperiods for the oldest group, but only true for the 1979–84 subperiod for those aged 65–74.

The small increases or decreases during the entire period discussed earlier were also experienced by almost all types of family units under age 25. Male unrelated individuals were the exception, and they experienced a large decrease in the 1979–84 subperiod. The other nonaged age groups also showed fairly consistent low growth. In the youngest group, for each family unit type, 1979–84 saw a substantial decline in their real median income. Most of these types of young family units had smaller declines during that subperiod.

Relative median incomes using all units (all ages) as the base are shown in table 20. For those aged 75 or older, all types of family units had increased relative



medians in the full period and in the 1967-79 period, but families headed by other men and women did not have increases in the 1979-84 subperiod. For the 65-74 age group, except for families headed by other females, all family unit types had increases in the total period and except for families headed by other males and females, all had increases in both subperiods. The decline in relative medians among families headed by other females occurred during the 1967-79 subperiod. In 1984, the relative medians for aged unrelated individuals remained quite low. However, relative medians for families in the 65-74 age group were greater than 1.00, except for families headed by other females.

### Summary and Conclusions

This article examines changes in the income of the aged and of other age groups from 1967 to 1984. The levels of income of various age groups are also analyzed. The most significant findings are:

The 1967-84 period shows gains for the aged relative to the nonaged, using medians, means, and the means of the second and ninth income deciles. Median real income adjusted for size of family unit rose 3.2 percent per year among aged family units and 1.2

percent per year for nonaged units. Differences in the income growth of the aged and nonaged were greater in the 1979-84 period than in the 1967-79 period. All of the detailed age groups within the aged group experienced rapid income growth. These relative gains for the aged were not typical of the entire post-World War II period; from 1947 to 1967, the incomes of the nonaged rose faster than those of the aged.

Despite a substantial difference in the rates of income growth for aged and nonaged units in 1967-84, the general shape of the age-income relationship was altered only slightly. In both 1967 and 1984, aged family units had relatively low median incomes, especially compared with units in middle age. Within the group aged 65 or older, the older units improved their positions slightly relative to the younger aged units, but in 1984 their incomes remained far below those of the younger aged units.

During the 1967-84 period, income inequality declined substantially for the aged group as a whole and for each detailed age group within the aged group. In contrast, income inequality increased for the nonaged group as a whole and for almost all the detailed nonaged groups. Inequality for aged units was substantially greater than for nonaged units in

**Table 20.**—Relative median incomes of family units, by age of unit head and type of unit, adjusted for size of unit

Age of unit head	Year	Type of unit							
		All units	Families				Unrelated individuals		
			Total	Unit head married, spouse present	Other male unit head	Other female unit head	Total	Men	Women
Under 25	1967	0.83	0.94	0.97	0.77	0.38	0.55	0.52	0.55
	1979	.74	.83	.97	.89	.28	.67	.76	.59
	1984	.59	.62	.78	.66	.23	.57	.63	.52
25-34	1967	1.02	1.00	1.05	1.30	.42	1.36	1.46	1.20
	1979	1.06	1.04	1.15	1.11	.44	1.14	1.24	1.03
	1984	1.02	.97	1.09	1.13	.38	1.09	1.15	1.04
35-44	1967	1.06	1.05	1.09	1.23	.61	1.24	1.46	.99
	1979	1.13	1.11	1.20	1.25	.61	1.22	1.37	1.05
	1984	1.16	1.14	1.24	1.21	.60	1.25	1.35	1.15
45-54	1967	1.29	1.33	1.38	1.30	.79	.98	1.12	.89
	1979	1.30	1.37	1.46	1.24	.81	.95	1.16	.74
	1984	1.31	1.38	1.51	1.42	.82	.99	1.23	.82
55-64	1967	1.19	1.34	1.38	1.29	.92	.72	.94	.67
	1979	1.21	1.43	1.49	1.27	.91	.67	.80	.60
	1984	1.16	1.34	1.44	.98	.80	.70	.80	.65
65-74	1967	.67	.85	.85	.83	.93	.44	.51	.42
	1979	.75	.92	.94	.83	.81	.50	.55	.49
	1984	.88	1.08	1.11	1.03	.82	.58	.62	.57
75 or older	1967	.46	.60	.57	.73	.72	.35	.43	.32
	1979	.56	.74	.73	1.02	.83	.45	.51	.43
	1984	.64	.84	.85	.94	.83	.50	.54	.48
Under 65	1967	1.10	1.13	1.17	1.23	.63	.87	1.09	.76
	1979	1.10	1.16	1.26	1.18	.57	.91	1.05	.75
	1984	1.06	1.12	1.25	1.13	.53	.89	1.01	.81
65 or older	1967	.58	.76	.75	.76	.80	.39	.48	.37
	1979	.66	.86	.87	.85	.81	.47	.53	.46
	1984	.77	1.00	1.03	.98	.82	.54	.58	.52
All ages	1967	1.00	1.08	1.13	1.10	.66	.60	.82	.50
	1979	1.00	1.11	1.20	1.11	.61	.73	.96	.59
	1984	1.00	1.10	1.21	1.11	.58	.77	.93	.66

Source: Tabulations from March Current Population Survey files.

1967, but by 1984 the difference had narrowed considerably. Most of the narrowing of that difference occurred from 1967 to 1979. Inequality for all units together increased during the 1967-84 period.

Poverty rates for the aged fell sharply in 1967-84. In 1984, however, the rate for aged persons continued to exceed the rate for each detailed age group in the 25-64 age range.

For the middle income quintile of the aged, Social Security benefit income accounted for most of the increase in total income in the overall period. Property income and other income also increased substantially. Social Security benefits were relatively more important in the increase in total income in 1967-79 than in 1979-84.

The composition of total income among the aged units changed substantially during 1967-84, as earnings fell sharply in importance and Social Security benefits and property income became more important. Most of the change in the earnings and Social Security benefit shares had occurred by 1979, but the property income share rose after that date as interest rates rose sharply before falling. Increases in the mean amounts of Social Security benefits played a very important role in the rising income of the aged.

All types of aged family units had increased median income in 1967-84. Aged female unrelated individuals experienced the largest percentage increase in median income. All types of aged family units except families headed by other females had rapid rises in median income in both subperiods. In 1984, aged unrelated individuals still had low median incomes, compared with other types of aged family units. Aged female unrelated individuals had the lowest relative median incomes.

Overall economic conditions during the 1967-84 period had an impact on the comparisons summarized above. If economic conditions in the future differ substantially from those in the period studied here, the comparisons of the income of the aged and nonaged groups would be affected.

The analysis of the current economic status of the aged in this article involves two principal weaknesses. First, the estimates of money income were not adjusted for underreporting. As noted earlier, research has shown that underreporting of income is not uniform across age groups; underreporting is more important for the aged than for other age groups. Thus, adjusting for underreporting would make the aged somewhat better off, compared with the nonaged. This problem is discussed in the Technical Note on page 22.

Second, money income before tax was used as the measure of economic resources. That measure was the only one that could be examined in the detail pre-

sented here. The most important omissions from the measure used in this study are taxes and noncash income. On average, aged units have paid a smaller percentage of their income in income taxes than nonaged units both because, due to lower incomes, they were in lower marginal tax brackets and because they benefitted from special tax breaks—an extra personal exemption, for example. The Bureau of the Census<sup>29</sup> estimated that in 1984 nonaged households paid 23 percent of their money income in Federal and State income taxes, property taxes on owner-occupied homes, Social Security taxes, and Federal employee retirement contributions; for aged households the outlay was only 14 percent of their money income.

The inclusion of noncash income poses several complex problems. Many types of noncash income exist and the choice of types to be included affects the results. For example, the inclusion of Medicare would add income primarily to the aged, while the inclusion of employer-provided benefits (health insurance, for example) would add income primarily to the nonaged. The question of which types of noncash income should be included remains a controversial one. Even if a consensus were reached on the types of noncash income to include, the appropriate valuation methods would continue to be controversial. The Bureau of the Census<sup>30</sup> has published estimates of poverty status in which several types of government noncash benefits are added to income; alternative valuation methods are used.

Further research on the economic status of the aged is needed using comprehensive definitions of economic resources. It is important to consider money income, noncash income, and taxes together. Wealth is also a relevant variable. In the ideal case, a range of alternatives concerning types of noncash income and valuation methods would be used in the analysis, and the data would be adjusted for underreporting.

## Technical Note

### Underreporting of Income Amounts

Underreporting of income amounts is known to be an important problem in the Current Population Survey (CPS), with total income roughly 10 percent below independent control aggregates in 1983, but with far greater shortfalls for some types of income. For

<sup>29</sup> Bureau of the Census, *After-Tax Money Income Estimates of Households: 1984* (Current Population Reports, Series P-23, No. 147), July 1986.

<sup>30</sup> Bureau of the Census, *Estimates of Poverty Including the Value of Noncash Benefits: 1984* (Technical Paper 55), August 1985.

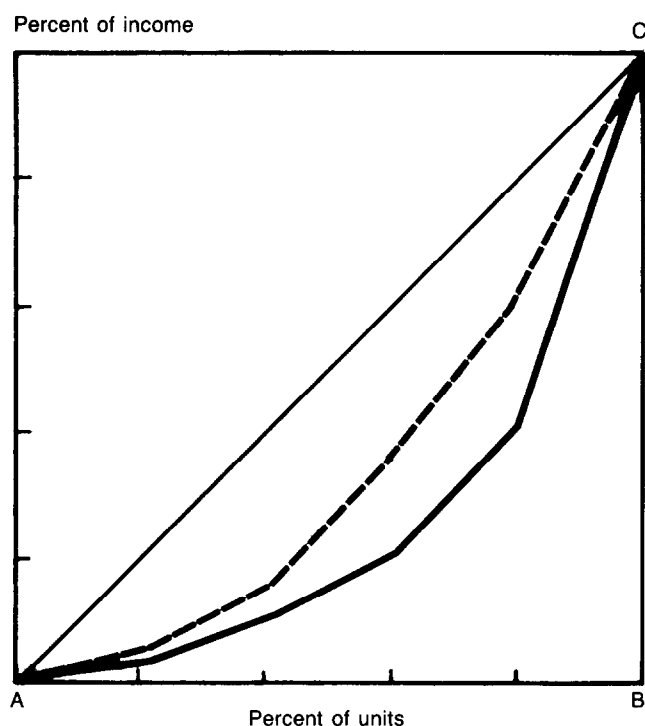
example, in 1983 property income was underestimated by more than 50 percent.<sup>31</sup> It is likely that underreporting of income was a slightly less important problem in 1984 than in 1967. Although estimates are not available for 1967, CPS total money income was about 85 percent of the independent control aggregate in 1964<sup>32</sup> and rose to 90 percent in 1972.<sup>33</sup> Thus, if the percentage was between 85 percent and 90 percent in 1967, rates of income growth estimated from the CPS for the 1967-84 period would be overstated slightly.

Underreporting of total income is thought to differ substantially by age: Underreporting rises as age increases.<sup>34</sup> The effects of making a crude adjustment for underreporting to 1983 income data have been reported by Radner.<sup>35</sup> The adjustment factors were based on 1972 estimates and therefore were substantially out of date; however, they were the most recent estimates available. Adjusted medians for 1983 were derived by multiplying the 1983 median for the age group by the 1972 adjustment factor. As would be expected, the relative incomes of older units rose and the relative incomes of younger units fell when the adjustment was applied. The ratio of the medians of the aged to the medians of the nonaged rose from 0.71 to 0.85, an increase of 20 percent. The estimates in this article have not been adjusted for underreporting.

### Income Inequality

As noted previously, relative income shares show the percentage of the group's total income that is received by a specific portion of the income distribution. A Lorenz curve relates cumulated relative income shares and cumulated percentages of units, when the units are ranked by size of income. Lorenz curves are illustrated in chart 2. If all units received the same income, the Lorenz curve would be the straight line AC—the line representing perfect equality. If all income was received by one unit, the Lorenz curve would be the line ABC. In the preceding analysis, a distribution is considered to be more (less) equal than a second distribution if the Lorenz curve for the first distribution lies above (below) the Lorenz curve for the second distribution, with no in-

Chart 2.—Illustration of Lorenz curves



tersection. In chart 2, the distribution represented by the broken-line Lorenz curve is more equal than the distribution presented by the solid-line Lorenz curve. If the two curves intersect, the comparison is considered ambiguous.

The Gini concentration ratio is a measure of inequality that can be interpreted as being based on a Lorenz curve. The Gini concentration ratio is defined as the ratio of the area between the Lorenz curve and the line of perfect equality (AC) divided by the area of the triangle ABC (the total area below line AC). If all units receive the same income, the Gini concentration ratio is zero. If all income is received by one unit, the Gini ratio is 1.0.

### Data

The data used for 1967, 1979, and 1984 are not strictly comparable in all cases. Among the most important changes in the CPS during the 1967-84 data period are:<sup>36</sup>

- (1) The introduction of new population controls as newer Decennial Census data became available: 1960 Census population controls were used for the 1967-70 data; 1970 Census controls were used for the 1971-79 data; for the

<sup>31</sup> Bureau of the Census, Current Population Reports, Series P-60, No. 151, *op. cit.*, table A-2.

<sup>32</sup> Edward C. Budd, Daniel B. Radner, and John C. Hinrichs, *Size Distribution of Family Personal Income: Methodology and Estimates for 1964* (Bureau of Economic Analysis Staff Paper, No. 21), Department of Commerce, June 1973.

<sup>33</sup> Bureau of the Census, *Money Income in 1972 of Families and Persons in the United States* (Current Population Reports, Series P-60, No. 90), December 1973.

<sup>34</sup> For example, see Daniel B. Radner, *Social Security Bulletin*, July 1982, *op. cit.*

<sup>35</sup> Daniel B. Radner, *Studies in Income Distribution*, No. 14, 1986, *op. cit.*, table A-6.

<sup>36</sup> For further detail about these differences, see various issues of the Bureau of the Census, Current Population Reports, Series P-60.

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- 1980-84 data, 1980 Census controls were used.
- (2) The questionnaire was revised to provide more detail on type of income beginning with the 1974 data, and again with the 1978 data (3/8 of the sample) and the 1979 data.
  - (3) The procedure for imputation of income to nonrespondents was revised beginning with the 1976 data. The imputation of interest income was changed in the 1984 data, producing a substantial increase in the amounts of interest income imputed.
  - (4) The "householder" concept replaced the "head" concept beginning with the 1979 data. Under the "head of family" concept, the wife in a married couple could not be the family head; under the householder concept, either spouse can be the householder. Thus, in estimates for 1979 or later, some families are classified according to the age of the wife.

This change would not be expected to have an important effect on the estimates in this article.

The CPS microdata files used for this article differed with respect to the top-coding of high income amounts. Both the March 1968 CPS file (1967 data) and the March 1985 CPS file (1984 data) used were not top-coded. The March 1980 CPS file (1979 data) was top-coded at \$50,000. In the two files that were not top-coded, amounts could only be coded up to \$100,000. Those amounts applied to specific income types of persons. The top-coding is performed by the Bureau of the Census to preserve confidentiality. These differences in top-coding do not have a substantial effect on most of the estimates shown. However, the estimates of inequality and (to a lesser extent) mean incomes are affected.