

Socioeconomic Characteristics of the Elderly: Some Black-White Differences

by JULIAN ABBOTT*

This article compares several characteristics of the black and white population aged 60 and older in March 1972. To distinguish race from economic-status effects the population is divided into quintiles of elderly units ranked by size of money income, and comparisons of selected demographic and economic characteristics are made within and across quintiles. Differences between social security beneficiaries and nonbeneficiaries are also analyzed to ascertain the effects of social security benefits.

The educational and occupational disadvantages of blacks were evident even at the highest income level—a status more likely to be achieved by married black couples with both spouses working. Black elderly units were less likely than whites to have social security benefits, other government or private pensions, or income from assets. They were generally more likely to have earned income or to receive public assistance payments.

IT IS COMMONLY KNOWN that the elderly, especially those who no longer work, are economically disadvantaged in comparison with younger groups.¹ Elderly blacks tend to suffer even more from low and inadequate incomes than the elderly population in general. A considerable amount of data documents the fact that wide differences exist between blacks and whites with respect to income level, education, employment, and other socioeconomic characteristics.² Blacks, however, are not

* Division of Retirement and Survivors Studies, Office of Research and Statistics

¹ Lenore A. Epstein and Janet H. Murray, *The Aged Population of the United States: The 1963 Social Security Survey of the Aged* (Research Report No. 19), Social Security Administration, Office of Research and Statistics, 1967; Lenore E. Bixby et al., *Demographic and Economic Characteristics of the Aged: The 1968 Social Security Survey* (Research Report No. 45), Social Security Administration, Office of Research and Statistics, 1975.

² Bureau of the Census, "Money Income in 1971 of Families and Persons in the United States," *Current Population Reports*, Series P-60, No. 85, 1972, and "The Social and Economic Status of the Black Population in the United States, 1971," *Current Population Reports*, Series P-23, No. 42, 1972. See also Herbert S. Parnes et al., *The Pre-Retirement Years*, vol. 1 (Manpower Research Monograph No. 15), Department of Labor, Manpower Administration, 1970.

a monolithic group, being made up of members with disparate educational achievements, as well as different work and occupational experiences—characteristics directly related to the level of income.

This study examines variations in education, work experience in 1971, and occupation on longest job in 1971 in relation both to race and to size of income for the elderly population aged 60 and older in 1972. It covers not only the extent to which these characteristics differ between blacks and whites as total money income varies, but also, given such differences, the extent to which blacks achieve certain economic levels. In addition, the relative differences between social security beneficiaries and those not yet receiving benefits are analyzed to assess the role of social security benefit payments, especially among the low-income elderly.

The method of analysis is straightforward. The population is described in terms of age, marital status, sex, beneficiary status, and total money income in 1971. The number of elderly units in the population is then divided into fifths, ranked by size of income. (An elderly unit consists of a married couple living together, one or both of whom is aged 60 and older, or a nonmarried person aged 60 or older who is widowed, divorced, never-married, or married but living apart from the spouse.) These economic-status categories (quintiles) are the basic units of analysis. This method is used as a control for money income, since the focus of the study is to describe and explain differences between black and white elderly units in the same income category in 1971.

Analysis of existing differences may lead to alternative approaches to the problem of inadequate income among the aged. The major limitation may be that money income at only one point in time is used. It is fully realized that a more thorough assessment could be obtained from longitudinal data or from a measure of economic status that included income-in-kind received from all sources and imputation for home ownership.

Opinions vary on what should be included in this measure. In any event, the data source for the study does not contain this information and such a measure of economic well-being was not intended within the scope of this article.

The data presented here are derived from the 1972 Social Security Survey of the Status of the Elderly (STATEL).³ This survey matches data from the March 1972 Current Population Survey (CPS) of the Bureau of the Census with program data from Social Security Administration's master beneficiary record. The sample examined here consists of 14,627 elderly units, of which 1,295 are black. They represent an estimated 19,541,248 white units and 1,912,534 black units aged 60 and older living in the United States in 1971. Further details of the sampling procedure are given in the technical note, page 38.

The definition of beneficiary status is similar to that used in the cited 1963 and 1968 surveys. A *nonbeneficiary* unit did not receive a monthly cash benefit during or before the survey year, 1971. A *beneficiary* unit has two categories: (1) "Full-year" beneficiaries—those who first received an old-age, survivors, and disability insurance (OASDI) monthly cash benefit in January 1971 or earlier and (2) "other" beneficiaries—those who received their first benefit in February 1971 or later, the transitionally insured, and the "special age-72" beneficiaries.⁴ In most discussions of differences between beneficiaries and nonbeneficiaries in this report, the "other" beneficiaries are excluded from the "beneficiary" category but included in the "total." This procedure permits a comparison of those with fully insured status who were entitled for the entire year with those who received no benefit.

³ For other reports based on this survey, see Gayle B. Thompson, "Aged Women OASDI Beneficiaries: Income and Characteristics, 1971," *Social Security Bulletin*, April 1977, and Susan Grad, "Income of the Population Aged 60 and Older, 1971" (Staff Paper No. 26), Social Security Administration, Office of Research and Statistics, 1977.

⁴ The transitional insured status and special age-72 provisions, for a limited period, allow persons with fewer than the required number of quarters of coverage to obtain eligibility for retired-worker benefits at age 72, at a lower rate than that for fully insured persons. Under the special age-72 provisions, persons aged 73-75 in 1971 needed only 9 quarters of coverage or fewer to be entitled. Persons aged 76 or older in 1971, who met certain requirements, could have become entitled without any quarters of coverage.

Partly by intention, and partly because of the small number of blacks in the sample, analysis of the characteristics of the elderly by economic status focuses on overall black-white differences. The differences are substantial and interesting, but it should be kept in mind that, in certain areas, the differences seen in relation to age, sex, marital status, and beneficiary status are considerable. These characteristics sometimes account for rather large differences that appear initially to be related to race.

CHARACTERISTICS OF THE POPULATION

Marital Status and Age

About half of the white elderly units and a third of the black were married couples. Among nonmarried persons about 78 percent of the white units and 72 percent of the black were women (table 1).

The age distributions for black and white units were similar for married couples⁵ and for nonmarried men. For both racial groups, about two-thirds of the married couples and three-fourths of the nonmarried men were aged 65 and older. Married couples tended to be younger than nonmarried persons. Nonmarried white women were the oldest of the groups.

Beneficiary Status

Elderly blacks were less likely than the elderly whites to be social security beneficiaries. In 1971, about 71 percent of the white units aged 60 and over and 65 percent of the black units were OASDI beneficiary units, as the following tabulation shows. The overall proportions of white and black beneficiaries differ chiefly because nonmarried white women were the most likely of the six groups to be beneficiaries (78 percent), and nonmarried black women were least likely (64 percent). About the same proportion of white and black married couples and nonmarried men were beneficiaries.

⁵ Age of a married couple as a unit is reported as that of the husband unless he is under 60, when the age of the wife is used.

Beneficiary status	Marital status and sex			
	All units	Married couples	Nonmarried persons	
			Men	Women
Black				
Total number (in thousands)	1,913	654	351	907
Total percent	100	100	100	100
Beneficiaries				
Regular, full year	60	60	66	67
Other	5	5	3	7
Nonbeneficiaries	35	36	31	36
White				
Total number (in thousands)	19 541	9 169	2 310	8,062
Total percent	100	100	100	100
Beneficiaries				
Regular, full year	65	60	68	71
Other	6	6	5	7
Nonbeneficiaries	28	34	28	22

In terms of age, the difference in beneficiary status was greatest for the oldest units. The figures that follow show that although less than a

Beneficiary status	Age of head				
	60-61	62-64	65 and over	65-72	73 and over
Black					
Total number (in thousands)	213	330	1 370	718	652
Total percent	100	100	100	100	100
Beneficiaries					
Regular, full year	11	31	74	74	74
Other	6	15	3	3	2
Nonbeneficiaries	83	54	23	23	24
White					
Total number (in thousands)	2 210	3 193	14,138	6,871	7 266
Total percent	100	100	100	100	100
Beneficiaries					
Regular full year	11	28	82	76	88
Other	5	12	5	7	4
Nonbeneficiaries	83	60	12	17	8

tenth of the white units aged 73 and older were nonbeneficiaries, about one-fourth of the blacks in this age group were not beneficiaries in 1971. Eighty-three percent of the white units aged 65-72 were beneficiaries, compared with 77 percent of the black units. The fact that such a large proportion of older blacks, especially those aged 73 and older, were nonbeneficiaries reflects the more lim-

ited extent to which they had worked in covered employment. Relatively large numbers of older blacks had been farm laborers or domestic workers, however, and may have worked only seasonally or casually or stopped working before coverage was extended to these occupations. They may also have had less knowledge of certain provisions for acquiring insured status—those for transitional insured status and for the special benefits payable to those aged 72.

The smaller differences in beneficiary status among the younger age groups, however, reflect the increasing proportion of black units receiving benefits in comparison with that of white units.⁶ Of those aged 60-61, about 16 percent of both races were beneficiary units. At ages 62-64 some evidence exists that the proportion for black units was slightly higher than for white units.⁷

On the average, nonbeneficiaries were younger than beneficiaries among both races. Among nonbeneficiary units, the black elderly tended to be much older than the white elderly, as table 1 shows. In almost half the black units not on the benefit rolls, the unit head was aged 65 or older. Nearly two-thirds of the nonmarried black women were in this category. Only one-third of all the white nonbeneficiary units (including half the nonmarried white women) had heads that old.

Besides being the youngest among the four race/beneficiary status groups, white nonbeneficiaries included the largest proportion of married couples (chart 1). About half of all black nonbeneficiary units were nonmarried women. Age, marital status, and sex thus account for some of the seemingly large black-white economic differences according to beneficiary status, noted later. White nonbeneficiary units, for instance, were more likely than their black counterparts to have some member—possibly both—still employed.

Income

The extent of inadequate income among groups of the elderly is not readily apparent when they

⁶Gayle B. Thompson, "Blacks and Social Security Benefits Trends, 1960-73," *Social Security Bulletin*, April 1975.

⁷In general, beneficiaries aged 60-61 would be receiving disabled-worker or widow's benefits, and at age 62 and older they would receive retired-worker or spouse's benefits. Workers or spouses awarded a benefit at ages 62-64 receive a reduced amount.

TABLE 1—Age and marital status and sex Percentage distribution of elderly units, by beneficiary status and race, 1971

Age of head	Black				White			
	All units	Married couples	Nonmarried persons		All units	Married couples	Nonmarried persons	
			Men	Women			Men	Women
All units								
Total number (in thousands).....	1,913	654	351	907	19,541	9,169	2 310	5,062
Percentage distribution, by marital status and sex.....	100	34	18	47	100	47	12	41
Total percent.....	100	100	100	100	100	100	100	100
60-61.....	11	15	9	10	11	16	11	7
62-64.....	17	21	17	15	16	21	15	12
65-72.....	38	40	35	37	35	38	32	33
73 and over.....	34	24	40	39	37	26	42	49
Beneficiaries ¹								
Total number (in thousands).....	1,142	390	231	521	12,786	5,503	1,564	5,720
Percentage distribution, by marital status and sex.....	100	34	20	46	100	43	12	45
Total percent.....	100	100	100	100	100	100	100	100
60-61.....	2	3	(²)	2	2	3	1	2
62-64.....	9	8	7	11	7	8	6	6
65-72.....	47	53	44	43	41	49	35	35
73 and over.....	42	36	49	44	50	41	57	57
Nonbeneficiaries								
Total number (in thousands).....	670	233	110	327	5 504	3,070	638	1,796
Percentage distribution by marital status and sex.....	100	35	16	49	100	56	12	33
Total percent.....	100	100	100	100	100	100	100	100
60-61.....	26	35	27	20	34	41	33	22
62-64.....	26	38	31	16	35	40	33	27
65-72.....	24	20	18	29	21	17	23	27
73 and over.....	23	7	24	34	10	2	11	24

¹ Excludes beneficiaries who received their first benefit in February 1971 or later, the transitionally insured, and special age 72 beneficiaries

² Less than 0.5 percent

are regarded as homogeneous. The economic disadvantage of older blacks is pronounced when compared with that of the elderly population as a whole. Further distributions reveal the severity of the economic plight of elderly nonmarried black women.⁸

Of the 1.9 million black units aged 60 and older in the United States in 1971, about 67 percent had money incomes of less than \$3,000 and 17 percent had less than \$1,000 (table 2). About 40 percent of all white elderly units had income below \$3,000, with 7 percent under \$1,000. At the other end of the income scale the white elderly group was more than three times as likely as the

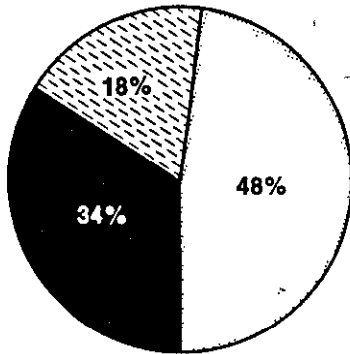
elderly blacks to have money income of \$10,000 or more. Nonmarried black women without social security benefits were the worst off, although those with benefits did not fare much better. About 43 percent of the former received less than \$1,000, and all but 6 percent of the latter received less than \$3,000 in 1971.

The income difference between white and black elderly units in 1971, as measured by the median income ratio, was 0.52. In other words, the median income of \$2,040 for elderly black units was only slightly more than half that of elderly white units. Both the level of income and the ratio of black-to-white median incomes, however, showed wide variations according to marital status, age of the unit head, and beneficiary status. The highest median income among this elderly population was \$10,152 for white married couples whose head was aged 60 or 61 (table 3). The black-white median

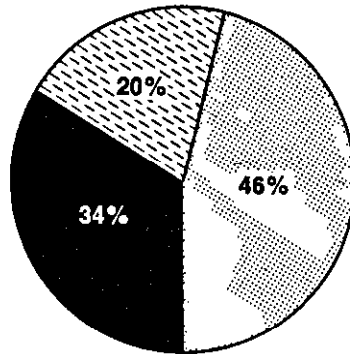
⁸ See Jacquelyn J. Jackson, "Quadruple Jeopardy: Black and Female and Old and Poor," paper presented at the symposium on "Aging Minorities and Minority Aged" at the annual meeting of the Gerontological Society, Houston, Texas, October 28, 1971.

CHART 1—Percentage distribution of elderly units, by marital status, sex, beneficiary status, and race, 1971

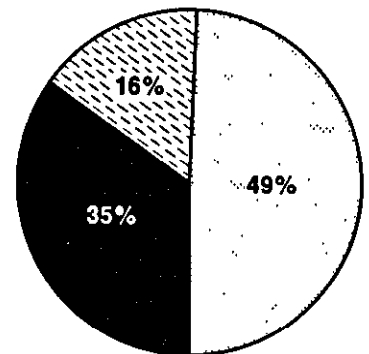
BLACK



All units

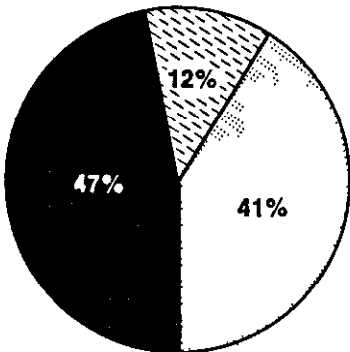


Beneficiaries

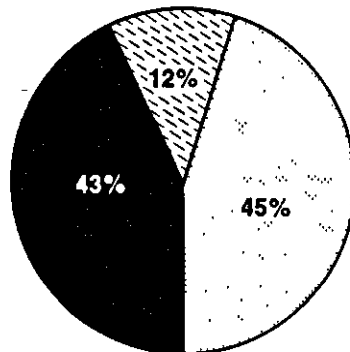


Nonbeneficiaries

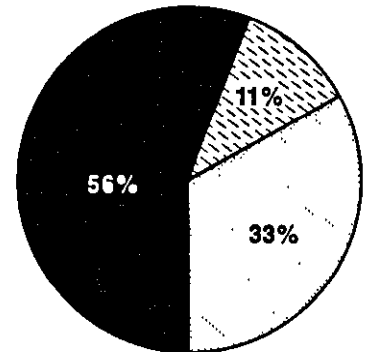
WHITE



All units



Beneficiaries



Nonbeneficiaries

■ Married couples

▨ Nonmarried men

▤ Nonmarried women

income ratio for this subgroup was 0.57. The lowest median income, \$1,337, was that of black nonmarried women aged 73 and over. This amount was 73 percent of the median income of her white counterpart.

Within racial groups the relatively superior income positions of married couples compared with that of nonmarried persons and of men compared with that of women among the nonmarried were similar. Both the median incomes for white married couples (\$6,605) and for black couples (\$4,344) were more than twice that of nonmarried men and three times that of nonmarried women

for their respective races. Among the nonmarried persons the median income of women was about three-fourths that of the men.

Income variations according to age differed for each race. Among the white elderly units, married couples as well as nonmarried persons, an expected negative association was evident for income size and age. Blacks, on the other hand, showed far less variation and no consistent pattern. Because of the much steeper decline in income for the white elderly at later ages, the relative disparity in incomes between the races tended to diminish with age. The ratio increased from 0.40 for heads

of units aged 60-61 to 0 64 for those aged 73 and older

Beneficiary status is an important factor when income comparisons are made between the races

The relative income difference between white and black beneficiary units is far smaller than that between nonbeneficiary units (a ratio of 0 64 for beneficiaries and 0 27 for nonbeneficiaries) The

TABLE 2—Total money income Percentage distribution of elderly units, by marital status, sex, beneficiary status, and race, 1971

Total money income	All units			Married couples			Nonmarried persons								
	Total	Beneficiaries ¹	Nonbeneficiaries	Total	Beneficiaries ¹	Nonbeneficiaries	Total			Men			Women		
							Total	Beneficiaries ¹	Nonbeneficiaries	Total	Beneficiaries ¹	Nonbeneficiaries	Total	Beneficiaries ¹	Nonbeneficiaries
Black															
Total number (in thousands)	1,913	1,142	670	654	390	233	1,258	752	437	351	231	110	907	521	327
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Less than \$1,000	17	10	26	1	1	2	25	15	39	15	10	28	28	18	43
1,000-2,999	50	61	33	31	38	19	60	72	40	54	63	37	62	78	41
3,000-4,999	16	17	13	26	30	20	10	10	9	19	22	12	7	5	8
5,000-6,999	8	6	11	17	14	20	3	1	6	6	3	13	2	1	4
7,000-9,999	5	3	9	13	9	18	1	(²)	3	3	1	7	1	0	2
10,000-14,999	3	2	6	8	5	14	1	(²)	2	1	(²)	4	1	0	2
15,000 or more	2	1	3	4	3	7	(²)	(²)	0	1	1	0	0	0	0
White															
Total number (in thousands)	19,541	12,786	5,504	9,169	5,503	3,070	10,373	7,284	2,434	2,310	1,564	638	8,062	5,720	1,796
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Less than \$1,000	7	5	10	1	(²)	2	12	8	21	8	5	16	13	9	22
1,000-2,999	33	42	14	11	14	5	52	63	26	44	54	23	55	65	27
3,000-4,999	20	24	11	22	31	7	18	18	17	23	26	15	16	16	17
5,000-6,999	13	13	12	19	22	13	7	5	12	9	7	13	7	5	12
7,000-9,999	10	8	16	16	15	19	5	3	12	7	4	13	5	3	12
10,000-14,999	10	6	19	17	10	27	3	2	9	5	2	12	3	2	7
15,000 or more	7	3	16	13	6	26	2	1	4	3	2	7	1	1	2

¹ Excludes beneficiaries who received their first benefit in February 1971 or later, the transitionally insured, and special age 72 beneficiaries

² Less than 0.5 percent

TABLE 3—Median income¹ of elderly units and blacks' median as percent of whites' median, by age, marital status, sex, and race, 1971

Age of head	All units		Married couples		Nonmarried persons					
	Black	White	Black	White	Total		Men		Women	
					Black	White	Black	White	Black	White
Median income										
Total	\$2,040	\$3,932	\$4,844	\$6,605	\$1,514	\$2,261	\$1,853	\$2,855	\$1,422	\$2,117
60-61	3,016	7,514	5,797	10,152	1,625	3,523	(²)	4,028	1,562	3,371
62-64	3,046	6,791	6,202	9,502	1,676	3,263	(²)	3,787	1,516	3,129
65-67	2,558	4,727	4,135	6,720	1,777	2,730	(²)	3,066	1,630	2,639
68-72	2,011	3,729	3,380	5,869	1,481	2,339	(²)	2,756	1,404	2,253
73 and over	1,667	2,609	3,377	4,788	1,395	1,941	1,587	2,608	1,337	1,829
Blacks' median income as percent of whites' median										
Total	52		66		67		65		67	
60-61	40		57		46		(²)		46	
62-64	45		65		51		(²)		48	
65-67	54		62		65		(²)		61	
68-72	54		60		63		(²)		62	
73 and over	64		70		72		61		73	

¹ Calculated from a 20-interval income distribution

² Not computed, base fewer than 75,000

TABLE 4—Median income ¹ of elderly units, by age, marital status, sex, race, and beneficiary status, 1971

Age of head, marital status, and sex	Black			White			Blacks median as percent of whites median	
	Beneficiaries ¹	Nonbeneficiaries	Beneficiaries as percent of nonbeneficiaries	Beneficiaries ¹	Nonbeneficiaries	Beneficiaries as percent of nonbeneficiaries	Beneficiary ¹	Nonbeneficiaries
Total	\$2,057	\$1,956	105	\$3,229	\$7,211	45	64	27
Age								
60-61	(*)	3,266	---	4,226	8,242	51	---	40
62-64	1,835	4,668	39	3,834	8,731	44	48	53
65-67	2,592	2,316	112	3,871	7,545	51	67	31
68-72	2,163	1,329	163	3,685	3,756	98	59	35
73 and over	1,891	1,162	163	2,780	1,482	188	68	78
Marital status and sex								
Married couples	\$3,596	\$5,850	61	\$5,304	\$10,546	50	68	56
Nonmarried persons	1,646	1,241	133	2,165	3,333	65	76	37
Men	1,876	1,594	118	2,653	4,398	60	71	36
Women	1,561	1,151	136	2,037	3,036	67	77	38

¹ Calculated from a 20 interval income distribution
² Excludes beneficiaries who received their first benefit in February 1971

or later the transitionally insured, and special age 72 beneficiaries
³ Not computed, base fewer than 75,000

median income of white nonbeneficiaries was more than twice that of white beneficiaries. Among blacks, however, no significant difference exists in the median income of beneficiary and nonbeneficiary units—except for married couples and/or those under age 65 (table 4). The differences are related primarily to the age, marital status, and sex characteristics of and the reasons for being nonbeneficiaries.

In essence, part of the relative economic disadvantage of the elderly blacks stems from the fact that 35 percent of all units were not entitled to social security benefits and that a substantial proportion of these nonbeneficiary units were nonmarried women and/or were aged 65 or older. In contrast, more than half of the white nonbeneficiary units were married couples and 81 percent of them were under age 65. Blacks were thus more likely to be nonbeneficiaries because they lacked insured status, but white nonbeneficiaries were more likely to still be working. An earlier study by the Social Security Administration found that blacks newly entitled to retired-worker benefits were more likely than white workers to become entitled to payable rather than postponed benefits at the time of award.⁹

INCOME DISTRIBUTIONS IN QUINTILES

Despite the differences in income cited above, a sizable majority of black and white elderly units—about three-fourths—had similar money income

The overlap in their income distributions was about the same magnitude for each type of aged unit—married couples, nonmarried men, and nonmarried women. This analysis is based on measures of integration and differentiation, computed by summing the similarities and differences in a detailed income distribution (expressed in percentages of each group).¹⁰

Most of the one-fourth with dissimilar incomes were primarily at levels between \$500 and \$2,000 and at \$15,000 or more. Blacks constituted the greater proportion in the lower income levels, as expected, and the white elderly predominated at the higher income levels.

Chart 2 illustrates the similarities and differences and the shape of the income-distribution curve of each racial group. What follows is an examination of the extent to which certain social and demographic characteristics differ for black and white elderly units with similar money income. The entire sample is used—not just the portion in the income overlap section of chart 2.

All elderly units are divided into five equal groups or quintiles, ranked by size of total money income, in order to be able to control for income. The first quintile represents the lowest income group—\$1,662 or less—and the fifth quintile is the highest—\$8,419 or more (table 5). To determine whether characteristics are related to income in the same way for each racial group, the data for black and white elderly units are shown

⁹ Leonard Rubin, "Economic Status of Black Persons: Findings From Survey of Newly Entitled Beneficiaries," *Social Security Bulletin*, September 1974.

¹⁰ For a further description of the method, see Murray S. Weitzman, *Measures of Overlap of Income Distribution of White and Negro Families in the United States* (Technical Paper No. 22), Bureau of the Census, 1972.

separately and the combined totals are not shown Table 5, for example shows that blacks represent about 18 percent of the lowest quintile and 3 percent of the highest, but in table 6 the reader can see that the proportions of nonmarried women in the first quintile and of married couples in both the first and fifth quintiles were generally similar for both races

Among both white and black units the lowest income categories (first and second quintiles) are made up predominantly of nonmarried women aged 65 and older, and the upper categories are chiefly married couples under age 65 (table 6) At the other income levels, however, both the age and the marital status/sex distributions within income quintiles differ considerably with race Among nonmarried persons in the third through

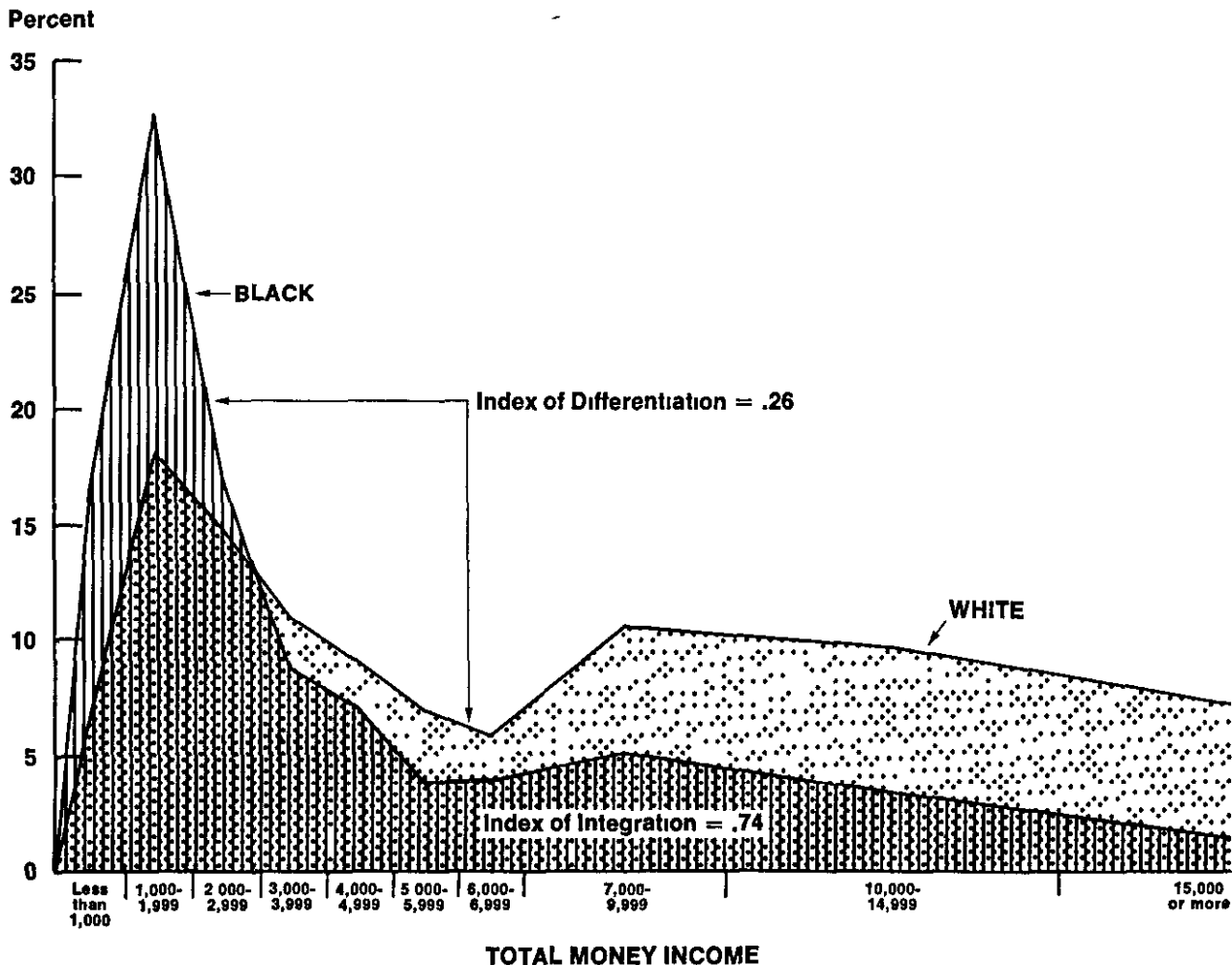
fifth quintiles, for example, blacks were divided almost evenly between men and women but, for the white elderly, two or more times as many women as men were found

Nonbeneficiaries were more likely than benefi-

Race and beneficiary status	Total number (in thousands)	Percentage distribution, by quintiles					
		Total	First	Second	Third	Fourth	Fifth
Black Beneficiaries ¹	1,142	100	37	31	19	10	4
Black Nonbeneficiaries	670	100	46	12	12	18	12
White Beneficiaries ¹	12,786	100	18	26	25	20	12
White Nonbeneficiaries	5,504	100	17	7	11	22	43

¹ Excludes beneficiaries who received their first benefit in February 1971 or later, the transitionally insured, and special age-72 beneficiaries

CHART 2—Percentage distribution of black and white elderly units, by total money income, 1971



ciaries to be in the higher economic categories (fourth and fifth quintiles), although 46 percent of the black nonbeneficiaries were in the bottom quintile, as seen in the preceding tabulation. Only 17 percent of white nonbeneficiaries were in the lowest quintile. The proportion of white nonbeneficiaries in the fifth quintile is about three-and-one-half times larger than the proportion of black (43 percent, compared with 12 percent).

Benefit Levels and Economic Status

For social security beneficiaries who spent most of their work lives in covered employment, the

primary insurance amount (PIA) is undoubtedly a good measure of economic status before retirement since it is based on the worker's average monthly earnings over a number of years. Table 7 shows that the direct relationship between PIA and current money income makes it a good indicator of economic status after retirement as well. Differences in PIA levels between black and white units, therefore, reflect the relative income disadvantage of blacks before and after retirement. Proportionately, more than twice as many blacks as white beneficiaries received the minimum PIA (\$70.40) in 1971. The opposite was true for beneficiaries with a PIA of \$185 or more.

TABLE 5—Economic status: Percentage distribution of all elderly units, by quintiles (ranked by money income), race, marital status, and sex, 1971

Race, marital status, and sex	Quintiles of elderly units					
	Total	First	Second	Third	Fourth	Fifth
Total number	21,453,782	4,290,756	4,290,756	4,290,756	4,290,756	4,290,756
Lower dollar limit	---	---	\$1,663	\$2,805	\$4,780	\$8,419
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
White	91.1	82.2	89.1	92.7	94.3	97.0
Married couples	42.7	5.9	16.4	46.0	65.7	79.7
Nonmarried persons	48.4	76.4	72.8	46.7	28.6	17.3
Men	10.8	11.5	14.9	13.6	7.9	5.9
Women	37.6	64.9	57.9	33.1	20.7	11.4
Black	8.9	17.8	10.9	7.3	5.7	3.0
Married couples	3.0	1.3	3.1	4.0	4.2	2.6
Nonmarried persons	5.9	16.4	7.7	3.3	1.5	3.3
Men	1.6	3.6	2.0	1.6	8.2	2.6
Women	4.2	12.8	5.7	1.7	7.7	1.4

TABLE 6—Marital status, sex, age, and economic status: Percentage distribution of elderly units, by quintiles (ranked by money income) and race, 1971

Marital status, sex, and age of head	Quintiles of elderly units											
	Black						White					
	Total	First	Second	Third	Fourth	Fifth	Total	First	Second	Third	Fourth	Fifth
Total number (in thousands)	1,913	763	466	314	243	127	19,451	3,529	3,823	3,977	4,047	4,165
Lower dollar limit	---	---	\$1,663	\$2,805	\$4,780	\$8,419	---	---	\$1,663	\$2,805	\$4,780	\$8,419
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Married couples	34	7	29	55	74	89	47	7	18	50	70	82
Under age 65	12	2	5	14	32	55	17	3	3	8	21	46
60-61	5	1	2	6	13	20	7	1	3	3	9	20
62-64	7	1	3	8	19	35	10	2	2	5	12	26
65-72	14	3	15	26	26	21	18	2	9	20	30	26
73 and over	8	3	8	15	15	13	12	2	7	21	19	10
Nonmarried men	18	20	18	22	14	6	12	14	17	15	8	6
Under age 65	5	4	4	6	7	3	3	4	3	3	3	3
60-61	2	2	2	3	1	1	1	1	1	1	1	1
62-64	3	3	2	6	4	2	2	2	2	1	2	2
65-72	6	5	8	10	3	3	4	4	6	5	3	2
73 and over	7	11	6	8	4	0	5	6	9	7	2	1
Nonmarried women	47	72	53	23	12	5	41	79	65	36	22	12
Under age 65	11	15	12	9	6	4	8	11	7	8	8	4
60-61	5	6	4	5	3	3	3	4	2	3	3	2
62-64	7	10	8	4	3	1	5	7	5	5	5	3
65-72	17	26	19	10	5	1	14	20	23	15	8	4
73 and over	19	31	22	4	2	0	20	48	35	13	6	3

TABLE 7—Primary insurance amount and economic status
Percentage distribution of beneficiary units,¹ by quintiles
(ranked by money income) and race, 1971

Quintiles of elderly units	Primary insurance amount				
	\$70.40	\$70.50- 109.90	\$110.00- 149.90	\$150.00- 184.90	\$185.00 or more
Black					
Total number (in thousands)	203	240	209	135	80
Percentage distribution	23	28	24	16	9
Total percent	100	100	100	100	100
First	50	48	26	4	1
Second	34	33	33	34	10
Third	14	10	28	30	42
Fourth	1	7	11	21	28
Fifth	1	3	2	1	18
Median income	\$1,436	\$1,484	\$2,157	\$2,757	\$3,864
White					
Total number (in thousands)	1,065	1,606	2,457	3,080	2,481
Percentage distribution	10	15	23	29	23
Total percent	100	100	100	100	100
First	40	33	20	5	1
Second	32	31	31	26	11
Third	15	18	28	33	25
Fourth	9	11	16	25	36
Fifth	4	7	7	11	28
Median income	\$1,804	\$2,065	\$2,654	\$3,634	\$5,648

¹ Excludes beneficiaries who received their first benefit in February 1971 or later the transitionally insured and special age 72 beneficiaries and beneficiaries for whom a proper PLA was not obtained (See definition of beneficiary status in Technical Note)

EDUCATION

About one-fourth of the heads of white elderly units in 1971 had completed less than 8 years of school, 20 percent were high school graduates, and about 15 percent had attended college (table 8). The majority of the black elderly—about two-thirds—had completed no more than 7 years of school, 8 percent finished high school, and about 4 percent attended college. This general educational disadvantage for the elderly is also well-documented for the younger age groups in the literature. The analysis here focuses on the extent of educational differences at various income levels and on whether level of education is related to income in the same way for elderly units of both races. The analysis also examines the hypothesis that, because education yields a lower economic return for blacks, the black elderly units in the lower quintiles of money income are likely to have more education than their white counterparts. All data on educational attainment refer to years of school completed by head of the unit.

For most persons in this study, formal schooling probably ended at least 35 years before the survey. A positive relationship remains—for both races—between years of school completed and total money income in 1971. The black elderly were, however, much less educated than the white elderly at all income levels. The degree of dissimilarity in education was slightly greater in each succeeding income quintile, largely because of increasing differences between the relative proportions of black and white units with 4 years of high school or more.¹¹

Despite the substantially higher educational levels for both races in the upper quintiles, the proportion of blacks in the fifth quintile with less than 8 years of school was five times as great as that of white units in the same income group. (The proportion of the white group who had less than 8 years of school was 40 percent of the lowest quintile and 8 percent of the highest quintile. The corresponding proportions of blacks were 73 percent and 44 percent, respectively.)

It appears, therefore, that more of the black elderly, especially in the highest quintile, achieved their economic status in spite of less education. A more reasonable explanation may be that almost all black elderly units in the fifth quintile—mostly married couples under age 65—worked in 1971. Nineteen percent of the white elderly units but only 6 percent of the black in the lowest quintile were in the upper educational category. Such educated white units were more likely to be non-married women with no earned income in 1971.

The wide differences in the educational profile of the elderly in each quintile may show only that education is not as good an indicator of income status for the white unit as for the black at low income levels and that the reverse is true at high income levels. Most of the white units in the highest quintile had more schooling, but this pattern was not evident among blacks in the same income class. The differences also suggest that a high degree of intercorrelation exists between education and other variables.

Actually, the less educated blacks in the top quintile represented only a small proportion of all blacks with less than 8 years of school. At all

¹¹ The index of differentiation for those with less than 8 years of school was constant at about 17.4 in all quintiles. For those with 4 years of high school or more, it ranged from 6.6 in the first quintile to 12.4 in the fifth quintile.

educational levels, in fact, the white elderly were likely to have achieved a higher economic status than the blacks (table 9) Only 1 in 10 of the

better-educated white units were in the bottom quintile

Chart 3 shows an interesting, apparently oppo-

TABLE 8—Years of school completed and economic status Percentage distribution of elderly units, by quintiles (ranked by money income), race, marital status, and sex, 1971

Years of school completed by head	Quintiles of elderly units											
	Black						White					
	Total	First	Second	Third	Fourth	Fifth	Total	First	Second	Third	Fourth	Fifth
All units												
Total number (in thousands).....	1,913	763	466	314	243	127	19,541	3,529	3,823	3,977	4,047	4,165
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary												
Less than 8.....	65	73	65	61	54	44	25	40	31	27	19	8
8.....	12	11	14	12	15	5	25	28	27	28	25	16
High school												
1-3.....	11	10	11	11	10	15	15	12	15	16	17	15
4.....	8	5	8	10	11	19	20	14	19	19	22	27
College												
1-3.....	2	1	2	4	5	3	7	4	5	6	9	12
4 or more.....	2	(1)	1	1	4	14	8	2	3	5	8	22
4 of high school or more.....	13	6	10	16	20	37	36	19	27	30	38	61
Married couples												
Total number (in thousands).....	654	* 56	134	172	180	112	9,169	251	703	1,973	2,821	3,421
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary												
Less than 8.....	64	-----	73	65	58	46	22	46	42	35	23	9
8.....	11	-----	10	10	18	6	25	25	29	30	28	17
High school												
1-3.....	10	-----	8	9	8	17	16	10	13	13	19	16
4.....	10	-----	7	11	9	18	20	12	11	15	18	27
College												
1-3.....	3	-----	3	4	4	1	8	3	3	4	6	12
4 or more.....	3	-----	0	1	2	12	10	4	2	3	6	19
4 of high school or more.....	16	-----	10	15	15	32	37	19	16	22	30	58
Nonmarried men												
Total number (in thousands).....	351	155	80	* 69	* 34	* 8	2,310	494	639	586	338	253
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary												
Less than 8.....	71	75	76	-----	-----	-----	33	47	40	32	20	10
8.....	11	12	9	-----	-----	-----	26	30	27	29	28	10
High school												
1-3.....	9	8	10	-----	-----	-----	14	13	11	16	12	20
4.....	6	5	2	-----	-----	-----	15	7	14	15	26	20
College												
1-3.....	2	(1)	2	-----	-----	-----	4	1	4	4	4	11
4 or more.....	1	0	2	-----	-----	-----	6	2	4	6	10	30
4 of high school or more.....	10	5	5	-----	-----	-----	27	10	22	24	41	60
Nonmarried women												
Total number (in thousands).....	907	551	246	* 73	* 30	* 7	8,062	2,783	2,481	1,419	888	491
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Elementary												
Less than 8.....	63	71	57	-----	-----	-----	25	38	25	14	8	4
8.....	14	12	18	-----	-----	-----	24	28	27	23	14	7
High school												
1-3.....	12	10	14	-----	-----	-----	15	13	16	20	14	8
4.....	8	6	10	-----	-----	-----	22	15	22	27	34	30
College												
1-3.....	2	1	2	-----	-----	-----	8	5	6	9	15	14
4 or more.....	2	(1)	2	-----	-----	-----	7	2	3	6	15	38
4 of high school or more.....	11	7	12	-----	-----	-----	36	21	32	42	64	81

¹ Less than 0.5 percent

* Percentages not computed, base fewer than 75,000

TABLE 9—Economic status and years of school completed
Percentage distribution of elderly units, by quintiles (ranked
by money income) and race, 1971

Years of school completed	Total number (in thousands)	Percentage distribution, by quintiles of elderly units					
		Total	First	Second	Third	Fourth	Fifth
Black							
<i>All units</i>							
Elementary Less than 8	1,239	100	45	24	16	11	4
8	232	100	37	27	17	16	3
High school, 1-3	202	100	36	26	16	12	9
4 of high school or more	240	100	20	20	21	20	19
White							
<i>All units</i>							
Elementary Less than 8	4,793	100	30	25	22	16	7
8	4,797	100	21	22	23	21	14
High school, 1-3	2,971	100	15	19	22	24	21
4 of high school or more	6,981	100	10	15	17	22	36

site, pattern in the education relationships of blacks and whites. The relative distributions of white units with 4 years of high school or more are consistent with the hypothesis of a positive association between education and income. For those with less than 8 years of education the pattern is less apparent. The reverse is true for blacks. Those with less than a high school educa-

tion were concentrated in the lowest economic group, those who finished 4 years of high school or more were as likely to be in the bottom as in the top quintile.

As might be expected, more education generally resulted in higher social security benefits, oftener for white beneficiaries than for black. More than half the black units with less than an elementary school education, compared with one-third of the white units, had PIA's of less than \$110 in 1971. On the other hand, the proportion of higher educated white units with a PIA of \$150 or more (62 percent) was almost twice that of black units (32 percent), as the preceding tabulation shows.

Labor-force participation, frequency and extent of employment, and occupational status all are affected by educational attainment. The education gap between young black and white persons has narrowed considerably in recent years,¹² but, even over long periods, income differences between the white population and disadvantaged minorities with the same education still persist.¹³ The implication is that even if the disadvantage of being less educated is eventually overcome by blacks, they will remain more likely than white workers to face the problem of inadequate income in old age if their opportunities to work and to hold higher paying jobs are not simultaneously improved.

WORK EXPERIENCE

When the work activity for the black and white populations aged 60 and older is compared, beneficiary status becomes especially critical. This factor is important for several reasons, not only with respect to differences in the proportions of each race entitled to benefits, but also in the age, marital status, and sex characteristics noted earlier. These characteristics show more similarity between black and white beneficiary units than between nonbeneficiary units.

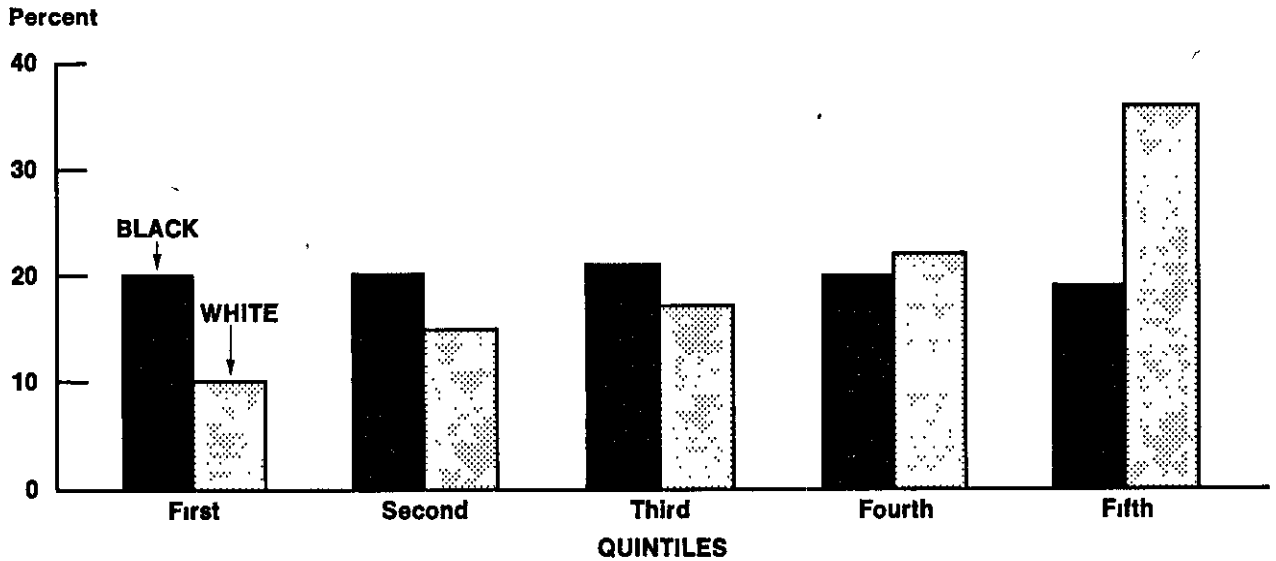
¹² Daniel O. Price, *Changing Characteristics of the Negro Population* (1960 Census Monograph), 1969. See also Sar A. Levitan et al., *Still A Dream: The Changing Status of Blacks Since 1960*, Harvard University Press, 1975, and Bureau of the Census, "The Social and Economic Status of the Black Population in the United States, 1971," *op cit*, 1972.

¹³ See Walter Fogel, "The Effect of Low Educational Attainment on Income: A Comparative Study of Selected Ethnic Groups," *Journal of Human Resources*, Fall, 1966.

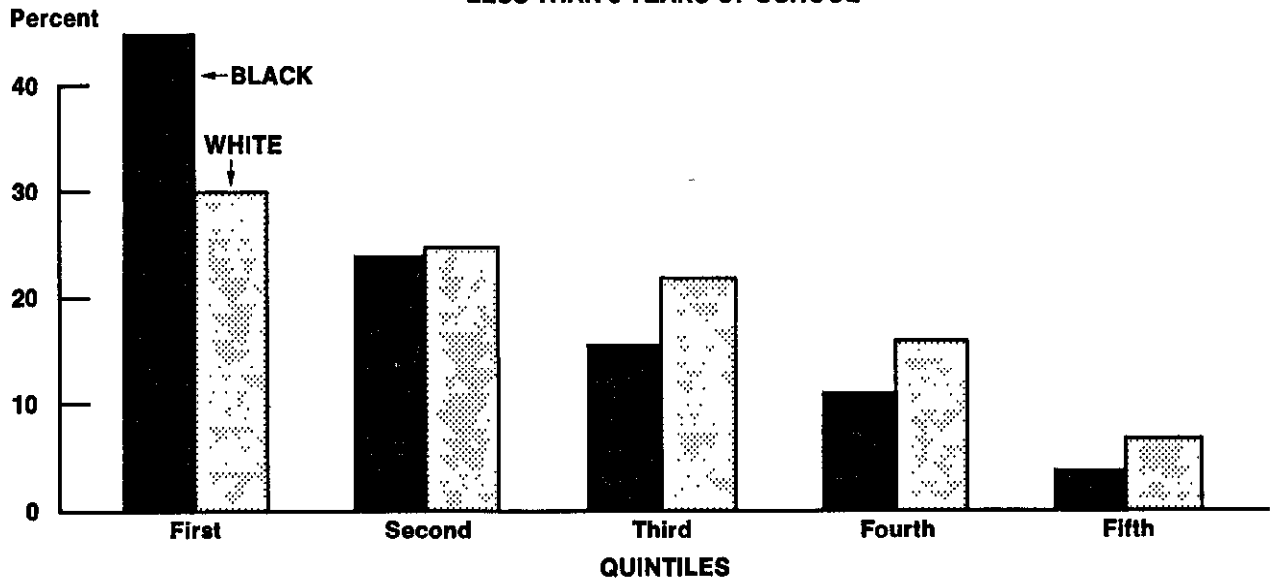
Years of school completed	Total number (in thousands)	Percentage distribution, by primary insurance amount					
		Total	\$70-40	\$70-109-90	\$110-149-90	\$150-184-90	\$185 or more
Black							
Elementary Less than 8	584	100	28	26	21	17	8
8	110	100	16	33	30	8	13
High school, 1-3	86	100	18	29	33	14	6
4	151	100	---	---	---	---	---
4 of high school or more	87	100	10	28	30	18	14
White							
Elementary Less than 8	2,789	100	13	20	26	28	13
8	2,916	100	10	15	26	29	20
High school, 1-3	1,624	100	9	15	22	28	26
4	1,948	100	9	12	20	29	29
4 of high school or more	3,361	100	8	11	18	29	33

¹ Percentages not computed, base fewer than 75,000

4 YEARS OF HIGH SCHOOL OR MORE



LESS THAN 8 YEARS OF SCHOOL



Blacks entitled to social security benefits were more likely in 1971 than their white counterparts to supplement their benefits by working, regardless of their economic status (table 10) In the two lowest income categories, where total money income was about \$2,800 or less, the proportion of blacks with some work experience was twice that of white beneficiaries Only a little less than one-third of all working beneficiaries in either race,

however, and substantially fewer in these lower economic categories worked full time all year. Work and income show the expected positive relationship for both races, but in the third and fourth quintiles the proportions of black beneficiary units with current work experience were still about one-and-a-half times that of white units at the same level.

Whether or not one works depends, of course,

TABLE 10—Work experience, extent of employment, and economic status Percentage distribution of elderly units, by quintiles (ranked by money income), race, and beneficiary status, 1971

Work experience and extent of employment	Quintiles of elderly units											
	Black						White					
	Total	First	Second	Third	Fourth	Fifth	Total	First	Second	Third	Fourth	Fifth
	All units											
Total number (in thousands).....	1,913	763	466	314	243	127	19,541	3,529	3 823	3,977	4,047	4,165
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Worked.....	43	18	35	64	82	99	44	11	17	38	60	85
Year-round/full time.....	18	2	5	25	56	76	23	3	4	11	30	62
Not year-round/full time.....	25	16	30	39	27	23	21	8	13	27	30	23
Did not work.....	57	82	65	36	18	1	56	89	83	62	40	15
	Beneficiaries ¹											
Total number (in thousands).....	1,142	419	356	212	109	47	12,786	2,311	3 276	3 145	2 542	1,512
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Worked.....	34	15	30	50	67	---	28	7	13	29	44	67
Year-round/full time.....	10	1	3	12	24	---	8	1	2	5	13	35
Not year-round/full time.....	25	14	27	38	33	---	20	7	11	24	31	32
Did not work.....	66	85	70	50	33	---	72	93	87	71	56	33
	Nonbeneficiaries											
Total number (in thousands).....	670	311	80	79	123	77	5,504	927	398	601	1,234	2,345
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Worked.....	55	21	42	93	96	100	77	22	44	80	89	97
Year-round/full time.....	34	3	12	61	79	81	58	10	20	47	66	83
Not year-round/full time.....	21	18	30	32	17	19	18	12	24	32	22	14
Did not work.....	45	79	58	7	4	0	23	78	56	20	11	3

¹ Excludes beneficiaries who received their first benefit in February 1971 or later, the transitionally insured, and special age 72 beneficiaries

² Percentages not computed, base fewer than 75,000

on ability and inclination, availability of suitable jobs, and need for income. No measures of the ability to work have been made here but, among individuals aged 60 and over, poor health is a prevalent reason for not working,¹⁴ and greater proportions of black than of white men and women report having limitations on their ability to work.¹⁵ The differences in median incomes and the distribution of benefit levels shown in tables 4 and 7 for black and white beneficiary units make it evident that a greater need for earned income exists among blacks. These data also suggest that as long as such differences in benefit levels (reflecting lower preretirement earnings) between black and white units persist, earned income will be sought more often by black than by white beneficiaries in similar economic circumstances.

¹⁴ Gayle B. Thompson, "Work Experience and Income of the Population Aged 60 and Older, 1971," *Social Security Bulletin*, November 1974.

¹⁵ Leonard Rubin, *op cit*.

A somewhat different picture emerges for nonbeneficiary units than for beneficiaries. With economic status controlled, few differences between the proportions of working white and black nonbeneficiaries appear (in the third and fourth quintiles only). Among nonbeneficiary units as a group, however, the black elderly were substantially less likely than the white elderly to have been employed in 1971. Almost half of all black units not receiving social security benefits, compared with 23 percent of the white nonbeneficiary units, did not work at all in 1971.

This apparent inconsistency when income is not controlled is partly due to the concentration of black and white units at opposite ends of the economic-status scale, where their likelihood of having worked is also opposite. In the bottom quintile, the 79 percent of the black units and the 78 percent of the white units who did not work meant that 37 percent of all black nonbeneficiary units but only 13 percent of all white units did not

TABLE 11—Work experience, marital status, sex, and economic status Percentage distribution of elderly units, by race, 1971

Work experience	Black	White
	Married couples	
Total number (in thousands).....	654	9 169
Total percent	100	100
Someone worked	70	64
Both worked	26	22
Husband only.....	31	34
Year round/full time	15	18
Wife only	14	8
Year-round/full time	5	3
No one worked.....	30	36
Nonmarried men		
Total number (in thousands)	351	2,310
Total percent.	100	100
Worked.....	36	36
Year-round/full-time	12	18
Did not work	64	64
Nonmarried women		
Total number (in thousands)	907	8 062
Total percent.....	100	100
Worked.....	26	24
Year-round/full-time	7	10
Did not work	74	76

work The respective proportions of workers in the top quintile represented a much larger proportion of all white nonbeneficiary units (41 percent) than of the black units (12 percent)

The discussion of ability and inclination to work, job availability, and need for income applies equally to nonbeneficiaries and beneficiaries It might be useful, however, to note that some persons may be eligible for cash benefits but are nonbeneficiaries simply because they chose to continue working Others are ineligible for benefits because they lack insured status on their own or their deceased spouse's work record The latter reason may apply more to the black elderly

The wide difference between black and white nonbeneficiaries in work experience is also related to the fact that white units were younger and disproportionately more likely to be married Fifty-six percent of the white nonbeneficiary units and 35 percent of the black nonbeneficiaries were married couples Nonmarried women made up about half of the black nonbeneficiary units It is essential that these distinctions be noted, since analysis of aggregate data on nonbeneficiaries results in comparisons between white married

couples and black nonmarried women The proportion of black and white workers showed little difference according to marital status, except that among married couples the proportion of units in which only the wife worked was almost twice as large among black couples (table 11)

Another factor relating to work differences between nonbeneficiaries is the inverse relationship between work experience and age for both races The result is a sharp drop in the proportion who work beyond the traditional retirement age of 65 (table 12) Black nonbeneficiaries as a group were, on the average, older than white nonbeneficiaries and they experienced a sharper decline in the proportion of those aged 65 and older who worked Almost half of all black nonbeneficiary unit heads, compared with slightly less than a third of the white unit heads, were aged 65 or older The younger black nonbeneficiaries (aged 60-61) were also less likely than their white counterparts to be employed

The black elderly may have been more likely to work than the white elderly in the same income group, but they were not as likely to achieve the same economic status for their efforts About three-fifths of the black beneficiary units and four-fifths of the white units in which there was full-time work activity all year were in the top two quintiles, as the figures below show Among non-

Beneficiary status and race	Total number (in thousands)	Percentage distribution, by quintiles					
		Total	First	Second	Third	Fourth	Fifth
Beneficiaries ¹							
Black	112	100	3	10	23	33	30
White	1,083	100	2	5	14	30	49
Nonbeneficiaries							
Black	228	100	4	4	21	43	27
White	3,214	100	3	2	9	25	60

¹ Excludes beneficiaries who received their first benefit in February 1971 or later the transitionally insured and special age-72 beneficiaries

beneficiary units the proportions were 70 percent and 85 percent, respectively

The work experience of the elderly in 1971 shows that earnings continue to be a major source of income for older persons For many this is true even after they become entitled to OASDI benefits Differences in the importance of earnings in relation to other sources of income and to the total money income of these elderly are examined later.

TABLE 12—Work experience and extent of employment Percentage distribution of elderly units, by beneficiary status, age, and race, 1971

Work experience and extent of employment	Beneficiary status and age of head											
	All units				Beneficiaries ¹				Nonbeneficiaries			
	60-61	62-64	65-72	73 and over	60-61	62-64	65-72	73 and over	60-61	62-64	65-72	73 and over
	Black											
Total number (in thousands).....	213	330	718	652	* 23	103	532	484	177	177	162	155
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Worked.....	74	67	45	19	---	37	43	23	78	62	48	5
Year-round/full time.....	42	33	14	7	---	16	9	9	46	50	34	2
Not year-round/full time.....	32	34	31	12	---	22	35	14	33	32	14	3
Did not work.....	26	33	55	81	---	63	57	77	22	18	52	95
	White											
Total number (in thousands).....	2,210	3,193	6,871	7,266	255	882	5,246	6,403	1,845	1,924	1,160	575
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Worked.....	84	76	45	16	64	48	37	17	90	89	67	9
Year-round/full time.....	61	50	18	5	35	20	10	5	68	69	53	3
Not year-round/full time.....	23	26	27	12	19	29	28	12	23	20	14	6
Did not work.....	16	24	55	84	46	52	63	83	10	11	33	91

¹ Excludes beneficiaries who received their first benefit in February 1971 or later, the transitionally insured, and special age-72 beneficiaries
² Percentages not computed, base fewer than 75,000

OCCUPATION

The occupation in which a worker is engaged for most of his working life is more likely to determine the sources of his retirement income and his eventual economic status than is his occupation in any given year. To the extent that many persons nearing or in retirement held the same job for a considerable number of years, occupation of the longest job in 1971 is indicative of the economic status of the elderly in this study. (According to a 1971 study, 86 percent of new beneficiaries, both those who had stopped and those who continued working, and 68 percent of those partly retired, had held their most recent jobs at least 5 years. Of the relatively small portion who changed jobs, only about half changed occupation)¹⁸ About 71 percent of the black elderly were in semiskilled and unskilled blue-collar and service work. Only one-third of the white elderly were in similar occupations, but about 56 percent were white-collar workers or skilled craftsmen.

Occupational status and income size for the elderly with work experience in 1971 showed the

anticipated positive relationship. The relatively greater concentration of black workers in the low-status occupations, compared with white workers, remained regardless of economic-status category (table 13). Even among those blacks in the top quintile, more workers were in these jobs (38 percent) than in upper-level white-collar jobs. Only about a tenth of the white elderly in the fifth quintile were unskilled or service workers. Among white elderly units, about 12 percent in the lowest quintile and 40 percent in the highest were professional, technical, and managerial workers. For blacks the corresponding proportions were 1 percent and 22 percent.

Within economic groups some of the apparently puzzling differences between the black and white elderly in occupational distribution can be accounted for by the extent of their 1971 work experience. Twelve percent of the white units (1 percent of the black) in the first quintile were in professional, technical, and managerial jobs, but 73 percent of the white units in this quintile had less than year-round, full-time work experience in 1971. In the top quintile, by contrast, the proportion of black units with low-status occupations was almost four times larger than that of white units, but two-earner couples characterized black units in this income group. In about 50 percent

¹⁸ See Virginia Reno, "Retirement Patterns of Men," in *Reaching Retirement Age Findings From a Survey of Newly Entitled Workers, 1968-70* (Research Report No 47), Social Security Administration, Office of Research and Statistics, 1976, pages 35-36

TABLE 13—Occupation on longest job in 1971 and economic status Percentage distribution of elderly units with work experience in 1971, by quintiles (ranked by money income) and race, 1971

Occupation of head	Quintiles of elderly units											
	Black						White					
	Total	First	Second	Third	Fourth	Fifth	Total	First	Second	Third	Fourth	Fifth
Total number (in thousands)	735	126	145	180	172	112	7,878	389	633	1,295	2,132	3 327
Total percent.	100	100	100	100	100	100	100	100	100	100	100	100
White collar												
Professional, technical, managerial	6	1	5	3	4	22	24	12	9	10	16	40
Sales	1	0	2	2	2	0	8	5	9	9	6	8
Clerical	5	0	0	4	11	12	11	6	11	11	14	9
Blue collar												
Craftsmen	6	3	5	8	5	13	14	4	9	10	14	18
Operatives	15	6	5	18	28	14	13	7	10	14	17	11
Nonfarm laborers	17	14	16	17	18	19	5	4	6	6	6	3
Farm workers												
Farmers, farm managers	4	9	5	3	1	1	8	21	15	13	7	4
Laborers, foremen	6	13	12	4	1	2	2	10	4	4	2	1
Service												
Private household	18	43	32	16	0	1	3	15	12	4	1	(¹)
Other	21	10	18	26	30	15	12	15	16	18	16	6

¹ Less than 0.5 percent

of all black married units in the fifth quintile, one or both spouses had year-round, full-time work

These findings suggest how some of the black units with low-status jobs were able to “make it” economically. It is useful, however, to remember that the presence of black and white units in an occupational group at a particular economic level is not the same as the probability that those workers will achieve equal economic status. Besides showing the substantial occupational differences within economic-status categories, blacks within the same major occupational groups as white workers were less likely to achieve income equal to that of the white workers (table 14). The broad white-collar category was used in the table because of the small number of blacks in the occupational groupings in this category. About 40 percent of the black white-collar workers were in the highest income group, compared with 57 percent of the white workers. Within each of the other occupational groupings, blacks were two-and-a-half to three times more likely than white workers to be in the lowest economic group.

In general, the data show a direct relationship between education and occupation for both the black and the white elderly in 1971. More education led to occupations of higher status—more often for white workers than for blacks (table 15). Among the least-educated workers, race differences were evident in the higher proportion of white craftsmen and operatives and the larger

proportion of black laborers and service workers

In the highest education category, the differences shifted. More white workers were in professional, technical, and managerial positions and more blacks were craftsmen and operatives. Thus, higher-educated elderly black workers were generally in the same occupational groups as white workers with less than 8 years of school. At both the lowest and highest education levels, about one-third of the black units would have had to change occupational groups to place them in the same kind of jobs held by their white educational counterparts.

Marital status, sex, and beneficiary status did

TABLE 14—Economic status and occupation on longest job in 1971. Percentage distribution of elderly units with work experience in 1971, by quintiles (ranked by money income) and race, 1971

Occupation of head	Total number (in thousands)	Percentage distribution, by quintiles of elderly units					
		Total	First	Second	Third	Fourth	Fifth
Black							
White collar	96	100	1	12	16	31	40
Craftsmen, operatives	156	100	8	9	29	35	19
Nonfarm laborers	123	100	14	19	24	26	17
Farm workers	72	100	39	33	17	5	6
Service, domestic	288	100	24	26	27	18	6
White							
White collar	3,367	100	8	5	12	23	57
Craftsmen, operatives	2,138	100	2	5	16	32	45
Nonfarm laborers	367	100	4	11	23	36	25
Farm workers	834	100	14	14	28	24	19
Service, domestic	1,171	100	10	15	28	31	17

TABLE 15—Occupation on longest job in 1971 and years of school completed Percentage distribution of elderly units with work experience in 1971, by race, 1971

Occupation of head	Years of school completed														
	Black							White							
	Elementary		High school		College			4 of high school or more	Elementary		High school		College		4 of high school or more
	Less than 8	8	1-3	4	1-3	4 or more	Less than 8		8	1-3	4	1-3	4 or more		
Total number (in thousands)	410	91	99	84	125	126	135	1,346	1,728	1,283	1,905	707	908	3,520	
Total percent.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
White collar															
Professional, technical, managerial	2	3	10	6	---	---	19	7	9	15	24	41	75	41	
Sales	1	1	2	4	---	---	2	3	6	8	10	12	9	10	
Clerical.....	2	4	6	21	---	---	18	4	7	14	18	15	7	15	
Blue collar															
Craftsmen	5	4	5	17	---	---	12	16	18	17	15	11	2	11	
Operatives	16	8	13	20	---	---	18	21	17	16	10	5	1	7	
Nonfarm laborers	21	15	21	0	---	---	2	10	7	4	3	2	1	2	
Farm workers															
Farmers, farm managers	5	3	3	1	---	---	1	12	14	8	5	5	2	4	
Laborers, foremen	10	0	2	3	---	---	2	6	4	1	1	(¹)	1	1	
Service															
Private household	15	37	23	12	---	---	11	5	4	3	2	1	(²)	1	
Other	23	26	17	16	---	---	16	18	14	14	11	8	3	8	

¹ Percentages not computed, base fewer than 75,000

² Less than 0.5 percent

not affect occupational differences (table 16) The proportions of white elderly units in each classification that included professional, technical, managerial, or skilled craftsmen were at least two-and-a-half times as large as those for blacks The reverse was true for unskilled labor and service jobs The largest differences were between the nonmarried women—54 percent of the white women and 13 percent of the black women were in white-collar jobs Fifty-five percent of the black women and 10 percent of the white women were domestics

INCOME SOURCES

The pattern of black-white differences in sources of income did not vary with economic status Larger proportions of elderly blacks in each quintile had earnings or received public assistance payments Retirement pensions and income from assets were much more frequent among the white population (table 17).

Retirement pensions—including OASDI and railroad retirement benefits, government employee pensions, and private pensions and annuities—were the most frequently reported source of income for the white elderly in every economic group except the top quintile (\$8,419 or more). The next most reported source was income from

assets For those in the fifth quintile, earnings were the most prevalent income source

For the black elderly, however, retirement pensions were the most frequent only up through the third quintile (less than \$4,780), followed by public assistance payments in the lowest two quintiles and earnings in the third quintile Earnings were the most prevalent source among blacks with incomes of \$4,780 or more, followed by retirement pensions in the fourth quintile and asset income or retirement pensions in the fifth quintile

Except for income from earnings, the same types of differences existed between black and white beneficiary and nonbeneficiary units The magnitude of these differences, however, varied with beneficiary status As expected (on the basis of the differences in work experience cited above), a larger proportion of black than of white beneficiary units in each quintile had earned income Among nonbeneficiary units within the same income group little difference was seen in the proportions with earnings

White elderly units were generally more likely than black units to have government employee pensions or private pensions and annuities, although differences within quintiles were not always significant Where comparisons could be made, the differences between black and white beneficiaries were smaller than those of nonbeneficiary units

TABLE 16—Occupation on longest job in 1971 Percentage distribution of elderly units with work experience in 1971, by race, marital status, sex, and beneficiary status, 1971

Occupation of head	Black					White				
	Married couples	Nonmarried		Beneficiaries ¹	Non-beneficiaries	Married couples	Nonmarried		Beneficiaries ¹	Non-beneficiaries
		Men	Women				Men	Women		
Total number (in thousands)	371	127	237	327	247	5 138	824	1,916	3 048	4,153
Total percent	100	100	100	100	100	100	100	100	100	100
Professional, technical, managerial.....	7	6	6	8	5	25	21	22	19	28
Sales	2	1	(²)	2	1	8	6	8	9	7
Clerical	6	2	7	2	9	6	7	24	9	11
Craftsmen	10	8	0	4	8	19	14	1	11	16
Operatives	18	20	7	6	23	3	13	12	10	14
Nonfarm laborers	24	25	1	15	20	5	10	(²)	5	5
Farm workers	12	12	4	12	7	12	16	4	17	7
Service (except private household)	21	25	20	26	17	10	12	18	14	11
Private household	(²)	1	55	25	10	(²)	1	10	5	1

¹ Excludes beneficiaries who received their first benefit in February 1971 or later, the transitionally insured, and special age-72 beneficiaries ² Less than 0.5 percent

TABLE 17—Source of money income and economic status Percent of elderly units with money income from specified sources, by quintiles (ranked by money income), beneficiary status, and race, 1971

Source of money income	Quintiles of elderly units											
	Black						White					
	Total	First	Second	Third	Fourth	Fifth	Total	First	Second	Third	Fourth	Fifth
All units												
Total number (in thousands) ¹	1,913	763	466	313	234	127	19 541	3,529	3,823	3,977	4 047	4,165
Percent of units with—												
Earnings	43	18	35	64	82	99	44	12	18	38	60	85
Income other than earnings												
Retirement pensions	67	61	85	77	52	45	76	76	92	88	75	62
OASDHI ²	65	59	82	75	49	39	72	74	90	85	69	44
Government employee	2	(²)	2	7	3	4	6	1	3	6	9	9
Private pension or annuity	0	(²)	3	12	16	11	15	1	8	20	26	19
Public assistance	30	40	40	14	7	5	7	16	13	4	1	(²)
Income from assets	13	6	9	17	18	44	53	22	42	54	66	77
Other unearned income ⁴	11	7	14	12	14	10	13	5	16	16	15	13
Beneficiaries												
Total number (in thousands) ¹	1,142	419	356	212	109	47	12,786	2,311	3,276	3,145	2 542	1,512
Percent of units with—												
Earnings	35	15	30	50	67	100	29	8	13	29	44	67
Income other than earnings												
Retirement pensions	100	100	100	100	100	100	100	100	100	100	100	100
OASDHI ²	100	100	100	100	100	100	100	100	100	100	100	100
Government employee	3	0	1	9	5	5	5	1	2	6	9	15
Private pension or annuity	6	0	4	17	30	-----	19	1	8	22	36	35
Public assistance	27	27	39	17	14	-----	6	9	12	4	2	(²)
Income from assets	13	8	10	18	21	-----	53	23	43	56	73	84
Other unearned income ⁴	10	3	15	11	22	-----	13	2	15	16	15	15
Nonbeneficiaries												
Total number (in thousands)	670	311	80	79	123	77	5,504	927	398	601	1,234	2 345
Percent of units with—												
Earnings	55	22	42	93	96	100	77	21	44	80	89	97
Income other than earnings												
Retirement pensions	3	1	9	5	3	(²)	12	3	17	18	14	11
OASDHI	2	(²)	8	3	1	(²)	6	2	10	9	8	6
Government employee	1	(²)	2	2	2	(²)	6	2	7	10	6	7
Private pension or annuity	1	(²)	2	2	1	(²)	9	36	26	2	1	(²)
Public assistance	87	62	51	4	1	(²)	9	36	26	2	1	(²)
Income from assets	13	4	5	12	18	(²)	52	16	31	43	51	72
Other unearned income ⁴	11	12	15	16	7	(²)	13	12	19	14	14	11

¹ Represents base numbers for receipt of earnings and social security (OASDI) About 95 percent of the white units and 96 percent of the black units reported on the other sources except in the fifth quintile where about 91 percent of the white units and 90 percent of the black reported
² Estimate based on combined Current Population Survey and master

beneficiary record information
³ Less than 0.5 percent
⁴ Includes unemployment compensation, workmen's compensation, veterans benefits alimony, contributions, and other miscellaneous income
⁵ Percentages not computed, base fewer than 75,000

Asset income was the second most frequent source of income for white beneficiary and non-beneficiary units but was more prevalent among beneficiaries at all levels. The white units had asset income more often than the black units, regardless of beneficiary status or income level. Differences were greater, however, for beneficiary than for nonbeneficiary units. The percentage differences between black and white units were also larger at each higher quintile.

For obvious reasons, elderly units receiving public assistance were concentrated in the lowest income groups, more often for black than for white units and for nonbeneficiary than beneficiary units. Among nonbeneficiary units, 62 percent of the black units in the first quintile and about 51 percent in the second—compared with 36 percent and 26 percent, respectively, of the white units—received part of their incomes from public assistance payments.

Black elderly units had to work or to rely on public income-maintenance programs either as their main sources of income or to supplement their retirement pensions more often than the white elderly. The payments under the public assistance program were means-tested, and thus the considerably higher proportions of black than white beneficiaries and nonbeneficiaries in each quintile who received these payments indicate that work was not as financially rewarding for black as for white workers. It further suggests that income from other sources, including OASDI benefits, was less for all black units than for white units.

When differences between the races in income sources are examined by benefit level, they tend

to reflect differences according to total money income. Public assistance payments or earnings were the most frequent income sources for black units, but white beneficiary units at each level received income from assets more often than from any other source (table 18).

Concern has been expressed recently about the high proportion of beneficiaries with minimum benefits who also receive other public pensions. The data in this study show that only 3 percent of the black units and 7 percent of the white beneficiary units with the minimum PIA (\$70 40) also received government employee pensions in 1971. Actually, receipt of government pensions hardly varied with benefit level. Beneficiaries receiving the minimum PIA were more likely than those at any other level to be receiving public assistance payments (16 percent for white beneficiaries and 51 percent for blacks). Only when PIA's were \$150 or more (for both black and white units) was the proportion of beneficiaries receiving private pensions or annuities relatively high.

The frequency of receipt of income from particular sources is more meaningful when examined in conjunction with the importance of the source to the total money income of the recipients. Table 19 shows the relative importance of the four most frequently reported income sources of elderly units aged 60 and older. Not only were the black units less likely than the white to receive social security benefits, but the benefits they did receive generally contributed less to their total money income. As a group a greater proportion of black than white beneficiaries had at least half their money incomes from this source, but

TABLE 18—Source of money income and primary insurance amount. Percent of beneficiary units¹ with money income from specified sources, by race, 1971

Source of money income	Primary insurance amount									
	Black					White				
	\$70 40	\$70.50-109 90	\$110 00-149 90	\$150 00-184 90	\$185.00 or more	\$70 40	\$70.50-109 90	\$110 00-149 90	\$150 00-184 90	\$185.00 or more
Total number (in thousands).....	203	240	209	135	80	1,065	1,606	2,457	3 080	2,481
Percent of units with—										
Earnings.....	35	34	38	39	49	17	27	33	27	40
Government employee pension.....	3	3	3	4	3	7	6	4	6	7
Private pension and annuity.....	2	2	8	20	38	7	7	8	24	42
Public assistance.....	51	29	21	16	12	16	14	6	2	1
Income from assets.....	10	12	15	21	19	43	45	48	60	71
Other unearned income ²	9	11	13	16	9	14	16	14	12	11

¹ See table 7, footnote 1

² Includes unemployment compensation, workmen's compensation, veterans' benefits, alimony, contributions, and other miscellaneous income

one-third of these black units were in the lowest quintile (compared with 16 percent of the white recipients) where they were least likely to have other resources. Thus OASDI benefits were their most important income source. These benefits constituted at least half the money income for a similar proportion—(about 95 percent) of black and white units in the lowest quintile. In the

other economic categories, OASDI benefits were a larger portion of total money income for the white elderly than for the blacks. They were almost the total income (90 percent or more) for a greater proportion of white units than of black units in each quintile.

Earnings, as stated earlier, were another major source of income and blacks were more likely to

TABLE 19—Percent of income from selected sources and economic status. Percentage distribution of elderly units, by quintiles (ranked by money income) and race, 1971

Percent of income from selected sources (recipients only)	Quintiles of elderly units											
	Black						White					
	Total	First	Second	Third	Fourth	Fifth	Total	First	Second	Third	Fourth	Fifth
Earnings												
Total number (in thousands)	811	130	156	200	200	127	8,375	330	644	1,475	2,398	3,529
Total percent.	100	100	100	100	100	100	100	100	100	100	100	100
1-19	13	28	23	15	2	0	11	29	30	16	10	4
20-39	13	12	25	16	8	4	13	18	25	20	17	4
40-59	13	13	20	17	6	6	13	11	17	22	12	10
60-79	15	4	14	12	22	19	15	5	10	12	16	18
80 or more	48	43	17	40	62	71	48	38	18	29	45	66
50 or more	67	51	43	59	88	93	69	47	37	50	66	88
90 or more	39	36	15	33	54	59	39	33	16	25	36	51
OASDI¹												
Total number (in thousands)	934	313	284	198	94	*46	11,641	1,896	2,805	2,844	2,466	1,591
Total percent.	100	100	100	100	100	100	100	100	100	100	100	100
1-19	10	(²)	4	8	28	---	13	(²)	1	4	15	64
20-39	19	1	19	32	48	---	21	2	9	20	42	32
40-59	24	14	33	32	22	---	24	9	24	37	32	3
60-79	20	24	23	23	1	---	18	15	28	28	(²) 10	0
80 or more	28	61	21	4	0	---	24	74	38	10	(²)	0
50 or more	60	95	56	47	9	---	53	95	78	56	(²) 23	0
90 or more	23	53	17	2	0	---	19	65	28	6	(²)	0
Public assistance												
Total number (in thousands)	562	300	193	*44	*18	*7	1,270	541	507	150	*60	*11
Total percent.	100	100	100	100	100	100	100	100	100	100	100	100
1-19	15	11	11	---	---	---	17	14	13	29	---	---
20-39	24	17	37	---	---	---	23	19	27	24	---	---
40-59	17	11	25	---	---	---	24	11	36	29	---	---
60-79	6	3	10	---	---	---	6	2	10	10	---	---
80 or more	38	58	18	---	---	---	30	54	14	8	---	---
50 or more	51	65	42	---	---	---	48	61	43	29	---	---
90 or more	37	57	17	---	---	---	29	53	13	8	---	---
Assets												
Total number (in thousands)	182	*43	*31	*37	*35	*37	9,009	658	1,430	1,926	2,341	2,654
Total percent.	100	100	100	100	100	100	100	100	100	100	100	100
1-19	71	---	---	---	---	---	60	59	54	56	59	67
20-39	21	---	---	---	---	---	21	22	31	23	21	15
40-59	4	---	---	---	---	---	11	9	10	15	10	9
60-79	1	---	---	---	---	---	5	2	4	6	8	4
80 or more	2	---	---	---	---	---	3	8	1	2	3	5
50 or more	4	---	---	---	---	---	13	13	8	14	15	13
90 or more	1	---	---	---	---	---	2	8	1	1	1	2

¹ Estimate based on combined Current Population Survey and master beneficiary record information

² Percentages not computed, base fewer than 75,000

* Less than 0.5 percent

have earnings than whites in the same income group if beneficiary status is disregarded. Except in the two highest quintiles, however, earnings did not differ for black and white units in level of importance. About 40 percent of all units of both races had earnings for almost all their income, and two-thirds had it for at least half.

Asset income was not a major source of income for many in terms of its contribution to total money income. Too few elderly blacks had income from assets to permit analysis by income quintiles. It accounted for less than one-fifth of total money income for about 70 percent of all black recipients. Asset income was common among white elderly units, but it was less than one-fifth of income for 60 percent of the recipients. For 1 in 8 white units and 1 in 25 black units, however, it constituted at least half of their money income.

Public assistance payments were a vital source of income for recipients of both races. It represented at least 50 percent of total money income for about half the white and black units receiving such payments. As noted earlier, however, blacks were about four times more likely than the white elderly to be dependent upon public assistance. It constituted almost all of the money income for a larger proportion of black than of white recipients and was, of course, most important to those in the lowest quintile.

SUMMARY AND IMPLICATIONS

Relationships between certain socioeconomic characteristics and total money income of the black and white elderly units were compared here. The analysis focused on differences between black and white units in the same money income category with respect to education, work experience, and occupation of longest 1971 job. Sources of income and their relative importance in the total money incomes of these elderly units also were examined.

According to the study findings, the black elderly were disadvantaged in educational attainment and occupational status, regardless of their economic status. Differences in the work experience of the two races, however, were related to beneficiary status and were not consistent at all income levels.

A positive relationship existed between education and money income in 1971 for both the white

and black elderly, but blacks had much less education at all income levels. Blacks were also less likely than similarly educated white persons to achieve the same economic status. It was evident that education is less than a perfect determinant of economic outcome. In the aggregate, more years of school did not necessarily mean higher income for either race. About 19 percent of the white elderly in the lowest economic-status category, for example, had completed 4 years of high school or more, and, in contrast, 44 percent of the black elderly in the highest quintile had completed less than 8 years of school.

At all income levels the black elderly who worked were substantially overrepresented in low-status jobs. Though a positive relationship exists between occupational status and income, regardless of race, among blacks in the highest economic-status category the proportion of nonfarm laborers and service workers was practically the same as that of white workers in the lowest quintile and four times that of white workers in the highest quintile. About 12 percent of the white elderly units in the lowest quintile reported work in top-level white-collar jobs. Blacks were less likely to have similar income even when classified in the same occupational group as white workers. They were also disproportionately concentrated in blue-collar jobs as unskilled laborers and operatives and in service occupations, no matter what their level of education was.

Marital status and the extent of work by the elderly units in the highest and lowest income quintiles contributed to the inconsistencies noted in both their occupational and educational profiles. About 80 percent of the white units in the first quintile were nonmarried women, most of whom did not work or worked less than full year, full time in 1971. Eighty-nine percent of the black elderly units in the top quintile were married couples, and in more than half of these units both spouses had some work in 1971.

Work, obviously a continuing necessity for many of the elderly, is probably not the most desired activity of the aged—especially those faced with poor health. Nevertheless, despite their lower educational levels and their concentration in low-paying occupations the black elderly were as likely to work—more likely among beneficiaries—as were the white elderly in the same income category. This work pattern could indicate

that the black elderly more often than the white elderly rely on earnings for income

Income from assets and from all retirement programs as a combined source was more prevalent among the white units than among black elderly units at all income levels. When government employee pensions and private pensions and annuities were examined separately, white units remained more likely than black units to receive money from these sources, though differences did not exist at all levels.

Proportionately more black than white units received public assistance payments at all income levels. This difference held true regardless of beneficiary status.

Some studies in the income status of the aged treat the aged as a homogeneous group. In doing so, the studies generally, because of the overwhelming numerical importance of the white population, depict the condition of the white elderly and sometimes fail to reveal clearly the comparatively disadvantaged situation of the black elderly—especially that of nonmarried black women. Only a small proportion of the elderly population depend on public assistance payments, for example, but this proportion includes a very large percentage of the black elderly. The reverse is true for the receipt of income from assets.

Even in the lowest income group, black and white units differed substantially in their sources of income. It is evident, therefore, that efforts to improve the income adequacy of the elderly will have different effects on the two races. Benefit increases in any of the retirement pensions would provide relatively less for blacks because of their lower rate of coverage and their lower lifetime earnings, on which benefit amounts are computed. It may be also that over the long run such provisions tend to increase the income gap between the black and white elderly. This aspect might be appropriate for further research. On the other hand, in the absence of extensive improvements in coverage or basic changes in benefit formulas, blacks would benefit more from the improved, but means-tested, assistance programs¹⁷ and from the

¹⁷ The supplemental security income for the aged, blind, and disabled (SSI) program became effective January 1, 1974. It replaced the State programs of aid to the aged, blind, and disabled and guaranteed a monthly income of at least \$140 for an individual or \$210 for a couple with no income. The amounts are adjusted for cost-of-living increases.

continued availability of jobs for those still able to work.

In reality, inadequate income among many of the elderly (more likely for the black than for the white elderly) is not a new experience in old age. It is, instead, a lifelong condition. For younger blacks, increased opportunities for higher education and better jobs, coupled with similar financial returns, would improve their economic status as well as reduce the differences between the black and white elderly in the future. Unfortunately, the problem of inadequate incomes may still exist for some of the aged in the future, but the burden might not be disproportionately on the black elderly. To the extent that such efforts are realized, policy decisions can be uniformly directed toward the alleviation, and perhaps elimination, of poverty for all groups among the aged.

Technical Note*

The Sample

The estimates in this report are based on data derived from the March 1972 Current Population Survey (CPS) of the Bureau of the Census matched with information from the Social Security Administration's master beneficiary record.¹⁸

The 1972 Social Security Survey of the Status of the Elderly (STATEL) extracted annual work and income information from the March 1972 CPS for all individuals aged 60 and older and their spouses. Estimates of the size of this older population were obtained by inflating the weighted sample results to independent estimates of the noninstitutionalized civilian population according to age, race, and sex. The independent estimates were based on statistics from the 1970 Census of Population, statistics of births, deaths, immigration, and emigration, and statistics on

* The author wishes to acknowledge the assistance of Susan Grad, also of the Division of Retirement and Survivor Studies. Ms. Grad is responsible for researching and resolving many of the technical difficulties of the matched tape and for creating some of the key variables.

¹⁸ For details on the survey design and sampling procedure, see Susan Grad, *op cit*, and the Bureau of the Census, *The Current Population Survey: A Report on Methodology* (Technical Report No. 7), 1963.

the Armed Forces The sample of 14,724 aged units examined in STATEL represents an estimated 21,640,641 units aged 60 and older (19,541,248 white, 1,912,534 black, and 186,859 of other races) Only the black and white units are included here

Methodology

To derive the economic-status categories for this study the sample population was distributed by size of money income and divided into quintiles The lower income level of each fifth of units ranked by income was estimated by cumulating the number of units in successive income intervals, subdividing the interval of each twentieth percentile into very small intervals, and interpolating linearly within the interval for that fifth Since the focus of the report was to examine whether the selected characteristics and income are related in the same way for the black elderly as for the white elderly, data are displayed in tables for black and white units separately within the respective quintiles among all units, with no combined totals

Definitions

Total money income—Total money income is the sum of all income received by the aged unit (the aged person and his spouse, if any), before deduction for taxes, from the following sources: (1) Earnings, (2) social security and railroad retirement benefits; (3) dividends, interest (on savings or bonds), income from estates or trusts, net rental income, and royalties, (4) public assistance or welfare payments such as old-age assistance, aid to families with dependent children, and aid to the permanently and totally disabled, (5) unemployment compensation, government employee pensions, veterans' payments, and workmen's compensation; and (6) private pensions, annuities, alimony, regular contributions from persons not living in the household, and other periodic income¹⁹

¹⁹ For more detail on the components of each of these items and for a discussion of the comparability of CPS income data with other data, see the Bureau of the Census, "Money Income in 1971 of Families and Persons in the United States," *op cit*, pages 6-8, 13-16, 21-22

Money receipts from the following sources were not included as income (1) The sale of property (stocks, bonds, and real estate, for example) unless the person was engaged in the business of selling property; (2) withdrawals of bank deposits, (3) loans; (4) tax refunds, (5) gifts; and (6) lump-sum inheritances or insurance payments

Data on total money income came from the CPS with two exceptions When the master beneficiary record benefit amount (including retroactive benefits) was greater than the CPS amount of social security and/or railroad retirement benefits, the former amount was substituted

Beneficiary status—Beneficiaries are those persons entitled to monthly cash benefits as retired workers, disabled workers, dependents, or survivors who first received benefits before February 1971 Those who received their first benefit in February or later, the transitionally insured, and "special age-72" beneficiaries are excluded from the "beneficiary/nonbeneficiary" categories but included in the "total"

The CPS questionnaire asked about the receipt of social security and/or railroad retirement benefits in 1971 in a single question To obtain the best estimate of beneficiary status, data from both agencies were used When there were matches the master beneficiary record data were used; otherwise, those who reported some income from social security and/or railroad retirement were classified as beneficiaries Some of these beneficiaries may have received railroad retirement benefits only This method and the problem of some missing data on primary insurance amounts (PIA) led to a discrepancy between the total number of beneficiaries in tables with PIA distributions and the number of beneficiaries in all other tables Totals have been omitted from PIA tables, therefore, to avoid showing tables with different beneficiary totals in the report

Primary insurance amount (PIA)—The PIA is the amount, based on the worker's average monthly earnings, payable to a retired worker who first receives benefits at age 65 or later The PIA is also the basis for computing benefit amounts for dependents entitled on the earnings record of the retired worker

Educational attainment—Educational attainment refers only to years of school completed

without regard to the quality of the education. It is the highest grade of school completed by the head of the aged unit.

Occupation—The data on occupation refer to the job held longest in 1971 by the head of the aged unit.

Work experience—Units with work experience are those who worked at civilian jobs during 1971 on a full- or part-time basis for pay or profit or who worked without pay on a family-operated farm or business at any time during the year. A unit is classified as having worked year-round/full-time if the work was performed for 50–52 weeks and 35 hours or more per week. Otherwise, the unit is classified as having worked less than year-round/full-time. The data presented show various combinations of work experience and the extent of employment of married couples.

Imputation of Missing Data

To reduce nonsampling error resulting from nonresponses, the Bureau of the Census devised procedures to impute work and income data²⁰ for all persons for whom this information is missing. When one or more income amounts are unreported, the nonrespondent is assigned the income amount(s) stored for the last respondent in the file who had similar demographic and economic characteristics such as age, sex, family status, race, number of weeks worked, earnings, and major occupational groupings. Work-experience data are imputed from earnings data when available, otherwise, they are allocated on the basis of other known data. Fortunately, work and earnings data are rarely missing at the same time.

²⁰ For a detailed discussion of these imputation procedures, methods devised to reduce income nonresponse, and the characteristics of income nonrespondents in the CPS, see the American Statistical Association, *Proceedings of the Social Statistics Section*. Emmett F. Spiers and Joseph J. Knott, "Computer Method To Process Missing Income and Work Experience Information in the Current Population Survey," 1969, pages 289–297; Mitsuo Ono and Herman P. Miller, "Income Nonresponses in the Current Population Survey," 1969, pages 277–288; Mitsuo Ono, "Current Developments on Collecting Income Data in the Current Population Survey," 1971, pages 342–347; Emmett Spiers, John Coder, and Mitsuo Ono, "Characteristics of Income Nonrespondents in the Current Population Survey," 1971, pages 369–374.

Reliability of Estimates

Since this analysis is based on a sample of the older population, all reported statistics—counts, percentages, and medians—are only estimates of population parameters and may deviate somewhat from their true values—that is, from the values that would have been obtained from a complete census, using the same schedules, instructions, and enumerators.²¹ Particular care should be exercised in the interpretation of figures based on relatively small numbers of cases as well as small differences between figures. As in any survey work, the results are subject to errors of response and nonreporting and to sampling variability.

The standard error is primarily a measure of sampling variability—that is, of the variations that occur by chance because a sample rather than the entire population is surveyed. As calculated for this report, the standard error also partly measures the effect of response and enumeration errors but does not measure systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error.

The figures presented in tables I, II, and III are approximations to the standard errors of various estimates shown in this report. These tables provide an indication of the order of magnitude of the standard errors rather than the precise standard error of any specific item.

Standard error of estimated numbers—Tables I and II present approximations of the standard errors of the estimated numbers of aged persons and aged units for the white and black populations, respectively.

Standard error of estimated percentages—The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the percentage and the size of the total upon which the percentage is based. Estimated percentages are relatively more reliable than the correspond-

²¹ Most of this discussion of estimation procedures has been excerpted from the Bureau of the Census, "Money Income in 1971 of Families and Persons in the United States," *op cit*, pages 16–18.

TABLE I—Standard errors of estimated numbers of all persons and white persons

[68 chances out of 100 Numbers in thousands]			
Size of estimate	Standard error	Size of estimate	Standard error
100	12	5,000	86
250	20	10,000	119
500	28	25,000	178
1,000	39	50,000	224
2,500	61	100,000	218

ing absolute estimates of the numerators of the percentages, particularly if the percentage is large (50 percent or more)

TABLE II—Standard errors of estimated numbers of persons of black and other races

[68 chances of out 100 Numbers in thousands]			
Size of estimate	Standard error	Size of estimate	Standard error
100	12	2,500	54
250	18	5,000	69
500	26	10,000	72
1,000	36		

Table III shows the standard errors of the estimated percentages of persons Use of this table in calculating the standard error of a single percentage and the standard error of the difference between two estimated percentages is illustrated below

Table 19 shows that an estimated 11 percent of all white aged units in the lowest quintile had some work experience during 1971 Since the base of this percentage is approximately 3,529,000, interpolation in table III shows that the standard error of the estimated 11 percent is approximately 0.6 The chances are 68 out of 100 that the estimate would have shown a figure differing from a complete census by less than 0.6 percent The chances are 95 out of 100 that the estimate would have shown a figure differing from a complete census by less than 1.2 percent (rounded to 1.0 percent). Thus the 95-percent confidence interval would range from 10 percent to 12 percent

For the difference between two sample estimates, the standard error is approximately equal to the square root of the sum of the squares of the standard errors of each estimate considered separately This formula will represent the actual standard error quite accurately for the difference between two estimates of the same characteristics in two different areas, or for the difference between sep-

TABLE III—Standard errors of estimated percentages of persons

Esti- mated per- centage	[68 chances out of 100]									
	Base of estimated percentage (in thousands)									
	100	250	500	1,000	2,500	5,000	10,000	25 000	50 000	100,000
2 or 98	1.7	1.1	0.8	0.5	0.3	0.2	0.2	0.1	0.1	0.1
5 or 95	2.7	1.7	1.2	0.9	0.5	0.4	0.3	0.2	0.1	0.1
10 or 90	3.7	2.3	1.7	1.2	0.7	0.5	0.4	0.2	0.2	0.1
25 or 75	5.4	3.4	2.4	1.7	1.1	0.8	0.5	0.3	0.2	0.2
50 ----	6.2	3.9	2.8	2.0	1.2	0.9	0.6	0.4	0.3	0.2

arate and uncorrelated characteristics in the same area If, however, a high positive correlation exists between the two characteristics, the formula will overestimate the true standard error.

A comparison of the difference in the percentage of white and black aged units in the lowest quintile with work experience in 1971 illustrates how to calculate the standard error of a difference between two percentages

Eleven percent of the white aged units and 18 percent of the black aged units in the lowest quintile worked in 1971—a difference of 7 percentage points The standard error of each of these percentages is 0.6 and 1.7, respectively The standard error of the estimated difference of 7 percentage points is

$$1.8 = \sqrt{(0.6)^2 + (1.7)^2}$$

The chances are thus 68 out of 100 that the estimated difference based on the sample would differ by less than 1.8 percentage points (rounded to 2.0) from that derived by using complete census figures The chances are 95 out of 100 that it would differ by less than 3.6 percentage points (rounded to 4.0) At both levels of confidence, therefore, the proportion of black aged in the first quintile with work experience in 1971 is greater than that of the white aged in the same category

Confidence limits of medians—The sampling variability of an estimated median depends upon the distribution and the size of the base Confidence limits of a median based on sample data may be estimated as follows (1) From table III using the appropriate base, determine the standard error of a 50-percent characteristic, (2) add to and subtract from 50 percent the standard error determined in step 1; and (3) the confidence interval for the median corresponding to the two points established in step 2 are then read off the distribution of the characteristic. A two-standard-error confidence limit may be determined by finding the values corresponding to 50 percent plus and minus twice the standard error shown in table III

To illustrate, the median income of the estimated 654,000 black married couples in 1971 was \$4,344

1 From table III the standard error of 50 percent of these married couples expressed as a percentage is about 2.6 percent

2 As interest usually centers on the confidence interval for the median at the two-standard-error level, it is necessary to add and subtract from 50 percent twice the standard error obtained in step 1. This procedure yields limits of about 44.8 and 55.2 (rounded to 45 and 55)

3 Since 40 percent of the couples had incomes below \$3,500 and 5 percent had earnings of \$3,500-\$3,999, the dollar value of the lower limit may be found by linear interpolation to be

$$\frac{(45 - 40) \times \$500}{5} + \$3,500 = \$4,000$$

4 Since 45 percent had incomes below \$4,000 and 13 percent had incomes of \$4,000-\$4,999, the dollar value of the upper limit may be found by linear interpolation to be

$$\frac{(55 - 45) \times \$1,000}{13} + \$4,000 = \$4,769$$

Thus the estimated median income of aged black married couples in 1971, derived from all possible samples, lies within the interval \$4,000-\$4,769 with 95-percent confidence

Notes and Brief Reports

American Indian SSI Recipients in Selected Areas*

Although concern has been expressed in recent years about the participation by American Indians in social welfare programs, information on this segment of the population is not directly available from program records maintained by the Social Security Administration. Estimates can be made, however, of the number of Indians receiving federally administered supplemental security income (SSI) payments in certain counties with large Indian populations. This note presents data on the geographic distribution of Indians, in December 1975, in those counties in which at least 90 percent of the nonwhite and nonblack residents were Indians, and describes the estimating procedure used.

* By Jack Schmulowitz and Richard A. Bell, Division of Supplemental Security Studies, Office of Research and Statistics. The recipient data file was prepared by Donald L. Robin.

ESTIMATING PROCEDURE

The Social Security Administration requests information on race when a person applies for a social security number. The check-box options, however, are limited to white, black, and "other." By contrast, decennial census data provide a wider range of the "other" racial categories—American Indian, Chinese, Japanese, Filipino, Hawaiian, Korean, Aleut, Eskimo, and "all other."

The estimate for a specific county is made on the following basis.

1 P equals the proportion of American Indians to the total in "other races" for the county, provided by the 1970 census.

2 N equals the number of SSI recipients of "other races" residing in the county, obtained from social security program records.

3 An estimate is made when P is equal to or greater than 0.9.

4 The number of Indian SSI recipients in the county is equal to the product NP .

This procedure assumes that the same proportion of Indians receive SSI payments as is the case for the other subgroups of the "other."