

Socioeconomic Achievements of U.S. Men, 1962 to 1972

Socioeconomic standing of men in the labor force has improved, but discrimination against black men persists.

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The socioeconomic achievements of all men in the U.S. labor force, and especially of black men, have increased in the past decade, but the opportunities for white men to hold high status jobs may have leveled off. Differences between blacks and whites in educational attainment, occupational status, and income have been reduced substantially, but there remain large residues of discrimination against blacks.

Within the past decade the development of causal models of stratification has greatly increased the possibilities for cumulative scientific investigation of the persistence of social inequality from one generation to the next (1-4). Among the important possibilities are the elaboration of models of educational, occupational, and economic achievement which elucidate the social and psychological mechanisms of stratification (3-5), and the pursuit of comparative study, as among population subgroups in one society, among societies (6), or between points in time. Our present interest is in the last of these possibilities, the comparison of processes of socioeconomic achievement across time. Specifically, we report trends from 1962 to 1972 in the educational attainment, occupational status, and income of black and white men in the United States, and we analyze and interpret those trends using a structural equation model of socioeconomic achievement.

In March 1962 the monthly Current Population Survey (CPS) of the U.S. Bureau of the Census included a supplementary questionnaire, "Occupational changes in a generation" (OCG) [see (7)], which yielded the first definitive measurements of patterns and

trends in occupational mobility among U.S. men. Analyses of this survey of 20,700 men, aged 20 to 64, established that there had been substantial upward mobility in the educational and occupational hierarchies between generations, and by an ingenious arrangement of OCG, CPS, and Census data it was possible to show that more recent cohorts enjoyed greater opportunities for movement into higher status occupations than their predecessors (2, pp. 90-111; 8). Further analyses of the 1962 data by means of age-constant intercohort comparisons suggested that improvements in educational and occupational opportunities in the aggregate have not been accompanied by substantial changes in the rigidity of the stratification system. That is, there has been no appreciable tightening or loosening of the regime connecting the achievements of men with those of their fathers (9).

In the past decade there has probably been as much concern about trends toward rigidification in American society as in any earlier period. Thus, efforts to obtain a new reading on trends in socioeconomic opportunity are surely in order. Detailed and definitive measurements of trend over the decade await the completion of a replicate and extension of the OCG survey (10). However, the discussion of recent mobility trends has already begun (11), and the inevitable anticipations and conjectures about trends in socioeconomic achievement can be given some basis in fact. By adaptation of a procedure used earlier by Duncan (8), it has been possible to obtain indirect evidence of changes in social mobility in the past decade (12, 13).

Using 1962 OCG data (7), we have estimated the parameters of a model

of socioeconomic achievement for black and nonblack men at ages 35 to 44, 45 to 54, and 55 to 64. (Since almost all nonblack persons are white, hereafter we refer to nonblacks as white.) If we substitute the means of cohorts 10 years younger in each of these equations, we obtain expected levels of achievement in 1972, when the younger cohorts are as old as those for whom the equations were constructed. If there were no intercohort shifts in achievement other than changes in the means of variables entering the equations, the expected levels of achievement would agree (except for sampling error) with actual levels of achievement observed in the March 1972 CPS. Differences between actual and expected achievements can be attributed to changes in the process of achievement or in variables other than those entering the equations. Further, by substituting intercohort shifts in the means of variables entering the equations, we obtain components of change in achievement attributable to each variable in turn. This method of standardization is described by Duncan (14).

The important assumption of our analysis is that the younger men, for whom we ascertain means of the regressors entering each equation from the 1962 OCG survey, are drawn from the same population as those 10 years older for whom we ascertain achievements from the March 1972 CPS. Since our analysis must of necessity pertain to men in the experienced civilian labor force (the employed plus the experienced unemployed), our comparisons are vulnerable to changes in coverage occasioned by death, migration, and entry into and exit from the labor force. For example, death and retirement substantially reduce a cohort's participation in the labor force between ages 45 to 54 and 55 to 64, many men complete military service and enter the civilian labor force between ages 25 to 34 and 35 to 44, and increasing numbers of nonwhites are outside of the labor force at ages 35 to 54 (13).

Our earlier findings about change in the occupation distribution (12, 13) were not affected by changing rates of participation in the labor force among white or black men, and we think this

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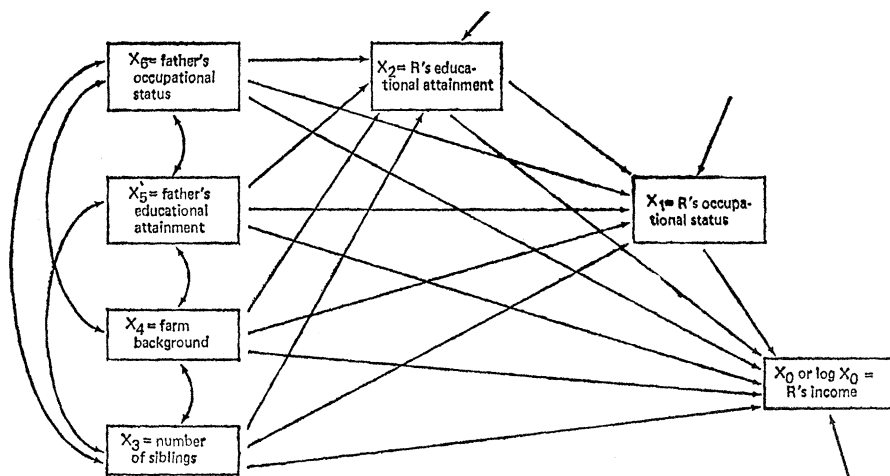


Fig. 1. A model of socioeconomic achievement among U.S. men.

applies also to the present analysis. Still, it should be born in mind that our analysis pertains to men of a given age who occupy a particular status in the labor force, not to all men of that age.

Our model of socioeconomic achievement is displayed as a path diagram in Fig. 1. The straight, single-headed arrows represent unidirectional causation, and the curved, two-headed arrows represent correlations that we have not interpreted in causal terms (15). The model takes educational attainment in years of schooling (X_2) to depend on father's occupational status in units of Duncan's (16) scale (X_6), father's educational attainment (X_5), respondent's farm background (X_4), and respondent's number of siblings (X_3). The respondent's current occupational status (X_1) depends on the four background variables and on educational attainment. Finally, the respondent's income (X_0 or $\log X_0$) depends on the background variables, educational attainment, and occupational status. Formally, the model is given by the recursive linear equations

$$\begin{aligned} X_2 &= \beta_{23}X_3 + \beta_{24}X_4 + \beta_{25}X_5 + \beta_{26}X_6 + \epsilon_2 \\ X_1 &= \beta_{12}X_2 + \beta_{13}X_3 + \beta_{14}X_4 + \beta_{15}X_5 \\ &\quad + \beta_{16}X_6 + \epsilon_1 \end{aligned}$$

and

$$\begin{aligned} X_0 &= \beta_{01}X_1 + \beta_{02}X_2 + \beta_{03}X_3 \\ &\quad + \beta_{04}X_4 + \beta_{05}X_5 + \beta_{06}X_6 + \epsilon_0 \end{aligned}$$

where the disturbances (ϵ_2 , ϵ_1 , ϵ_0) are not correlated with one another or with variables on the right-hand side of the equation in which they appear, and where we have suppressed notation for race-age cohorts and for individuals within cohorts.

We have modified earlier models of

achievement (2, 3) by entering farm background as a predetermined variable, because it has been suggested that the social status of farming is not accurately represented by its position on the Duncan scale and, also, because there have been large intercohort shifts out of farming in the recent past. We have estimated two equations for income, one in real (1961) dollars and the other in semilog form. In the first functional form the regression coefficients are interpretable as dollar shifts in income, and in the second, they are interpretable as approximate proportionate shifts in income (17).

Intercohort Shifts in Background and Achievement

Table 1 gives the arithmetic means of background and achievement variables by age and race as ascertained in the March 1962 CPS and OCG or in the March 1972 CPS (7). With a few small exceptions, the intercohort shifts in socioeconomic background and numbers of siblings all tended to improve the socioeconomic chances of more recent cohorts of U.S. men. That is, in younger cohorts, men were generally reared in smaller families and were less likely to be reared on farms, or in families headed by a poorly educated father or one with an occupation of low status. Consequently, if the process of socioeconomic achievement were unchanged, we would expect younger cohorts to obtain more education, hold higher status jobs, and earn more money than their predecessors. The exceptions to this pattern occur among the older blacks. In 1962, 45- to 54-year-old black men reported fathers with higher occupational status

than did men aged 35 to 44. Obviously, this means that the average occupational status of the fathers of the cohort 45 to 54 in 1962 will be higher than that of the fathers of the cohort 45 to 54 in 1972. Also, among black men there were essentially no changes in father's occupational status and in numbers of siblings between 1962 and 1972 at ages 55 to 64.

Every age-constant intercohort comparison in Table 1 shows increasing educational attainment, occupational status, and real income between 1962 and 1972. In educational attainment the shifts range from 0.6 to 0.9 year among whites and from 0.9 to 1.8 years among blacks. At each age the intercohort shift is larger for blacks than for whites. The intercohort shifts in occupational status range from 1.5 to 2.5 points on the Duncan scale among whites and from 5.5 to 6.1 points among black men. At each age the intercohort shifts in occupational status are between two and four times larger among blacks than among whites. The increases in real dollar income are substantial for men of both racial groups, and again the shifts are larger among blacks than whites. The intercohort shifts in real income were each about \$1450 for white men and ranged from \$1800 to \$2100 among black men. In proportionate terms the intercohort increases in real income were much larger for black than for white men because blacks had lower incomes in 1962 than whites. Thus, the shifts in the natural log of income ranged from 0.25 to 0.30 among whites and from 0.58 to 0.83 among blacks.

If we look at white men aged 35 to 44 (see the upper left panel of Table 1), all of the means reported for 1962 were ascertained in the March 1962 CPS or the OCG supplement. The reports of X_6 , X_5 , X_4 , X_3 , and X_2 for men aged 35 to 44 in 1972 were ascertained from men aged 25 to 34 in 1962 in the March CPS or OCG supplement, and the reports of X_1 and of X_0 for men aged 35 to 44 in 1972 were ascertained in the March 1972 CPS. As a consequence of these procedures, the means of X_6 , X_5 , X_4 , X_3 , and X_2 for the cohort aged 35 to 44 in 1962 appear again as entries for the cohort aged 45 to 54 in 1972, and the means of X_6 , X_5 , X_4 , X_3 , and X_2 for the cohort aged 45 to 54 in 1962 appear again as entries for the cohort aged 55 to 64 in 1972.

In the case of educational attainment (X_2), we actually have two re-

ports for each cohort, one from the March 1962 CPS and one from the March 1972 CPS. Since little schooling is completed after age 25, if there were no time-dependent biases in reports of schooling, comparisons of these reports might indicate changes in coverage between 1962 and 1972. However, there is a tendency for men to inflate reports of their educational attainment with age (18), so the education data could not be used to assess changes in population coverage. Throughout our analyses we used reports of educational attainment from the March 1962 CPS. Had we used same-age, rather than same-year reports of schooling, we would have estimated slightly larger intercohort shifts in educational attainment and attributed correspondingly larger shares of the shifts in occupational status and income to changes in educational attainment between cohorts.

It should be kept in mind that the estimated shifts in status do not apply to the substantial numbers of black men in the prime working ages who are not in the labor force. In earlier work (13) we found that the upgrading of the nonwhite occupation distribution between 1962 and 1972 was accomplished partly by shifts out of lower status occupations and into higher status occupations and partly by increased rates of absence from the labor force. Among nonwhite men at ages 35 to 44, 5.8 percent were not in the experienced civilian labor force in 1962, and 8.2 percent were not in the experienced labor force in 1972. At ages 45 to 54, 10.8 percent of nonwhite men were out of the labor force in 1962 and 14.1 percent were out of the labor force in 1972. These figures may be compared with rates of absence from the labor force among whites of 3 to 6 percent in the same age ranges and during the same years (13). It would be misleading to note the chances for improved socioeconomic standing of black men who are in the labor force without our adding that growing numbers of black men in the prime working ages simply do not participate in ordinary economic activities.

Evidently, successive cohorts of white and black men in the civilian labor force have experienced improvements in socioeconomic standing and the increments have been greater for black than for white cohorts. In addition, among men who were 35 to 44 or 45 to 54 years of age in 1962, there

have been upward intracohort shifts in the real incomes of blacks and whites and in the occupational status of blacks. Still, in 1972 as in 1962, black men have lower levels of educational attainment, occupational status, and income than their white age-peers; we shall return in a later section to the persistence of racial differentials in achievement. We turn next to an interpretation of intercohort shifts in achievement within each racial group.

Interpretation of Intercohort Shifts

Table 2 gives the components of intercohort shifts in achievement among white and black men, which were generated by our regression-standardization technique. For example, there is a total difference in educational attainment of 0.62 year between white men aged 35 to 44 in 1962 and in 1972. Of this shift, 0.25 year or 40 percent can be attributed to intercohort changes

Table 1. Means of achievement variables at selected ages by race: U.S. men in the experienced civilian labor force, March 1962 and March 1972.

Variable	Age 35 to 44 in		Age 45 to 54 in		Age 55 to 64 in	
	1962	1972	1962	1972	1962	1972
<i>White men</i>						
X_{60}^*	28.63	30.23	26.47	28.63	25.86	26.47
X_5	7.99	8.73	7.55	7.99	7.40	7.55
X_4	0.2616	0.1980	0.3017	0.2616	0.3568	0.3017
X_3	4.11	3.72	4.55	4.11	4.95	4.55
X_2	11.36	11.98	10.55	11.36	9.65	10.55
X_1	40.67	42.94	38.08	40.65	36.93	38.42
X_0	6873.0	8327.0	6765.0	8214.0	5930.0	7375.0
Log X_0	8.565	8.821	8.520	8.792	8.303	8.602
<i>Black men</i>						
X_{60}	14.79	17.41	16.33	14.79	16.35	16.33
X_5	6.09	7.06	5.69	6.09	4.00	5.69
X_4	0.3748	0.2965	0.4398	0.3748	0.4855	0.4398
X_3	5.31	5.30	6.02	5.31	6.02	6.02
X_2	8.37	9.70	7.43	8.37	5.68	7.43
X_1	19.31	25.16	17.20	22.66	14.73	20.80
X_0	3118.0	5132.0	3020.0	5093.0	2711.0	4475.0
Log X_0	7.537	8.367	7.711	8.334	7.522	8.100

* Sources: March 1962 and March 1972 Current Population Surveys and March 1962 CPS Supplement, "Occupational changes in a generation" (7). Note: Variables are X_{60} , father's occupational status [Duncan SEI scale (16)]; X_5 , father's educational attainment in single years; X_4 , farm background; X_3 , number of siblings; X_2 , educational attainment in single years; X_1 , occupational status (Duncan scale); X_0 , income (1961 dollars).

Table 2. Components of intercohort change in educational attainment, occupational status, and income, 1962 to 1972, by race and age: U.S. men in the experienced civilian labor force. (Variables and sources are defined in the footnote to Table 1.)

Component	White				Black			
	X_2	X_1	X_0	Log X_0	X_2	X_1	X_0	Log X_0
<i>Men aged 35 to 44 years</i>								
X_{60} , X_5 , and X_4	0.25	0.52	131	0.0180	0.55	0.66	-20	0.0256
X_3	0.08	0.07	18	0.0039	0.00	0.00	0	0.0001
X_2	0.29	2.47	141	0.0215	0.78	1.76	287	0.1117
X_1		-0.79	116	0.0193		3.43	181	0.0515
X_0 or log X_0			1048	0.1933			1566	0.6411
Total	0.62	2.27	1454	0.2560	1.33	5.85	2014	0.8300
<i>Men aged 45 to 54 years</i>								
X_{60} , X_5 , and X_4	0.20	0.46	84	0.0091	0.24	-0.16	43	0.0291
X_3	0.08	0.09	7	0.0036	0.11	0.06	24	0.0087
X_2	0.53	2.80	167	0.0331	0.59	1.25	74	0.0253
X_1		-0.78	203	0.0278		4.31	137	0.0437
X_0 or log X_0			988	0.1984			1795	0.5162
Total	0.81	2.57	1449	0.2720	0.94	5.46	2073	0.6230
<i>Men aged 55 to 64 years</i>								
X_{60} , X_5 , and X_4	0.08	0.37	44	0.0166	0.30	0.21	-84	-0.0684
X_3	0.06	0.13	6	-0.0037	0.00	0.00	0	0.0000
X_2	0.76	2.75	192	0.0444	1.45	2.59	380	0.2082
X_1		-1.76	98	0.0179		3.27	130	0.0437
X_0 or log X_0			1105	0.2238			1338	0.3945
Total	0.90	1.49	1445	0.2990	1.75	6.07	1764	0.5780

Table 3. Components of differences between blacks and whites in educational attainment, occupational status, and income by age: U.S. men in the experienced civilian labor force, March 1962 and March 1972. (Variables and sources are defined in the footnote to Table 1.)

Component	1962				1972			
	X_2	X_1	X_0	$\text{Log } X_0$	X_2	X_1	X_0	$\text{Log } X_0$
<i>Men aged 35 to 44 years</i>								
$X_0, X_1,$ and X_2	0.98	2.70	501	0.0296	0.88	2.47	454	0.0255
X_3	0.25	0.22	54	0.0120	0.33	0.29	72	0.0158
X_4	1.76	11.90	681	0.1034	1.07	9.07	519	0.0789
X_1		6.54	1090	0.1816		5.95	907	0.1511
X_0 or $\text{log } X_0$			1429	0.7014			1243	0.1827
Total	2.99	21.36	3755	1.0280	2.28	17.78	3195	0.4540
<i>Men aged 45 to 54 years</i>								
$X_0, X_1,$ and X_2	0.88	2.05	398	0.0349	1.05	2.68	553	0.0354
X_3	0.27	0.29	23	0.0119	0.22	0.24	18	0.0097
X_4	1.97	10.78	644	0.1276	1.72	10.33	617	0.1223
X_1		7.76	1650	0.2255		4.74	1421	0.1943
X_0 or $\text{log } X_0$			1030	0.4091			512	0.0963
Total	3.12	20.88	3745	0.8090	2.99	17.99	3121	0.4580
<i>Men aged 55 to 64 years</i>								
$X_0, X_1,$ and X_2	1.23	2.38	148	0.0293	0.89	2.42	186	0.0333
X_3	0.16	0.35	17	-0.0098	0.22	0.48	23	-0.0135
X_4	2.58	12.14	848	0.1957	2.01	9.54	666	0.1538
X_1		7.33	1463	0.2664		5.18	1162	0.2114
X_0 or $\text{log } X_0$			743	0.2994			863	0.1170
Total	3.97	22.20	3219	0.7810	3.12	17.62	2900	0.5020

in socioeconomic background (father's occupational status, farm background, and father's education), and another 0.08 year or 13 percent is explained by the smaller families of younger men. The remaining 0.29 year or 47 percent of the intercohort shift in educational attainment must be attributed to other changes in social structure between the times when these two cohorts completed their schooling. Of the net shift in occupational status of 2.27 points on the Duncan scale between the cohorts aged 35 to 44 in 1962 and in 1972, 0.52 point or 23 percent is due to the intercohort shift in social background, 0.07 point or 3 percent to the reduction of family size, and 2.47 points or 109 percent of the observed shift is due to increases in educational attainment. Since the sum of these components is larger than the observed intercohort shift in occupational status, the net shift in status between 1962 and 1972 is a negative 0.79 point on the Duncan scale. That is, 35- to 44-year-old white men with given "qualifications" of social background and education held lower status jobs in 1972 than in 1962, perhaps because of the increased supply of men who were educationally qualified by 1962 standards.

Of the \$1454 shift in real income of 35- to 44-year-old white men between 1962 and 1972, \$131 or 9 percent was due to changing socio-

economic background, \$18 or 1 percent to changing family size, \$141 or 10 percent to increased educational attainment, and \$116 or 8 percent to increased occupational status. The remaining \$1048 or 72 percent of the increase in real income could not be explained by intercohort shifts in social background, educational attainment, or occupational status. Expressing the same components in semi-log form, we find a total increase in income between the two cohorts of about 26 percent, of which less than 1 percent is due to smaller families, about 2 percent each to the shifts in socioeconomic background, educational attainment, and occupational status, and about 20 percent to other differences between the cohorts.

The components of intercohort shifts in educational attainment, occupational status, and income among white men at the two older ages are generally similar to those of white men at ages 35 to 44. Changes in socioeconomic background, as well as the secular increase in schooling, contribute to rising levels of educational attainment, but the secular increase is more important at the older ages. Intercohort shifts in socioeconomic background account for about a fifth of the change in occupational status between cohorts of white men, but changes in family size explain little of the increase in status. At every age the intercohort shifts in

educational attainment are more than large enough to explain the observed increases in occupational status. Consequently, the net or structural shift in occupational status between 1962 and 1972 is negative for whites at every age. Changes in socioeconomic background, educational attainment, and occupational status each make modest contributions to the observed intercohort growth of real income among whites, but changes in family size have a negligible direct effect on income shifts, and two-thirds to three-quarters of the growth of income at each age must be attributed to social changes other than those expressed in our model of achievement.

While the intercohort shifts in educational attainment are larger for blacks than for whites at every age, the components of shifts in educational attainment are, proportionately, similar for black and white men at the same age. In the case of occupational status, the black and white components are quite different. For blacks as for whites, changes in socioeconomic background make a modest contribution to the intercohort increase in occupational status. Shifts in educational attainment contribute an increment of 1.25 to 2.59 points of occupational status to the black intercohort shifts. While these are not trivial, they are smaller than the corresponding components of change in status among whites of the same age. Since the shifts in mean educational attainment are larger for blacks than whites, the smaller effect of changing educational attainments must be attributed to blacks getting lower returns for their educational attainments than whites (19, 20). This finding provides evidence of the obstacles faced by blacks in attempting to achieve socioeconomic parity with whites through the educational system. Not only do blacks obtain fewer years of schooling than whites, but they need to increase their schooling by a larger amount than whites to effect a given increase in occupational status.

The major difference between the black and white intercohort shifts in occupational status is not in the effect of schooling, but the effect of changes in social structure that are not specified explicitly in our model of achievement. We think it is fair and accurate to refer to these changes as shifts in opportunity. While the occupational opportunities of white men were reduced by 0.75 to 1.75 points on the

Duncan scale between 1962 and 1972, the occupational opportunities of black men increased by 3.25 to 4.25 points. Over the decade 1962 to 1972, increases in occupational status among whites were more than accounted for by the changes in social origins and educational attainments between cohorts, but black men throughout the ages 35 to 64 experienced an improvement in occupational status which could not be explained by intercohort shifts in social origins or in schooling. Again, the restriction of our analysis to men in the labor force should be kept in mind.

The components of intercohort shifts in real income are generally similar for black and white men of each age. There are some anomalous results among blacks at ages 55 to 64 which we are inclined to attribute to the limited number of observations on those two cohorts. Elsewhere, our finding is that shifts in socioeconomic background, schooling, and occupational status each contribute modestly to the growth in real income between cohorts, but the largest component of change is changing opportunity, that is, factors not specified explicitly in our model. Just as the growth of opportunity for schooling and for occupational achievement was greater for black than for white men in the labor force at every age from 35 to 64, so was the growth in income opportunities greater for black than for white men. Among whites the net intercohort shifts in real income were about \$1000, but among blacks the net increases in real dollar income ranged from \$1300 to \$1800, or 50 to 60 percent of income in 1962.

Racial Differentials in Achievement

Table 3 shows components of the differences between blacks and whites in educational attainment, occupational status, and income at ages 35 to 44, 45 to 54, and 55 to 64 in 1962 and in 1972. To generate these interpretations of racial differentials in achievement we took the 1962 regressions for whites as the standard and substituted differences of means between black and white men in 1962 and in 1972. Given the predominant pattern of interaction (differences in slope) between the white and black regressions in 1962, the choice of regressions for whites as the standard yields lower-

bound estimates of racial differentials in achievement which are not attributable to social background or prior achievements (14, 20). Following Duncan's usage we think it appropriate to refer to such residual racial differentials as effects of discrimination.

Our procedure may be clarified by an example. At ages 35 to 44 in 1962, white men obtained 3 years more of schooling than blacks. Think of a group of white men with the same social origins as the average black man. From the white regressions in 1962 we would expect this disadvantaged group's educational attainment to fall 0.98 year below the mean for all whites because of its poorer socioeconomic background, and to fall another 0.25 year below the mean for all whites because of its members' larger numbers of siblings. In fact, the mean educational attainment of 35- to 44-year-old blacks falls still another 1.76 years below the mean for whites, and we attribute this last component to racial discrimination.

Because of the recursive property of our model of achievement, the components of changing opportunity or of discrimination do not express the full impact of changes in opportunity or of racial discrimination on occupational status and income. For example, the educational component of racial differentials in occupational status represents discrimination by race to the extent that the racial differential in educational attainment is based on discrimination. The same holds for the educational and occupational components of the racial differential in income. Thus, the components of change in each measure of socioeconomic achievement which we have attributed to discrimination or to changing opportunities represent those factors to the extent that they operate independently of the measured causes of achievement in the model.

In carrying out similar calculations for men in 1972 we make the additional assumption that the slopes of the regressions for white men of a given age are the same in 1972 as in 1962. For example, among 35- to 44-year-old men in 1972, the racial differential in educational attainment is 2.28 years. If the regressions for white men at age 35 to 44 in 1962 were valid for men of the same age in 1972 we would conclude that 0.88 year of the 1972 differential is explained by the inferior socioeconomic origins of black

men, 0.33 year by the larger families in which black men are raised, and the remaining 1.07 years by the residue of discrimination. The critical assumptions affecting the validity of these calculations are those of population coverage, to which we referred earlier, and the constancy of the regressions for whites. Further, the status of our discrimination components as lower-bound estimates is vulnerable to the possibility that changes in the regression lines for blacks have altered this result. We think it unlikely that intercohort changes in regression slopes for blacks or whites at the ages in question could be large enough to affect the outcome of our analysis in any important respect.

If black men in the labor force have experienced greater increases in educational attainment, occupational status, and income than whites of the same age over the past decade, these gains have not been great enough to offset the discriminatory obstacles faced by black men. In 1972 as in 1962 there are large differences in the educational attainment, occupational status, and income of black and white men in each of the age groups 35 to 44, 45 to 54, and 55 to 64. In 1962 the racial differential in educational attainment ranged from 3 to 4 years of schooling, and in 1972 it ranged from 2.25 to 3 years. In 1962 the occupational differential between the races was 21 or 22 points on the Duncan scale at every age, and in 1972 it was about 18 points. In 1962 the income differential between the races ranged from \$3200 to \$3800, and in 1972 it ranged from \$2900 to \$3200 in constant (1961) dollars. In the natural log of income, the differentials ranged from 0.78 to 1.03 in 1962 and from 0.45 to 0.50 in 1972.

Not only the total differences between the races, but also the discriminatory components of those differentials, persisted from 1962 to 1972. In 1962 the net racial difference in educational attainment ranged from 1.75 to 2.6 years of schooling, and in 1972 it was 1.1 to 2.0 years. In 1962 the discriminatory component of the racial differential in occupational status was between 6.5 and 7.8 points on the Duncan scale, and in 1972 it was between 4.7 and 6.0 points. In 1962 the discriminatory component of the difference in income between the races ranged from \$740 to \$1430, and in 1972 it ranged from \$510 to \$1240.

While the differences in socioeconomic achievement between black and white men persisted from 1962 to 1972, they were also smaller at the later point in time. Of the total racial differentials in education, occupational status, and income, and their discriminatory components, only one was larger in 1972 than in 1962. That exception was the discriminatory component in the black-white income difference at ages 55 to 64, which increased from \$743 to \$863; in the corresponding semi-log decomposition this mild reversal did not occur. If the discriminatory components of the black-white differentials were absolutely smaller in 1972 than in 1962, so also were the components explained by social background and prior achievements. That is, the discriminatory differentials between the races in educational attainment, occupational status, and income were as large a proportion of the total racial differentials in 1972 as they were in 1962 (21).

At every age, and in both 1962 and 1972, a substantial component of the educational differential between the races could be explained by differences in socioeconomic background. These components were between 0.9 and 1.2 years of schooling, and they accounted for 28 to 39 percent of the black-white difference in years of schooling. A smaller component of the differential, from 0.16 to 0.33 year of schooling or 4 to 15 percent of the total, could be explained by the larger families in which black men were reared. The remaining 47 to 65 percent of the racial differential in schooling was not explained by the variables in our model, and in this sense it is attributable to discrimination. However, a substantial share of the residual difference in schooling between blacks and whites may be attributable to racial differences in academic ability (4, 14).

Components of 2.0 to 2.7 points on the Duncan scale or 10 to 15 percent of the racial differentials in occupational status were attributable to differences of socioeconomic background between black and white cohorts in 1962 and in 1972. The larger number of siblings in black families contributed little to the observed differences in occupational status between blacks and whites, only 0.22 to 0.48 point on the Duncan scale or 1.0 to 2.7 percent of the total racial difference in status. Black-white differences in years of schooling accounted for the largest com-

ponent of the racial gap in occupational status. These components ranged from 9 to 12 points on the Duncan scale and accounted for 51 to 57 percent of the black-white difference in occupational status. Discrimination was the second largest component of the racial differential in occupational status; it accounted for differences between the races of 4.7 to 7.8 points on the Duncan scale or 26 to 37 percent of the total black-white differential.

In 1962 and in 1972 at every age, differences in socioeconomic background between the races accounted for a small share of the black-white income differential. These shares ranged from 5 to 18 percent of the dollar gap, or between \$150 and \$550 in 1961 dollars. Only a negligible share of the racial gap in incomes could be explained by the direct effects of the larger families in which black men were reared. Black-white differentials in educational attainment accounted for \$500 to \$850 of the racial gap in income; this was 16 to 26 percent of the total black-white difference. Black-white differences in occupational status accounted directly for 28 to 46 percent of the racial gap in income: those components of the dollar gap ranged from \$900 to \$1650. The remaining 16 to 38 percent or \$500 to \$1400 of the racial gap in income was attributable to racial discrimination in incomes which occurred independently of racial differences in socioeconomic background, numbers of siblings, educational attainment, or occupational achievement.

Discussion

In the present analysis we have tried to address two questions: "What has been the trend of socioeconomic opportunity for black and white men in the United States during the past decade?" and "What has been the trend of racial discrimination in the socioeconomic achievements of black men?" We have found that the socioeconomic opportunities of all men in the labor force, and especially of blacks, have increased in the past decade, but the opportunities for white men to hold high status jobs may have leveled off. Differences between blacks and whites in educational attainment, occupational status, and income have been reduced substantially, but there remain large residues of discrimination against

blacks in all three areas of achievement. These made up as large a proportion of the total racial gap in schooling, occupational status, and income in 1972 as they did in 1962. In 1972 as in 1962, the source of black-white differentials in achievement is not primarily the greater prevalence of impoverished origins among blacks, but the cumulative effects of discrimination by race at every stage of a man's life.

We hasten to add that our analysis is tentative and incomplete, and it would be inappropriate for us to conclude without mentioning some of its limitations. Our operational definitions of "opportunity" and of "discrimination" deserve elaboration. We have defined changes in opportunity as intercohort shifts in the distribution of education, occupation, or income, respectively, to the extent that they are not explained by shifts in the distributions of their measured causes in our model of socioeconomic achievement. Likewise, we have defined discrimination as racial differences in the distribution of educational attainment, occupational status, or income to the extent that they are not explained by differences between the races in their measured causes in our model of achievement. These definitions are invalid insofar as the specification of our model of achievement is in error. The omission of relevant causal factors which vary between cohorts and between the races is one important source of error, and a second is error of measurement in variables entering our model of achievement as regressors. For example, we have already noted that measured differences in academic ability between black and white men may account for a substantial share of the black-white difference in years of schooling not otherwise explained by our model. Also, measurement errors in retrospective reports of socioeconomic background could lead to serious downward biases in the estimated effects of background variables in the OCG data (22). We think the best available data show these biases are not large (4, 23), but more evidence is needed on this subject. In any case the effect of either sort of error would probably be to make our estimates of opportunity and of discrimination too large (algebraically, not in absolute value).

While we do not regard our estimates of trends in opportunity and in discrimination as definitive, we do think

they provide some answers to important questions that have been raised about changing opportunities in the United States. For example, Jencks *et al.* (4) speculate:

Unfortunately, we do not have good data on developments since 1962. One thing is clear, however. If the occupational status of blacks has improved, this has been because of direct efforts to eliminate discrimination and compensate for past discrimination. It has not been because black's test scores have risen or because they have appreciably more educational credentials than they did a decade ago.

From our analysis we can suggest that Jencks *et al.* are both right and wrong on this point. From the right-hand panel of Table 2 we can see that there has been a substantial improvement in the occupational opportunities of black men, although we are unable to say whether this is due to "direct efforts to eliminate discrimination and compensate for past discrimination." At the same time our analysis shows that shifts in educational attainment between black cohorts do account for a substantial share of their inter-cohort increases in occupational status.

We would caution against efforts to interpret our estimates of changes in socioeconomic opportunities and in discrimination in terms of programmatic efforts at social melioration carried out during the 1960's. The cohorts we have investigated are far too old to have been affected by programs aimed at children and youth in the past decade. Their educational attainments and, to some degree, their occupational distributions were determined 15 or more years ago. While we have analyzed inter-cohort shifts of the past decade, to a large extent the outcomes of our analyses were determined much earlier in the lives of these cohorts. Some men who were already in the prime working ages at the beginning of the 1960's were undoubtedly touched by public interventions in the job market, but we doubt that such interventions

were extensive or successful enough to have effected many of the changes we have measured.

Finally, we note some of the questions on which the present analysis has not touched at all. One important issue is that of intercohort change in opportunity and in discrimination at the younger ages. Since our method of analysis can be applied only to cohorts covered in the 1962 survey, we have not been able to say anything about trends in the socioeconomic achievements of cohorts which entered the prime working ages after 1962. Since these are the cohorts most likely to have been affected by public policies directed to equalizing opportunities, it is at the younger ages that we might expect to find changing patterns of inequality and opportunity. Second, throughout our analysis we have assumed the constancy of the coefficients of our model of socioeconomic achievement, but changes in these coefficients would reflect important trends in stratification and mobility. Is the effect of educational attainment on jobs and income rising or falling? Are there different trends in returns for educational achievement for white and for black men? Is there a greater or lesser tendency for statuses to persist across generations? Have there been changes in the mechanisms by which socioeconomic backgrounds affect the achievements of U.S. men? We cannot begin to answer these and other important questions about trends in stratification at the present time, but we are hopeful of doing so as data come in from the 1973 OCG survey (10).

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