Data for this study comes from the 1971 Current Population survey made in March 1972 by the Bureau of the Census. Findings indicate that there has been little change in the relative educational achievement of the major European ethnic groups during the last fifty years. Russians continue to maintain the large lead they have after one generation in this country; Italians, Poles, and French have improved slightly; the British have declined slightly; and Germans and Irish have remained unchanged. On the other hand, blacks and especially Chicanos have dramatically increased their level of schooling relative to the national average. In 1971, very large differences exist in earnings among the ethnic groups, with Russians far ahead and blacks far behind; slightly above blacks are Chicanos and Puerto Ricans; considerably above the latter are Cubans, Central or South Americans, and other Spanish; between the Latin groups and Russians are the remaining European groups, led by the British, Italians, and Poles. These differences in earnings among men, 18 to 65 years, do not disappear when ethnic differences in age, education, marital status, and location are held constant. Differences in adjusted earnings do not vary with age but do so at least for the Non-European groups with educational level. The pattern seems to indicate that changes in relative quality of schools has not affected black-white earnings differences, but that the protests of the civil rights movement of the sixties have improved relative earnings of well-educated blacks. (Author/RJ)
INSTITUTE FOR RESEARCH ON POVERTY DISCUSSION PAPERS

DIFFERENCES IN EARNINGS AND EDUCATION AMONG ETHNIC GROUPS

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UNIVERSITY OF WISCONSIN - MADISON

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DIFFERENCES IN EARNINGS AND EDUCATION AMONG ETHNIC GROUPS

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July 1973

The research reported here was supported in part by funds granted to the Institute for Research on Poverty at the University of Wisconsin by the Office of Economic Opportunity pursuant to the provisions of the Economic Opportunity Act of 1964. The conclusions expressed herein are those of the author.
The findings of this paper indicate that there has been little change in the relative educational achievement of the major European ethnic groups during the last fifty years. The Russians continue to maintain the large lead they had after one generation in this country, the Italians, Poles, and French have improved slightly, the British have declined slightly, and the Germans and Irish have remained unchanged. On the other hand, blacks and especially Chicanos have dramatically increased their level of schooling relative to the national average.

In 1971 very large differences exist in earnings among ethnic group, with Russians far ahead, and blacks far behind. Slightly above the blacks are Chicanos and Puerto Ricans. Considerably above them are Cubans, Central or South Americans, and Other Spanish. Between the Latin groups and the Russians are the remaining European groups, led by the British, Italians, and Poles. These differences in earnings among men 18 to 65 do not disappear when ethnic differences in age, education, marital status, and location are held constant.

The differences in adjusted earnings do not vary with age, but they do vary, at least for the non-European groups, with educational level. The pattern seems to indicate that changes in the relative quality of schools has not affected black-white earnings differences, but that the protests of the 1960s Civil Rights movement have improved the relative earnings of well-educated blacks.
DIFFERENCES IN EARNINGS AND EDUCATION AMONG ETHNIC GROUPS

I.  

Black-white differences in education and income have been well known and widely discussed among social scientists and policy-makers for many years. From Myrdal's (1944) pioneering work to more recent articles by Batchelder (1964), Gilman (1965), Welch (1967), and Gwartney (1970), many writers have attempted to measure these differences and allocate them among various causes. These causes have included discrimination in labor markets and in schools, as well as differences in age and location.

Some attention has also been paid to differences in occupational achievement and income among white ethnic groups. Duncan and Duncan (1968) and Nam (1959) found large differences in occupation among ethnic groups but little difference in mobility, after controlling for family background and education. Rosen (1959) found a correlation between achievement and motivation among ethnic groups, but Gockel (1969), Goldstein (1969), and Duncan and Featherman (1972) found that differences in psychological factors did not seem to affect the occupational achievement or incomes if education was held constant. Some of the studies comparing the foreign born, the native born of foreign parents, and the native born of native parents have been based on national data, but all the work comparing different ethnic groups has been on local surveys.

Few studies have been made of the earnings and education of Chicanos, Puerto Ricans, and other Latin American groups. Fogel (1966) found that large differences between these groups and Anglos remain
after controlling for educational differences, while Lyle (1973) found evidence of labor market discrimination against Latins as well.

This paper analyzes differences in education and earnings among a national sample of men of seven European ethnic groups, five Spanish heritage groups, blacks, and a miscellaneous group. Section II describes the data and discusses differences in measured education and earnings. Section III presents evidence showing a small narrowing in differences in educational achievement among European groups during the last fifty years, and a much more substantial narrowing for blacks and especially Chicanos. Sections IV, V, and VI analyze differences among ethnic groups in earnings, first for all men, then separately by age groups and educational level. The findings of the paper are summarized in Section VII.

II.

The data for this study comes from the 1971 Current Population Survey (CPS), conducted in March 1972 by the U.S. Census Bureau. This is a randomly selected national sample of the entire population, with individual weights which can be summed to estimate the number of people in the nation within a specified category. The survey includes over 100,000 persons over 18, and over 30,000 working men between 18 and 65.

In addition to the usual questions on family structure, age, sex, education, employment, and income, CPS respondents were asked what their origin or descent was. They were allowed to choose from a list that included black, German, Italian, Irish, British (English, Scot, Welsh), French, Polish, Russian, Chicano, Puerto Rican, Cuban, Central or South American, Other Spanish, Other, and Don't Know. There are more than
1500 men in the sample for each of the first five groups, though the numbers are considerably lower for some of the Latin American groups.

Over 30 percent of the men classified themselves as "Other" or "Don't Know." Decennial Census reports on rates of immigration and on ethnic origin indicate that most of these men come from ethnic groups not listed by the CPS, including Norwegians, Swedes, Danes, Greeks, Austrians, Hungarians, Japanese, Chinese, Filipinos, and American Indians. However, many of the "Other" and "Don't Know" must be mixtures of specified groups, or must have no ethnic identity at all. In the discussion below, these men, both the unspecified groups—most of whom arrived just before World War I—and the others who have been here long enough to intermarry and forget their ancestry, are lumped together in a miscellaneous group.

Table 1 presents the number of men in each ethnic group in the nation, the actual number in the CPS, their average earnings, and the average years of school completed. The group with the lowest average earnings ($5910) is the blacks. Although they have been in this country longer than any of the other ethnic groups, blacks have obviously not benefited from having ancestors who fought in the Revolutionary War.

Only slightly above the blacks in average earnings are two other groups whose forebears have been American citizens for several generations, Chicanos ($6193) and Puerto Ricans ($6421). Although many Chicanos are recent immigrants from Mexico, the families of many others have lived in the U.S. since the Mexican War in 1847. In 1970, 75 percent of Chicanos were children of native born Americans. And Puerto Ricans have lived under American control, presumably with
American responsibility for their educations and economic development, since 1898. They have been American citizens since 1917, though most Puerto Ricans have come to the mainland only in the last generation. Other recent immigrants from Latin America have fared much better than the Puerto Ricans, however. Cubans and South or Central Americans have average earnings slightly over $7000, although almost all of them have come to this country within the last ten or fifteen years. And people who classified themselves as "Other Spanish" had average earnings of $7956, closer to the averages of the lowest European groups than to those of the other Latin groups. However, 85 percent of this group was born in the United States. In addition to some people from Spanish-speaking Caribbean countries such as the Dominican Republic, evidence from Grebler et. al. (1970) indicates that many of these men are probably middle-class Chicanos who no longer want to identify with a largely lower-class ethnic group.

All the European groups have average earnings considerably above those of all the Latin groups. However, among Europeans, there is only a vague correspondence between period of greatest immigration and earnings. The Russians, who seem to be a special case in several respects, have earnings far higher than the other groups, at $12,647. They are followed by the British ($9750), who have been here longest among the European groups and whose mother culture forms the basis for the dominant American culture. The next highest groups are not the Germans and the Irish, whose families have been here the next longest, and who are supposed to come from northern European cultures almost as similar to the American as British culture. Rather, Italians and Poles are the groups with the third and fourth highest average earnings, at
<table>
<thead>
<tr>
<th>Group</th>
<th>National Number (000)</th>
<th>Number in CPS</th>
<th>Average Earnings</th>
<th>Average Years Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>5803</td>
<td>4359</td>
<td>$9215</td>
<td>12.1</td>
</tr>
<tr>
<td>Italian</td>
<td>2071</td>
<td>1541</td>
<td>9539</td>
<td>11.6</td>
</tr>
<tr>
<td>Irish</td>
<td>3331</td>
<td>2471</td>
<td>8851</td>
<td>11.8</td>
</tr>
<tr>
<td>French</td>
<td>1064</td>
<td>789</td>
<td>8568</td>
<td>11.3</td>
</tr>
<tr>
<td>Polish</td>
<td>1220</td>
<td>902</td>
<td>9462</td>
<td>11.7</td>
</tr>
<tr>
<td>Russian</td>
<td>478</td>
<td>357</td>
<td>12647</td>
<td>13.8</td>
</tr>
<tr>
<td>British</td>
<td>6362</td>
<td>4736</td>
<td>9750</td>
<td>12.5</td>
</tr>
<tr>
<td>Mexican, Chicano</td>
<td>901</td>
<td>670</td>
<td>6193</td>
<td>8.8</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>230</td>
<td>170</td>
<td>6421</td>
<td>8.3</td>
</tr>
<tr>
<td>Cuban</td>
<td>154</td>
<td>117</td>
<td>7032</td>
<td>10.4</td>
</tr>
<tr>
<td>Central or South American</td>
<td>115</td>
<td>84</td>
<td>7075</td>
<td>11.3</td>
</tr>
<tr>
<td>Other Spanish</td>
<td>251</td>
<td>187</td>
<td>7956</td>
<td>10.8</td>
</tr>
<tr>
<td>Black</td>
<td>3326</td>
<td>2303</td>
<td>5910</td>
<td>9.9</td>
</tr>
<tr>
<td>Other &amp; Don't Know</td>
<td>14960</td>
<td>11075</td>
<td>8810</td>
<td>11.8</td>
</tr>
<tr>
<td>All Men</td>
<td>41360</td>
<td>30566</td>
<td>$8795</td>
<td>11.7</td>
</tr>
</tbody>
</table>

$9539 and $9462, respectively. Arriving in the second, reportedly less desirable, wave of immigration after 1890, their images in recent jokes hardly include the economic success these statistics indicate.10

Finally, the bottom three European groups are the Germans, Irish, and the French, with average earnings of $9215, $8851, and $8568, respectively.11 The miscellaneous category includes some nonEuropeans such as American Indians, Chinese, Japanese, and Filipinos, but consists primarily of Europeans. Although the families of many of the men in the miscellaneous group came to America so long ago that they have lost any ethnic identity whatsoever, their average earnings are near the bottom of the Europeans, just below the Irish but above the French.

Do the groups with the highest earnings also have the highest levels of schooling? The data presented in Table 1 indicate that the answer is mixed. The group with by far the highest earnings, the Russians, also have considerably higher than average education, 13.8 years. However, while their average education was 118 percent of the average for all men, their average earnings were 144 percent of the average.

The group with the second highest earnings, the British, also had the second highest level of schooling. However, the third and fourth groups by earnings, the Italians and the Poles, had less education than the fifth and sixth groups, the Germans and the Irish, and less than the miscellaneous category. Among the three recently arrived Latin groups, Cubans, Central or South Americans, and Other Spanish, there was little connection between average years of schooling and average earnings. And at the bottom of the earnings ladder, black average earnings were about $300 and $500 below the averages of
Chicanos and Puerto Ricans, but black average education was a year to a year and a half greater.

III.

If the accepted wisdom about economic and social mobility in the United States is true, we should expect that differences among ethnic groups, perhaps blacks aside, should decrease from generation to generation. There might be large differences between first generation Italians, Russians, and Poles on the one hand, and British, Irish, and Germans whose families have been in this country for several generations. But if there is assimilation and upward mobility, then the difference between third generation Italians and sixth generation British should be small, if not nonexistent.

The first generation came to this country with their education complete, usually unable to speak English, with customs and working experience more suited to subsistence agriculture than industrial capitalism. They were generally at a severe disadvantage vis-à-vis other workers in the labor market. We might expect that their children, the second generation, would have an easier time than their parents, but may still not be on equal footing with men from ethnic groups who have been in this country longer. They often spoke the language of their parents at home instead of English, and may have other hold-overs from the mother country that are unsuited for social and economic success in America. If the melting pot theory is correct, by the third generation the grandchildren of the original immigrants should have assimilated so completely that no important differences between them and older groups persist.
Unfortunately, the CPS does not contain information on generations. However, by comparing ethnic group averages by age with the averages of all men by age, it should be possible to obtain some indication concerning mobility. Peak immigration for Italians, Poles, and Russians was between 1890 and 1914. Men of these ethnic groups who were 55 to 64 in 1971, born between 1907 and 1916, were thus usually the children of immigrants if not immigrants as small children themselves. Men from these groups who were under 35 in 1971, the children or grandchildren of the older men, were therefore third or fourth generation Americans.

The families of the British, Irish, and Germans, in general, came to this country several decades earlier than the eastern and southern European groups. (The British, on average, have been here longer than the other two groups.) While these northern and western European immigrants have continued coming to America since the periods of peak immigration, most men of these ethnic groups are probably at least sixth generation Americans.

Thus if we compare older Italians to older Germans, on average we are comparing first and second generation Americans with third or fourth generation ones. And if we look at the younger age groups, we are comparing the third and fourth generation with the sixth generation. If differences between the newly arrived ethnic groups and the older groups are narrowing with increasing generations, then the ratio of the Italians to the group average should rise with age, but the ratio of the Germans or the British should fall with age. Younger Italians should be higher, relative to all other men, than their grandfathers, but younger Germans should be lower.
Education is a better measure of mobility in this case than earnings for the following reason. The earnings of all age groups are for 1971, whereas the education was completed as long ago as 1920. If discrimination against ethnic groups has decreased since 1920, in schools and in labor markets, then education will reflect discrimination of that year directly, but earnings of 1971 will reflect it only indirectly through the effects of education and work experience. This will also be true if differences in education and earnings between groups are the result of differences in language and custom. If these differences have narrowed during the last fifty years, for individuals as well as for groups, then 1971 earnings will not show the differences that existed fifty years ago, but education will.

To see if ethnic differences in education have been declining over time, the ratio of average education for each ethnic group to the average of all men was calculated for four age categories, 25 to 34, 35 to 44, 45 to 54, and 55 to 64. Men 18 to 24 were not included because so many of them were still in school, especially for those groups with high average education. Table 2 presents the results.

The most striking aspect of these figures is how little change there has been in the relative education of different ethnic groups. German men between 55 and 64 left school between 1920 and 1935, depending on age and years of education. Their average schooling was 104 percent of the average for all men in their age category (upper right hand corner of Table 2). Their sons, men between 25 and 34 who left school between 1955 and 1967, had 103 percent of the total average. The same stability is true for the Irish, whose average education ranged from 99 percent to 102 percent of the total.
TABLE 2
Relative Schooling of Ethnic Groups, By Age Group

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>1.02</td>
<td>1.01</td>
<td>1.01</td>
<td>1.02</td>
<td>1.01</td>
</tr>
<tr>
<td>Italian</td>
<td>1.00</td>
<td>.98</td>
<td>.97</td>
<td>.91</td>
<td>.71</td>
</tr>
<tr>
<td>Irish</td>
<td>1.00</td>
<td>.99</td>
<td>.96</td>
<td>.97</td>
<td>1.01</td>
</tr>
<tr>
<td>French</td>
<td>.95</td>
<td>.95</td>
<td>.95</td>
<td>.85</td>
<td>.92</td>
</tr>
<tr>
<td>Polish</td>
<td>1.02</td>
<td>1.02</td>
<td>.97</td>
<td>.95</td>
<td>.82</td>
</tr>
<tr>
<td>Russian</td>
<td>1.20</td>
<td>1.16</td>
<td>1.16</td>
<td>1.17</td>
<td>1.07</td>
</tr>
<tr>
<td>British</td>
<td>1.04</td>
<td>1.05</td>
<td>1.04</td>
<td>1.08</td>
<td>1.12</td>
</tr>
<tr>
<td>Mexican, Chicano</td>
<td>.78</td>
<td>.68</td>
<td>.58</td>
<td>.43</td>
<td>.40</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>.68</td>
<td>.67</td>
<td>.66</td>
<td>.61</td>
<td>.59</td>
</tr>
<tr>
<td>Cuban</td>
<td>.85</td>
<td>.88</td>
<td>.82</td>
<td>.93</td>
<td>1.18</td>
</tr>
<tr>
<td>Central or South</td>
<td>.86</td>
<td>1.00</td>
<td>.94</td>
<td>1.00</td>
<td>1.80</td>
</tr>
<tr>
<td>American</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Spanish</td>
<td>.89</td>
<td>.89</td>
<td>.86</td>
<td>.81</td>
<td>.71</td>
</tr>
<tr>
<td>Black</td>
<td>.87</td>
<td>.82</td>
<td>.77</td>
<td>.67</td>
<td>.61</td>
</tr>
<tr>
<td>Other and Don't Know</td>
<td>.99</td>
<td>.99</td>
<td>.98</td>
<td>.97</td>
<td>.97</td>
</tr>
<tr>
<td>Average Years of School for All Men</td>
<td>12.7</td>
<td>12.7</td>
<td>11.5</td>
<td>10.6</td>
<td>9.0</td>
</tr>
</tbody>
</table>

NOTE: The columns of this table are the ratios of average years of school completed for the men of each ethnic group within an age category to the average for all men within the age category. Computed from CPS data.
Even the Russians, the group with the highest education and highest earnings, supposedly with the highest mobility, have not increased their education relative to the rest of the population since 1925. The oldest age group had average education 120 percent of all men their age, while the youngest group had 121 percent of their age group's average. Most of the oldest men were probably sons of immigrants, if not immigrants themselves as young children. These percentages indicate a truly amazing rate of mobility from the first to the second generation. In 1930, 22 percent of Russian born men over 65 were illiterate, as were 11 percent of such men between 45 and 64. The parents of the oldest men in the CPS thus had significantly below average educations, while their sons had the highest education by far of any ethnic group in the survey. Also surprising, however, is that since the second generation, around 1930, Russian men have not further increased their educations relative to other ethnic groups.

The two other groups in this study that immigrated during the same period as the Russians seem to have taken longer to improve their levels of education, but once they rose to about the national level, they too have been fairly stable. The oldest group of Italians, immigrants and sons of immigrants, had only 92 percent of the average for their age group. The next three age groups, however, have had 100 percent, 101 percent, and 102 percent of the average schooling for all men their ages. The Poles have shown steadier mobility than the other groups, but the change between the 35 to 44 group and the 25 to 34 group has been the smallest, from 102 percent to 104 percent of the average for all men. The older groups rose relative to other men, from 95 percent for the oldest group, to 97 percent for the next oldest group, to 102 percent for the 35 to 44 group.
Like the Italians, the French rose from 89 percent to 98 percent of the average for all men from the oldest group to the next to oldest. But for the next two groups there has been almost no relative change. French men 35 to 44 and 25 to 34 have average educations 97 percent and 96 percent of national averages, respectively.

If the average education of most groups is either stable or rising slightly with respect to the average of all groups, some group must be declining. If the newer immigrant groups are upwardly mobile, then the older groups must be downwardly mobile, at least relatively. The data on relative education in Table 2 bear this out. The average education of the British, the oldest European ethnic group, has declined from 112 percent of the national average for all men 55 to 64, to 108 percent, to 107 percent, and finally to 105 percent for men between 25 and 34. British men who completed their educations ten to twenty years ago are thus still above the national average in years of school, but by considerably less than their fathers, who finished school forty to fifty years ago.

The two largest non-European ethnic groups have experienced a dramatic increase in relative education. Blacks between 55 and 64, with an average of 7.5 years of school, had 71 percent of the average of all men their age. Blacks between 25 and 34 had 88 percent of the total average. This sharp increase is almost certainly associated with the migration of blacks from the rural South to the urban North. In 1930, when the oldest group was leaving school, 54 percent of blacks lived in the rural South, but in 1960, when the youngest group was leaving school, only 25 percent did. 13
Chicanos have had an even more rapid rise in relative education. The average education of the oldest group was only 4.8 years, by far the lowest of any age-ethnic group in this study. Many but by no means most of these men were born in Mexico. Among the younger groups, the percentage of native born certainly increases, but relative schooling increases even faster, from 44 percent, to 62 percent, to 70 percent, and for the youngest group to 80 percent of the average of all men in the age category.

The number of individuals of other Latin groups in the CPS is too small to draw firm conclusions from the data, but their relative education does not seem to rise from older to younger men. Puerto Ricans in the oldest age group had 67 percent of the average for all men, while Puerto Ricans in the youngest group had only 69 percent. Among Cubans, Central or South Americans, and Other Spanish, the oldest age group had higher relative education than the younger groups. However, since for these four Latin groups there were only ten, nineteen, three, and nineteen men in the oldest age category, not too much reliance should be placed in these figures.

To summarize the results of this section, then, in terms of education there has been very little mobility among European ethnic groups since 1925 or so. Changes that have occurred have been in the expected directions, with the newer southern and eastern European groups increasing relative to all men, and the northern and western groups decreasing or remaining constant. The oldest group, the British, have declined in relative educational achievement, but the next two oldest groups, the Germans and the Irish, have had almost no change. Among the three more recently arrived groups, the Russians had already attained far
higher than average education by the second generation, but have not improved their standing during the last forty years. The Italians did not rise to the national average until a generation later, and the Poles not until a generation after the Italians. The miscellaneous category, composed primarily of various European groups, has had education just equal to that of all men for all four age groups.

The relative educations of blacks and especially Chicanos, on the other hand, increased dramatically during this period, with almost every age group showing a significant rise over every older age group. This was not the case, however, for the four other Latin groups in the Survey, whose relative educations were about the same for all four age groups.

IV.

Section II indicated that substantial differences in earnings persist among ethnic groups, and although differences in education are smaller for younger men than for older ones, there continue to be large differences in schooling as well. Substantial differences among ethnic groups also exist in location, marital status, and even in age. This section tries to answer the question of how much of the earnings differences can be explained by the four variables, education, age, marital status, and location, and how much must be attributed to other factors associated with ethnic groups.

Holding education constant avoids the fundamental issue of what accounts for economic and social success. Saying that an ethnic group has done well in America because of its high level of schooling begs the basic question of why that group rather than another was able to use education as a means to economic success. What characteristics of the
successful group, or what characteristics of the period or place in which the group settled, permitted it to attend school longer, or to benefit more from the longer years once they left school?

Holding education and the other variables constant does, however, allow us to see how much of the earnings difference must be attributed to discrimination in labor markets or school quality. In the case of blacks and Latins, the labor market discrimination is often explicitly racial, based solely on physical features. However, among European ethnic groups, and among the non-European groups as well, much of the discrimination may be based on class. Two men completely equal in abilities, looking for work in the same labor market, but from different classes, will on average have different earnings. The son of rich parents will usually earn more than the son of poor parents, even if the two sons are equal in all respects related to work ability, including years of school and achievement as measured by standardized tests. See Bowles (1973), Blau and Duncan (1967), Duncan, Featherman, and Duncan (1972), and Gintis (1971), for evidence to this effect concerning occupational achievement as well as income. Because the average class background (as indicated by average occupation, education, and earnings of parents) differs widely among ethnic groups, we might expect differences in earnings to remain after accounting for differences in education, etc.

To see how much differences in earnings among individuals could be accounted for by differences in age, education, marital status, and location, and how much was explained by ethnic group, I ran two similar regressions. The first had earnings in dollars as the dependent variable and the second had the log of earnings. The independent
variables included years of school completed and dummy variables for living in the South, in metropolitan areas, for being married spouse present, and for four age categories (18 to 24, 25 to 34, 35 to 44, and 45 to 54). Thus the reference group consisted of unmarried men between 55 and 64 living outside the South and outside metropolitan areas.

Independent variables for South and SMSA locations were included in the regressions because wage rates are lower in the former and higher in the latter than elsewhere. Marital status is an often used proxy for motivation, and age affects earnings through on-the-job training, physical and mental ability, and social custom. Because of the hill shaped relation between age and earnings, dummy age variables instead of a continuous term were used.

Measures of unemployment and occupation were not included in estimating earnings, because these are two of the most important ways in which labor market discrimination operates. From the Irish a hundred years ago to the blacks today, exclusion from better paying, higher status occupations with more stable employment has been a major problem. Including occupation and unemployment would permit estimating differences in earnings among ethnic groups within occupations. For some purposes this surely is interesting, but since here we are concerned with all labor market discrimination rather than discrimination within occupations, these measures were not included in the regressions.

Although the data on education included all men over 25, the sample used for estimating earnings differences has been limited to nonstudent men between 18 and 65. The earnings of other groups are dominated not by their ability to earn but by their labor force participation decisions. All women, and men under 18 or over 65, or in school, have
much larger variations in motivation than prime-age nonstudent men. Child rearing or housekeeping, part time work because of school attendance, and retirement possibilities complicate the relation between education and earnings for these groups. For instance, a highly educated graduate student has low earnings because he is still in school. His actual earnings are a very poor indication of what he could make, with his education, if he chose to work full time. Similarly, the earnings of women are affected by interruptions in work experience due to child rearing. Estimating returns to education for women is important but much more difficult than for men. Therefore women are excluded from this study.

Men with negative earnings have also been excluded, because for them one year's measured income is a completely worthless indication of their normal earnings. Earnings for a longer period than one year would of course be a better measure for all men, but for men with negative earnings the one year measure is especially bad. Men with zero incomes were also excluded, because they probably were not able to work because of physical or mental disabilities. These disabilities are not caused by education, but rather are occasionally the cause of low education. Including these men would tend to understate the earnings of working men with little schooling, and thus to overstate the effects of education.

Table 3 presents the results of the two earnings regressions. In column 1 are the coefficients of the ethnic dummy variables from the regression with earnings as the dependent variable, in column 2 from the regression with the log of earnings as the dependent variable. These coefficients represent the difference in average earnings of each ethnic group from the miscellaneous category, not from any average
TABLE 3

Ethnic Differences in Adjusted Earnings

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>35.8</td>
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</tr>
<tr>
<td>Italian</td>
<td>178.3</td>
<td>.056*</td>
</tr>
<tr>
<td>Irish</td>
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<td>-.004</td>
</tr>
<tr>
<td>French</td>
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<td>.020</td>
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<tr>
<td>Polish</td>
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</tr>
<tr>
<td>Russian</td>
<td>1793.2*</td>
<td>.127*</td>
</tr>
<tr>
<td>British</td>
<td>303.3*</td>
<td>.049*</td>
</tr>
<tr>
<td>Mexican, Chicano</td>
<td>838.0</td>
<td>-.143*</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>-190.3</td>
<td>-.058</td>
</tr>
<tr>
<td>Cuban</td>
<td>-1805.2*</td>
<td>-.247*</td>
</tr>
<tr>
<td>Central or South American</td>
<td>-1631.4*</td>
<td>-.228*</td>
</tr>
<tr>
<td>Other Spanish</td>
<td>-337.7</td>
<td>-.010</td>
</tr>
<tr>
<td>Black</td>
<td>-1548.1*</td>
<td>-.232*</td>
</tr>
<tr>
<td>Other and Don't Know</td>
<td>R</td>
<td>R</td>
</tr>
</tbody>
</table>

* t > 2.
of all men. The coefficients in column 1 can be interpreted as dollar differences in earnings among ethnic groups, after holding constant other differences. The antilogs of the coefficients in column 2 are percentage differences in earnings among ethnic groups. The results from the two regressions are essentially the same, though occasionally a coefficient from the log regression is significant while the linear coefficient is not.

In general, those ethnic groups that have the highest earnings before accounting for other factors still have the highest earnings after adjustment. Russians have by far the highest earnings of any group. They also have by far the largest coefficient, both in the log and in the linear regression—almost $1800 above the earnings of the miscellaneous group. The British, the group with the second highest earnings, also have the second highest coefficient in the linear regression, $303, though only the fourth biggest coefficient in the log regression. All these coefficients are significantly different from the miscellaneous group's earnings.

Italians and Poles are the third and fourth groups in earnings and in linear coefficients, which are $178 and $118 respectively, not significantly different from the miscellaneous group. However, their coefficients from the log regression indicate that after adjusting for age, education, marital status, and location, they make slightly more than the British, but significantly more than the miscellaneous group. None of the last three European groups, the Germans, Irish, and French, have coefficients from either regression significantly different from the miscellaneous group.
Some of these results are perhaps to be expected, but some of them are difficult to interpret indeed. It is not terribly surprising that the British earn more than other groups, even after accounting for education. They are the oldest, best established group, from the WASPs who exclude rich Jews and Catholics from their country clubs to the skilled workers who excluded the newer immigrant groups from their unions fifty years ago and exclude blacks and Latins today. The enormous success of the Russians, most of whom as noted above are Jews, may be difficult to explain but is at least widely known. It is interesting, however, that a very large portion of the difference between their earnings and those of other Europeans is not explained by differences in age, education, marital status, or location.

More surprising are the coefficients which show that the earnings of two of the most recently arrived European groups are higher, other things constant, than the earnings of three of the older European groups. Can there really be explicit labor market discrimination against German, Irish, and French men in favor of Italian and Polish men? Do the cultures of the latter groups, which seemed so foreign to the Anglo-Saxon culture of the dominant American group three generations ago, actually equip their men to succeed better than the cultures of the former three groups? Or can differences in the quality of schools attended by these groups account for the differences in earnings?

Far less surprising are the results which indicate that earnings differences between European and nonEuropean groups are not primarily the result of differences in age, education, marital status, and location. All coefficients for the black and Latin groups in both regressions were negative, and except for Puerto Rican and Other Spanish men, were significantly so.
The men with adjusted earnings farthest below those of the miscellaneous, primarily European, group were the Cubans and Central or South Americans, with $1805 and $1631 lower, respectively. Almost all of these men are immigrants themselves. The Cubans, especially, came to this country in the middle of their careers. The age group with the highest relative education among the Cubans is the oldest. Since all their education and most of their work experience was in a foreign country with a different language, these first generation Americans earn substantially less than their schooling and age would bring them if they had been born here.

Although they have been in this country for many generations, blacks have been provided with schooling far inferior to white schooling, and are still subject to severe labor market discrimination. Before adjusting for differences in age, education, marital status, and location, the difference in earnings between blacks and the miscellaneous group was $2900. After adjustment the difference was still $1548. The coefficient from the log regression implies that blacks earned 79 percent of the miscellaneous group's earnings after adjustment, versus 67 percent without adjustment.

Gwartney (1970) adjusted for differences between whites and blacks in education, scholastic achievement, age, region, and city size, using 1960 Census data. Although his results are not strictly comparable to mine, he also found that adjusted black income was about 80 percent of white income. On the one hand, simply comparing my number with his indicates that there has been no change between 1959 and 1971. On the other hand, Gwartney estimated that including scholastic achievement in his earnings functions accounts for between 12 and 18 percent of the
black-white difference. Since I do not include such a variable in my regressions, it may be that black-white differences have narrowed somewhat during the last decade. (Average earnings for the miscellaneous group are very close to the average for all whites.)

Chicanos also have a large part of the difference between their earnings and the earnings of the miscellaneous group unexplained by age, education, marital status, and location. The unadjusted difference was $2617, but the adjusted difference was $838, highly significant and quite large, but still far less than the unexplained difference for blacks. The log coefficient implies that Chicanos earned 87 percent of what comparable men from the miscellaneous group earned. These results seem to indicate that although the forces which prevent Chicanos from continuing in school as long as the rest of the population may be just as strong as for blacks, pure labor market discrimination is less, though still very substantial.

Puerto Ricans have earnings only $228 higher than Chicanos, and average schooling half a grade lower, the lowest of any group. However, when age, education, marital status, and location are held constant, the difference between them and the miscellaneous group falls to less than $200. Neither the linear nor the log coefficient is significantly different from zero, partly because both coefficients are small, partly because there are few Puerto Ricans in the sample.

It is possible that less discrimination exists against Puerto Ricans than against Chicanos, blacks, and other non-European groups, and that the quality of schooling they received was as high as for European groups, but these explanations seem unlikely. Most of the Puerto Ricans are first generation mainlanders, and 72 percent still
speak Spanish at home. Moreover, the results of Section II indicate that their relative education is not rising, so some form of discrimination in schools if not in labor markets does seem to exist. Perhaps the difference between Chicanos and Puerto Ricans is the result of inadequate location measures. Puerto Ricans may be concentrated in larger SMSAs, or in regions outside the South where discrimination is less than in the areas where Chicanos live. Unfortunately, the CPS does not provide detailed information on location.

V.

Two studies have attempted to show that differences between whites and blacks in returns to schooling is the result of the vastly inferior quality of southern black schools, especially before 1940. Weiss and Williamson (1972) found that blacks educated in the rural South had lower returns to schooling than northern and urban blacks, as well as lower than whites. Welch (1973) reported results showing a strong vintage effect. Blacks educated during the 1930s and 1940s obtained small returns to schooling, but the returns of blacks educated since then have been much larger, comparable to or larger than returns obtained by whites.

Improvements in the quality of black schools should result in increased returns to education for blacks. Increased school quality should also result in a narrowing of the black-white earnings difference among younger men, once other factors including years of education have been held constant. In earnings functions which do not include measures of school quality, the large difference between black and white schools forty years ago will be picked up by the race variable. If the difference in school quality has decreased over time, then the
size of the coefficient of the race variable should be smaller for men educated ten years ago than for men educated forty years ago. If Welch is right, measured differences in adjusted earnings should be smaller among younger men than among older men.

The same narrowing in adjusted earnings may also be taking place among white ethnic groups, Latins as well as Europeans. Many of the oldest men among the more recent immigrant groups received their educations abroad. For most of the others, as well as many of the middle-aged men, the English used in school was a foreign language. These factors may have resulted not only in fewer years of schooling for these men, but also in less learning during the years spent in school.

For all the reasons that we expected to find greater differences in years of schooling among older men of different ethnic groups, we might also expect greater differences in adjusted earnings as well. Many writers have found that family background is an important determinant of achievement even after holding education and other factors constant. Ethnic differences in family background are far larger for the older men than for the younger ones. The fathers of the oldest group of Russians, Italians, Poles, and of all the Latins were born and usually died outside this country. The fathers of most of the British, Irish, and Germans were born here, as were many of their grandfathers. Not only differences in country of birth, but also in education, and even in literacy rates, are much smaller for the fathers of the younger groups than for the fathers of the oldest group. Thus if earnings are affected by family background independently of the effect of family background on years of schooling, then it is reasonable to expect that
ethnic differences among European and Latin groups will be larger for older men than for younger men.

A final factor that may be especially important for blacks is relative improvement due to the Civil Rights movement of the last decade. Actions on the part of several sections of the black community, including first students, then the middle class, and finally ghetto men and women, have brought dramatic changes in expressed white attitudes toward many forms of discrimination. If this struggle has resulted in better schools, then the effect should be increased returns to education for blacks during the next decade. If the struggle has forced corporations and governments to hire well-educated blacks as highly visible tokens, then this change should show up as increased returns to education for blacks compared with returns prior to the 1960s.

However, if the Civil Rights movement has benefited blacks of all classes, then we might expect more of a narrowing between the races among the young than among all age groups. A black who was shunted into a dead-end job in 1950 may not be able to benefit from decreased discrimination in 1965, but a young black just entering the labor force should be able to take advantage of the new opportunities if they actually exist. If the decrease in discrimination is real, but only helps the young, then looking at black-white differences for men of all ages, as in Gwartney (1970) and in Table 3 above, will not reflect this change. Only comparisons by age group will indicate the narrowing gap if only young blacks have benefited.

To see if ethnic and racial differences in adjusted earnings are smaller for younger men than for older men, regressions were run
separately for men 18 to 24, 25 to 34, 35 to 44, 45 to 54, and 55 to 64. As before, the dependent variable was annual earnings, and the independent variables included years of school, a continuous age variable, and dummy variables for married men, men living in the South, in SMSAs, and for the thirteen ethnic groups. Regressions with the log of earnings as the dependent variable were also run. Results were very similar and are not presented. Again, the reference group was nonsouthern unmarried men outside SMSAs, of the miscellaneous, primarily mixed European, ethnic group. The ethnic coefficients thus indicate differences from this group, rather than from an average of all men in the age category. Table 4 presents these coefficients.

The results provide only very weak support for the hypothesis that ethnic differences in adjusted earnings are smaller for young men than for old men. The group that conforms best to the predicted pattern is the Cubans. Their relative earnings start $10 above those of the miscellaneous group for men between 18 and 24, and decline steadily to $3005 below the earnings of the miscellaneous group for men between 55 and 64. Central or South Americans and Puerto Ricans, two other recently arrived Latin groups, have similar declines in relative earnings with age.

However, the largest Latin group, the Chicanos, have just the opposite pattern. The greatest difference from the miscellaneous group is for men 25 to 34, when Chicanos earn $1229 less. The difference declines for every older group, until with men 55 to 64 Chicanos actually earn $435 more than men of the miscellaneous group with similar age, education, marital status, and location. Because of the small number of Chicanos in the oldest age group, this last difference
TABLE 4
Ethnic Coefficients from Linear Earnings Regressions by Age Groups

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
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<tbody>
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<td>194</td>
<td>349**</td>
<td>412***</td>
<td>-149</td>
<td>-191</td>
</tr>
<tr>
<td>Irish</td>
<td>-156</td>
<td>25</td>
<td>288***</td>
<td>-161</td>
<td>-685*</td>
</tr>
<tr>
<td>French</td>
<td>53</td>
<td>170</td>
<td>90</td>
<td>249</td>
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</tr>
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<td>Polish</td>
<td>203</td>
<td>461**</td>
<td>-206</td>
<td>505***</td>
<td>-253</td>
</tr>
<tr>
<td>Russian</td>
<td>-498</td>
<td>2662*</td>
<td>2037*</td>
<td>1194*</td>
<td>1378*</td>
</tr>
<tr>
<td>British</td>
<td>-151</td>
<td>109</td>
<td>412*</td>
<td>492*</td>
<td>297***</td>
</tr>
<tr>
<td>Mexican, Chicano</td>
<td>-589*</td>
<td>-1229*</td>
<td>-812*</td>
<td>-749**</td>
<td>435</td>
</tr>
<tr>
<td>Puerto Rican</td>
<td>86</td>
<td>-536</td>
<td>-958***</td>
<td>-466</td>
<td>-2575**</td>
</tr>
<tr>
<td>Cuban</td>
<td>10</td>
<td>-970</td>
<td>-1346**</td>
<td>-2838*</td>
<td>-3005*</td>
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<tr>
<td>Central or South American</td>
<td>-753</td>
<td>-1379*</td>
<td>-1965*</td>
<td>-2980*</td>
<td>-1272</td>
</tr>
<tr>
<td>Other Spanish</td>
<td>-880**</td>
<td>-138</td>
<td>-501</td>
<td>-765</td>
<td>552</td>
</tr>
<tr>
<td>Black</td>
<td>-455*</td>
<td>-1664*</td>
<td>-2155*</td>
<td>-1891*</td>
<td>-1223*</td>
</tr>
</tbody>
</table>

* Statistically significant at 5 percent level.
** Statistically significant at 10 percent level.
*** Statistically significant at 20 percent level.
is not statistically significant, though all the differences for the middle three age groups are.

Chicano men have had by far the largest improvement in relative schooling of any group. Men 54 to 65 had only 40 percent of the years of schooling of all men their age, but Chicano men 25 to 34 had 78 percent of the average of their age. Relative earnings have not increased for younger Chicanos nearly so fast. From 55 percent for the oldest group, they have climbed only to 72 percent for men 25 to 34. Results discussed in the next section indicate that the difference in adjusted earnings between Chicanos and the miscellaneous group increases dramatically with education. More than for any other group schooling does not open doors for Chicanos.

It seems likely that the strong negative correlation between age and education among Chicanos, together with the weak correlation between education and earnings, produces the measured improvement in relative earnings with age shown in Table 4. If it were possible to run regressions allowing differences between Chicanos and others to vary with age and education simultaneously, the results might be different. However, the number of Chicanos in most of the age-education categories would be far too small to obtain coefficients even remotely reliable.

Differences between blacks and the miscellaneous group also do not grow larger with age. Men 25 to 34, who entered the labor force around 1960, who should have benefited most from the Civil Rights struggles against job discrimination, had earnings $1664 less than those of comparable men from the miscellaneous group. By contrast, men 55 to 64, who began working around 1930, had earnings only $1223 lower than the miscellaneous group. The largest difference was for men 35 to 44, $2155. These results do not support Welch's (1973) contention that black
earnings have improved for men who entered the labor force after 1950 because of improvement in relative school quality after 1940.

The rather small difference for the youngest group, $455, is probably not a good indication of future differences for men of that vintage. More men from the well-educated groups were still in school, and therefore excluded from the regression, than from the less educated groups such as blacks. On the other hand, it is possible that job discrimination has in fact almost ended for black men beginning work after 1965, but that men only slightly older were not able to escape low paying, dead-end jobs. In light of other black-white comparisons, however, this seems very unlikely.

Among all the European groups, adjusted earnings decline with age relative to the miscellaneous group. This is true for the British and Germans almost as much as it is for the Italians, Poles, and Russians. If adjusted earnings declined with age only for the more recently arrived groups, or only for the older groups, the pattern of coefficients might imply one sort of mobility or another. Since all groups show a decline in adjusted earnings compared to the miscellaneous group, however, I am not sure how to interpret these results. Comparisons among the specific European groups, rather than with the miscellaneous group itself, may shed light on changes with age.

To start with the most erratic group, Poles of the youngest group have the highest adjusted earnings of all fourteen ethnic groups. The next oldest group of Poles is behind Italians and Russians, but still far ahead of the other groups. However, Poles 35 to 44 have adjusted earnings far below those of any other European group, while Poles 45 to 54 are back higher than all groups but the Russians. The pattern for Italians is much less erratic. The youngest three age groups are
second in adjusted earnings, while the oldest two groups are sixth and fourth respectively among European groups. Although the decline with age is not so sharp as for the Cubans, Puerto Ricans, and Central or South Americans, it is nevertheless clear.

The Russians also show a relative decline in adjusted earnings. In every age group but the youngest (close to half of Russian men in this age group were excluded from the regression because they were students) Russians earn far more than similar men of other ethnic groups. But the difference between the Russians and the miscellaneous group declines from $2662 for men 25 to 34 to $1378 for men 55 to 64. The difference between Russian men and British men also narrows, from $2551 for men 25 to 34 to $702 for men 45 to 54, to $1088 for men 55 to 64.

In summary, the results of earnings regressions run separately for five age categories provide only the weakest support for the hypothesis that adjusted earnings differences are smaller for young men than for old men. The groups whose adjusted earnings decline most consistently with age were three recently arrived Latin American groups, Puerto Ricans, Cubans, and Central or South Americans. On the other hand, the adjusted earnings of Other Spanish men showed no pattern with age, and those of Chicano men actually improved with age. The age pattern of adjusted earnings of blacks was U shaped, and indicated neither relative improvement for men educated after 1940 nor for men entering the labor force after the Civil Rights activities of the 1960s.

Among the more recently arrived European groups, Italians showed a relative decline in adjusted earnings with age, and the Russians' substantial lead over all other groups was smaller for the older categories.
However, the adjusted earnings of Polish and French men seemed to have no age pattern at all. If differences in adjusted earnings were narrower for younger men, then the ethnic groups who have been here longest should have their relative earnings positively correlated with age. This was somewhat true for British and German men, but not at all true for the Irish.

Even if the pattern of coefficients in these regressions had conformed to the hypothesis of narrowing differences for younger men, the precision of these results is too low to draw firm conclusions. Only for blacks were the coefficients significantly different from zero (i.e., from the adjusted earnings of the miscellaneous group) at the one percent level for all five age categories. No other ethnic group's coefficients were all significant even at the 10 percent level. For most of the European groups the difference from the miscellaneous group was often too small to be significant. For many of the Latin groups, the number of men in any one age group was too few for the coefficient to be significant. For no ethnic group were the differences between coefficients of different age groups much larger than the standard errors of these coefficients.

VI.

There is also good reason to expect ethnic differences in earnings to vary with education. Many skilled jobs requiring advanced schooling have traditionally been closed to blacks, no matter how good their credentials. Jobs as supervisors, managers, and foremen have until very recently been restricted almost entirely to whites. Poorly paid work requiring little education may be open to any worker unable to
find something better--black or white. But for occupations requiring more education, especially those involving supervising other workers, no amount of schooling would qualify a black. If the widely held beliefs about this pattern of job discrimination are correct, we should find increasing differences between blacks and whites at higher levels of education.

Among the first generation Latin groups--the Cubans, Puerto Ricans, Central or South Americans, and Other Spanish--we might expect adjusted earnings to decrease with education for another reason. Except for the youngest age group, almost all the men in these ethnic groups received their education and early work experience outside the United States. The skills necessary to be a farm laborer, custodian, or unskilled factory worker are probably no harder to learn for a man with foreign education and work experience than a native. But the skills required to be a businessman or office manager may be much harder for a foreigner to acquire. And those occupations requiring special certification, such as teacher, lawyer, or doctor, may be impossible to transfer from one country to another. Thus it is reasonable to expect increasing differences in adjusted earnings between the first generation Latin groups and the older European groups.

Among the European groups themselves, there is no strong reason to think that differences will vary by educational level. Whatever causes differences among ethnic groups in adjusted earnings--whether family background, motivation, basic abilities, or quality of schooling--these differences need not operate differently at different educational levels. On the other hand, it is possible that they do.
To see whether ethnic differences in adjusted earnings do, in fact, vary with education, separate regressions were run for five educational levels, 0 to 8, 9 to 11, 12, 13 to 15, and 16 or more years of school completed. As in the earnings regressions discussed above, the independent variables included years of school completed, and dummy variables for living in the South, in metropolitan areas, for being married spouse present, for four age categories (18 to 24, 25 to 34, 35 to 44, and 45 to 54), and for thirteen ethnic groups. The reference group consisted of unmarried men of the miscellaneous ethnic group between 55 and 64 living outside metropolitan areas outside the South. Once again the regression coefficients presented in Table 5 are deviations from men of this reference group, and not from any average of all men in the regression.

The coefficients of Table 5 are from regressions with the log of earnings rather than earnings itself as the dependent variable. The antilogs of these coefficients are percentage differences of each ethnic group from the miscellaneous group, rather than dollar differences. The results of regressions on the entire sample and for different age groups showed the same pattern for the linear and log forms, and it seemed easier to discuss dollar differences than log differences. The two forms did not produce identical results for the regressions by educational level, however, because average earnings differed so widely from one level to another. For instance, blacks' earnings as a percent of miscellaneous group earnings were substantially higher for men with 16 or more years of schooling than for men with 12 years. However, because the average earnings of the college graduates were so much higher than the average for high school graduates, the dollar
difference in adjusted earnings between blacks and the miscellaneous group was greater for the former. Because substantial differences between percentage and dollar coefficients did exist, it seems preferable to concentrate on the results from the log regressions in this case.

With the exception of Chicanos, the coefficients presented in Table 5 constitute fairly strong evidence against the hypothesis that differences between blacks and Latins on the one hand and European groups on the other increase with education. For blacks, the percentage difference from the miscellaneous group is hill shaped. The blacks earning the smallest percentage compared to similar men from the miscellaneous group are those with high school degrees, 75 percent. Blacks with eight years or less and with sixteen years or more both earned most relative to the reference group, 86 percent. The difference between the black coefficients for the 0 to 8 group and the 12 group is 1.8 times the sum of their standard errors. The differences between blacks and the miscellaneous group are significant at the five percent level for men with 16 or more years, and at the one percent levels for the other four groups.

Coefficients of three of the four recently arrived Latin American groups provide even stronger refutation of the hypothesis that relative earnings decrease with education. Earnings of Puerto Rican men, for example, are 88 percent of those of comparable men of the miscellaneous ethnic group for the lowest educational category, 78 percent for men with high school degrees, and an astounding 127 percent for men with 13 to 15 and men with 16 or more years of school. (There were only seven and four Puerto Ricans in the last two groups, so these very large positive differences are not statistically significant.)
## TABLE 5

Ethnic Coefficients from Log Earnings Regressions by Educational Group

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>0-8</th>
<th>9-11</th>
<th>12</th>
<th>13-15</th>
<th>16+</th>
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<td>.012</td>
<td>.042</td>
<td>.001</td>
</tr>
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<td>.055</td>
<td>.037</td>
<td>.035</td>
<td>.057</td>
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<tr>
<td>Irish</td>
<td>.011</td>
<td>-.034</td>
<td>.009</td>
<td>.003</td>
<td>-.028</td>
</tr>
<tr>
<td>French</td>
<td>.011</td>
<td>.089</td>
<td>.053</td>
<td>-.072</td>
<td>.002</td>
</tr>
<tr>
<td>Polish</td>
<td>.226*</td>
<td>-.022</td>
<td>.041</td>
<td>.057</td>
<td>.005</td>
</tr>
<tr>
<td>Russian</td>
<td>.109</td>
<td>.100</td>
<td>.079</td>
<td>.186*</td>
<td>.143*</td>
</tr>
<tr>
<td>British</td>
<td>.044</td>
<td>.012</td>
<td>.038</td>
<td>-.006</td>
<td>.076*</td>
</tr>
<tr>
<td>Mexican, Chicano</td>
<td>-.113**</td>
<td>-.254*</td>
<td>-.092***</td>
<td>.217*</td>
<td>-.340*</td>
</tr>
<tr>
<td>Puerto Rican</td>
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<td>-.018</td>
<td>-.250*</td>
<td>.236</td>
<td>.236</td>
</tr>
<tr>
<td>Cuban</td>
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<td>-.304***</td>
<td>-.396*</td>
<td>-.025</td>
<td>.110</td>
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<td>-.296</td>
<td>-.225</td>
<td>-.423*</td>
<td>.148</td>
<td>-.056</td>
</tr>
<tr>
<td>Other Spanish</td>
<td>.067</td>
<td>-.018</td>
<td>-.003</td>
<td>.134</td>
<td>-.217***</td>
</tr>
<tr>
<td>Black</td>
<td>-.159*</td>
<td>-.260*</td>
<td>-.284*</td>
<td>-.224*</td>
<td>-.152*</td>
</tr>
</tbody>
</table>

* Statistically significant at the 5 percent level.
** Statistically significant at the 10 percent level.
*** Statistically significant at the 20 percent level.
For Cubans and Central or South Americans the pattern of relative earnings is very similar. There is a decline from the lowest educational group to the middle group, then a much larger increase from the middle to the highest group. Although the number of men in any ethnic-educational category is often very small, and rigorous statistical tests are not met, nevertheless the pattern seems clear. Recent Latin American immigrants with above average education do at least as well as most of the European groups, but Latin men with less education, especially those with twelve years of school, do much worse than the European groups. This is in sharp contrast to the experience of the European groups themselves when they first came to this country. See for instance Feldman (1931).

Of the two other Latin groups, the coefficients of Other Spanish do not show any pattern at all. They are first positive, then negative, then positive, then finally negative. The coefficients for Chicanos, however, do become increasingly negative with education, except, strangely, for men with 12 years of school. Chicano men with eight or less years of school earn 89 percent as much as comparable men of the miscellaneous group. The percentages for the next four education categories are 78 percent, 91 percent, 80 percent, and finally 71 percent. Except for the third category, all these differences are statistically significant at the 10 percent level.

Differences between the seven European groups and the miscellaneous group vary only slightly by educational level, and in no systematic pattern. Only one coefficient seems worth commenting on, one for which I can offer no explanation. Polish men with eight or less years of school make an extraordinary 25 percent more than men of the
miscellaneous group. Poles of other groups make at most 6 percent more. The 25 percent difference is significant at the 1 percent level.

The results of the separate earnings regressions by educational level suggest several interesting hypotheses about the causes of differences in earnings by ethnic groups. The finding that black-white differences are smaller for college graduates than for high school graduates is in sharp contrast to general beliefs that there is more discrimination against blacks in high income occupations than in menial jobs. It is possible that these beliefs were always wrong. However, in light of earlier studies which found low returns to schooling for blacks, it seems more likely that important changes have occurred during the last decade, changes which have forced large employers to hire more well-educated blacks.

To a large extent, the Civil Rights movement has been a struggle on the part of middle-class blacks for improvements in their treatment by white society. Desegregation in schools, restaurants, and hotels benefits primarily those blacks rich enough to afford homes in white neighborhoods or meals in white restaurants. Similarly, various government poverty programs have provided virtually worthless training for low income blacks but high paying administrative jobs to blacks with college degrees. In private industry as well, black pressure has been more successful in forcing corporations to hire well-educated, well-groomed blacks for front office jobs than to hire blacks with below average educations.

In contrast to blacks, Chicanos have been much less vocal, and what struggles against discrimination that have occurred have almost all been by and for those with the least education, the farm workers. Until the
last year or so, Chicanos have not demanded, at least not vociferously or successfully, better jobs for the well-educated. Although they have been given some positions in government agencies, there have been no plans for Brown Capitalism. It seems likely that the contrast between black-white differences in earnings by educational level and Chicano-white differences is the result of differences in black and brown activism.

VII.

The results of this paper indicate that most of the differences which existed among European ethnic groups in educational achievement fifty years ago persist to this day. The narrowing that has occurred has been primarily an improvement among the more recent groups that immigrated immediately prior to World War I and a relative worsening for the groups that were here before then. Russians, the group with the highest level of schooling, have not changed their relative advantage during this entire period. Since they immigrated between 1900 and World War I, their mobility must have occurred almost entirely between the first and second generations. The two other recently arrived European groups, the Italians and the Poles, reached the national average in years of schooling during the second and third generations respectively. The oldest European ethnic group, the British, still have above average educational attainment, but by less than was the case fifty years ago. The Germans and the Irish, two other early groups, have had almost no change in relative education since the 1920s.

Among non-European groups, however, there has been a sharp improvement. Blacks have increased their years of schooling from 61 percent
of the national average to 87 percent during the last fifty years, while Chicanos have increased from 40 percent to 78 percent. Most of the men of the four other Latin American groups included in this study came to this country as adults, and therefore their level of schooling is not an indication of their mobility.

Large differences in earnings also exist among ethnic groups. Many of these differences remain after ethnic differences in age, education, marital status, and location have been accounted for. Russians again are the highest group, followed at a distance by the British, Italians, Poles, Germans, French, and Irish. The pattern of earnings among European groups thus does not seem to follow the length of time their families have been in this country. Blacks have the lowest earnings, both adjusted and unadjusted, with Chicanos and Puerto Ricans only slightly better off. The other Latin groups fall in between these three and the European groups, at least in unadjusted earnings. After adjusting, however, the newly arrived Cubans and Central or South Americans do even worse than the blacks.

These differences in adjusted earnings among ethnic groups do not vary in any systematic way with age. Specifically, differences between blacks and whites are not smaller for younger men who presumably have received educations more nearly equal in quality than the educations of older men. However, ethnic differences do vary with educational level among nonEuropeans. Better-educated Cubans, Puerto Ricans, and Central or South Americans do very much better compared to European groups than do their compatriots with less education. The relative position of Chicanos, however, deteriorates considerably with years of schooling. The differences between blacks and whites is greatest for high school
graduates and about equal among men with grade school and men with college education.

This contrast in the variation of relative earnings with educational level of the two largest minority groups, blacks and Chicanos, suggests that picketing may be more effective in increasing earnings than studying. During the 1960s, black college students managed to convince governments and corporations that it was good business to employ well-educated blacks, while less educated blacks and well-educated Chicanos were less vocal and less successful. Economics departments today are not eager to hire blacks because black economists have suddenly increased their marginal productivity. Rather, the departments are threatened with protests from students and loss of funding from the federal government if they do not help to decrease the earnings difference between highly educated blacks and whites. The pressure to hire well-educated Chicanos is much less, and the pressure to hire poorly educated blacks is also smaller.
FOOTNOTES


2 Because students and men without positive earnings were excluded, the total of 41.4 million men computed from CPS data may be slightly below figures published in Current Population Reports.

3 Computed from U.S. Bureau of the Census, 1970 Census of Population, PC(1)-C(1), Table 86, and CPR, Series P-20, No. 213, Table 2. On the other hand, 96 percent of all immigrants from Mexico have come to this country since 1910, and 69 percent since 1924. See Historical Statistics of the United States, Series C 88 to 114 for this and all other immigration data cited below, unless otherwise specified.

4 In 1969, 56 percent of the 1.5 million Puerto Ricans in the United States were born in Puerto Rico. Since half of the Puerto Ricans were under 18, the percentage born outside the U.S. among men over that age must be much higher. See CPR, Series P-20, No. 213, Tables 2 and 3.

5 Ibid. Eighty-two percent of Cubans in the U.S. were born in Cuba, and 64 percent of Central or South Americans were born abroad.

6 Ibid.

7 Eighty-eight percent of all Russian immigrants came to this country between 1890 and 1914. Although born in Russia, most of these immigrants spoke Yiddish as their mother tongue, and almost all of them were Jewish. See U.S. Bureau of the Census, 1930 Census of Population, Vol. II, p. 342.

8 Fifty-six percent of British immigrants between 1820 and 1971 arrived before 1890.

9 Sixty-four percent of German immigrants and 73 percent of Irish immigrants arrived before 1890.

10 Eighty-one percent of Italian immigrants arrived between 1890 and 1924 when immigration laws changed, and 12 percent have come since 1924. The vast majority of Polish immigrants arrived between 1900 and 1914. However, since Poland did not exist during those years, most Polish immigrants were listed as coming from Austria-Hungary, Germany, or Russia. Total Polish immigration for all years is reported at 488,000, but over a million persons gave Poland as their country of birth in 1920 and in 1930. Perhaps as many as 20 percent of these were Jews.
Separate statistics on immigration from France do not exist. Most of these men are probably French Canadians who have come to this country since World War I. Data on the country of birth of the foreign born population indicate a fairly steady rate of immigration directly from France since 1860 or 1870.


14 CPR, Series P-20, No. 213, Table 10.
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**Government Documents**


