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YOUTH EMPLOYMENT IN THE SEVENTIES: THE
CHANGING CIRCUMSTANCES OF YOUNG ADULTS

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ABSTRACT

This paper examines the changing employment patterns for young men and women aged 16 to 24 over the 1970s and pays particular attention to the widening racial differences. Between 1970 and 1980 employment rates for both black men and women in this age range fell roughly 14 points relative to those of whites. Macroeconomic conditions, the reduction in the size of the military, changing schooling patterns, family structure, fertility patterns, and several public policies, are all examined in an attempt to understand the patterns of the seventies.

The conclusion reached is that perhaps one-half of the diverging racial employment patterns can be "explained" by the variables we examine. For young men the most important forces appear to be the changing structure of the military, worsening macroeconomic conditions, and increased school enrollment among blacks. For women, the military is less important, of course, but shifts in family structure and fertility are rather important.

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YOUTH EMPLOYMENT IN THE SEVENTIES:
THE CHANGING CIRCUMSTANCES OF YOUNG ADULTS

by

David T. Ellwood and David A. Wise

Virtually all 16 year old Americans live at home, are supported by one or both of their parents, trudge wearily to school, avoid work, and are intrigued by members of the opposite sex. Within less than ten years, much of that changes. By age 24 most live independently. With a few exceptions, they have long since left school. Most are married; many have babies.

The transition from teenager to adult includes an almost overwhelming concentration of major events. Two-thirds of first marriages and more than half of first births happen during this period. Less than one-third of twenty year olds will be living in the same house four years later. Teenagers average two jobs per year; by age 24, they are likely to be in one which will last ten years.

For most youth, the transition from full-time schooling while living at home to independent household formation and labor market participation occurs without great difficulty. For a few, however, the period entails long spells out of school and without work. In the past decade there has been increasing concern about youth employment problems. Indeed, in the 1970s teenage unemployment emerged as a major issue in the public domain. Our goal is to survey the evidence on recent trends in youth labor market experiences and to explore possible explanations of these trends. The scope of this paper extends well beyond teenage unemployment, however.

We focus on youth aged 16-24 and we explore employment primarily. Employment rates differ among youth for many reasons. National economic fluctuations, age, military service, household formation, parenting responsibilities, and family background all influence employment. We report differences in employment patterns across groups and trends in these patterns over time, particularly in the 1970s. Where possible we explore causes and effects of these patterns and trends.

The wide variety of critical changes which occur between ages 16 and 24 create particularly extreme heterogeneity in this group. The timing of school leaving, marriage, childbearing, and serious job search differ greatly among youth. And each of these has important labor market consequences and may in turn be influenced by labor market conditions. The diversity also complicates interpretation of labor market statistics.

Virtually all middle aged men are working or looking for work. Non-employment is relatively easy to interpret. The situation is slightly more complex for women of a similar age because the group which is not working is composed both of those actively seeking work and a large number who have other responsibilities which preclude work. These persons are usually termed unemployed and not in the labor force respectively.

Normally the unemployment rate is defined as the number of unemployed divided by the labor force (those who are working or are seeking work). The employment rate is the ratio of employed persons to the total population (not just the labor force). In principle the unemployment rate measures the difficulty of getting work, that is, the proportion who are looking for work but can't find it. The employment ratio

simply captures the proportion of the population who have jobs.

For those who are still in school, work may be sporadic and part-time during the school year, full-time but temporary during the summer. Those seeking work will include persons who desire spending money and those who need support to continue in school. By contrast, out of school youth presumably are interested in longer term employment at least eventually. Still it may be hard to distinguish those who are diligently engaged in job search from those with relatively weak labor market attachment. The unemployed may include some who are not seriously interested in working. The not in the labor force group may include some persons who have become discouraged by fruitless job search.

The confusion created by the dynamics of youth schooling and work can be illustrated by considering two measures of unemployment. In early 1976, the official Bureau of Labor Statistics unemployment rate was 20 percent for persons aged 16 to 19, yet just 4 percent of this group was both out of school and out of work. The 20 percent figure indicated that one-fifth of those who were in the labor force (employed or seeking work) were unable to find work. Both numerator and denominator include persons enrolled in school along with those who are not. Almost half of teenagers classified as unemployed are also in school. If we confined our attention to those not in school, we would still have an unemployment rate of close to 20 percent because we would exclude both employed and unemployed persons who are in school. The 20 percent figure may well reflect the employment difficulty faced by those youngsters who have left school before most of their peers. It does not indicate that being out of school and without employment is a serious

problem for most teenagers. Most teenagers are in school. What might be regarded as the most serious social ill, being both out of school and unemployed, touches just 4 percent of youth at any one moment. Certainly these figures do not indicate that the bulk of all teenagers are in desperate straits.

We shall concentrate on employment rates (employment to population ratios), avoiding for the most part the difficult distinctions between the unemployed and those out of the labor force. Employment is a convenient bottom line, an important indicator to compare across groups and over time.

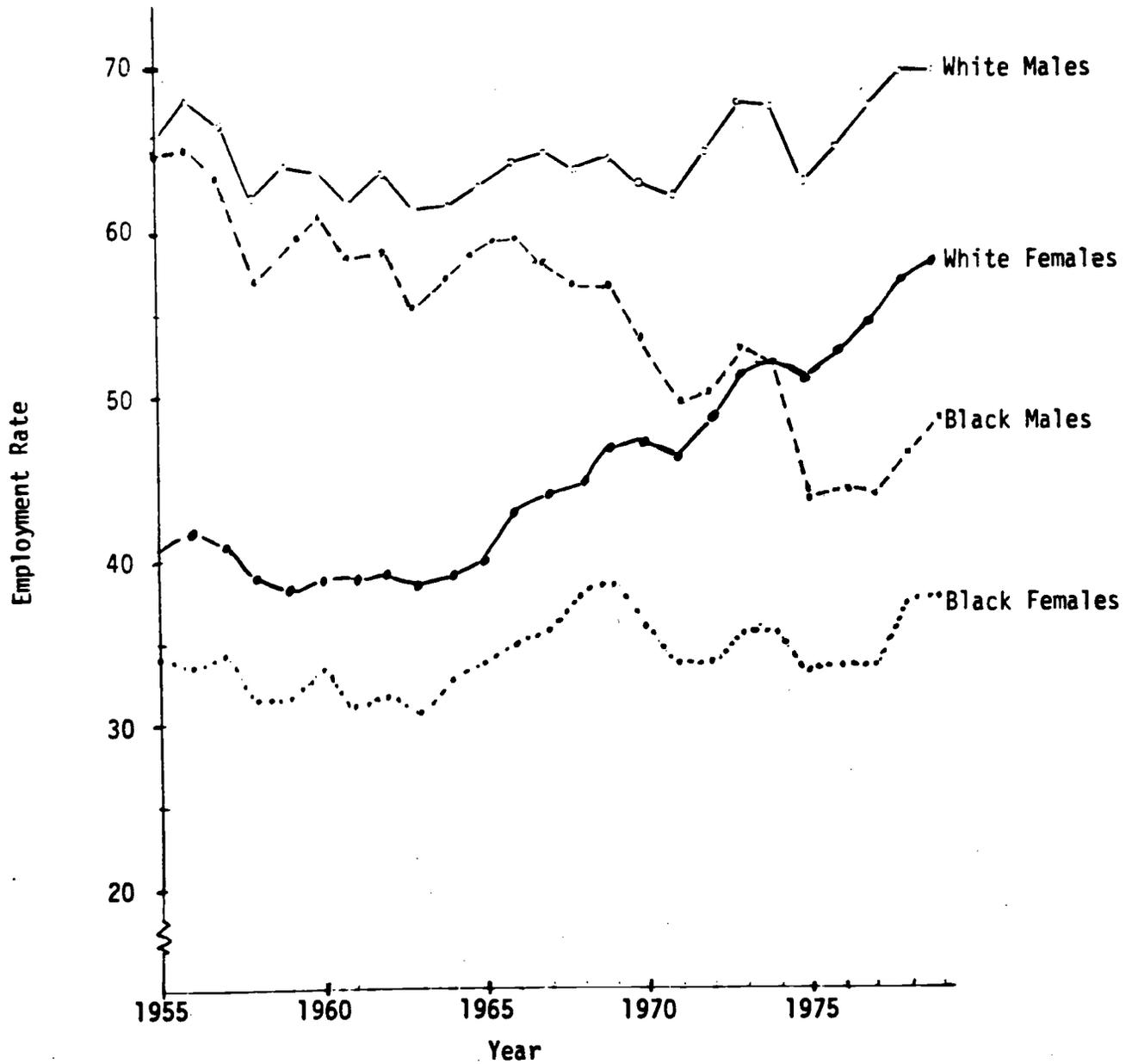
EMPLOYMENT PATTERNS

Figure 1 shows the civilian employment rates between 1955 and 1979 for all persons aged 16-24, by sex and race. It is these patterns we seek to understand. Employment rates for the four groups and the changes over time are quite different:

- Employment rates for white males are the highest and have been relatively stable over time, rising slightly in the seventies.
- Employment rates for black males were comparable to those of whites in 1954, but by 1979 the gap had widened to over 20 percentage points. Moreover the largest declines came during the seventies.
- Employment rates for white females rose gradually over the sixties and jumped quite dramatically during the 1970s.
- Employment rates for black females have remained low and largely unchanged over the period.

For both men and women the gap between blacks and whites widened roughly 14 points between 1969 and 1979. For males the widening reflected

Figure 1. Employment Rates for Persons Aged 16-24 By Race and Sex, 1955 to 1979



Source: Handbook of Labor Statistics, 1980

primarily a fall in black employment; for females, a rise in white employment.

In the remainder of the paper, we explore a wide variety of potential explanations of these differences and trends. We have chosen to address six major issues:

- Demography
- The Military
- Schooling
- Household Formation
- Family Background
- Public Policy

We have made no attempt to fully disentangle the multitude of possible interactions or to report the sometimes large literature surrounding each issue. Instead, we have chosen to rely primarily on published data and simple tabulations of the 1976 Survey of Income and Education and to report the trends and patterns which appear on these data. We seek to decompose the overall changes into the effects of these individual influences by asking, for example, the hypothetical question of how much employment rates would have changed had one variable alone changed. Inevitably, this sort of calculation ignores interactions and it often raises issues of causality. For example, did changing family structures reduce employment or did poorer employment prospects influence family income?

DEMOGRAPHY

The baby boom has come of age. Between 1960 and 1980 the number of

youth aged 15-24 rose from 12 percent of the population to over 17 percent. The sudden expansion in the supply of young workers this period might be put forth as an explanation for the declining employment rates of some youth. To absorb the extra workers, demand would have had to expand considerably. Some economic reasoning would suggest that the relatively greater number of young workers could be employed only if their wage rates fell relative to the wage rates of adult workers.

We believe this large demographic bulge surely had an impact on the youth labor market. Relative wage rates of young white workers did fall. And quite possibly the occupational choices of young workers were affected. However, we do not believe the data support an hypothesis linking the bulk of the changing employment patterns described in Figure 1 with the bulge in the relative number of youth. Our conclusions rest on three facts.

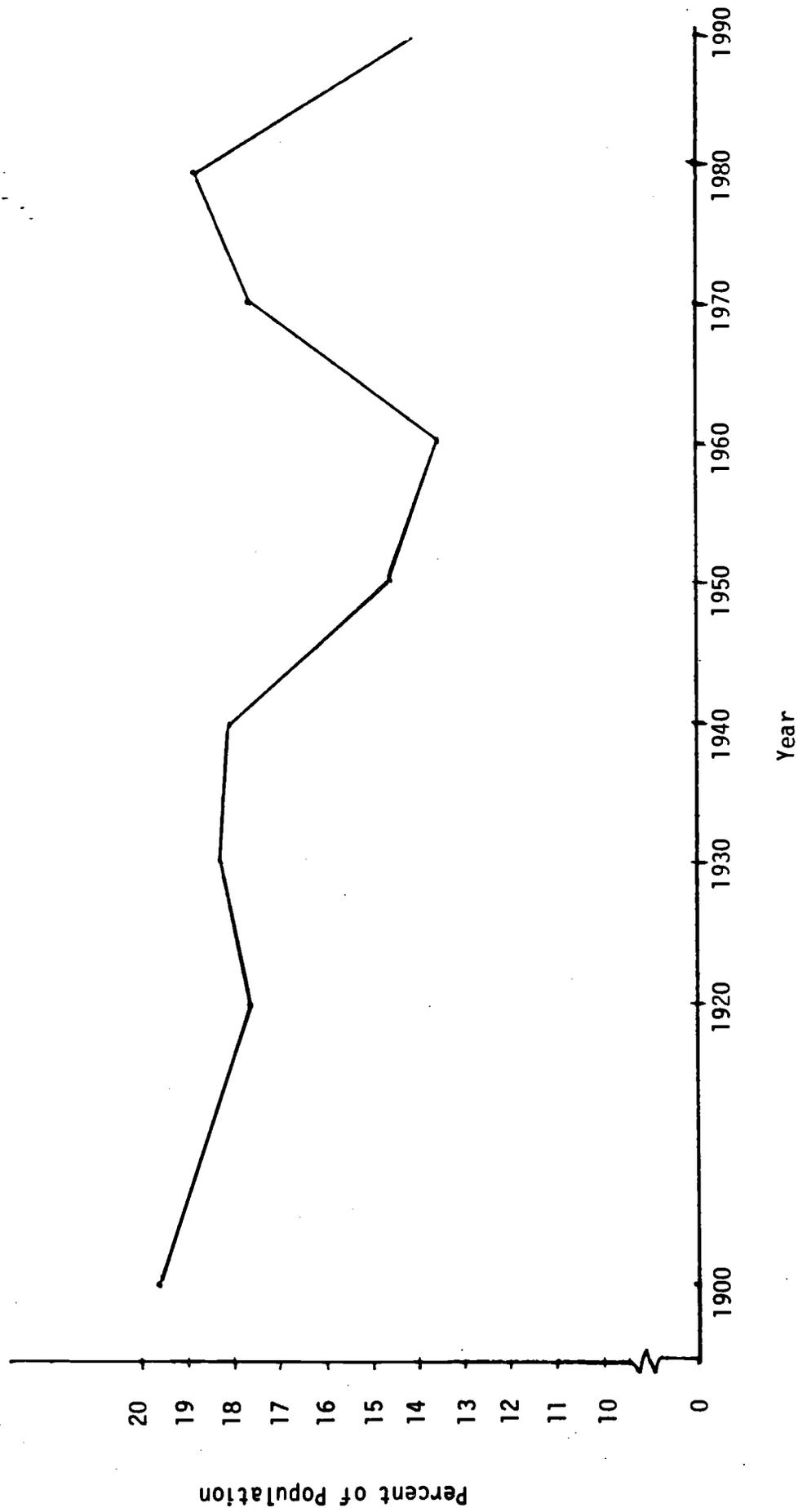
- The employment patterns over this period differ dramatically by demographic groups.

Throughout the 1960s and 1970s the employment rates for young whites, particularly women were moving upward. The rates for these groups rose particularly rapidly in the 1970s, just when the rate for black men was beginning to fall most sharply. Surely if a sudden excess supply of young workers had appeared, we should have expected all groups to suffer at least somewhat. Instead we see opposite trends for whites and blacks in the 1970s.

- The timing of the boom does not coincide with the most rapid falls in minority employment.

We still might be tempted to turn to the baby boom as a primary

Figure 2. Youth 15-24 as a Percent of Total Population



explanation of black employment problems were it not for the fact that the bulk of the baby boom bulge was absorbed in the 1960s while the worst problems for minorities occurred in the 1970s. Between 1961 and 1971 youth increased from 12 to 16 percent of the population. By contrast over the next decade the proportion of youth rose just one more percentage point. But comparatively and absolutely, minority youth fared far better in the 1960s than in the 1970s.

- The market has shown a remarkable ability to adjust to changing supplies of youth during the summer.

In March of 1976 there were 3.8 million teenagers in the full-time labor force and 3.0 million of these had jobs. In July of that same year, the ranks had swelled to 8.3 million workers when youngsters were on summer vacation. Of the additional 4.6 million new entrants to the labor force, 4.0 million had found jobs. Indeed the unemployment rate among youth is typically lower in July than during the school year. If the market can adjust to a nearly threefold increase in teenage labor supply each summer, it seems hard to believe it could not adjust to a far more gradual increase over several decades.

Nonetheless, several authors, notably Wachter (1978), have argued that the supply effects have interacted with institutional rigidities in the labor market to worsen the position of youth, especially black youth. We surely cannot rule out the possibility that the baby boom was an important contributing factor, but we cannot with much precision assess its independent contribution to the growing racial employment gap.

We turn now to an issue where we can say a good deal more. We consider the impact of the vascillating level of military manpower on

youth employment.

THE MILITARY

One of the most dramatic changes in the seventies was a substantial reduction in the size and composition of the military. While these changes have been widely noted in popular discussion, they have received surprisingly little attention in the youth employment literature.¹ The silence may, in part, reflect uncertainty about how to treat the military. Most authors are interested primarily in assessing the performance of the civilian labor market and data are almost always collected only for those in the civilian population.

The military is a major employer of men between the ages of 18 and 24. Obviously the need for military personnel serves as additional labor demand for young men. At the same time, military employment is often regarded as very different from civilian employment. The working conditions, the skills, the commitment and the risks may indeed differ enormously between the sectors and the working conditions within the military obviously vary depending on whether the country is fighting a war. Moreover, the nature of the selection process changes from year to year. In draft years, the proportion of the eligible population inducted and the rules for deferral or avoidance are quite variable. With the volunteer army, rigid pay rules and working conditions seem to deter many of the more able or educated young men while the military may reject those with comparatively low skills. The vast complexity of the whole issue coupled

1. One notable exception is Cooper (1978).

with poor data probably has led most authors to ignore the entire issue (it certainly has for us up until now).

Yet the changes in the military over the past several decades have been quite dramatic and may have had a serious impact on the youth labor market. We have found:

- There has been a sizable long term decline in the relative number of young men in the military over the last three decades, interrupted by the Vietnam war. The decline in military manpower in the 1970s effectively increased the civilian 18-24 year old labor force at least as much as the baby boom did during the decade!

Figure 3 shows that in 1952 nearly one-third of all 18-24 year old young men were serving in the military. By 1964 the proportion had fallen to 15 percent. Five years later, the Vietnam war had boosted the military back up to 20 percent. But by 1979, only 7 percent of the age group are military personnel. The possible impact of these declines can be gleaned by contrasting them to the baby boom rises of the 1970s. Between 1969 and 1979, the total male population aged 18-24 rose 25 percent. However, the total male civilian population jumped by over 50 percent. Thus at least one-half of the rise could be traced directly to the decline in the role of the military. By contrast, in the previous decade the total population had risen 50 percent but the civilian population had grown by slightly over 40 percent. In fact, although the baby boom occurred primarily during the 1960s, the growth in the civilian labor force of persons aged 16-24 was actually slightly greater in the 1970s.

- Between 1969 and 1978, the proportion of young whites in the military fell precipitously while the proportion of young blacks remained relatively constant.

Figure 4 shows that after the Vietnam war, the proportion of young

Figure 3. Percent of All Men Aged 18-24
In the Military

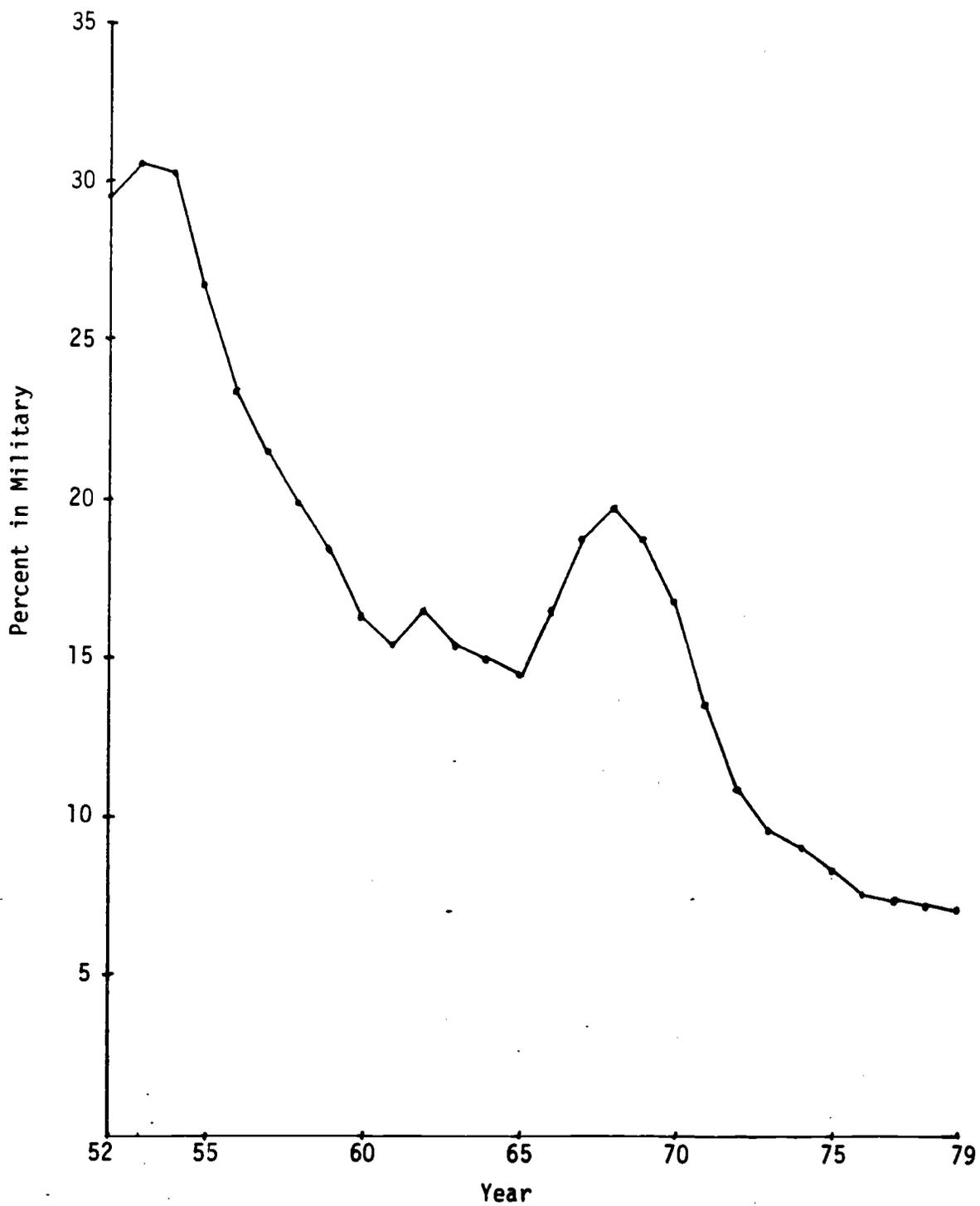
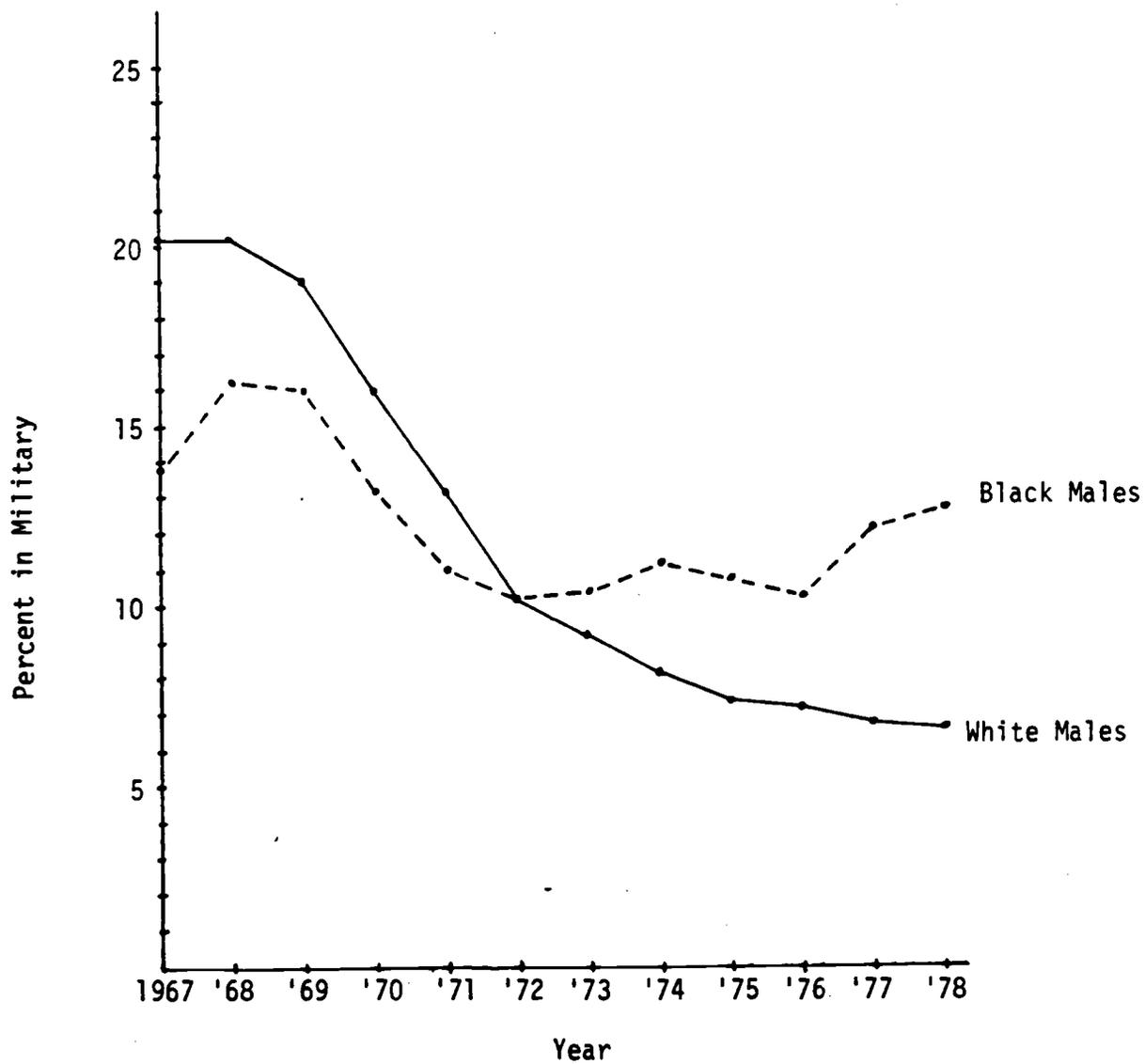


Figure 4. Percent of Men Aged 18-24
In the Military, by Race



whites between 18 and 24 doing military service fell sharply. After peaking at roughly 20 percent, the proportion fell to under 7 percent in 1978. Somewhat to our surprise, at the military peak in the late 1960s whites were actually proportionately more common than blacks, with only 16 percent of blacks and 20 percent of whites serving. But the fall-off in service for blacks was much smaller in the 1970s. Indeed, after a low of 10 percent in 1972, black participation rose during the 1970s. Beginning in 1973, young blacks have been disproportionately found as military personnel. By 1978, blacks were twice as likely as whites to have enlisted.

- If those in the military are treated as employed, the black/white employment gap grew 11 points rather than 14 points during the 1970s. Moreover, if we take account of the likelihood that draft avoidance induced many young whites to remain in school longer than they otherwise would have, the gap narrows another 2 points.

It is unclear what is the proper way to treat the military. One logical treatment would be to include military personnel as employed and calculate employment to population ratios for the entire population (civilian and military). Such a calculation leads to less growth in the black/white employment gap over the 1970s than the employment rates based only on the civilian population show. Since whites were disproportionately serving in the military in 1969, their employment rates are boosted more than that for blacks. Conversely, blacks were overrepresented in the later years so their employment rates are pushed up more in 1979. The net effect is that the racial employment gap grows by 2 to 3 points less if the military is treated as employment.

Moreover, the Vietnam war buildup depressed employment rates for

another reason. It induced persons to remain in school longer to avoid the draft. We shall see later that enrollment rates for men bulged in the late sixties while those for women did not. Persons enrolled in school tend to work much less than those out of school. We are not aware of any studies of this military impact on enrollment. A rough calculation based on the assumption that enrollment patterns would have followed a straight line for both races between 1964 and 1974 in the absence of the war indicates that the enrollment effect was much larger for whites. We shall discuss the importance of school enrollment in a later section. But it appears that some of the growth in employment rates for whites over the 1970s was spuriously caused by the artificially high school attendance rates in the late 1960s. A rough estimate is that another 2 points of the widening black/white employment gap can be traced to this enrollment effect.

Thus as much as 4 to 5 points of the original 14 point gap for men might be eliminated by including those in the military as employed and by controlling for the draft induced school enrollment. These calculations, however, take no account of the possible additional impact that the rapid increase in the civilian labor force might have had. Let us turn now to the impact of the rapid fluctuations in the short term demand for labor.

MACROECONOMIC CONDITIONS

Macroeconomic conditions have a sizeable impact on employment and unemployment rates of youth. A common indicator of the strength of the economy is the adult unemployment rate. According to recent estimates,

for every one percentage point rise in the employment rate for adult males there is a 2 point fall in the employment rate, for white teenagers, and a 3 point fall in the rate for blacks. For 20 to 24 year olds the figures are slightly higher.¹ The unemployment rate for adult males varied greatly over the late 1960s and early 1970s. In the boom of 1968 and 1969 this rate reached 1.5 percent, the lowest in many decades. During the recession of 1970-71 the figure rose to 3.1 percent and in the recession of 1975-76 the rate topped 4.9 percent.

Unemployment rates, which may capture job availability more precisely than employment rates, show the influence of macroeconomic conditions quite dramatically. Figure 5 displays unemployment rates for black and white teenagers, for persons in their early twenties, and for men over 20.

We can draw several important conclusions.

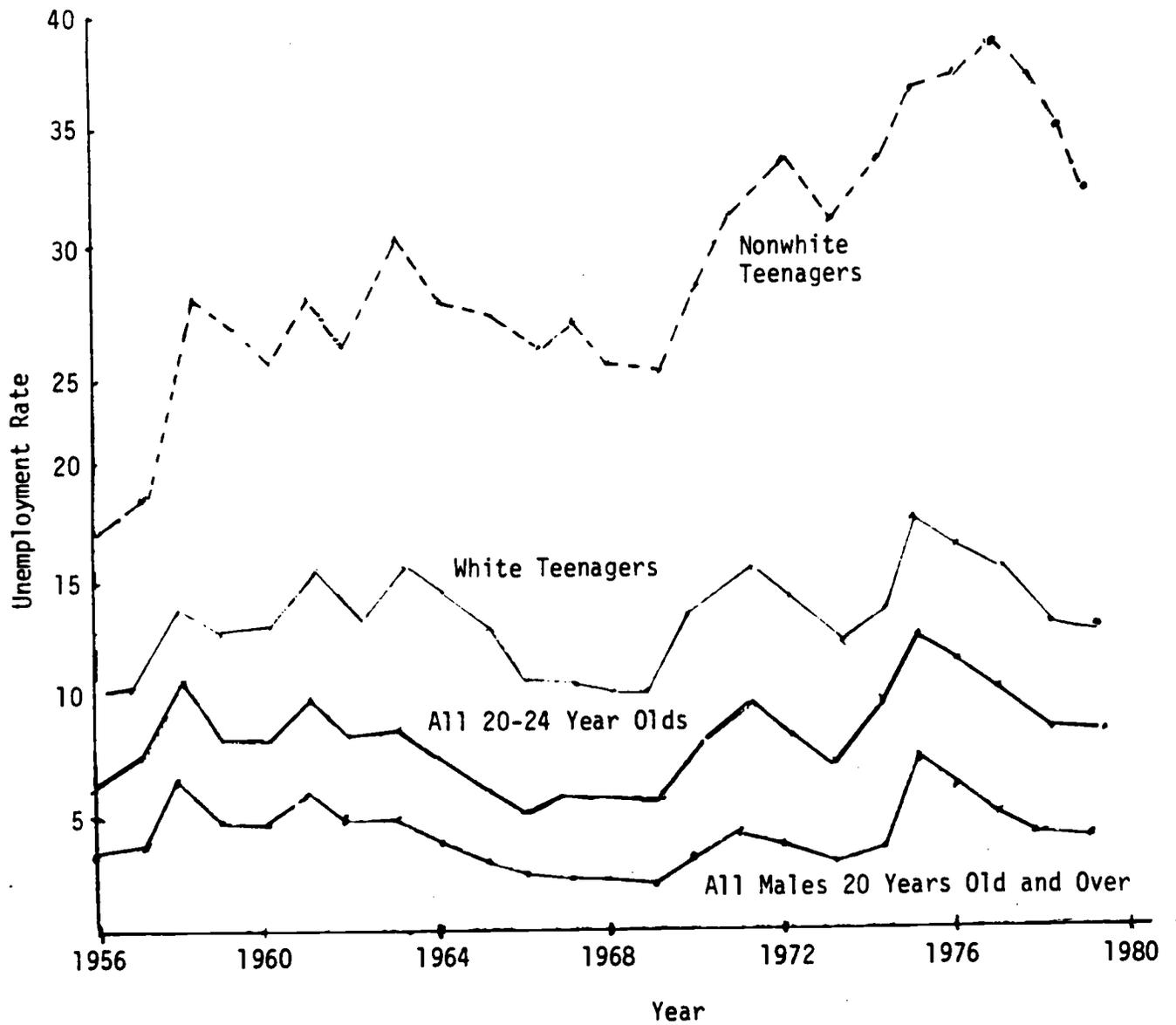
- The youth unemployment (and employment) rates are very sensitive to macroeconomic conditions.

During the recessions of 1958, 1961, 1970-71, and 1975-76, youth unemployment rates rose very sharply. During the most serious post-war recession in 1975-76, the black teenage unemployment rate was over 35 percent and for whites the figure exceeded 15 percent. By contrast during the late 1960s when the economy was heated to its highest (and most inflationary) post-war level, black teenage unemployment rates fell below 25 percent, and white rates were close to 10 percent.

- About one-third to one-half of the decline in male black employment rates between 1969 and 1979 could be traced to weaker economic conditions. But only about 14 percent of the increase in the disparity between black and white employment rates could be attributed to the change in economic conditions.

1. See Freeman (1978).

Figure 5. Unemployment rates for Selected Groups



Source: Handbook of Labor Statistics, 1980

The seventies were a period of much weaker economic performance than the sixties. The average unemployment rate for all persons was below 5 percent in the sixties; in the seventies it was 7 percent. Between 1969 and 1979, the adult male unemployment rate rose 1.4 percentage points. Using cyclical sensitivity figures cited earlier we would have predicted a 4 to 5 percent drop in the employment rate for black youth during that period, and a 3 percent lower rate for whites, all else the same. In fact, during that period the overall employment rate of black males fell almost 10 points while it rose about 4 points for whites. About one-third to one-half of the 10 point decline for blacks would be accounted for by the decline attributable to weaker aggregate demand. But the difference between the rates for blacks and whites increased by 14 points between these two years. Only about 14 percent of this difference (2 of 4 points) could be attributed to economic conditions. We have not seen separate estimates of the cyclical sensitivity of women's employment rates, but we presume the results would be similar to those for men.

- Even when the economy is booming extreme black/white differences remain.

While macroeconomic conditions help to explain the employment patterns of different groups over time, they provide little help in understanding the differences between them at any point in time. In 1969 the economy was extremely tight. The military buildup had reached its peak, and many white youngsters were staying in school. Yet sizable differences in employment and unemployment rates remained. For example, the teenage unemployment rates for blacks was still 25 percent when the white rate had fallen nearly to 10 percent.

In combination, then, the changing military and macroeconomic conditions can explain up to half (7 points) of the 14 point growth in the racial employment gap for young men, though possible interactions between the two have not been considered. For women only the macroeconomic effects can be used, so much more remains unexplained. Recall that a portion of the military effect was related to reduced school enrollment. We now explore the importance of schooling more directly.

SCHOOLING

Schooling plays a major role in the labor market experience of youth. The influence is two-fold. First, while young people are in school they often do not work. When they do, their jobs typically involve short-term part-time work. During the summers, we have already seen that teenage employment represents a massive influx into the full-time labor force. Second, after young people complete their schooling, their level of education is highly correlated with their labor market employment experiences. In the language of human capital, youngsters who have accumulated more capital reap larger rewards.

We begin by looking at the differing patterns of schooling for men and women and blacks and whites over time. We then consider changes in the employment rates of youth in and out of school. Finally, we explore the impacts of changes in enrollment, together with increases in the employment of students on the overall employment rates which we seek to understand.

There are several statistics that might be used as indicators of school attainment. An appealing one is the enrollment rate for persons aged 16-24.

It captures the proportion of the age group that is enrolled in school. It also is ideal for understanding how employment patterns for those enrolled in school differ from the patterns of those who have left school. Figure 6 shows enrollment rates for men and women between 1954 and 1978. Later we shall treat blacks and whites separately. This figure reveals:

- Enrollment rates which rose steadily through the 1950s and 1960s leveled off during the 1970s, and then fell for young men.

Enrollment rates for young women rose throughout the 1950s and 1960s, then leveled off in the 1970s. In 1954 only 25 percent of women aged 16 to 24 were enrolled in school. By 1970 over 40 percent were. The pattern was rather different for men. Enrollment rates for men moved from 43 percent to 55 percent in the 1960s. But in the 1970s this trend halted abruptly. Male enrollment rates fell rather dramatically over this period. We have already suggested that this pattern may reflect a surge in enrollment to avoid the draft in the late 1960s. The labor market effects of all of these enrollment changes are likely to be profound since those enrolled in school typically are employed far less than those out of school.

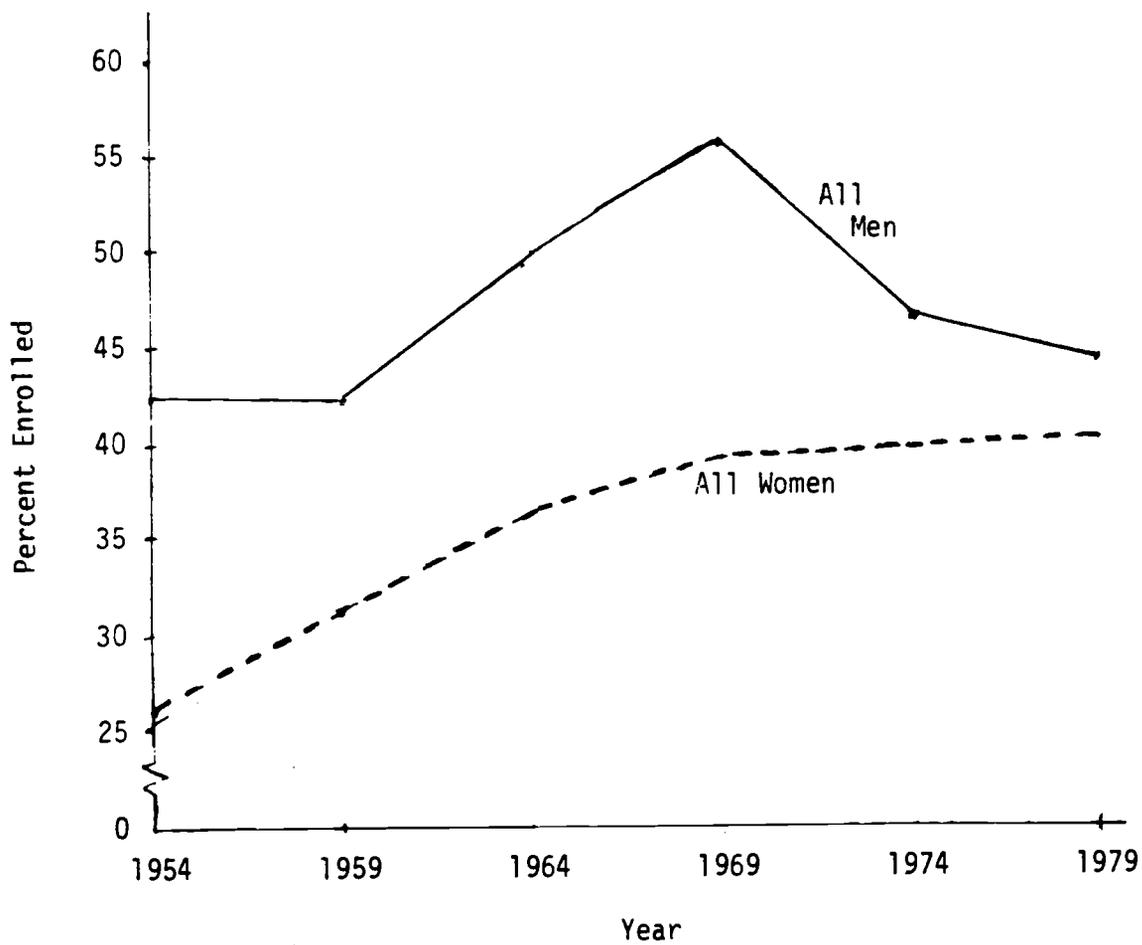
Enrollment rates by race have been published since 1964. Table 1 reports these rates by sex and race in selected years.

- During the 1960s and 1970s the enrollment gap between blacks and whites was largely eliminated. Enrollment rates for blacks continued to rise slowly over the 1970s for both men and women.

In 1964, some 51 percent of white males were enrolled in school while only 39 percent of black males were similarly inclined. By 1979 a larger proportion of black men than white men were actually enrolled. Similarly for women, blacks now remain enrolled as long as whites.

The median black, as well as the median white, now completes high

Figure 6. Percent Enrolled by Sex for Persons Aged 16-24



Source: Handbook of Labor Statistics, 1980

Table 1. Percent of Persons Aged 16-24 Enrolled
in School; by Race and Sex

	1964	1969	1974	1979
White Male	51.1	56.4	45.9	43.9
Black Male	39.4	47.2	49.0	47.1
White Female	36.5	39.2	39.2	40.2
Black Female	34.2	38.4	41.8	40.2

Source: Bureau of Labor Statistics

school. But other measures show a continuing gap in total educational achievement. The dropout rate for blacks continues to exceed that for whites: 13 percent of whites aged 16-24 are high school dropouts while 20 percent of blacks in this age group have not completed high school. Black youth apparently pass through fewer grades per year of enrollment. In addition, for any number of grades completed, achievement test scores typically are lower for blacks than for whites. Thus, while blacks remain in school almost as long as whites, the educational outcomes may continue to be very different.

Fewer blacks go on to college. According to a 1972 survey of high school graduates, about 54 percent of whites attend a post-secondary school full-time upon graduation from high school, while about 42 percent of blacks do so. However, after controlling for individual and family background attributes--including parents' education and income, high school class rank, and scholastic test scores--blacks are much more likely than whites to attend a post-secondary school. For example, the probabilities of attendance evaluated at the mean of attributes of white and at the mean of attributes of non-white high school graduates are as follows:

<u>Evaluated At</u>	<u>White</u>	<u>Non-White</u>
Mean of white attributes	.68	.83
Mean of non-white attributes	.36	.58

By these measures, there is a substantial positive race effect on post-secondary school attendance even as early as 1972.¹

1. See Meyer and Wise (1981).

The changing enrollment patterns clearly influence labor markets.

Persons in school are less likely to work. Thus:

- All else the same we should have expected to see falling employment rates for blacks and whites over the 1950s and 1960s as enrollment rates rose since fewer students than non-students work.

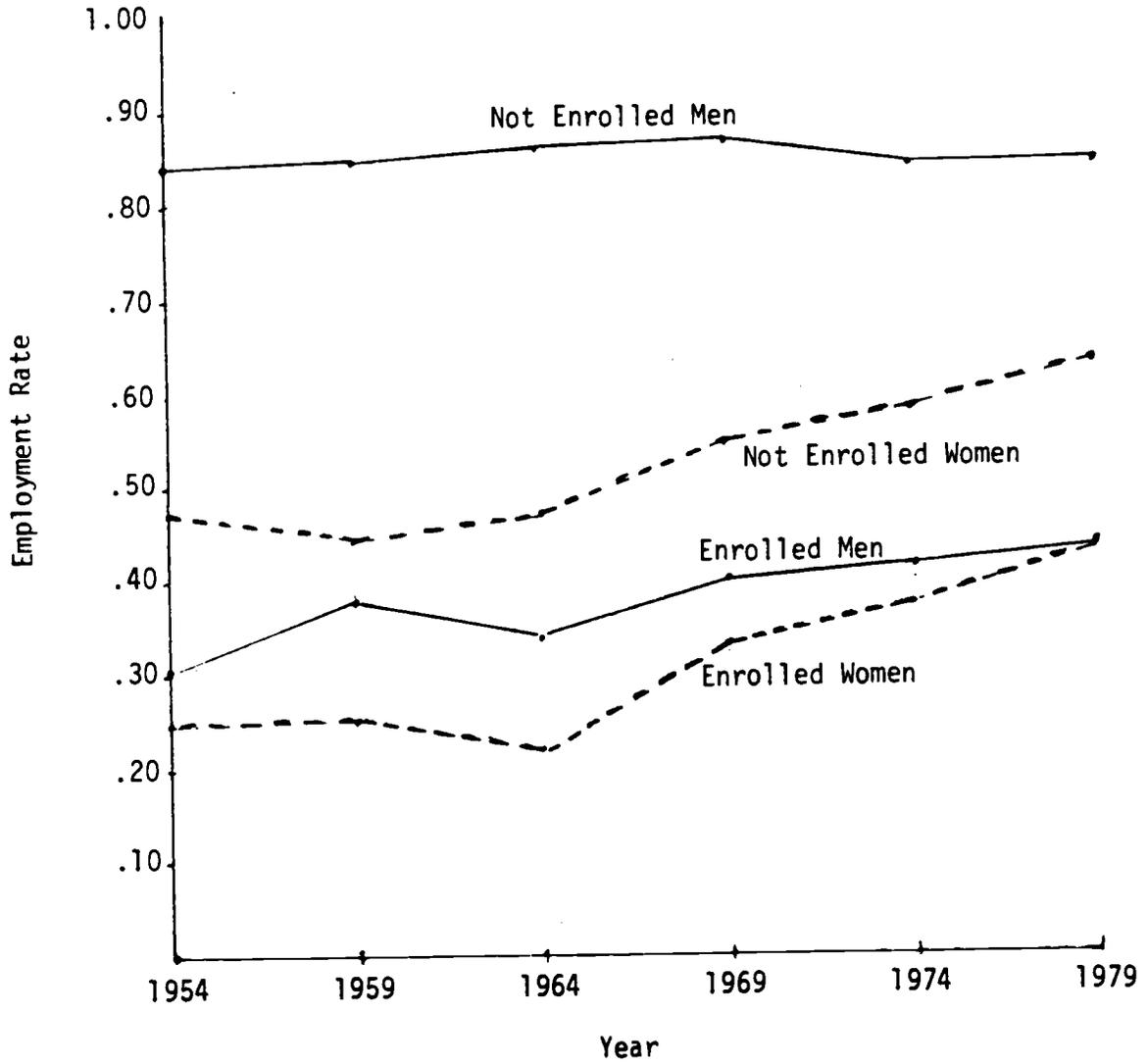
In 1954 when 33 percent of all youth aged 16-24 were enrolled in school the employment rate for students was roughly 25 percent; for non-students, 65 percent. Overall the employment rate was 52 percent. Therefore, when enrollment had risen to 47 percent, as in 1970, we should have expected the employment rate to fall to 49 percent if nothing else changed. If we do the calculation separately for men and women, we would have expected the rate to fall 2 points for men, 3 points for women. That they did not in fact fall indicates that one of two things happened. The employment rates rose for in-school youth or for out of school youth, or both.

To discover which, Figure 7 shows the employment rates for youths aged 16-24 who were enrolled and not enrolled in school by sex. (Racial differences are described below.) The figure reveals:

- For both men and women employment rates for those in school have risen sharply since 1954.
- For men out of school there has been relatively little change in employment rates. For out of school women on the other hand, work has become increasingly common.

Of all persons aged 16-24 enrolled in school over 40 percent are now working at any point in time during the school year. Presumably a much higher proportion work at some time during the school year. Work while in school became much more common throughout the seventies. Obviously the

Figure 7. Employment Rates by Sex for Persons Enrolled in School and Not Enrolled in School



Source: Handbook of Labor Statistics, 1980

Table 2. Employment Rates for Persons Aged 16-24 Enrolled in School and Not Enrolled by Race and Sex, Selected Years

	1964	1969	1974	1979
ENROLLED				
White Male	34.1	41.4	43.8	45.4
Black Male	30.1	29.4	26.4	23.4
White Female	23.3	34.7	40.4	45.4
Black Female	15.4	22.3	18.2	20.6

NOT ENROLLED				
White Male	86.7	88.1	85.4	85.7
Black Male	80.5	82.4	72.1	69.8
White Female	47.3	55.1	60.2	66.0
Black Female	48.0	50.7	46.9	43.1

Source: Bureau of Labor Statistics

increased work may have important implications for education practices and indeed for the effects of education. For example, it raises questions about the impact of outside work on the quality of education received and the longer term prospects for jobs. Meyer and Wise (1982) found that young persons who work in high school are employed substantially more weeks per year after graduation than youth who don't work while in high school.

The racial patterns in employment by school enrollment status are even more startling. Table 2 shows that:

- In spite of similar enrollment rates, blacks are far less likely to work whether in or out of school. While employment rates were rising for whites in school and white women out of school, employment rates for blacks were stagnant or falling for both enrolled and not enrolled men and women.

Employment rates for in-school blacks are half those of whites. Moreover, blacks lost ground over the seventies. For example, between 1969 and 1979, employment of white women in school rose from 35 to 45 percent in spite of the fact that general economic conditions worsened. Black women in school, on the other hand, experienced a small decline in employment rates. Jobs while in school are now of major significance for white youth, but far less common for blacks. The stagnant job picture for blacks transcends school enrollment. Whereas white women out of school worked much more in 1979 than in 1969, black women were actually working a lot less.

SUMMARY OF SCHOOL ENROLLMENT IMPACTS

Let us pause now and summarize the labor market impact of the changing enrollment patterns for blacks and whites. We treat each group

separately.

- The rising employment rates for white men over the seventies reflect a falling enrollment rate and a rising employment rate for those in school.

Virtually the entire change in employment rates for white men over the past three decades might be traced to the combination of schooling and macro effects. In the sixties when the economy was strong, increased enrollments were offset by increased work in school and overall employment rose somewhat. In the seventies, enrollment rates started to fall. Together with rising employment of school enrollees, these forces would have pushed overall employment rates up considerably, but macroeconomic conditions dampened the increase.

- The falling employment rates for black men transcend school boundaries. In school or out, black male employment rates declined over the 1970s.

Since school enrollment for black men was the same in 1979 as it was in 1969, very little of the decline in employment can be traced to changing enrollment patterns. Blacks are very unlikely to work while in school, and the proportion who do is falling rapidly. Both in school and out, employment rates are falling.

For men, changing enrollment rates seem to account for as much as 3 points of the 14 point growth in the racial employment gap. We have already accounted for the bulk of this impact when we described the effects of induced enrollment in the Vietnam era. Thus, we have "explained" slightly over half of the gap so far using the military, macro, and schooling effects. We shall have to look to other forces such as family background and family formation for further explanation.

- The rising employment rates for white women over the 1970s reflects increased employment for both those in and out of school.

For women, on top of rising employment rates for those in school, there were rapidly rising rates for those out of school. Employment rates for white women both in school and out rose over ten points during the 1970s even though the economy was weaker than in the sixties. Only half of the rise for women over this period can be linked to employment patterns of those in school. The rapidly changing behavior of those out of school must also be considered.

- Enrollment and employment patterns for black women were virtually identical in 1969 and 1979.

Black women are by far the most stable group along these dimensions. Enrollment rates changed little. Employment rates for those in school and out fell slightly.

The widening racial employment gap for women reflects rapidly changing employment patterns for white women in school or out. We will seek clearer answers as we explore household formation and family background influences below.

Before proceeding to these issues, however, let us pause for a little more detail on employment patterns of whites and blacks who are in school and those who are not. Our subsequent analysis will be based on a special tabulation of the Survey of Income and Education for 1976. Thus the employment and enrollment patterns shown there merit our scrutiny and are shown in Table 3.

The racial differences shown are quite dramatic. Once again we see that although blacks and whites have relatively similar enrollment rates,

employment rates both for school enrollees and school dropouts are vastly lower for blacks. We see that for younger age groups enrollment rates, by race were quite similar by 1976. Some differences remain for older college age men and women. But the critical racial difference lies in employment. Whether in school or out, blacks work much less. Whereas nearly half of white male teenagers work while in school, less than one-fifth of comparable blacks do. Similar patterns emerge for white women. We again conclude that school enrollment cannot explain the bulk of the black employment declines in the 1970s. Indeed, the employment rates for out of school teenage blacks are now so low that they approach the rates for those in school. These results are troubling indeed for they suggest that more years in school has done little to improve the employment prospects of young blacks or that other forces have swamped these benefits. Young blacks face employment problems whether they are in school or out.

We noted that school also affects employment for those who are out of school because employment rates are strongly correlated with level of schooling. We turn to that issue next.

EMPLOYMENT OF OUT OF SCHOOL YOUTH

Once a youngster leaves school, level of education is strongly associated with employment.

- Persons with college diplomas work more than high school graduates who in turn work more than high school dropouts. The pattern applies equally to whites and blacks and men and women and differences persist as people age.

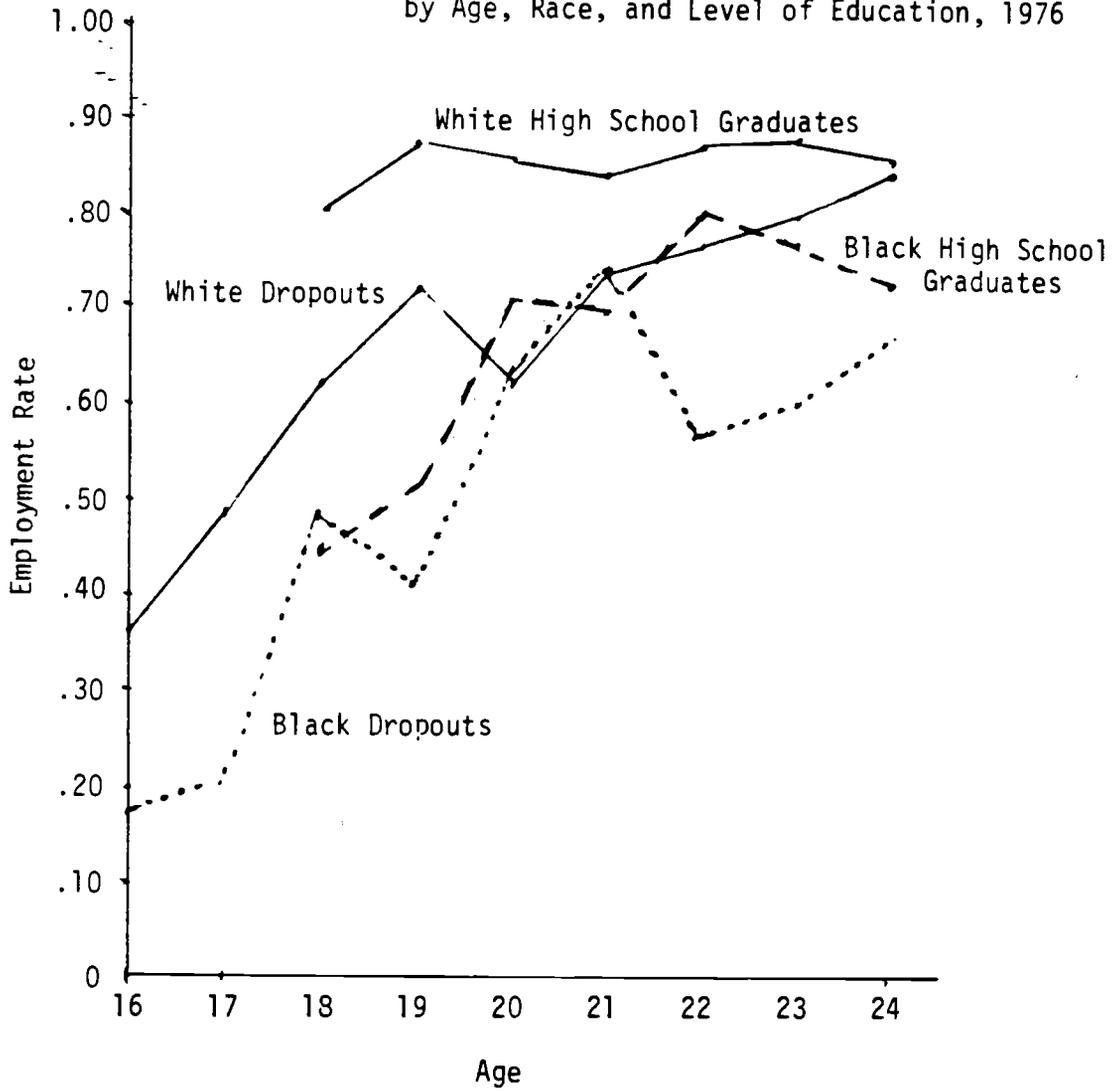
Figure 8 displays employment rates for out of school men by race,

Table 3. Percent Enrolled and Employment Rates for Persons Enrolled and Not Enrolled in School by Age, Race, and Sex, 1976

SEX AND AGE	Percent Enrolled in School		Employment Rate for Those in School		Employment Rate for Those <u>Not</u> in School	
	White	Black	White	Black	White	Black
Males						
16-19	82.0	80.1	.471	.177	.708	.376
20-24	42.7	33.9	.493	.344	.793	.639
Females						
16-19	84.0	79.3	.394	.171	.624	.334
20-24	44.1	35.8	.316	.354	.777	.536

Source: Tabulations of the Survey of Income and Education, 1976.

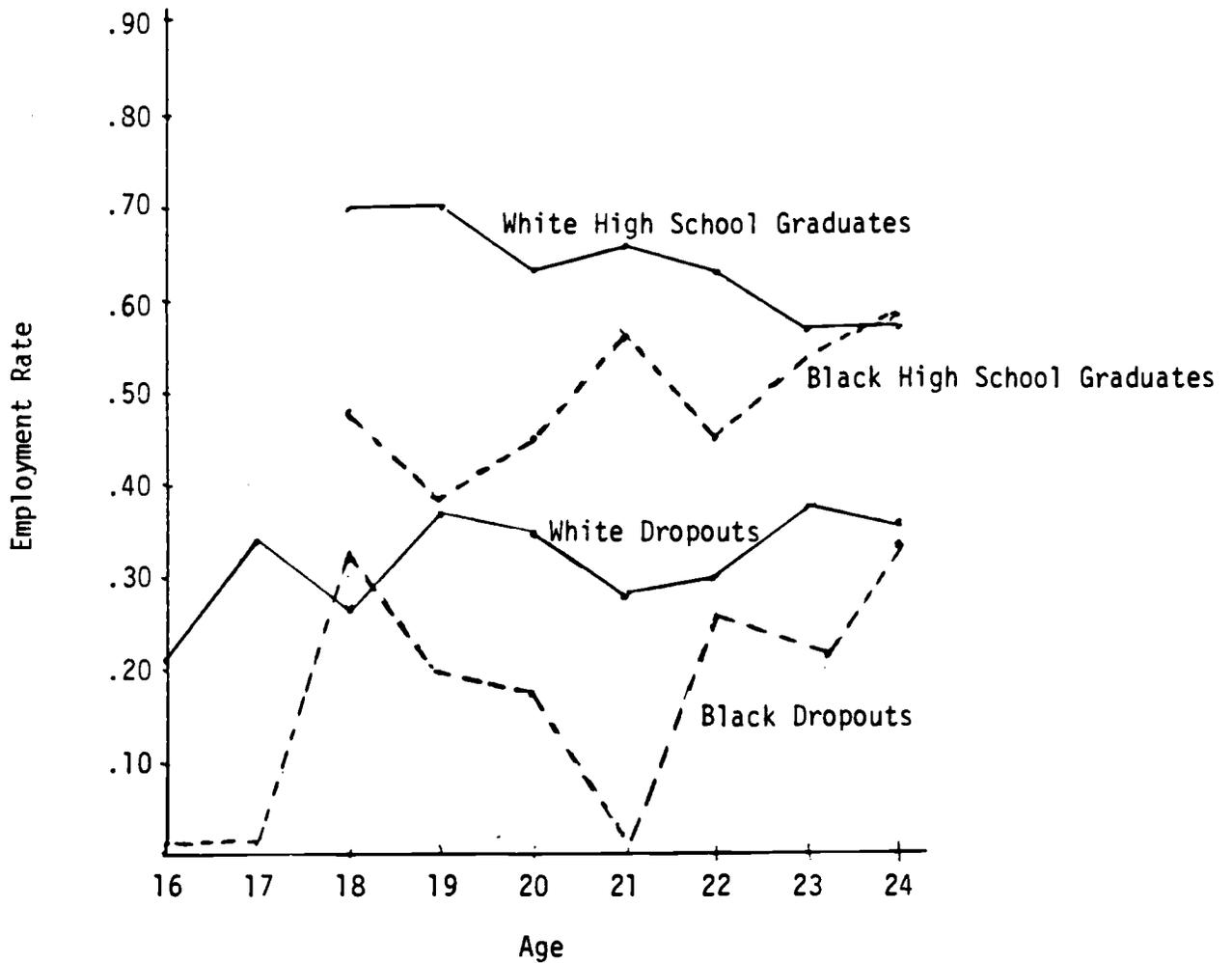
Figure 8. Employment Rates for Out of School Males by Age, Race, and Level of Education, 1976



Note: Results for black dropouts have low precision.

Source: Tabulations of 1976 Survey of Income and Education

Figure 9. Employment Rates for Out of School Women by Age, Race, and Level of Education, 1976



Note: Results for black dropouts have low precision.

Source: Tabulation of 1976 Survey of Income and Education

age, and years of schooling. Figure 9 displays similar figures for women. Race, age, sex, and schooling are all highly correlated with employment. For black dropouts the picture is particularly bleak. Less than 20 percent of 17 year old black male dropouts work, virtually none of the comparable women work. Even seven years later at age 24, only 67 percent of black men and 35 percent of black women high school dropouts work! Fortunately less than one-quarter of blacks can be found in this category. Still the low levels of work are quite distressing. Increasing education raises the employment rates quite dramatically. Yet black high school graduates still fare worse than white high school dropouts.

It is quite obvious that schooling level and employment are closely related. Higher levels of schooling are associated with distinctly higher employment for all groups. And at the high school level at least, blacks and whites of equal age and education have quite different employment levels.

This concludes our discussion of the relationship between schooling and employment. Emerging already is a picture of an employment pattern for white men that is stable and easy to explain on the basis of traditional economic determinants like schooling and macro conditions. Employment for white women rose faster over the seventies than we might have expected based on these factors alone. The employment patterns for blacks are deteriorating very rapidly for reasons that are not easy to explain. We have explained slightly over half of the worsening picture for men thus far, but much less for women. In an effort to understand more we turn to issues of household formation.

HOUSEHOLD FORMATION

Perhaps the most significant of events that occur during the teens and early twenties involves household formation. Over 98 percent of 16 year olds live at home. Almost none are married or have children. By age 24, all but a quarter have left home, half are married, one-third are living with children of their own. The labor market implications and complications of family formation are far-reaching. Married women work less, married men work more. Women with children rarely attend school and are far less likely than childless women to work. Labor market outcomes undoubtedly influence family formation too. Divorce rates rise in recessions. Couples may not want to marry or have children until one or both are "established" in their jobs. In this section we shall discuss the association between household formation and employment. It is exceptionally difficult to disentangle cause and effect here. We begin with a description of such associations in 1976 and then consider the implications that changing family formation had for the 1970s.

Youth between 16 and 24 are far too heterogeneous to treat all ages collectively. Thus we concentrate on family formation variables for persons of two ages, 18 and 24. We break the population in the Survey of Income and Education into three categories: married and not living in a parent's home (independent married), single and not living in a parent's home (independent single), and living at home (dependent). Over 95 percent of those living in their parent's home are unmarried. Within each group we distinguish persons with no children from those with children. Tables 4, 5, and 6 describe the distribution, the school enrollment, and employment patterns of those not enrolled in school for

Table 4. Percent Distribution of 18 and 24 Year Olds by Race and Sex

CATEGORY	Age 18		Age 24	
	White	Black	White	Black
MALE				
<u>Not Living Independently</u>				
Without Child	93.2	95.1	27.2	34.7
With Child	0.4	0.0	0.7	0.4

<u>Living Independently</u>				
Married Without Child	1.6	0.6	22.3	10.6
Married With Child	1.1	0.1	27.7	29.0
Single Without Child	3.6	3.0	21.5	25.0
Single With Child	0.1	1.1	0.7	0.2

FEMALE				
<u>Not Living Independently</u>				
Without Child	80.4	78.2	15.1	20.1
With Child	0.8	6.9	1.6	5.8

<u>Living Independently</u>				
Married Without Child	6.1	3.3	25.8	12.3
Married With Child	5.4	3.0	38.3	32.2
Single Without Child	6.4	4.8	15.1	9.2
Single With Child	0.8	3.9	4.2	20.5

Source: Tabulations of 1976 Survey of Income and Education.

Table 5. Percent of 18 and 24 Year Olds Enrolled in School by Race and Sex

CATEGORY	Age 18		Age 24	
	White	Black	White	Black
MALES				
<u>Not Living Independently</u>				
Without Child	75.8	75.4	25.3	22.9
With Child	NA	NA	NA	NA

<u>Living Independently</u>				
Married Without Child	16.9	NA	27.0	13.2
Married With Child	13.9	NA	11.7	14.8
Single Without Child	45.3	76.5	27.0	22.9
Single With Child	NA	NA	NA	NA

FEMALES				
<u>Not Living Independently</u>				
Without Child	77.3	77.3	21.3	34.5
With Child	17.6	42.9	22.9	16.5

<u>Living Independently</u>				
Married Without Child	31.4	0.0	18.7	35.3*
Married With Child	10.5	9.3	5.6	16.9
Single Without Child	51.5	48.1	28.0	28.5
Single With Child	9.6	51.8	2.9	21.2

Source: Tabulation of 1976 Survey of Income and Education.

*This figure appears to be a statistical artifact. At all other ages less than 5 percent of married black women without children are enrolled in school.

Table 6. Employment Rate for Persons Aged 18 and 24
Who Are Not Enrolled in School by Race and Sex

CATEGORY	Age 18		Age 24	
	White	Black	White	Black
MALES				
<u>Not Living Independently</u>				
Without Child	.727	.428	.776	.561
With Child	NA	NA	NA	NA

<u>Living Independently</u>				
Married Without Child	.964	NA	.912	.842
Married With Child	.682	NA	.957	.851
Single Without Child	.708	.390	.875	.918
Single With Child	NA	NA	NA	NA

FEMALES				
<u>Not Living Independently</u>				
Without Child	.681	.449	.795	.814
With Child	.399	.378	.742	.153*

<u>Living Independently</u>				
Married Without Child	.315	.227	.798	.552
Married With Child	.218	.289	.379	.513
Single Without Child	.759	.245	.918	.784
Single With Child	.215	.112	.603	.394

Source: Tabulation of 1976 Survey of Income and Education.

*This figure appears to be a statistical artifact, employment rates are typically .4 for all other ages.

18 year olds and 24 year olds by race and sex.

A wide variety of patterns emerge.

- The overwhelming majority of 18 year olds still live at home. Some 80 percent of women and nearly 95 percent of men live at home at this age. By age 24 most persons have left home.

Table 4 makes quite clear that household formation has hardly begun by age 18, particularly for men. Whether in school or not, working or not, the vast majority of men still live with their parents. Indeed another tabulation shows that 84 percent of out of school employed 18 year old men are still living at home. Marriage pulls a larger percentage of women out of the household. Some 12 percent of white women are married and living separately; 6.3 percent of black women are.

This finding may be important as we consider the significance of early employment problems. Since virtually all teenagers live at home, there may be less pressure for them to work and the short-term financial consequences of being out of work may be less severe than for older independent persons. It's possible that a fraction of these make important contributions to family income. Yet even out of school youth living with families in poverty or near poverty provide on average only 10 percent of family income. Some teenagers may face serious financial hardships when they are unemployed, but most probably do not.

By 24, however, things have changed rather drastically. Only one-quarter of the white men and just 16 percent of white women are still at home. Moreover, for those who have not left home, lack of a job may prevent exit. By this age, employment has become far more important.

- Marriage and childbearing sharply reduce school enrollment and employment rates for women. For

men school enrollment also is lower for those who are married, but employment is higher.

At age 18 the enrollment rate among married white women with no children is 31 percent as compared to 77 percent for those who are unmarried and living at home. If the woman has a child and lives away from home, chances are 9 out of 10 that she is out of school. If she has a child but lives with her parents, she is more likely to remain in school, but even then only 20 percent are enrolled.

For married black women the situation is perhaps worse, but for those who are unmarried and have children the enrollment effects are much less pronounced than for white women. Virtually none of the 18 year old married black women in our sample are enrolled in school. However, childbearing for unmarried black women seems to have smaller effects on enrollment than it does for whites. Some 42 percent of unmarried black women who have children and live independently are still enrolled in school. Over half of those who are single parents living with their parents go to school. These figures are lower than those for women without children, but the differences are not so great as they are for whites.

Employment is also lower among mothers. White teenage mothers who have left school are half as likely to work as their out of school peers without children. For black mothers, however, the employment effects of children are not nearly so strong as for whites, whether living with parents or a husband. It's not that black mothers are so likely to work, rather their unencumbered peers are so unlikely to be employed that both groups look similar.

The living situation of unwed mothers sharply influences the likelihood of their working. A mother living with her parents is much more

likely to work than one who is married or living singly. For black teenagers the effects are particularly pronounced. An unwed black mother living with her parents is four times as likely to work as an unwed mother living alone.

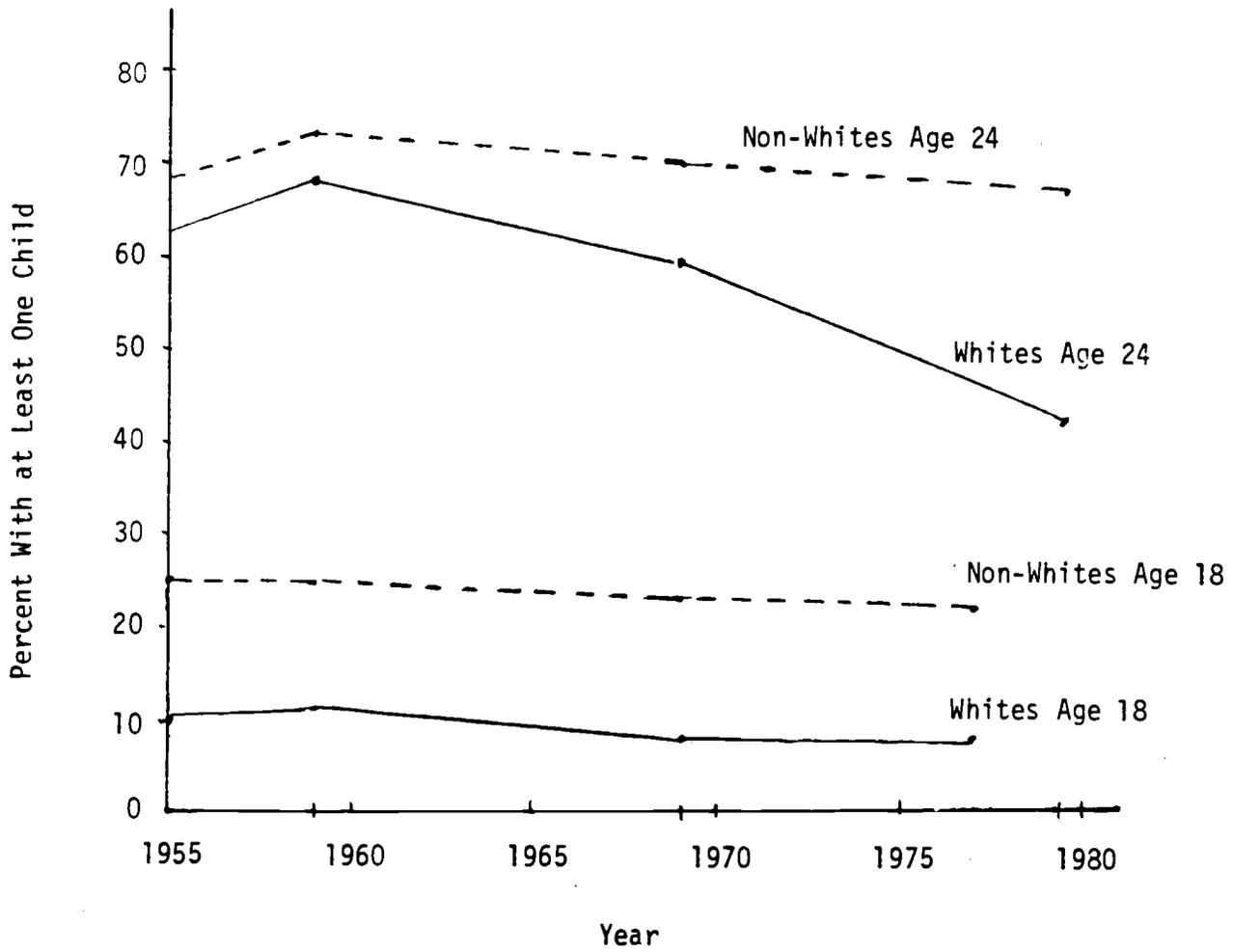
Although the effects of childbirth and marriage are particularly strong for the teenager, it is important to keep in mind that only 13 percent of white and 14 percent of black 18 year olds in our sample are married, have children, or both. The 24 year old age group is the one most affected by marital and family status.

By age 24 only 30 percent of women of either race are both unmarried and childless. Some 85 percent of the whites and 80 percent of the blacks in this category who are out of school are working. For women who marry but do not yet have children, employment rates fall to 80 percent for whites and 55 percent for blacks. Obviously for whites at least marriage alone has largely ceased to be strongly related to labor market activity. Children have the most significant influence. Mothers, black or white, work less than half the time.

Men are affected differently by marriage. Married men, like married women, are unlikely to be enrolled in school. But they are more likely to work than their unmarried peers. Married men may feel more financial pressure. Or marriage may be postponed until employment is obtained. Whatever the direction of causality, according to recent Current Population Survey data, once marital status, schooling, and race are controlled for there is no relationship between the age of youth and their employment status.¹ It may be that changing family status accounts for much of the

1. See Meyer and Wise (1981).

Figure 10. Percent of Women Aged 18 and 24 With at Least One Child, by Race



apparent rise in employment as youths age.

How has childbearing affected employment? One of the most dramatic trends of the 1960s and 1970s was a substantial decline in the fertility rate for young white women (see Figure 10). Over the same period fertility rates were essentially level for black women. Marriage rates declined for both groups. It seems likely that the changing patterns of family formation have affected the employment rates of women. We conclude:

- The changing family structures between 1970 and 1980 could have been associated with as much as a 2 percentage point increase in the employment rate for white women aged 16 to 24 and a 1 point decrease in the employment rates for black women. As much as 3 points of the widening employment gap between black and white women during the seventies might be traced to changes in family structure. Changing household formation seems to explain little for men.

In performing these calculations we compared what the 1980 employment rates would have been had family structures been the same as in 1970 and if employment rates by family type were identical to those in 1976. One reason that the net effects of changing fertility are so small is that some mothers actually work more than non-mothers because they also are not enrolled in school. It should be noted that these simple calculations do not indicate the direction of causality. Household formation decisions may be influenced by labor market conditions. If childbirth and marriage are more likely when conditions are bad, our calculations would exaggerate the impact of changing household formation and vice versa.

For women, the widening racial employment gap can be traced largely to rising employment rates of white women. Thus far, we have explained

2 points of the 14 point gap for women by the worsening macroeconomic conditions, and 3 points from changing family structure. Changing enrollment patterns offered little explanatory power. The remaining differences must be traced to rising employment for women (both in school and out) within a family structure category.

The labor force participation of married women, particularly those with children, rose dramatically over the seventies. Young married women between 20 and 24 had participation rates of 43 percent in 1968. Ten years later, 59 percent of married women were in the labor force! Some of this increase can be traced to reduced childbearing which we have already accounted for. But much of the rise reflected increased work by mothers. During the 1970s the labor force participation rates for married mothers with young children shot up ten points. The forces we have explored offer little power in explaining these rises. It is clear, however, that for white women, the increased employment in the seventies must be traced in large part to this last fact. We have yet to explain why employment patterns for black women did not follow suit.

For men, the family structure variables seem far less potent. We have already noted that the bulk of the changes in white employment rates can be traced to changing military composition, macroeconomic conditions, and school enrollment, and some of the fall in employment for blacks can be traced to these same causes. Overall, these factors explain roughly 8 of the 14 point rise in the employment gap. In the next section we explore yet another possible influence, family background.

FAMILY BACKGROUND

One of the most obvious differences between blacks and whites is

family background. Whereas 85 percent of white teenagers live in two-parent households, nearly half (45 percent) of blacks live with one parent. Moreover, while only 7 percent of white teens living at home live in households with incomes below the poverty line, 35 percent of black teens do. In this section we explore whether these differences and the dramatic changes in family structures over the 1970s might have influenced employment patterns over the past decade.

It is difficult to trace family background for youngsters who have already left home. Virtually all teenagers live at home, but a substantial portion of 20-24 year olds have moved out. Thus we will concentrate on teenagers only in this discussion, then seek to generalize the results to the older age group. In our analysis we have divided all families into two types, single parent and two parent. Within each type we have further subdivided these families into three income categories: below the poverty line, 100 percent to 200 percent of the poverty line, and over 200 percent of the poverty line. This makes 6 family type and income categories. Table 7 gives the percent distribution by category and the percent enrolled in school, by race and sex for teenagers living at home. Here we see:

- School enrollment is strongly related to both family type and income for both races and both sexes. Teenagers from poor and single parent families are less likely to enroll in school.

Less than 70 percent of white males in poor single parent families are enrolled in school. Some 77 percent of white males in single parent families with income more than twice the poverty line are enrolled. And fully 85 percent of persons in two parent families with this higher level of income go off to school each day. Similar figures apply to all three other sex and race combinations.

- As is well known, blacks are heavily concentrated in single parent and low income families.

Some 60 percent of white teenagers are in moderate to high income, two parent families. Only 15 percent of blacks are. Only 3 percent of whites are in poor single parent families, but nearly one-quarter of black teenagers are found in such families.

- Black school enrollment is as high or higher than white enrollment within virtually every family type and income category. Lower enrollment rates for blacks thus can be completely accounted for by family background differences.

Sample sizes in many cells are small, but in general black and white enrollment rates look remarkably similar within family type and income groupings. In many cases black enrollment rates are actually higher. Thus the lower enrollment rates for blacks overall can be attributed to their concentration in lower income and single parent families. As mentioned above, analysis of post-secondary school attendance patterns shows that controlling for family background and other individual attributes, blacks are much more likely than whites to attend a post-secondary school, and in particular to attend a four-year college or university.

Table 8 displays employment rates for those in school and out of school for the various family type and income groups. The results are quite dramatic.

- For males and females, blacks and whites, enrolled or not, from single parent or two parent families, rising family income is associated with rising levels of employment.

One out of every four white males in poor single parent families who is enrolled in school is also working. If his family had income over twice the poverty line he was twice as likely to be working. Astonishingly,

Table 7a. Percent Distribution and Enrollment Rates for Persons 16-19 by Race, Sex, Family Type, and Income Level: Males

FAMILY TYPE/ INCOME LEVEL	Percent Distribution		Percent Enrolled in School	
	White	Black	White	Black
SINGLE PARENT:				
Family Income				
Below Poverty Line	2.5	22.3	68.4	78.6
100-199% of Poverty Line	6.7	18.7	74.9	74.6
200% of Poverty Line and Over	5.3	2.9	77.4	71.1
All Incomes	14.5	43.9	74.7	76.4
TWO PARENT:				
Family Income				
Below Poverty Line	4.0	11.5	71.1	71.6
100-199% of Poverty Line	24.0	29.5	81.1	85.4
200% of Poverty Line and Over	57.6	15.6	84.7	86.6
All Incomes	85.5	56.1	83.1	82.9

Source: Tabulations of Survey of Income and Education 1976.

Table 7b. Percent Distribution and Enrollment Rates for Persons 16-19 by Race, Sex, Family Type, and Income Level: Females

FAMILY TYPE/ INCOME TYPE	Percent Distribution		Percent Enrolled in School	
	White	Black	White	Black
SINGLE PARENT:				
Family Income				
Below Poverty Line	3.0	25.4	60.5	73.3
100-199% of Poverty Line	5.7	17.8	81.9	75.3
200% of Poverty Line and Over	5.7	2.7	81.0	91.9
All Incomes	14.4	45.9	77.1	76.4
TWO PARENT:				
Family Income				
Below Poverty Line	4.1	12.3	71.4	79.2
100-199% of Poverty Line	24.3	26.9	83.4	80.8
200% of Poverty Line and Over	57.1	15.1	87.0	89.2
All Incomes	85.6	54.1	85.5	82.9

Source: Tabulations of Survey of Income and Education 1976.

Table 8a. Employment Rates for Persons 16-19 by School Attendance, Race, Sex, Family Type, and Income Level: Males

FAMILY TYPE/ INCOME LEVEL	Persons Enrolled in School		Persons Not Enrolled in School		All Persons Total	
	White	Black	White	Black	White	Black
SINGLE PARENT:						
Family Income						
Below Poverty Line	.248	.129	.456	.288	.314	.163
100-199% of Poverty Line	.376	.200	.615	.299	.436	.225
200% of Poverty Line and Over	.522	.336	.705	.545	.563	.395
All Incomes	.410	.172	.611	.313	.461	.205
TWO PARENT:						
Family Income						
Below Poverty Line	.358	.116	.614	.422	.432	.203
100-199% of Poverty Line	.449	.190	.645	.327	.486	.210
200% of Poverty Line and Over	.501	.204	.791	.718	.545	.273
All Incomes	.480	.181	.732	.444	.523	.226

Source: Tabulations of Survey of Income and Education 1976.

Table 8b. Employment Rates for Persons 16-19 by School Attendance, Race, Sex, Family Type, and Income Level: Females

FAMILY TYPE/ INCOME LEVEL	Persons Enrolled in School		Persons Not Enrolled in School		All Persons Total	
	White	Black	White	Black	White	Black
SINGLE PARENT:						
Family Income						
Below Poverty Line	.189	.084	.204	.227	.195	.122
100-199% of Poverty Line	.330	.204	.507	.330	.362	.235
200% of Poverty Line and Over	.381	.313	.687	.392	.439	.324
All Incomes	.329	.147	.457	.270	.358	.178
TWO PARENT:						
Family Income						
Below Poverty Line	.258	.104	.307	.163	.272	.116
100-199% of Poverty Line	.355	.177	.631	.456	.401	.230
200% of Poverty Line and Over	.432	.272	.745	.671	.473	.315
All Incomes	.405	.189	.668	.418	.443	.228

Source: Tabulations of Survey of Income and Education 1976.

only 30 percent of out of school black males living in poor single parent households work. Some 55 percent of those of higher income homes are working. In each category we see rising family income associated with higher levels of employment. This may be in small part a statistical artifact. Families with working teenagers are not as likely to be poor. However, in virtually none of the household groupings, particularly the higher income ones, do the youngsters contribute more than 10-15 percent of family income on average, thus we believe this effect is small.

- For persons out of school, family type is very strongly associated with employment rates. Teenagers from two parent families are far more likely to be working. For those enrolled in school, family type shows a less dramatic but still substantial relationship to employment for whites, and very little relationship for blacks.

For both races and both sexes, coming from a single parent family substantially diminishes the likelihood that a youngster out of school will be working. Some 40-45 percent of blacks of either sex in two parent families who are out of school, are employed; roughly 30 percent of those from single parent families are employed. White women living with two parents have employment rates of 67 percent; those who live with only one have rates of 45 percent. The pattern applies for all income groups, though there is a hint in the data that the negative relationship is less severe for higher income single parent families. Family type seems to alter behavior most for white women, least for white men. In all cases the impact is large. It is unclear from this data whether the family type effects are direct or indirect via level of schooling achieved or household formation decisions. Regardless, the structure of families seems to be strongly correlated with labor market outcomes, particularly for women.

We can only speculate about the reasons for these findings. Possibly youth from poor families have less access to networks or contacts and information that help in finding jobs. Or persons from poor or single-parent families may be less likely to have working role models. And it is possible that welfare rules offer substantial disincentives to work for youth in poor families.

For those in school, the effects are less strong. White employment rates for youngsters in two parent families are still somewhat higher than those for persons in single parent families. But for blacks, family type has only a small impact. Only a small fraction of young blacks work while in school regardless of their family type. (Nonetheless, those from families with higher incomes work more.)

These results suggest that the rapidly changing family structures of the 1970s may indeed have had profound labor market impacts. We will consider that issue in a moment. It is important to recognize, however, that:

- In every family type and income classification, blacks always fare much worse than whites. Even if family structures and income levels for blacks were identical to those of whites, the overall employment rate for black teenagers living at home would rise only from 21 to 27 percent. The overall rate for whites is 48 percent. Thus the black-white gap cannot be attributed primarily to family background differences. For out of school youth, however, as much as one-half the gap can be attributed to family structure and family income.

Overall, the employment rate for white persons in this sample is 48 percent; for blacks the rate is 21 percent. If the black population had the same income and family type configuration as whites, and employment rates within each category were unchanged, black employment rates would

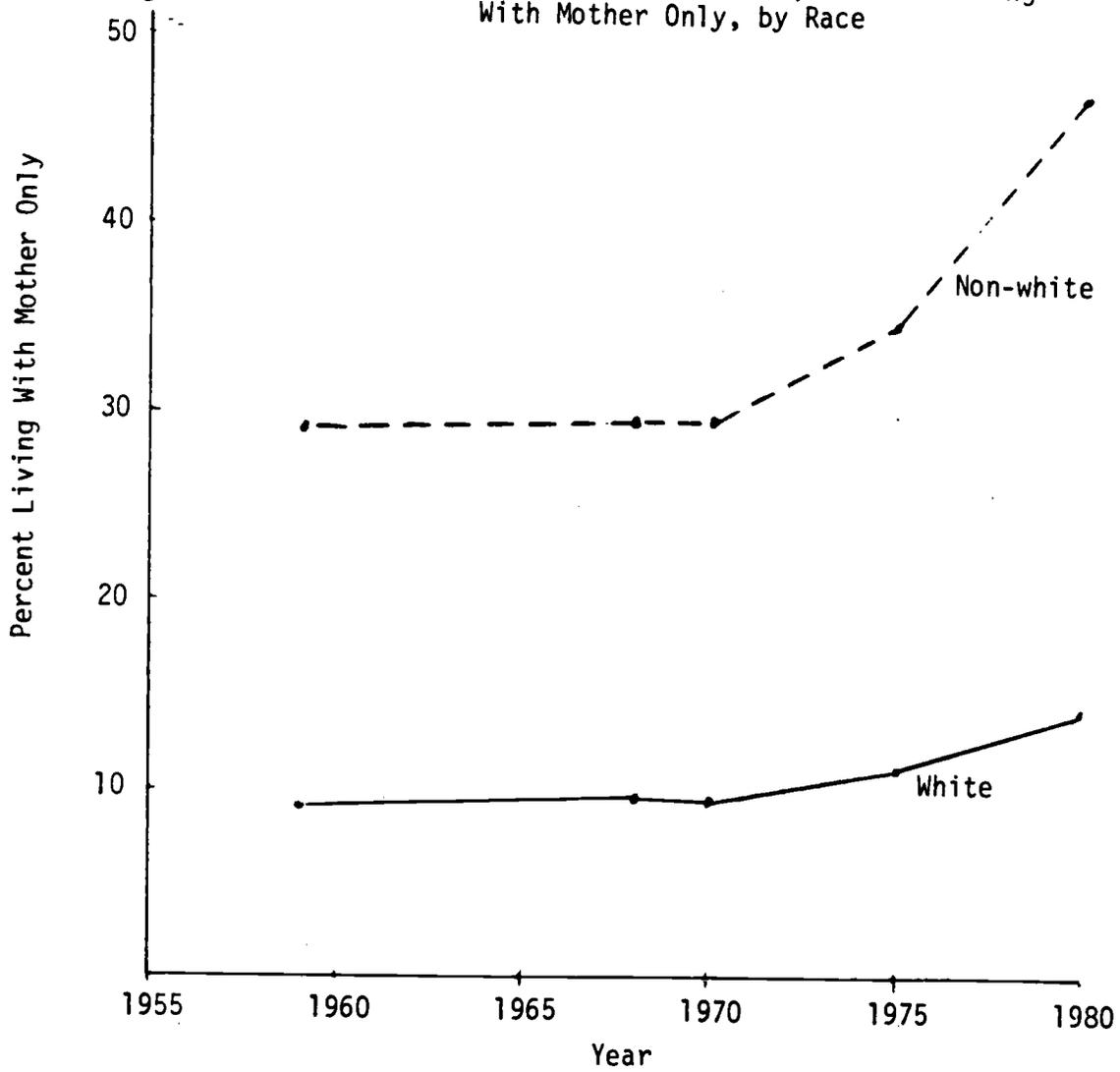
rise from 21 to 27 percent. Thus although family structure and family income effects are sizable, the bulk of the black-white employment gap for teenagers cannot be traced to the differing family backgrounds of blacks and whites.

The sample sizes are probably too small to perform this calculation for out-of-school youth only and generate a result of great reliability. When the calculation is performed, roughly half of the difference can be traced to these characteristics. The result follows from the far greater impact of family income and structure on the employment of out-of-school blacks.

We turn at last to the changing family patterns of the 1970s and their possible influence on employment rates. Figure 11 documents a trend which has been widely discussed elsewhere. There was a sudden and sharp increase in the number of single parent families during the 1970s. For blacks the changes were enormous. Whereas 30 percent of black teens were found in single parent households in 1970, nearly 50 percent were in this family type by 1980. Over the same period the percent of white teenagers in single parent households rose from 9.1 to 14.4 percent. It is instructive to consider the possible impacts of these changes on employment.

- For out of school teenagers the changing family structure may have been associated with a decline in the overall employment rate by three points for black males and females while it had no influence on whites. For in-school teens, impacts for all groups were negligible. Since most teens are in school overall the changing family structure lowered employment rates for minority teenagers by one point. However, since most 20-24 year olds are out of school, impacts could be larger for that group. Perhaps two points of the 12 point increase in the black-white employment gap could be traced to family structure changes.

Figure 11. Percent of Persons Aged 14-19 Living With Mother Only, by Race



The nearly 20 percent increase in single parent black families might have been expected to be associated with lower employment rates, particularly for those out of school. If the differences in employment patterns between youngsters for single parent and two parent families held at the 1976 level (roughly .15 points) throughout the period and if we treat the changes as exogenous then overall employment rates for those out-of-school would have fallen three points. Between 1970 and 1980, however, the impacts of the altered family structure on those in school would be negligible since family structure is so weakly related to employment rates for blacks in school. Since most persons are in school, the overall impact for minority teenagers is small, perhaps lowering employment by one point.

Recall, however, that most 20-24 year olds are out of school, so they may be more heavily affected by family background. On the other hand, many left home before the full change of the 1970s had occurred. At most we might believe the changing family structure caused a two to three point fall in minority employment for those in their early twenties. Averaging the effects for the teenagers with that for 20-24 year olds, at most two points of the 12 point fall in minority employment might be traced directly to changing family structure, and then only if such changes are treated as exogenous.

In short, family structure and family income are critical determinants of employment patterns. For males, then we have now explained as much as 9 or 10 points of the 14 point growth in the gap. For females, we have accounted for perhaps 6 or 7 points. Nonetheless, we still are unable to explain all of the changes in minority employment patterns relative to whites over the 1970s. Now we turn to our final topic: government programs.

PUBLIC POLICY

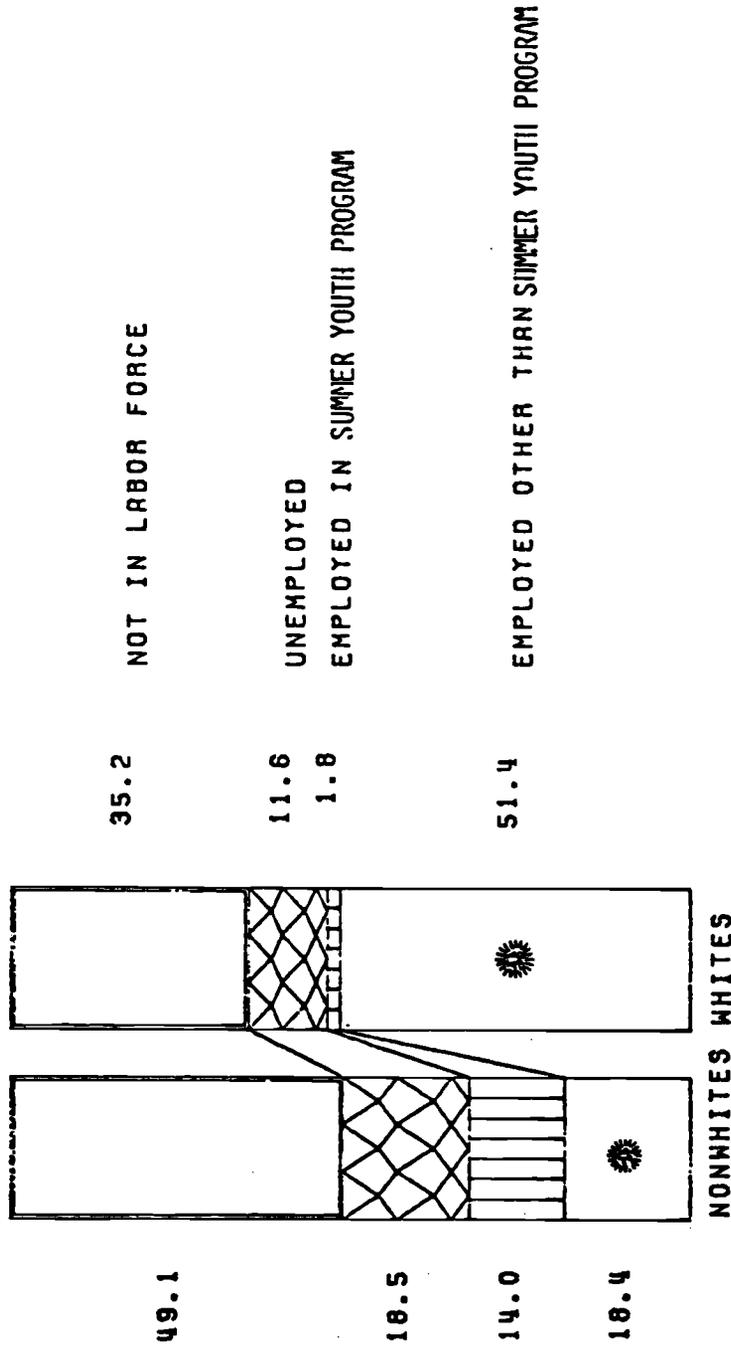
Many government programs may have had an influence on the employment and related experiences of youth over the 1970s. We shall focus on three: youth employment programs, minimum wage legislation, and the Basic Educational Opportunity Grant (BEOG) program.

Youth Employment Programs

The rising interest in the labor market problems of youth was matched in the late 1960s and 1970s by a rapid increase in public training and employment programs for youth. In 1964 fewer than 50,000 youth under age 22 were served by federal employment and training programs. By 1969 perhaps 750,000 participated in some program. In 1979 nearly two million youth received federally sponsored labor market aid. During the Carter years a diverse set of programs, many experimental, were created or expanded to help youth. The programs ranged from the Young Adult Conservation Corps where youth are employed in conservation or other public projects to the Youth Incentive Entitlement Projects, experimental programs where youth are guaranteed part-time work while in school and full-time summer jobs if they return to school.

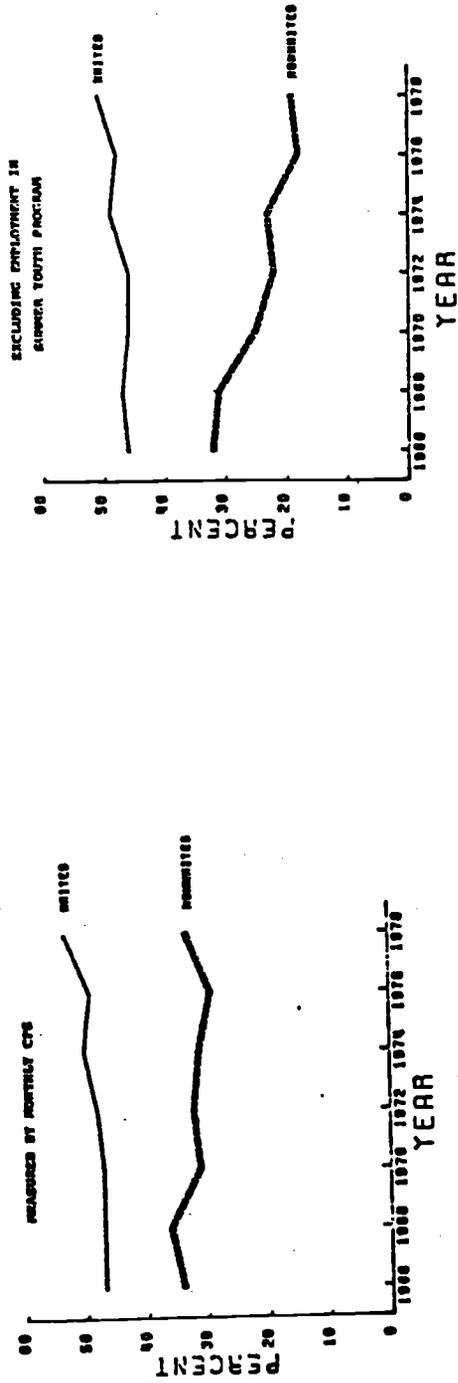
The largest single program was the Summer Youth Employment Program (SYEP) which provides employment for disadvantaged youth aged 14-21 during the summer months. The program grew from roughly 400,000 persons in 1969 to over one million in 1978. The enormity of the program can be illustrated by the fact that nearly 45 percent of all summer jobs held by minority youth aged 14-19 in July 1978 were provided under SYEP. On the other hand, just 3 percent of jobs for whites during the same period were similarly provided. As shown in Figure 12, some 50 percent of white

Figure 12. Employment Status of 14-19 Year Old Whites and Nonwhites, July 1978



Source: Office of Youth Programs, The Summer Youth Employment Program: A Report on Progress, Problems, and Prospects, February 1979.

Figure 13. July Employment/Population Ratios for 14-16 Year Old Whites and Nonwhites



Source: Office of Youth Programs, The Summer Youth Employment Program: A Report on Progress, Problems, and Prospects, February 1979.

Figure 14

WAGE DISTRIBUTION FOR 16 & 17 YEAR OLDS

SOURCE: MAY 1970 CPS

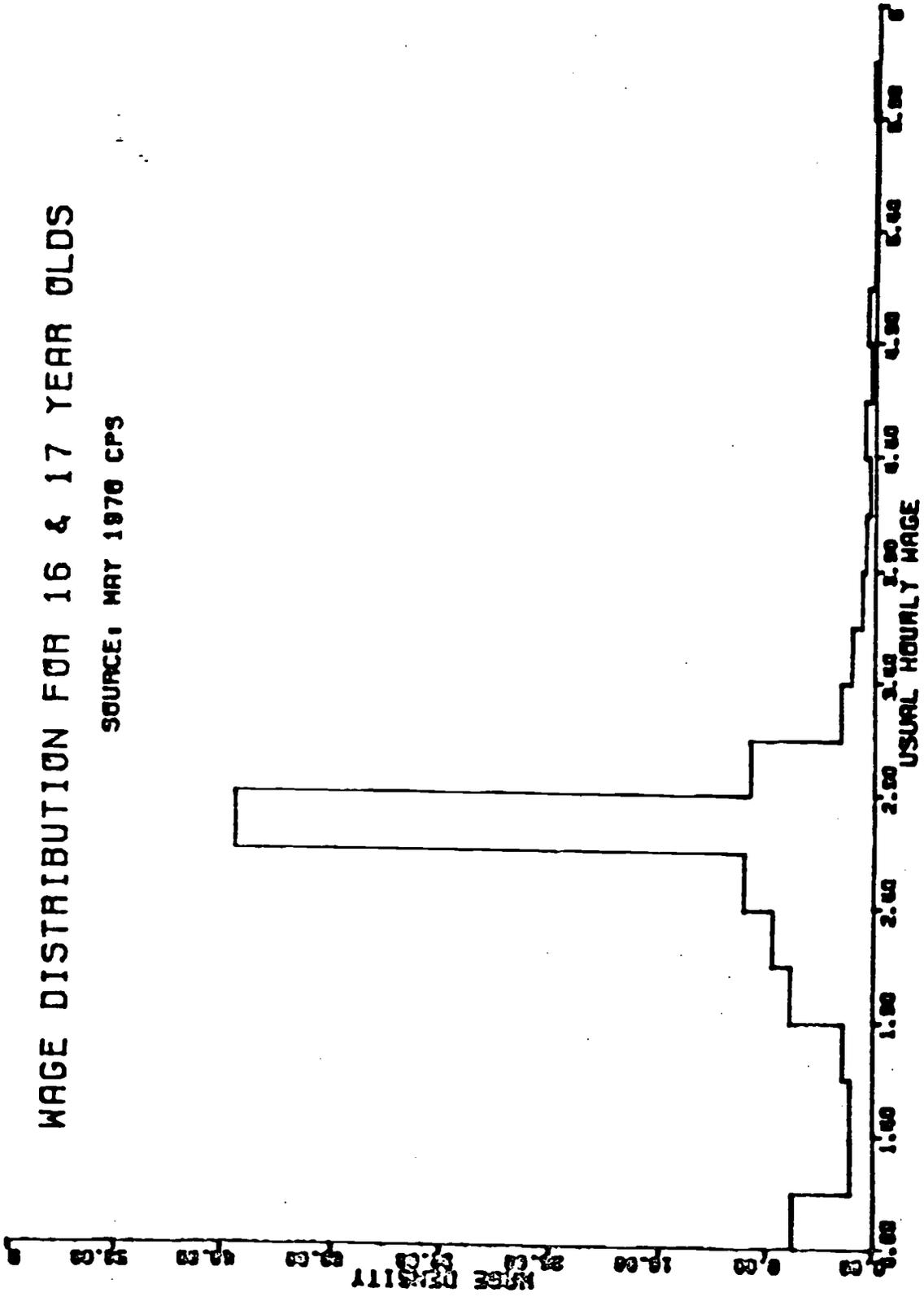


Figure 15

WAGE DISTRIBUTION FOR 18 & 19 YEAR OLDS

SOURCE: MAY 1978 CPS

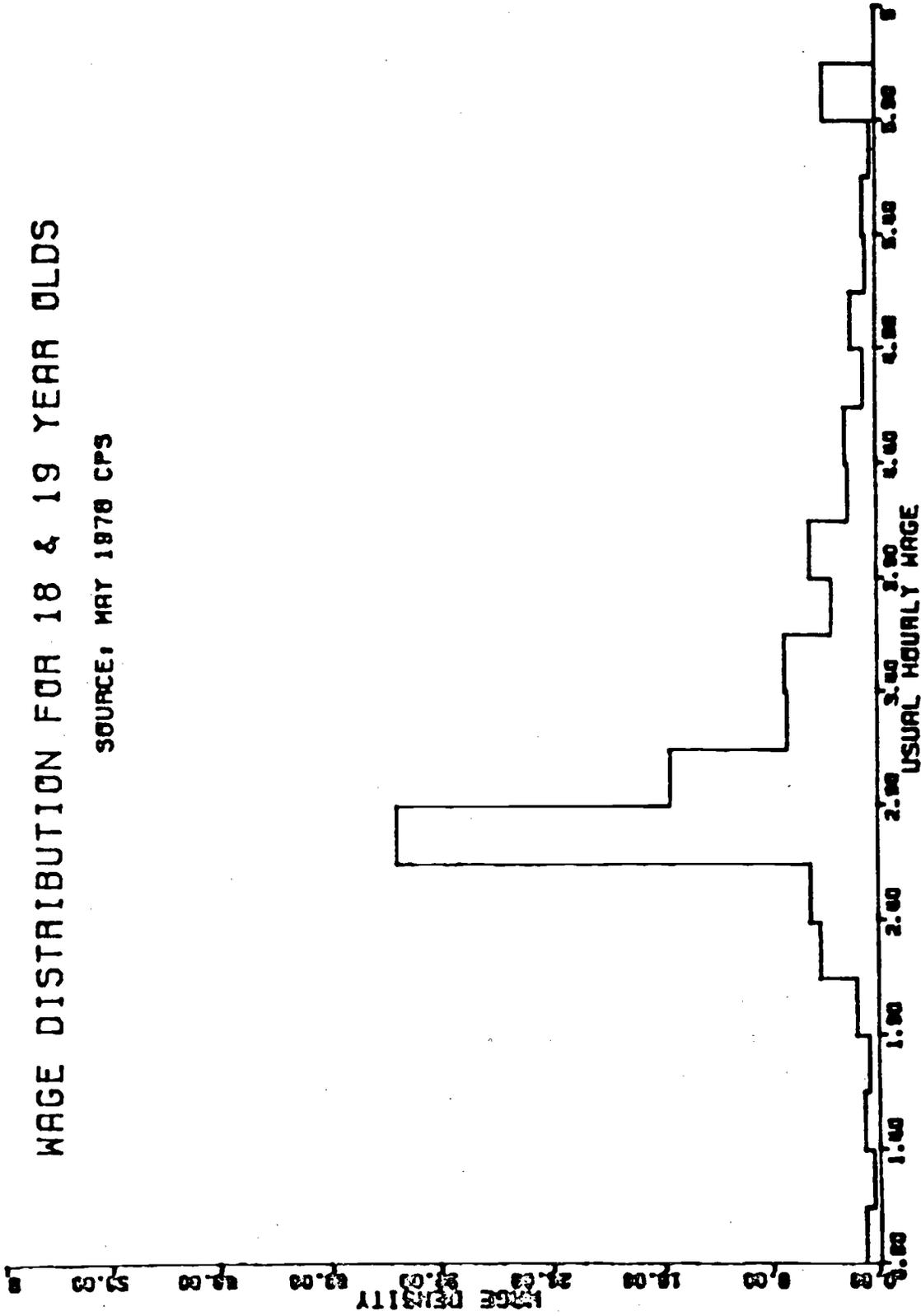
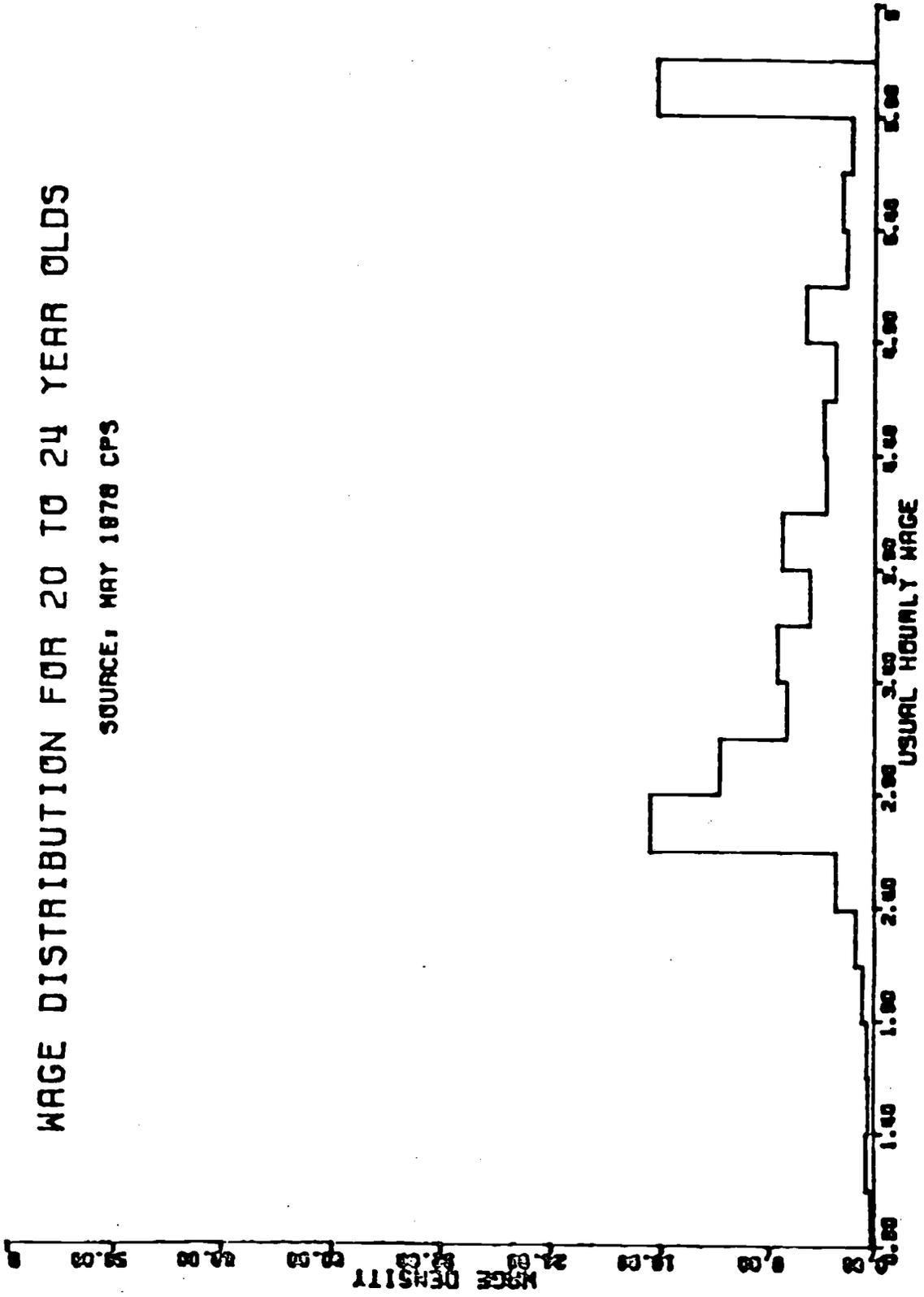


Figure 16

WAGE DISTRIBUTION FOR 20 TO 24 YEAR OLDS

SOURCE: MAY 1978 CPS



youth (aged 14-19) had private sector jobs outside the program, only 18 percent of minority youth did. The program provided jobs for another 2 percent of whites and 14 percent of non-whites. Those figures must be interpreted carefully. Fully 40 percent of all SYEP jobs go to very young teenagers aged 14 and 15, so the contribution for older youth may be smaller. Still the size of the public sector role in the labor market for minority teenagers is astonishing.

It is impossible to know the extent to which summer jobs displaced some youth from unsubsidized private sector jobs. It is worth noting that employment rates for minority teenagers as shown in Figure 13 may not have fallen as much over the seventies in the summer months as they did during the school year, suggesting perhaps that these programs mitigated the problems of minority youth. On the other hand, it is possible that these public sector jobs do not provide the kind of work experience and job networks that private employment might.

The Minimum Wage

Since its inception in 1938, the scope of the minimum wage has been continuously expanded, primarily through extended coverage. Perhaps 90 percent of non-supervisory workers are now subject to the minimum, either through the federal legislation itself or through state extensions. The real minimum was about the same in 1970 as in 1980. In these years it was about 15 percent higher than the 1973 level, the lowest of the real values during the seventies.

What has been the effect of the minimum on the employment and earnings of youth? Figures 14 through 16 show the distribution of youth wage

Table 9. Simulated Employment Effects of the Minimum Wage, by Race and Age

Age Group	Total	White	Black
16-24	3.9	3.7	5.6
20-24	2.2	2.1	3.5
16-19	7.1	6.9	10.1
16-17	8.7	8.6	10.1

rates for selected age groups in 1978, when the minimum was set at \$ 2.65.

The figures make clear that:

- The minimum has a dramatic effect on youth wage rates. A large proportion of some age groups are paid at the minimum. A substantial proportion of teenagers are also paid below the minimum.

The employment impact of the minimum wage has been the subject of a long list of studies that we shall not attempt to summarize. Rather we shall report results from a recent analysis of Meyer and Wise [1981]. Their study concentrates on youth 16 to 24 during the 1970s. It also emphasizes the earnings as well as the employment effect of the minimum. According to their estimates,

- Without the minimum wage, employment of youth would have been 3.9 percent higher than it was. Employment of those 16 to 19 would have been 7.1 percent higher and among those 20 to 24, it would have been 2.2 percent higher. The effect among blacks was considerably larger than among whites, 5.6 versus 3.7 percent.

Simulated employment effects of the minimum are shown in Table 9 by race and age groups. These estimates reveal a rather substantial employment effect.¹ The minimum wage also affects youth earnings. It increases

1. Other estimates are in general not dramatically different from these but are probably a bit lower on average.

on average the average wage of those employed but reduces the number of persons employed. Results not shown here show that the two effects almost exactly offset one another. Total youth earnings are about the same with the minimum as they would be without it. It is not surprising that the minimum should have a relatively large effect on teenage employment. Over the seventies, the minimum was on average very close to the average wage rate 16 to 17 year olds would have had in the absence of the minimum.

As we have shown above, many employed youth, especially minority youngsters, have government-provided jobs that pay the minimum, more than some would otherwise receive. If it were not for these jobs, the observed effect of the minimum would presumably have been somewhat greater.

Aid for Post-Secondary Education: The BEOG Program

The role and scope of federal student financial aid activities has been periodically debated and revised. In the middle 1960s a desire to equalize educational opportunities across income classes became prominent. The Basic Educational Opportunity Grant (BEOG) Program initiated in 1973 gave fullest expression to this policy goal. Over the 1970s, programs became the dominant aid instrument as, over time, benefits under the program were extended to higher income groups.

We know of only one analysis of the program's impact.¹ It reveals that:

- Without BEOG awards, post-secondary school enrollment of low income youth would be about 37 percent lower than it is. Enrollment of middle

1. See Fuller, Manski, and Wise [1980].

and upper income youth would be only 6 percent lower, although by 1979 40 percent of BEOG aid was to middle and upper income youth.

- Without the BEOG grants, enrollment in two-year colleges and in vocational-technical schools would be about 31 percent lower. Enrollment in four-year colleges and universities is virtually unaffected by the program.

Approximately 40 percent of 1979 awards went to middle and upper income students. But awards to upper and middle income youth have very little effect on their enrollment patterns, whereas awards to low income students have a substantial effect on the post-secondary school enrollment of this group. In addition, the awards have virtually no effect on enrollment in four-year colleges for any income group, according to these estimates. The effect of the awards is to increase enrollment by low income students in two-year colleges and in vocational-technical schools.

Predicted enrollments (in thousands) by school type and by income group, with and without BEOG awards (in thousands) are as follows in 1979:

Income Group	All Schools		Four-Year Schools		Two-Year and Voc-Tech Schools	
	With BEOG	Without BEOG	With BEOG	Without BEOG	With BEOG	Without BEOG
Lower	590	370	128	137	462	233
Middle	398	354	162	164	238	190
Upper	615	600	377	378	238	222
Total	1603	1324	668	679	935	645

Total enrollment would be 17 percent lower without the BEOG awards according to these estimates: 37 percent lower among low income students, 11 percent lower among middle income youth, and 2 percent lower among upper income youngsters. While for many low income students, the awards seem

to tip the balance in favor of junior colleges and vocational schools versus full-time entry into the labor force, attendance at four-year colleges and universities is not affected greatly by the awards. Apparently two-year schools, vocational schools, and work are much closer substitutes for each other than four-year college programs are for any of these three.

In conclusion, we emphasize that these three programs apparently have countervailing influences on employment of young people. Youth employment programs are intended to increase employment, especially among the disadvantaged. The grants are designed to increase education and therefore improve labor market opportunity later. But since these programs increase the enrollment of low income youth, they reduce their measured employment while they remain in school, since persons in school work less than persons out of school. At the same time, the minimum wage reduces employment for these same groups.

CONCLUSIONS

We have examined employment patterns across groups and over time. Our basic focus has been on understanding the widening racial employment gap over the seventies. For both men and women, the gap grew by roughly 14 points during the 1970s. For men this reflected a roughly 4 point rise in employment rates for whites and a 10 point fall for blacks. For women, virtually all of the change came from rising employment of white women. We have explored a wide variety of possible explanations for these changes. Our findings are:

- The changing structure of the military may have had a significant influence on employment patterns of youth. If persons in the military are treated as employed, we reduce the unexplained growth in the employment gap by 2 to 3 points for men.

- The macroeconomic state of the economy continued to have a substantial influence on employment of young people. The general economic weakness of the 1970s hurt the young, particularly blacks, disproportionately. These influences may have added 2 points in the gap for both men and women.
- Enrollment rates for blacks rose slightly over the seventies. For white males rates fell sharply (perhaps due to the elimination of draft-induced enrollment in the late sixties), while for females employment was stable in the seventies. These changes can explain perhaps 3 points of the gap for males and none of the gap for females.
- The median black is now receiving almost as much education measured by years of schooling as whites. Yet employment rates for blacks vis-à-vis whites have not increased correspondingly.
- Employment for whites enrolled in school grew considerably in recent years and now reaches almost half of all youngsters in a given month. For blacks work while in school remains uncommon.
- Household formation decisions are highly correlated with schooling and employment patterns. Women with children are far less likely to work or attend school than their childless peers. Unwed whites are almost always out of school and rarely work. For unwed blacks, the influence of childbirth on school enrollment is less severe, but still substantial. In general, employment rates are higher for unwed mothers if they live in a parent's home than if they live independently. The sharply reduced birth rate of the 1970s for white women seems to have pushed up school enrollment and work when out of school. Moreover, the labor force participation of mothers and childless married women rose sharply over the decade. Perhaps 3 points of the rise in the employment gap for women can be accounted for by these forces for both men and women.
- Policies of the 1970s simultaneously increased and diminished demand for youthful workers. Youth programs grew enormously over the decade. At the same time the minimum wage remained a deterrent to hiring unskilled youth and BEOGs grants increased post-secondary school enrollment for youth from low income families. Overall there was an enormous increase in youth employment programs during the

late 1960s and 1970s. Unfortunately, the employment picture for minority youth looks even worse today than it did in the 1970s.

The one area where we feel somewhat uncertain involves the large supply changes affecting the labor market. While we believe the baby boom alone cannot explain very much, coupled with the sharply reduced military manpower needs in the 1970s the increase in the supply of civilian manpower was quite sizable. Moreover the steep rise in labor force participation of white women, both young and old may have further crowded the labor market. Black workers may have been displaced. We have not sought to quantify these effects at all.

The changing employment patterns for whites can be traced almost entirely to the factors we could measure. White men attend school somewhat less and work more when they are in school than they did in the 1960s. As a result, employment rates rose, though they were dampened by worsening economic conditions and the minimum wage. White women work more in school, are less likely to be married or have children, and if they are married or have children they are more likely to work now than in the 1960s. These trends collectively overpowered negative macroeconomic forces.

For blacks the patterns are somewhat more perplexing. Changing military structure, worsening macroeconomic conditions, changing family structure, and increased school enrollment all contributed to the decline in civilian employment of blacks relative to whites. Still many of these results simply push questions back to one further level of complexity. Why are blacks more likely to be in the military, why are they strongly influenced by macroeconomic fluctuations, why are family structures changing? Perhaps the answers to these questions would also shed light on the large residual gap we have been unable to explain.

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