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BLACK YOUTH NONEMPLOYMENT:
DURATION AND JOB SEARCH

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ABSTRACT

This paper analyzes reservation wages and durations of nonemployment for young blacks and whites. Self-reported reservation wages are compared for blacks and whites before and after controlling for indicators of labor demand such as received wages, weeks worked, or other personal characteristics. The effects of these reservation wages on durations of nonemployment as well as on subsequent wages are analyzed as well.

The results show that young blacks seek jobs and wages which are comparable to those of young whites, but which are higher relative to what young blacks obtain. On the other hand, young blacks appear at least if not more likely to take specific low-skill jobs, albeit temporarily. These reservation wages appear to have positive effects on nonemployment durations and subsequent wages for both groups, and explain up to a third of the higher nonemployment durations of young blacks.

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I. Introduction and Overview

Total nonemployment is often decomposed for analytical purposes into two components: the frequency with which spells are experienced; and the duration of an average spell. The frequency is the total number of spells and reflects the rate of turnover (i.e., quits and layoffs) out of employment; while duration reflects the length of time before employment is gained or regained. While most analyses of the youth employment problem for blacks and whites in the past decade have stressed job turnover and the frequency with which spells of unemployment occur, some recent work by Clark and Summers shows that the durations of these spells are crucial components of observed unemployment rates for youth and adults alike.

This study analyses the lengthy durations of nonemployment spells that are observed for young black males relative to those of young white males, and focuses particularly on reservation wages as determinants of duration. Reservation wages are defined as the lowest wages which individuals are willing to accept for employment, and are stressed in the job search literature as the key determinants of unemployment duration which are chosen by individuals on the supply side of the labor market. Of course, labor demand can affect the durations of nonemployment for young blacks as well; the key determinants on this side of the market include aggregate demand, skills, and discrimination. The direct effects of these forces on duration for young blacks and whites are also considered below, as are the effects of low levels of demand on the choices of reservation wages for each group.

The importance of analyzing durations of nonemployment spells and reser-

vation wages in studying black youth nonemployment (i.e., unemployment or time out of the labor force) can be easily demonstrated. Clark and Summers (1982) point out that the duration of nonemployment is significantly longer for young blacks than for young whites. They also find that differences in unemployment and nonemployment rates between young blacks and whites primarily reflect differences in probabilities of gaining employment among those without jobs rather than differences in probabilities of becoming nonemployed. Therefore, an ability to explain the lengthy durations of unemployment and nonemployment which young blacks experience would also mean an ability to explain much of the huge rates of nonemployment for young blacks generally.

As for the focus on reservation wages as a determinant of duration, this has been motivated by the conflicting views on the relative willingness to work among young blacks and whites which have appeared in recent studies by social scientists as well as in the popular press. In a few studies, young blacks appear to be more willing than young whites to accept certain low-wage jobs.¹ This was found to be true even after controlling for personal and family background characteristics. But elsewhere the reluctance of young blacks to accept low-wage jobs which are considered "dead-end" or "menial" has been stressed. This latter view emphasizes the development of a new consciousness or a new set of expectations among blacks as a consequence of the Civil Rights movement ; and, according to this view, jobs indicating low status to which blacks may have been relegated in large numbers historically are now shunned by younger cohorts of blacks. The role of crime as a superior source of income and/or status is also stressed in this literature.

Therefore this study analyses reservation wages, as indicators of willingness to accept certain kinds of work, as well as durations of nonemployment for young blacks and whites. Two major issues are considered here: (1) Potential differences in ^{reservation}wages between young blacks and whites; and (2) The effects of these reservation wages on durations of unemployment for each. Self-reported reservation wages are therefore compared for blacks and whites before and after controlling for various indicators of labor demand such as received wages, weeks worked, and the personal characteristics which determine them. The effects of these reservation wages on duration of nonemployment spells as well as on subsequent wages are then analyzed. Some evidence is also presented on certain determinants of reported reservation wages, though a complete, structural model of reservation wage formation is not attempted here. The data used in the analysis are taken from the Youth Cohort of the National Longitudinal Survey (NLS) and the National Bureau of Economic Research (NBER) Survey of Inner-City Black Youth.

There are four remaining sections in the paper. The first section presents a general framework for the analysis of nonemployment durations and reservation wages which is used to derive the equations that are estimated below. Some econometric issues which arise in the estimation of these equations, and the data used for the estimation are also discussed here.

The second section presents empirical evidence on reservation wages for young blacks and whites. Summary evidence on various self-reported measures of reservation wages and received wages is first presented. Differences in results between various reservation wage measures are explained, and some evidence is

presented on the relationship between reservation wages, the characteristics of jobs which individuals seek, and the kinds of low-wage, low-skill jobs which are somewhat more available for black youth. Equations in which these reservation wages are estimated as functions of labor market characteristics and experiences such as wages and weeks worked are also presented. Some of these equations are then used to calculate racial differences in reported reservation wages when controlling for labor market characteristics.

The third section explores the effects of reported reservation wages on subsequent labor market outcomes for young blacks and whites, such as nonemployment durations and wages received on the next job. Some separate wage equations are also estimated for different categories of job ultimately received. These equations not only estimate the extent to which differences in reservation wages for blacks and whites explain their differences in nonemployment rates; but they also show which of the various reported reservation wages have the most predictive power with regards to outcomes and thereby test for the "validity" of these self-reported measures.

Finally, the fourth section summarizes the results presented earlier and discusses implications for policy as well as the need for further research.

As for the major empirical results contained here, these can be summarized as follows:

- 1) Reported reservation wages of young blacks for the jobs which they are seeking as well as the jobs themselves, are fairly comparable to those of young whites. But after controlling for labor market characteristics of individuals such as received wages and weeks worked, the reservation wages of blacks

appear to be high. The jobs which are sought also appear to be more unrealistic for blacks than for whites relative to those which are ultimately obtained.

2) Reservation wages for specific, low-wage jobs are generally lower for blacks than for whites, and they appear to be more comparable only after controlling for weeks worked. Both blacks and whites demand compensating differentials for jobs considered to be unpleasant or menial.

3) The reservation wages of young blacks for the jobs which they are seeking have significant positive effects on the nonemployment durations and subsequent wages. Those of whites appear to have lesser effects on their durations of nonemployment but greater effects on their subsequent wages than those of blacks. Thus the jobs sought and wages expected for them again appear to be more frequently realized among whites than blacks.

4) Reservation wage for specific, low-wage jobs often have significant effects on wages subsequently received for both blacks and whites, especially when the jobs attained are low-wage laborer or service jobs.

An overall picture emerges in which young blacks seek and aspire to jobs and wages which are comparable to those of young whites, but these are less realistic for the blacks. Whites with higher reservation wages are therefore more likely to actually obtain higher wages while their black counterparts are relatively more likely to gain longer spells of nonemployment. Though the blacks hesitate to take jobs which are "dead-end" or "menial," this is true of whites as well. In fact, young blacks are more likely than young whites to accept certain low-wage and low-skill jobs, but they appear to do so only temporarily while continuing to hope for better employment. These better jobs

which are sought by young blacks, and their reservation wages for these jobs, thus appear to contribute somewhat to durations of nonemployment, which are already lengthy because of demand-side factors.

I. Nonemployment Durations and Reservation Wages: Models, Data, and Econometric Issues

In order to understand the relationship between nonemployment duration, job search characteristics such as reservation wages and search effort, and demand more generally, the following identity is often used:

$$(1) E(DN)_t \equiv 1/P_{ne,t} \equiv 1/[P(\text{Off})_t * P(\text{Acq} | \text{Off})_t]$$

where $E(DN)_t$ is the expected duration of a completed spell of nonemployment beginning in period t ; $P_{ne,t}$ is the transition probability--i.e., the probability that the individual will move from nonemployment to employment within the specified time period; $P(\text{Off})_t$ is the probability of receiving a job offer; and $P(\text{Acq} | \text{Off})_t$ is the conditional probability of accepting offers that are received.

The probability of receiving offers for a young black reflects, among other things, the demand for his labor that exists in the labor market. Among the factors which shift this demand are the level of aggregate demand in the individual's area, which includes the business cycle and the strength of the local economy; these factors have been shown to have strong effects on employment for both black and white youth.² A further effect on the demand for young black labor might be discrimination. Blacks may be perceived as having fewer skills than whites and therefore might face greater difficulty in obtaining employment. Young blacks might also have less access to various kinds

of employment than do young whites for the following reasons: 1) Blacks who live in inner-city areas may have difficulty travelling to work in firms which have located in the suburbs; 2) they might have less information about job vacancies than do young whites; and 3) they might have fewer "connections" in firms where vacancies arise. Finally, an individual's actual skills may be an important determinant of his probability of receiving offers in the labor market. While the demand shift factors determine the potential probability of receiving an offer, the probability of actually receiving one also depends on the intensity of the individual's search effort.

As for the probability of accepting offers, this depends exclusively on the level of the individual's reservation wage relative to the offered wage. Offer wages are embodied in a distribution $f(w^o)$ that is conditional on having received an offer and that also reflects the demand shift factors mentioned above. Jobs are accepted only when $w^o > w^r$, where w^r are reservation wages. Therefore, the expected duration of unemployment for an individual with search effort $SE_{i,t}$ and reservation wage $w^r_{i,t}$ is:

$$(2) \quad E(DN)_{i,t} = \frac{1}{\pi(SE_{i,t}) \cdot (1-F(w^r_{i,t}))}$$

where π is the function relating search effort to offer probabilities and F is the cumulative distribution function of offered wages.

This equation assumes, of course, that reservation wages and search effort will remain constant over the entire expected duration of nonemployment. If this is not the case, the transition probabilities and expected durations for subsequent periods will change and will be reflected in

the observed durations of nonemployment.

As for expected wages, these are also determined for a given offer wage distribution and reservation wage in the following manner:

$$(3) \quad E(w)_{i,t} = \frac{w^r \int_{w^r}^{\infty} w \cdot f(w) dw}{\int_{w^r}^{\infty} f(w) dw}$$

where each possible wage above the reservation wage is weighted by probability of receiving it. This weighted sum is divided by the sum of the weights so that these weights add up to one.

Having shown how reservation wages interact with offer probabilities and offer wages to determine expected durations of nonemployment and received wages, the determinant of reservation wages can be briefly considered. It is fairly standard in the job search literature to show that reservation wages are in part determined by the following factors:

$$(4) \quad w^r = w^r(\pi, f(w), y, d, H)$$

where y represents an individual's nonwage income sources, d represents his discount rate, and H represents an individual's time horizon for working.³ Nonwage income raises reservation wages by lowering the costs of nonemployment, while greater demand-side factors and horizons raise reservation wages by raising the expected benefits of demanding a higher wage for employment. Higher discount rates should lower these expected benefits and therefore lower reservation wages. With regards to the offer wage distribution $f(w)$, it has been shown that both the mean and variance of this distribution have positive effects on reservation wages.

This basic model can be extended in a number of ways to make it more

relevant for white and black youth. For instance, it can also be shown that, if individuals do not have rational expectations with regard to offer probabilities and offer wages, their subjective expectations will determine their reservation wages rather than the actual demand side characteristics; and overly optimistic expectations which slowly adapt over time may lead to high reservation wages. Furthermore, reservation wages can vary across jobs for a particular individual if the nonwage characteristics of these jobs vary; and if these nonwage characteristics enter the individual's utility function.⁴ Thus the reservation wages for jobs with unpleasant characteristics may exhibit demands for "compensating differentials."

Models in which utility is maximized instead of income also allow tastes for leisure to affect reservation wages as well. These models incorporate labor supply as well as job search factors, and can be used to explain search intensity and labor force participation.⁵ Thus the reservation wages of people who are not always actively searching can be considered as well.

Finally, these models often imply a declining reservation wage as the spell of nonemployment proceeds, rather than the constant one assumed above. This can be caused by a number of factors, which include: declining assets or flows of outside income; declining marginal value of leisure; adapting expectations; and systematic search in which higher wage offers are pursued earlier and lower ones later.

The models of reservation wage formation and non employment duration discussed here imply that a set of recursive equations could be estimated empirically in which the demand for an individual's labor and other factors

determine his reservation wage which, in turn, determine subsequent spells of nonemployment and subsequent wages. In particular, the following equations are estimated here:

$$(5) \quad DN_{t+n} = DN(X_t, w_t^r, S_t)$$

$$(6) \quad w_{t+n} = W(X_t, w_t^r)$$

$$(7) \quad w_t^r = w^r(X_t)$$

where DN_{t+n} is the duration of the completed spell of nonemployment from the (1979) survey date onward and w_{t+n} is the subsequently received wage; w_t^r and is the reservation at that time and S_t is a measure of search effort; and the X_t are the determinants of the demand for an individual's labor.

Except for these labor demand factors, other determinants of reservations wages which are listed above are omitted from equation (7). For one thing many of these factors which we observe can be considered endogenous with respect to reservation wages--e.g., many sources of nonwage income which range from government programs to illegal activities. The same can be said about preceding spells of nonemployment.⁶ Including endogenous variables as determinants in the model would lead either to serious biases or to identification problems which would hopelessly complicate the analysis. For this and other reasons, the goals of this paper are simpler: to compare reservation wages of young blacks and whites relative to what is available for each, and to evaluate the effects of these reservations on subsequent wages and spells for each group.

However, certain determinants of reservation wages are examined below in

order to explain differences in responses by the same individual to different reservation wage questions. For instance, occupational expectations and horizons are considered below through the use of summary and tabular evidence on these factors. The effect of nonwage job characteristics are also considered, since reservation wages are asked for various specific jobs in the surveys used below. Some outside evidence on the role of nonwage income is also mentioned below.

It should also be noted here that Equation (5) is essentially a demand function; and its identification is achieved in this recursive model by having direct observations of the reservation wage rather than the received wage as the independent variable in the duration equation. The reservation wage itself is a function of the expected demand-side determinants of duration and subsequent wages but not of duration or wages per se; its exogeneity in Equations (5) and (6) is thereby assured.

Also, the above equations are estimated separately for blacks and whites in all cases. Racial differentials in variables such as reservations wages, when controlling for personal characteristics in X_t , are obtained by using estimated coefficients from equations for whites with mean characteristics of blacks to obtain predicted reservations wages for whites with the same characteristics as blacks. The differences between these predicted measures and the actual ones for blacks are considered estimates of the race effect.

Most of the econometric issues associated with estimating Equations (5) - (7) are discussed below as the empirical results are presented. But a few of the more salient problems are briefly mentioned here, as well as the methods

used for dealing with them.

For instance, it is crucially important for a comparison of reservation wages between blacks and whites that the determinants of the demand for an individual's labor, represented by X_t , be reasonably complete. Otherwise, unobserved characteristics which are positively correlated with wages and employment but negatively correlated with race will bias downwards any measure of the black-white differential in reservation wages which attempts to control for demand characteristics.

To deal with this problem, various specifications of equation (7) are estimated. In some, the X_t reflect a set of specific determinants of wages and employment. These include "human capital" variables such as age, experience, schooling, and "Knowledge of the World of Work;"⁷ background variables such as household income and the presence of a library card at home; and other individual characteristics such as region, urban residence, and marital status. But since this set is bound to be incomplete, wages on most recent job or weeks worked in the previous year are used instead as controls in other equations. The former can be considered a proxy for offer wages while the latter a proxy for offer probabilities. Of course, received wages and weeks worked reflect expected wages and durations which are themselves conditional on past reservation wages. Therefore, these variables are instrumented on the exogenous X_t and appear only as predicted values in equation (7). These predicted values enable individuals who would otherwise report wages as missing due to lack of employment in the previous year to be included as well in these estimations. But since the predicted variables are functions of the same underlying deter-

minants, they are too highly correlated to be included together in any equation and they therefore appear separately in versions of equation (7). The underlying X_t were used separately as well for purposes of identification. The predicted wages are also used as controls in equation (6) for the offer wage distribution. Weeks worked are not used here, since wages are conditional as an offer having been received; proxies for offer probabilities are therefore not relevant here.

As for equation (5) for durations of subsequent spells, the coefficient on the reservation wage is likely to be downward biased by the positive correlation of unobserved characteristics with reservation wage measures and their negative correlations with durations of spells. In fact, this downward bias has been serious enough to produce theoretically incorrect negative coefficients on reservation wages for whites in some versions of this equation. It should also be pointed out that the source of heterogeneity in equation (5) is the correlation of unobserved characteristics with reservation wages and durations, while in equation (7) it is their correlation with reservation wages and race. Thus the controls which are appropriate in the two equations may differ. In fact, an expanded group of X_t variables described below are included directly in equation (5), and they are the most successful in ridding this equation of the downward bias. On the other hand, predicted wages and weeks worked were more successful in dealing with unobserved racial differences in equation (7). Therefore, the results reported below are sometimes based on equations which use different controls for labor demand; these are pointed out in each case.

A further source of downward bias in the estimated coefficients on reser-

vation wages in equations (5) and (6) is the error that may exist in self-reported reservation wage measures. This possibility could have very serious implications for much of the empirical work presented below, since differences in mean reservation wages are an important finding which could be undermined if the self-reported measures are not considered to be valid determinants of behavior. In fact, several reservation wage measures are reported below which give somewhat different results on relative reservation wages of blacks and whites. But by estimating equations (5) and (6) separately for each of the reported measures, their effects on behavior can be tested and their "validity" or relative degrees of error thereby determined. This is done below in Section III.

Finally, some potential selection biases are considered here. Since spells of nonemployment observed prior or subsequent to the survey date exist only for those who were nonemployed at that point in time, past completed spells for the currently employed and nonemployed are missed. Several issues are raised here. For one thing, Akerlof and Main (1980) have shown that individuals with multiple spells of nonemployment in a year account for a great deal of observed nonemployment. The focus here on one spell per person thus abstracts from the issue of multiple spells. Furthermore, Kaitz ⁽¹⁹⁷⁰⁾ has pointed out that omission of past completed spells could bias the estimated mean durations of spells in either direction: a "length" bias exists whereby short spells are less likely to be observed than longer ones, creating an upward bias in mean duration; and an "interruption" bias also exists whereby only a truncated part of any given spell is observed, creating a downward bias. The issue is considered below by comparing summary evidence on current spells with that of past spells that are

calculated from retrospective employment histories in the NLS Surveys.

Selection on employment can also bias the coefficients of any of the estimated equations. Heckman (1979) has shown that the correlation between the error term and the regressors of an equation induced by sampling depends on the correlation between the determinants of the sampling variable and those of the dependent variable of the analysis. Since individuals with short spells are more likely to be seen as being currently employed, spell duration can be considered a determinant of observed employment status; and since reservation wages are the hypothesized determinants of this spell duration, they are determinants of employment status as well. Thus the dependent variables of Equations (5) and (7) are themselves the determinants of the samples used to estimate them, and the correlations described above may be quite severe.

To deal with these potential biases, reservation wages of both the employed and nonemployed for each racial group are presented below. Furthermore, attempts have been made to use the Inverse Mills Ratio to correct for potential selection problems in certain wage and reservation wage equations that appear below.⁸

A few other sampling issues will be considered here as well. Students are omitted from all estimations reported below since their labor market experiences often reflect a different set of factors than those of non students. However, results not reported here show similar ratios of reservation wages to received wages for students and nonstudents of each racial group in the NLS; thus the omission of students is unlikely to be a major source of selection bias. The samples here include some individuals who have not actually searched for

work in the previous month, since the discussion above indicates that search theory can be applied to those who are not always actively looking for work. However, the relevant questions in the NLS have been asked only of individuals who have searched in the previous month or intend to search in the coming year; those permanently out of the labor force are thus included here.

A final sampling issue here involves the oversampling of low-income whites in the NLS. Because we are interested in estimating relationships for the black and white populations rather than those nonrandomly selected samples; and because estimated relationships may vary across income groups; all estimations below are weighted by sample weights to produce population-wide estimates. Though this may induce some heteroscedasticity which would bias estimated standard errors, the coefficients are unbiased estimates of population-wide relationships. The decision to weight the samples rather than stratify them by income was based on the small sample sizes used below.

As noted above, two major datasets have been used for the estimation of these equations. These are the New Youth Cohort of the National Longitudinal Survey (NLS); and the Survey of Inner-City Black Youth recently conducted by the National Bureau of Economic Research (NBER).

The new NLS is a survey of young men and women aged 14 through 21 in 1979. Minorities have been oversampled, creating a reasonable nationwide sample of young black males with which to work (1380 in total) and which can be compared to young whites (3081 in total). Since low-income whites have also been oversampled, all estimations are weighted by the sample weights so that a true nationwide sample is obtained within each racial group.

Among the variables included in the NLS dataset are reported reservation wages, search effort in the previous month and retrospective histories which give starting and ending dates for each period of employment. Also, the 1979 and 1980 panels are both available. Thus, for individuals who are nonemployed at the time of the 1979 Survey, durations of subsequent spells and wages ultimately received on the next job are available from the 1980 Survey and appear as the dependent variables of equations (5) and (6). Durations for prior spells can be calculated within each panel. Extensive information is also available on family background and personal characteristics. Occupations aspired to for the future and sought currently are also useful indicators of accuracy in labor market expectations.

The NBER Survey was conducted between November 1979 and May 1980 among 2400 young black men, ages 16 through 24 in the inner-cities of Boston, Chicago, and Philadelphia. The interviews were limited to inhabitants of city blocks with at least 70% black residents and 30% of its families below the poverty line in income. The questions in the survey focused on the daily activities of both the employed and nonemployed; their family backgrounds, their job search behavior and experiences (e.g., reservation wages, number of rejected offers and offer wages, time spent and methods used while searching, etc.); their retrospective work histories for the preceding 12 months; their income sources, participation in illegal activities; and alcohol or drug use. Its usefulness as a supplement to the NLS, which will provide the bulk of the black-white comparisons, lies in: (1) its focus on Northern, inner-city blacks, who are the greatest "problem group" with regards to youth employment; (2) the fact that

many of the questions used here from the NBER Survey are directly comparable to those of the NLS, after which some were modelled; and (3) other questions in the NBER Survey are not duplicated elsewhere and probe at the relevant factors in explaining the black unemployment situation. Thus the two surveys together provide for a good comparison of young blacks and whites nationwide, as well as an additional look at a group of young blacks whose employment problems are especially severe.

II. Relative Reservation Wages for Blacks and Whites: Controlling for Demand Characteristics

This section presents empirical evidence from the NLS and NBER Surveys on the relative reservation wage levels of young blacks and whites. The first few tables present summary evidence comparing various reported reservation wage measures with received wages of young blacks and whites. These provide a crude measure of reservation wages relative to offer wages for each group. The next few tables present distributions of occupations sought and held by these groups and their relationships to the reported reservation wages. It is shown the individuals report quite different reservation wages according to the characteristics of the jobs to which they pertain. Some differences in reservation wages also appear to result from differences in the formats of the questions used to gauge them, as described below. The last few tables in this section show results from equations in which wages, weeks worked, and other characteristics are used to control for a broad range of demand-side factors in determining the relative reservation wages of blacks and whites.

Tables 1 and 2 present summary measures on various reported reservation

wages and received wages in the NBER and NLS Surveys. The first of these presents means and standard deviations on received wages and on reservation wages for jobs which individuals are seeking or have in mind more generally; the histograms presented in the Appendix to this chapter also present the full distributions on many of these variables. The second table presents frequencies on reservation wages for specific jobs such as dishwashing, factory work, etc., which were designated in the survey.

The reservation wages presented in Table 1 for the NLS responses to the question, "What would the wage (or salary) have to be for you to be willing to take it," which follows the question, "What type of work have you been looking for?" or "What type of work will you be looking for?" among those who intend to seek work in the coming year. The reported reservation wage is therefore for "job sought" where the latter is allowed to vary across individuals. Responses are also open-ended in the sense that the individuals could state any wage rates they wished to instead of answering "yes" or "no" to rates listed in the survey. The questions were asked of both employed and nonemployed who sought work or intended to seek work that year, and the questions were asked in both the 1979 and 1980 surveys.

The reservation wages in Table 1 for the NBER survey also refer to jobs which vary across individuals. One question states, "Suppose you were offered a job of the type that you are looking for," and then states different travel times which might be needed to get to and from work. For each time, the individual was asked whether or not he would accept the job at \$2.50 per hour and then at rates which increased by .50 each until one was accepted. Thus, unlike the

Table 1

Reservation Wages and Received Wages:

Means and Standard Deviations

	NLS					
	Reservation Wages: For Job Sought		Received Wages: Most Recent Job		Ratio of Reservation to Received Wages	
	<u>Whites</u>	<u>Blacks</u>	<u>Whites</u>	<u>Blacks</u>	<u>Whites</u>	<u>Blacks</u>
Nonemployed, 1979-80	4.59 (1.96)	4.47 (2.21)	4.75 (2.76)	4.00 (2.20)	.966	1.118
North	4.73 (1.85)	4.51 (1.77)	5.05 (2.96)	3.91 (1.88)	.937	1.153
South	4.31 (2.22)	4.45 (2.54)	4.02 (1.98)	4.07 (2.45)	1.072	1.093
Employed, 1979-80	6.01 (3.05)	5.40 (2.95)	5.13 (2.25)	4.26 (1.86)	1.172	1.268
Full Year	6.18 (3.06)	5.29 (2.36)	5.32 (2.26)	4.30 (1.88)	1.162	1.226
Part Year	5.71 (3.00)	5.66 (3.83)	4.76 (2.16)	4.19 (1.82)	1.120	1.351
Nonemployed, 1979	4.39 (1.95)	4.23 (2.41)	4.23 (2.97)	3.85 (2.41)	1.038	1.099
			Received Wages: <u>First Job,</u> <u>Subsequent Year</u>			
Nonemployed, 1979 Work in Subsequent Year	4.36 (1.86)	4.20 (2.60)	4.73 (2.37)	4.33 (2.03)		

Table 1 (Continued)

Reservation Wages and Received Wages:
Means and Standard Deviations

NBER
Blacks

	<u>Reservation Wages:</u>			<u>Received Wages:</u>
	<u>For Job Sought</u>	<u>For Best Job Attainable</u>	<u>For Any Job</u>	<u>Most Recent Job</u>
Nonemployed	3.61 (1.26)	3.64 (1.58)	3.40 (1.11)	3.98 (1.98)
Employed	4.44 (1.43)	4.59 (1.85)	3.98 (1.19)	4.34 (1.52)

Ratio of Reservation Wages to Received Wages:

	<u>For Job Sought</u>	<u>For Best Job Attainable</u>	<u>For Any Job</u>
Nonemployed	.907	.915	.854
Employed	1.023	1.058	.917

Note: Only nonstudents included in both the NLS and NBER samples in all tables. Total sample sizes are 1599 for employed whites with wages, and 1130 for those with reservation wages in the 1979-80 NLS. Comparable numbers are 350 and 491 for nonemployed whites; 567 and 379 for employed blacks; and 329 and 191 for nonemployed blacks. Sample weights are used in all calculations using the NLS. For the NBER sample sizes are 475 for employed and 821 for nonemployed young blacks. Reservation wages in the NLS defined only for those who sought employment in the previous month or intended to seek it in the next year. Wages received in either survey are for those with employment in the previous year.

NLS version of this question, the one in the NBER survey used a closed rather than open-ended format. The "job sought" reservation wages of Table 1 for the NBER Survey present the wages chosen at the lowest travel time of 30 minutes.

Another series of questions in the NBER Survey read, "Say that for some reason you had to get (a job/another job) right now ... what would be the best job you think you could get," "how much per hour do you think you would earn on that job," and "if you were offered that job tomorrow would you take it if it paid _____," where the same wage rates were used as in the above question to gauge responses. Though one might expect the 30 minute travel time designated in the earlier variable or the stipulation of "having to get a job right now," in the latter to bias the responses in various ways, they were generally quite similar to each other.

A final question appeared in which the respondent is asked to list the "lowest hourly pay you'd be willing to take on any job right now" and these responses are also included in Table for "sought job" and "best job," responses to this final question were open-ended but directly followed the others in sequence. All questions were asked of all individuals, both employed and nonemployed, in the sample.

Several interesting findings emerge from Table 1. Perhaps the most striking is that the reported reservation wages for jobs sought by blacks in the NLS are similar to those reported by whites in an absolute sense, but they are generally higher relative to their previously or currently received wages than are those of whites. For the total sample of nonemployed the ratio of reservation to received wages is 15.2% higher among blacks than whites. The black

and white difference is higher in the North than in the South; but even for the latter group the ratio remains well above that of Northern whites, who constitute three-fourths of the total for this group.

Of course, we would prefer to have offer wages rather than received wages for this comparison, but the former are not observed. As mentioned above, received wages are endogenous with respect to reservation wages due to the truncation of the offer wage distribution from below by past reservation wages--the higher the past reservation wage, the higher is the received wage and the lower is the ratio of the two. Thus, the ratio of reservation wages to offer wages is likely to be even higher for blacks. These measures also ignore the lower probability of receiving offers for blacks and therefore that the level of reservation wages relative to overall demand facing blacks is presumably even lower.

Most of the analysis in this paper concerns only the currently nonemployed, since only they have the spells of nonemployment directly or subsequent to observations on reservation wages which we are trying to explain. But as noted above, selection based on employment creates the possibility that lower reservation wage individuals with shorter past nonemployment spells are being removed from the sample, and that the magnitude of this effect could differ between blacks and whites. The evidence of currently employed than among the nonemployed that is presented below raises the possibility that selection on employment may be an important source of bias.

Therefore Table 1 also includes reservation and received wages of employed individuals in the NLS who are seeking or intend to seek new employment. Since we are primarily interested in the effects of reservation

wages on nonemployment durations, the reservation wages of employed individuals who only do on-the-job search and who have not been nonemployed in the recent past are less relevant here. It is therefore useful to distinguish between those who have had nonemployment spells in the previous year and those who haven't among the currently employed. Also, an individual's current reservation wage is not necessarily unchanged from that which determined his previous nonemployment spell; but at least the current one provides a useful first approximation to the unobserved one from the past.

The results show that the ratio of reservation wages to received wages is higher for employed blacks than for employed whites, especially among those who have had nonemployment spells in the previous year. Thus the omission of these individuals and their spells from the analysis does not appear to induce a major selection bias with regards to reservation wages.

Table 1 also shows that the standard deviations of received wages among both employed and nonemployed are generally lower for blacks as well as their means. Thus the apparently higher reservation wages of blacks cannot be attributed to a higher variance in their offer wage distributions despite the lower means.

Finally, the reservation wages of the 1979 samples, and particularly of those who gain employment in the subsequent year, can be compared to the wages at which such employment is gained. Although comparisons of such means provide no evidence on correlations between the two measures, the comparison is at least useful as a first step towards evaluating the validity and effectiveness of self-reported reservation wages. For if these reservation wages are truncating

distributions of after wages from below, we would expect the mean received wages to be somewhat higher than the reservation wages. In fact, the results here show this to be true for both groups, though the difference is not significant for blacks. Thus either the validity of responses or their abilities to obtain these wages becomes more questionable for blacks than for whites.

Before moving on to consider results from the NBER Survey, it might be useful to briefly consider the full distributions of wages and reservation wages for blacks and whites as well as the summary statistics presented in Table 1. These distributions are presented in the Appendix to this chapter for the nonemployed. They show, for instance, that the ratio of reservation wages to received wages are higher for blacks than for whites at the medians of their respective distributions as well as at the means. These medians are 4.00 for reservation wages and 3.00 for received wages of nonemployed blacks; and 4.00 and 3.50 for nonemployed whites. They also show that few of the jobs sought would be accepted at below the minimum wage (\$2.90 in 1979, \$3.10 in 1980) by either group, although a small fraction of received wages fall below the minimum for each group.

Furthermore, the distributions of received wages are more heavily spiked at the minimum wage for blacks than for whites. If this is true of the actual offer wage distributions as well, any movement of the reservation wages of blacks above the minimum will have greater effects on their nonemployment durations. This is true because a greater part of their wage distribution is being truncated by the reservation wage, leaving a smaller fraction of the distribution that is acceptable. By differentiating Equation (2), we thus see this more

clearly: $dP_{NE}/dw^r = -\pi f(w^r)$ where P_{NE} is the transition probability, w^r is the reservation wage, and π is the offer probability. A more heavily spiked offer wage distribution for blacks means a higher $f(w^r)$ for them and thus a larger effect on transitions and durations. This result is confirmed by estimates from duration equations for blacks and whites below which show larger effects of reservation wages on the durations of blacks. The higher spiking at the minimum for blacks also confirms the notion presented above that the variance of the offer wage distribution appears to be lower for them and cannot be responsible for their relatively higher reservation wage.

Thus far, a fairly consistent picture has emerged in which the reservation wages for sought jobs of young blacks in the NLS are higher relative to received wages than are those of young whites. However, some puzzling contradictions appear when considering the results of the NBER Survey in Table 1 and of the reservation wages for specific jobs in both surveys in Table 2. In Table 1, the reservation wages for "sought jobs," "best jobs" and "any jobs" of young inner-city blacks are well below those of blacks and whites in the NLS, especially relative to their received wages. Furthermore, histograms on the reservation wages of the NBER nonemployed indicate that a substantial fraction of youths are willing to accept their sought jobs below the minimum, and that the median reservation wages are close to the minimum at \$3.00 per hour. That the medians and means differ quite substantially here is no surprise, given the spiking of the wage distributions around the minimum and the large right-hand tails.

Other inconsistencies appear upon consideration of Table 2. This table presents reservation wages for a list of specific jobs. In this case the format

Table 2

Reservation Wages for Specific Jobs:
 Percentage Willing to Accept
 Work at Given Wage or Less

<u>NLS</u>	<u>Whites</u>			<u>Whites</u>			<u>Whites</u>		
	<u>TOT</u>			<u>North</u>			<u>South</u>		
	2.50	3.50	5.00	2.50	3.50	5.00	2.50	3.50	5.00
Sought Job, 1979	.02	.41	.70	.02	.40	.67	.01	.42	.76
Neighborhood Cleaning	.25	.44	.65	.21	.42	.59	.35	.50	.81
Cleaning	.18	.38	.62	.12	.31	.55	.32	.53	.77
Dishwashing	.17	.34	.60	.13	.28	.55	.26	.47	.68
Factory	.22	.46	.70	.20	.44	.67	.28	.52	.78
Supermarket	.17	.39	.67	.16	.35	.63	.21	.50	.78
Received Wage, Most Recent Job	.07	.59	.79	.06	.54	.76	.09	.72	.88
	<u>Blacks</u>			<u>Blacks</u>			<u>Blacks</u>		
	<u>TOT</u>			<u>North</u>			<u>South</u>		
	2.50	3.50	5.00	2.50	3.50	5.00	2.50	3.50	5.00
Sought Job, 1979	.03	.45	.75	.03	.41	.74	.03	.50	.77
Neighborhood Cleaning	.31	.55	.79	.31	.54	.77	.31	.55	.79
Cleaning	.36	.60	.77	.33	.53	.68	.39	.65	.83
Dishwashing	.36	.60	.75	.36	.55	.73	.39	.68	.81
Factory	.35	.71	.86	.38	.66	.82	.33	.76	.89
Supermarket	.44	.69	.84	.40	.61	.78	.48	.76	.89
Received Wage, Most Recent Job	.16	.60	.82	.19	.60	.80	.12	.58	.83

(over)

Table 2(Cont'd)
Reservation wages for Specific Jobs:
Percentage Willing to Accept
Work at Given Wage or Less

<u>NBER</u>	<u>Blacks</u>		
	2.50	3.50	5.00
Sought Job	.24	.65	.93
Dishwashing	.15	.47	.85
Factory Labor	.26	.61	.93
Supermarket	.19	.59	.89
Received Wage, Most Recent Job	.11	.57	.84

NOTE: NLS samples are limited to the 1979 panel of the Survey, since questions for specific jobs only appear that year. Only the nonemployed are included here. Sample sizes are 241 for the whites and 160 for those with received wages; for blacks in the NLS they are 186 and 90 for those with wages; for those in the NBER they are 821 and 503, respectively. Reservation wages for sought job and received wages for most recent job have been rescaled from the continuous to the discrete form.

of the questions is identical between the two surveys, though the list of jobs considered in the NLS is longer. The question reads, "If you were offered a job as a _____, would you accept it at _____?" In each case the wage rates considered are \$2.50, \$3.50, and \$5.00 an hour. Table 2 presents the percentages of the nonemployed who are willing to accept these jobs at each wage rate in the two surveys. Since this set of questions was asked only in the 1979 survey of the NLS, responses to the question on sought job for that year have been rescaled to the same format and are presented here as well. The same has been done for sought job on the NBER Survey and for most recently received wages in both surveys.

Several strong findings emerge from Table 2. Perhaps most important is the much greater willingness of blacks than of whites in the NLS to accept each of the specific low-skilled jobs, even though there is no such greater willingness to accept the sought jobs. This is true among those in the North as well as the South. It is even true when comparing these reservation wages to received wages for each group. Among whites and especially blacks there is a fairly substantial fraction of individuals who are willing to accept these jobs at below the minimum wage, even though this was not the case for either group with regards to their sought jobs.

Comparisons between the different reservation wage measures for each group produces some interesting findings. For whites, the cumulative percentage of individuals willing to accept jobs like factory or supermarket work at \$3.50 or \$5.00 is relatively close to the percentage for sought jobs, even though virtually no one accepts their sought job at \$2.50. But for blacks, no such con-

vergence occurs - the percentage accepting work remains lower at each level for the sought jobs. The discrepancy is strongest among blacks of the South, whose reservation wages for sought jobs are higher but for the specified jobs lower than those of blacks in the North. Finally, some demands for "compensating differentials" can be seen among both blacks and whites in the preference of each for factory or supermarket jobs relative to such unpleasant, dead-end, or menial jobs as dishwashing or cleaning positions.

As for the NBER Survey, there is greater consistency here between reservations wages for sought jobs and those for specified jobs in factories and supermarkets. The same relative dislike of jobs such as dishwashing is also evident. In fact, reservation wages for sought jobs are lower here than for jobs like dishwashing. Furthermore a comparison of the reservation wages for specific jobs between inner-city blacks of the NBER Survey and blacks from the NLS shows that the absolute willingness of inner-city blacks to accept these jobs is quite comparable to that of Northern blacks in the NLS. If anything, the reservation wage rates are somewhat higher for the inner-city groups, especially at the 2.50 mark. In any event, the relatively comparable responses of Northern blacks across the two surveys when questions were asked in the same formats indicates the crucial importance of these formats in determining the different responses received.

To summarize, results from the NLS show that reported reservation wages for jobs sought relative to previously received wages are higher for blacks than for whites, while reservation wages for specified, low-skilled jobs appear to be lower. The latter result is generally consistent with evidence from the NBER

Survey, where similarly phrased questions show reservation wages for specified jobs among inner-city black youths to be somewhat higher than those of Northern blacks more generally. Reservation wages for both groups show a demand for compensating differentials with regard to jobs considered menial or unpleasant.

The variety of responses to differing reservation wage questions by the same individuals in the NLS, with their very different implications for black and white youth job search behavior, make it crucial to understand why these differing responses occur and which of the reported reservation wages have stronger behavioral implications with regards to subsequent wages and durations of nonemployment.

A few different hypotheses will be considered here on the question of why responses differ across various reservation wage equations, and some empirical evidence on the issue will be presented. Some evidence on the crucially important question of which reservation wage measures have more predictive power with regards to subsequent nonemployment durations and wages received will be explored in the next section.

The two hypotheses considered with regards to differences between reported reservation wages include the two major differences between the questions asked in each case. One hypothesis involves differences between open-ended and closed formats on questions of these types. All but one of the NBER questions on reservation wages asked individuals whether or not they would accept specific dollar amounts rather than asking them to come up with a dollar figure of their own; and the one question in which this was not done directly followed the others in sequence. Accordingly, Tables (1) and (2) show fairly

consistent responses to these questions in the NBER Survey. By contrast, the "job sought" question in the NLS is open-ended while the one for specific jobs uses specific dollar figures; and the inconsistencies between responses to the two kinds of questions are much stronger in the NLS, for whites and especially for blacks, than they are in the NBER data.

One explanation for this may be that open-ended questions allow individuals to confound their wage expectations with their reservations.⁹ This hypothesis is supported by the fact that explicit wage expectations were asked of individuals in the NBER Survey, and responses to these questions were substantially higher than responses to reservation wage questions. In fact, the mean wage expected on the "best job" obtainable by nonemployed individuals in the NBER Survey is 4.88, which is substantially closer in value to the reported reservation wages of blacks in the NLS than are the reservation wages for sought jobs reported in the NBER Survey. The fact that inconsistencies in the NLS are higher for blacks, especially for southern blacks, than for whites may indicate either a greater degree of confounding on their part or a greater degree of expectational error on their part.

Another hypothesis about differences in reported reservation wages involves the nature of the jobs being considered. Reservation wages for sought jobs allow these jobs to vary between individuals and racial groups. The distribution of these jobs for each group relative to what they can obtain could thus be an important determinant of reservation wages relative to received wages for each group. The jobs sought also differ from the specified jobs, which are primarily low-wage and low-skill positions.

Furthermore, different dimensions of the sought or specified various jobs could have different implications for the relevant reservation wage. On the one hand, unpleasant nonwage characteristics of jobs which might also be considered menial may lead to higher reservation wages for these jobs; this appears to be the case for whites and blacks within the NLS as well as for blacks within the NBER, all of whom are more willing to accept factory or supermarket work over dishwashing or cleaning. On the other hand, jobs sought may command higher reservation wages than low-skilled jobs for a number of reasons. For one thing, the low-skilled jobs may be regarded as more temporary because of their "dead-end" nature while sought or desired jobs may be regarded as more permanent. As noted above, theoretical treatments of reservation wages within the search literature have emphasized the importance of time horizon and its positive effects on reservation wages; and empirical evidence has shown that turnover rates are higher and employment durations lower in low-wage service occupations than in other occupations.¹⁰ Another reason why sought or desired jobs may carry higher reservation wages than low-skill jobs is that higher wages may be regarded as more appropriate and therefore more equitable than the former. A long tradition exists within the literature of labor economics that emphasizes the importance of traditional wage norms for jobs and considerations of equity and relative position with regards to comparable workers.¹¹ An understanding among youth that these low-skill jobs generally pay low wages may enable them to occasionally accept these jobs, particularly if they regard them as being temporary and if they need the earnings quickly while they continue to search or to aspire to longer-term positions for which they will demand

higher pay. Of course, the willingness to accept the low-skill job even temporarily diminishes greatly when these jobs are considered unpleasant or menial, as is the case for dishwashing and cleaning.

It is therefore quite possible that the higher reservation wages in the NLS for jobs sought may reflect the characteristics of those jobs as well as confounding of expectations with reservations. Again, one must ask why the willingness to accept temporary jobs would be greater for blacks in the NLS than for NBER blacks or for whites. It might be, for instance, that the dislike of dead-end or menial jobs is the relatively stronger effect for whites and Northern, inner-city blacks; it might also be that the expectations of the nationwide (including Southern) groups of blacks with regards to attainable occupation or pay at those jobs may be more unrealistic than those of whites and of Northern, inner-city blacks. It thus becomes clear that expectations about wages and jobs attainable are an important part of both explanations, although their implications for reservation wages differ somewhat between the two stories.

Some empirical evidence on the issues of occupational expectations and time horizons, as well as their effects on the various reservation wage measures, is provided below. Table 3 presents distributions on occupations held, sought, and aspired to at age 35 by nonemployed blacks and whites in the 1979 NLS. Distributions for occupations held prior to the current spell of nonemployment as well as for those found after the spells are both listed. The aspired occupations represent responses to the question, "What do you hope to be doing at age 35?"

Table 3

Frequencies on Occupations Sought and Held by the
Nonemployed

NLS

	<u>Job Previously Held</u>		<u>Job Sought</u>		<u>Job Found</u>		<u>Job at Age 35 Aspired to</u>	
	<u>W</u>	<u>B</u>	<u>W</u>	<u>B</u>	<u>W</u>	<u>B</u>	<u>W</u>	<u>B</u>
Not Specified	.318	.451	.504	.560	.325	.352	.165	.104
White Collar	.045	.059	.075	.062	.042	.110	.529	.556
Crafts- Operatives	.339	.185	.262	.248	.397	.248	.252	.290
Laborer Service	.298	.305	.160	.130	.236	.290	.054	.050

Note: These are weighted frequencies for the 1979 panel of NLS. Job Previously Held refers to 1979 survey while Job Found refers to response from 1980 Survey for those nonemployed in 1979.

The results show that the distributions of jobs sought and aspired to are remarkably similar between young blacks and whites while the distributions of jobs held are not. More specifically, blacks are more heavily represented in the laborer and service categories as well as the white collar area (mostly clerical) while whites are much more heavily represented in the crafts and operative positions. Since the latter categories generally include more skilled and highly-paid positions than the former, it appears that young blacks have occupational expectations which are higher than those of whites relative to what each group ultimately obtains. This view is also consistent with one presented over ten years ago by Leonard Goodwin (1973), who argued that the black and poor wanted work like everyone else but had no means of achieving their occupational aspirations.

Having demonstrated the relatively higher occupational expectations of young blacks, it remains to be seen how these expectations affect their responses to the various reservation wage questions. Table 4 presents reservation wages of nonemployed blacks and whites in the NLS for jobs sought and jobs specified disaggregated by job sought. As before, reservation wages for jobs sought appear in continuous form and as the percentage accepting work at \$3.50 or less; reservation wages for specified jobs appear only in the latter form.

The results show that the reservation wages of young blacks for jobs sought increase quite dramatically when the job in question moves beyond the laborer and service category. The percentage of blacks willing to accept these jobs at \$3.50 or less drops from over 50% when the job sought is from this category to 40% or less in other categories. For whites this decline is visible

Table 4

Mean Reservation Wages by Occupation
Sought of the Nonemployed

<u>NLS - B</u>	Job Sought:							
	<u>Not Specified</u>		<u>White Collar</u>		<u>Craft & Operative</u>		<u>Laborer & Service</u>	
	<u>W</u>	<u>B</u>	<u>W</u>	<u>B</u>	<u>W</u>	<u>B</u>	<u>W</u>	<u>B</u>
Reservation Wage for Job Sought	4.51	4.49	4.04	4.28	4.76	4.24	3.62	3.28
Percent Accepting at < \$3.50								
Job Sought	.365	.409	.529	.322	.422	.371	.495	.813
Neighborhood Cleaning	.383	.558	.539	.430	.515	.543	.491	.515
Cleaning	.368	.629	.337	.118	.438	.592	.344	.669
Dishwashing	.344	.645	.303	.413	.317	.533	.400	.688
Factory	.479	.681	.479	.457	.505	.789	.348	.791

Note: Samples are the same as those of Table 2. All means are weighted.

though much less pronounced. Willingness of blacks and whites to accept the specified low-skill jobs also shows some sensitivity to the jobs which they claim to be seeking. In particular, those who are seeking white-collar jobs are less likely to accept specified low-skill jobs than those who are seeking other jobs. But the differences in these measures across the job sought categories are far less striking than they are among blacks for the reservation wages attached specifically to jobs sought.

This fact becomes even clearer when one compares reservation wage measures within each category of job sought. Generally, those who seek laborer or service employment have comparable or lower reservation wages for these sought jobs than for the specified low-skill jobs. But among blacks, those who seek other jobs have higher reservation wages for sought jobs than for specific ones. It is clear, then, that the jobs which the black nonemployed seek affect their reservation wages for these positions, although many of them who are seeking skilled blue-collar or white-collar jobs at higher wages seem willing to accept the specified low-skill jobs at lower wages.

The hypothesis that blacks will accept lower wages for the specified jobs because they regard them as being more temporary cannot be tested directly, but the latter part of the statement can be demonstrated on its own. The NBER Survey included questions about individuals' intended time horizons for their most recently held jobs. One question asked, "Did/Do you regard this job as being long-term or temporary?" while another asked, "How long did/do you intend to stay on this job?" Responses to these questions are presented for the different occupational groupings in the NBER sample in Table 5. Turnover rates,

Table 5

Time Horizons and Turnover Rates for Jobs
By Occupation

<u>NBER - Blacks</u>	<u>White Collar</u>	<u>Crafts & Operatives</u>	<u>Laborer & Service</u>
Perceptions of Long-Term Potential:			
Long-Term	.39	.40	.29
Temporary	.53	.56	.65
Don't Know	.07	.04	.06
Intended Employment Durations:			
< 3 months	.14	.14	.19
3-6 months	.08	.12	.10
6-12 months	.02	.03	.04
Indefinite	.67	.66	.56
<u>Turnover Rates</u>	.64	.66	.72

Note: Calculations are done for all who had employment in previous year. Turnover rates defined as percentage of all with employment who lost or left their jobs in the previous year.

defined as the percentage of individuals who lost or left jobs in the previous year, are also presented for these groupings. As expected, the results show that laborer and service jobs are more often regarded as being temporary by those who hold them than are other jobs; and intended employment durations are shorter as well. The more objectively defined turnover rates also show higher rates of movement out of (and therefore shorter employment durations in) these jobs. The evidence is thus consistent with the claim that black individuals may be less choosy about certain low-skill jobs than they are about others which they are seeking because they often expect the former to be temporary.

Of course, none of this demonstrates that the responses to the open-ended reservation wage questions for sought jobs in the NLS are truly reservations as opposed to just expectations about wages. It remains to be shown which of the reservation wages listed here have greater predictive power with regards to subsequent durations of nonemployment and wages received. This issue will be addressed in Section III.

For now, it has been shown above that reservation wages for jobs sought by young blacks are higher relative to wages they ultimately receive than are those of young whites; while the reported reservation wages of blacks for specific low-skill jobs appears to be lower. The comparisons between means (or frequencies) of reservation wages and received wages are a crude first attempt to judge the level of reservation wages of young blacks and whites relative to the potential offer wages of each group in the labor market, where the latter is a reflection of the demand for labor facing each group. However, such comparisons are of limited usefulness here. For one thing, they control only for offer

wages but not for offer probabilities. Since black-white wage differentials have declined in recent years while employment differentials have risen, omitting the latter from the controls is likely to demand bias estimated black-white differentials in reservation wages. Furthermore, the endogeneity of received wages with respect to reservation wages is also likely to bias downward any measure of the latter relative to the former. This bias may be compounded by the omission from the sample of those without any employment in the previous year, a state which may have been caused for some by their high reservation wages. On the other hand, the ratio of reservation to received wages may not be constant across all individuals within each racial group. In particular, if this ratio declines as received wages rise, the ratio of the means for whites may understate the true ratio among whites whose characteristics are comparable to those of blacks. Thus the black-white differential in this ratio will reflect an upward bias as well; and the net effects of these downward and upward biases are unclear.

Therefore, different specifications of Equation (7) above have been estimated for blacks and for whites, and they have been used to calculate racial differences in reservation wages in the following manner:

$$\Delta w^r = \bar{w}_B^r - \beta_w X_B = (\beta_B - \beta_w) X_B$$

where the β are the estimated coefficients of Equation (7) and the X are either predicted wages, weeks worked, or their underlying determinants which are described in Section I.¹²

The equations used to predict wages and weeks worked appear in Table A.1 of the Appendix. The equations presented there were estimated using OLS and

included both currently employed and nonemployed individuals in the sample. Due to the large number of individuals without wages or work in the previous year, some equations were estimated using the inverse of the Mills ratio calculated from probit equations for employment in the previous year. However, the coefficients on this variable proved to be highly sensitive to what was included in the first stage probit equation and predicted wage values were unstable and often implausible.¹³

Table 6 presents the results of simple reservation wage equations on predicted wages or predicted weeks worked in the NLS surveys. Some equations contain the continuous reservation wage for sought jobs as the dependent variable, while others contain a dummy variable for whether or not the sought or specified jobs would be accepted at \$3.50 per hour. The latter results are from equations which have been estimated as linear probability models.¹⁴ Most of these equations within the NLS have been estimated separately by region; these disaggregated results on the merged 1979 and 1980 sample for the continuous job sought variable are presented as well here.

The results of Table 6 show that the reservation wages of whites are consistently more responsive to demand side factors than are those of blacks. The differences exist with regard to both wages and weeks worked and in reservation wages for both sought and specified jobs. Most of the observed differences are reasonably significant as well.¹⁵ The regional breakdown shows that the lower responsiveness is primarily a characteristic of blacks in the South, but regional breakdowns on the 1979 NLS sample, though not presented here because of very small sample sizes for Southern whites, also show smaller coefficients for

Table 6

Coefficients from
Simple Reservation Wage Equations
for Predicted Wages and Weeks Worked

NLS	<u>Whites</u>		<u>Blacks</u>	
	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>
	Wages	Weeks Worked	Wages	Weeks Worked
<u>Dependent Variables- Reservation Wages for:</u>				
Sought Jobs 1979, 80				
TOT	.623 (.085)	.013 (.003)	.420 (.120)	.007 (.003)
North	.630 (.116)	.012 (.003)	.618 (.162)	.013 (.004)
South	.718 (.175)	.012 (.006)	.260 (.178)	.003 (.004)
Sought Jobs, 1979				
	.716 (.153)	.015 (.005)	.399 (.194)	.007 (.004)
<u>Percent Accepting Wages < \$3.50 in 1979 for:</u>				
Sought Jobs	-.817 (.219)	-.015 (.007)	-.652 (.287)	-.008 (.007)
Neighborhood Cleaning	-.286 (.226)	-.008 (.007)	.134 (.239)	.002 (.007)
Cleaning	-.574 (.220)	-.019 (.007)	-.285 (.285)	-.002 (.007)
Dishwashing	-1.048 (.206)	-.032 (.006)	-.406 (.276)	-.002 (.006)
Factory	-.201 (.231)	-.018 (.007)	-.701 (.257)	-.012 (.006)

Note: Separate equations estimated for wages and weeks worked. Independent variables are predicted values based on equations which are presented in the Appendix. Equations for the NLS are weighted by the sample weights. Only the nonemployed are included in samples for reservation wage equations, while wage and weeks worked equations included both the employed and nonemployed. Continuous reservation wage and predicted wage variables appear in logs.

Northern blacks than for Northern whites with regards to several of the specified occupations.¹⁶

Table 7 shows the calculated racial differences in reservation wages using coefficients of whites from equations in Table 6, as well as those from equations where the X_t variables were directly entered into the reservation wage equation. For the sake of comparison, racial differences in mean reservation wages and in the ratios of reservation to (predicted) received wages are included in the table as well.

The results of this table show that the reservation wages of young blacks for sought jobs are higher than those of whites when controlling for wages and weeks worked. This result appears to reflect the greater responsiveness of reservation wages among whites to wages and weeks worked, as well as the lower levels of these variables for blacks. The weeks worked control produces a larger effect than the one for wages, since the racial difference in weeks worked is larger than that in received wages; predicted values for both are shown in Table A.2 of the Appendix. This table also shows mean values of the underlying X_t variables for blacks and whites. As is apparent from line 2 of Table 7, the racial differences in these variables and their effects on reservation wages were not strong enough to produce a racial differential in reservation wages when these variables were used as the controls.

The results also show that the racial differential inferred above from simply comparing mean reservation to received wages for each group is virtually identical to the one obtained from an equation controlling for weeks worked. It thus appears that the various downward biases discussed above in estimating the

Table 7

Black-White Differences in Reservation Wages -
With and Without Various Controls

NLS

<u>Black-White Differences</u>	Reservations Wages For:				
	<u>Sought Job, 1979-80</u> <u>Total</u>	<u>North</u>	<u>South</u>	<u>Sought Job, 1979</u> <u>Total</u>	
1. Differences in Means, No Controls	-.013	-.031	.051	-.042	
2. Controlling for Exogenous Determinants of Wages and Weeks Worked	-.007	-.018	-.018	-.041	
3. Controlling for Wages	.094	.098	.092	.089	
4. Controlling for Weeks Worked	.134	.133	.155	.149	
5. Ratio of Mean Reservation Wages to Received Wages	.135	.176	.104	.149	
Percent Accepting Wages < \$3.50 in 1979 for:					
	<u>Sought Jobs</u>	<u>Neighborhood Cleaning</u>	<u>Cleaning</u>	<u>Dishwash</u>	<u>Factory</u>
1. Differences in Percentages, No Controls	.015	.076	.194	.279	.227
2. Controlling for Exogenous Determinants of Wages and Weeks Worked	.006	.053	.150	.203	.219
3. Controlling for Wages	-.134	.024	.081	.088	.099
4. Controlling for Weeks Worked	-.167	-.025	-.041	-.108	.013

Note: All differences are between blacks and whites, respectively. Mean received wages and weeks worked in all cases reflect predicted values here, due to large numbers of missing values for the actual variables. All means and equations are weighted. Coefficients from equations for whites are used along with mean black wages, weeks worked, or characteristics to predict reservation wages for whites when controlling for these characteristics.

racial differential though the means are almost exactly counterbalanced by the upward bias of using a constant ratio of reservation to received wages for whites (a notion rejected by the coefficients on wages for whites in Table 6, which are significantly less than one).

As for the results on reservation wages for specific jobs, these remain generally lower for blacks than for whites even when controlling for wages. But when controlling for weeks worked, the willingness of young blacks and whites to accept these jobs become more comparable. In the case of dishwashing, the control for weeks worked actually produces lower reservation wages for whites. This appears to reflect the especially strong responses to wages and weeks worked of the reservation wages of whites for this job.

To sum up, then, the reservation wages of young blacks for jobs sought are comparable to those of young whites in an absolute sense; but they are higher for the former after controlling for wages on weeks worked. The same appears to be true of the jobs sought by young blacks. On the other hand, reservation wages for specific low-skill jobs are generally comparable or lower for blacks, even after controlling for these factors. It remains to be seen how the various reservation wage measures affect the nonemployed durations and subsequent wages of each group.

Before moving on to this issue, a final note should be added concerning the determinants of the relatively high reservation wages of blacks. While some summary evidence has been presented above on the roles of occupational expectations and characteristics, none has been presented on the role of nonwage income which is central to most job search and labor supply models.

But evidence presented elsewhere shows that reservation wages and nonwage income are positively correlated for young blacks in the NBER survey.¹⁶ Furthermore, illegal income is a major source of nonwage income for this sample; and Viscusi (1983) shows that participation in illegal activities is negatively correlated with perceived labor market opportunity for this group. Thus, the outside income generated by illegal activities (and other sources) for low-skill young blacks may be an important source of their relatively high reservation wages.

III. Reservation Wage Effects on Nonemployment Durations and Subsequent Wages

This section considers the effects of the various reported reservation wage measures on durations of subsequent nonemployment spells and on wages subsequently received using the panel data from the NLS. The estimated results of Equations (5) and (6) are therefore presented and discussed below.

Before moving to these results, Table 8 presents summary evidence on the durations of nonemployment spells for blacks and whites in the NLS sample. Durations of three types of spells are presented here: 1) The full, completed spell of all those who are nonemployed at the time of the 1979 survey; 2) the incomplete portion of that spell which occurred prior to the survey; and 3) the portion which occurred subsequent to the survey. The calculations therefore use retrospective employment histories of both the 1979 and 1980 surveys to generate the completed spells for those who were still nonemployed in 1979.

Table 8

**Durations of Nonemployment Spells:
Means and Standard Deviations**

NLS - 1979

	<u>Whites</u>	<u>Blacks</u>	<u>Black-White Difference</u>
Current Completed Spells			
TOT	317.26 (209.28)	406.47 (211.35)	.281
North	298.97 (204.96)	422.70 (215.63)	.414
South	379.29 (217.04)	387.84 (205.99)	.023
Spells Prior to Survey			
TOT	156.93 (126.81)	212.10 (132.35)	.351
North	147.03 (124.24)	223.91 (130.18)	.523
South	189.11 (131.74)	198.89 (133.10)	.052
Spells Subsequent to Survey			
TOT	162.64 (135.45)	195.29 (138.67)	.201
North	153.66 (131.00)	200.06 (141.83)	.302
South	194.04 (147.85)	190.58 (135.48)	-.018

NOTE: Spells calculated from retrospective employment histories in the 1979 and 1980 NLS surveys for those who were unemployed in 1979. All spells greater than one year in length are included with a value of 365. All means are weighted using sample weights. Sample sizes are 241 for whites and 186 for blacks. Black-White Difference calculated with durations of whites as base.

These results show that the durations of completed spells of nonemployment are about 28% higher for blacks than for whites, with somewhat smaller differentials for the portions occurring subsequent to the survey and somewhat larger for those occurring prior to the survey. About all of the differentials occur in the North rather than the South, though these numbers should be interpreted with caution. For durations are substantially longer for Southern whites than for Northern ones. Thus Southern blacks also have substantially longer durations than Northern whites, who make up about three-fourths of the total white population and thus are primarily responsible for their aggregate results. Blacks, of course, are quite evenly split between the two regions and aggregate results weight both about equally.

Two other points should be mentioned here. First, the NBER results are omitted here since only the incomplete, prior spells are available for that cross-section survey. As has been the case before, the calculated results for this group were quite similar to those of Northern blacks in the NLS.¹⁷ Second, the issue of past, completed spells among the currently employed must again be mentioned here. As noted before, the past spells are more likely to have been missed at the time of the survey because they are likely to be shorter. Looking only at spells of the currently nonemployed is therefore likely to give upward-biased estimates of mean duration, especially when considering the full, completed spells (which are not subject to the downward bias of truncation by the survey date). In fact, the past completed spells estimated from the retrospective histories were substantially shorter than any of those presented in Table 8.¹⁸ However, this was about equally true for

blacks and whites. The racial differentials for these spells was also in the 20-30% range, and thus the case for a substantial bias in estimated differences between blacks and whites is reduced.

Therefore, given that the nonemployment rates for blacks and whites in the NLS are .396 and .196 respectively, the overall nonemployment differential is 102%; and differences in durations of spells appear to account for about a third or so of the nonemployment rate differentials between the two groups in this sample.¹⁹ It should be noted that this is a smaller fraction than found by Clark and Summers or by Ballen and Freeman, all of whom found duration to account for over half of nonemployment differentials between young blacks and whites. The one-third figure can thus be regarded as a lower bound to the true estimate.

Moving on to the estimated effects of reported reservation wage measures on these durations, Table 9 presents the coefficients of duration equations which take the form of Equation (5) above. The dependent variable in each case refers to the portion of the completed spell occurring subsequent to the 1979 Survey date, since the reservation wage reported on that date directly determines transition probabilities and therefore expected durations from that date onward.²⁰ As equation (5) specifies, the independent variables include: a reservation wage measure; a dummy variable for whether or not the individual has actively searched for work in the previous month; and a set of variables to control for the labor demand factors which determine offer probabilities and offer wages. This set of control variables includes all of the determinants of wages and weeks worked presented above, as well as dummy variables for occupation, industry, and collective bargaining for jobs

Table 9

Effects of Reservation Wages on Durations of
Subsequent Spells of Nonemployment

Equations for:	Whites		Blacks	
	Coefficient	F-Value	Coefficient	F-Value
1. Reservations Wages for Sought Job, 1979				
Total	.112		.585	
	(.342)		(.313)	
North	.334		1.801	
	(.386)		(.726)	
South	1.001		.136	
	(1.474)		(1.442)	
<u>Percent Accepting Job at < 3.50:</u>				
2. Sought Job		4.75		2.86
3.50	1.68		-.749	
	(.339)		(.339)	
5.00	.801		-.384	
	(.348)		(.358)	
3. Neighborhood Cleaning		1.02		1.10
3.50	-.315		-.424	
	(.244)		(.301)	
5.00	-.042		-.221	
	(.292)		(.355)	
4. Cleaning		1.91		2.09
3.50	-.018		-.416	
	(.258)		(.278)	
5.00	-.484		.133	
	(.278)		(.396)	
5. Dishwashing		1.91		.33
3.50	.142		-.047	
	(.273)		(.302)	
5.00	-.404		.198	
	(.288)		(.386)	
6. Factory		.07		.56
3.50	-.080		-.355	
	(.266)		(.338)	
5.00	.007		-.251	
	(.310)		(.427)	
Critical		2.68		3.10
F.05				

Note: Separate equations estimated for each reservation wage measure. F-Values are for pairs of dummies indicating willingness to work at given wages. Sample includes all those nonemployed in the 1979 panel of the NLS. Controls include a dummy variable for search in the previous month; all of the determinants of wages and weeks worked used above; and also dummies for occupation, industry and collective bargaining. Missing values on these latter variables are given zero values and special dummy variables which take on values of one. All equations are weighted using sample weights. Sample sizes are 170 for whites and 129 for blacks. Durations of spells and continuous reservation wages are in logs. Means of the dependent variables on the total samples are 4.412 for whites and 4.738 for blacks.

occurring prior to 1979. Individuals without employment in the previous year were given zero values on these variables and values of one on dummy variables for missing values.²¹ Other specifications of this equation using the more limited set of demand determinants or using predicted wages or weeks worked were estimated as well. But these controls were generally insufficient to overcome the downward bias due to omitted personal factors on the reservation wage coefficients²², and theoretically incorrect negative coefficients appeared in these equations for whites. Results for blacks were far more robust with respect to the controls used.²³

Two other features of the results presented in Table 9 (as well as in Tables 10-12 for subsequent wages) are noted. Separate duration equations are estimated for each reservation wage measure. These measures appear in both continuous and discrete form for the job sought; and in discrete form only for specified jobs. The discrete forms appear as a pair of dummy variables, which reflect willingness to accept work at 3.50 or less and at greater than 3.50 but 5.00 or less. To compare the predictive power of the different reservation wage measures with regards to outcomes, F-statistics are presented for each set of reservation wage dummies. These can be compared with the critical F-values for joint significance at the .05 level for each sample size that appears in the table as well.

The results show that reservation wages for sought jobs have strong effects on the durations of nonemployment for young blacks, particularly for those in the North. Since both the durations and the reservation wage measures are expressed in logs, the coefficients can be interpreted as elasticities. The results show an elasticity of over .5 for the nationwide sample of blacks and as high as 1.8 for those in the North. The results for whites are positive but much smaller and not significant.

There are two possible interpretations for the smaller estimated coefficients for whites in these equations. One, as noted above, is that the coefficients are downward biased because certain unobserved components of demand are correlated positively with durations but negatively with reservation wages. If either of these correlations is greater for whites than for blacks, the resulting bias in their coefficients will be greater. There is, in fact, some reason to believe that both correlations are greater for whites. For, though these coefficients are not reported here, several of the observed measures of personal characteristics and family background appear to have smaller effects on duration for blacks than for whites.²⁴ Furthermore, the simple equations of Table 6 show greater responsiveness of reservation wages to wages and weeks worked for whites than for blacks. Therefore, if the observed and unobserved components of demand have similar relationships to duration and to reservation wages, we would expect the downward bias to be greater for whites.

However, another explanation of the lower estimated effects of reservation wages for whites is that the effect is, in reality, lower for them. As noted above, the partial effect of reservation wages on durations is $-\pi f(w^r)$, where π is the probability of receiving offers and $f(w^r)$ is the value of the probability density function for wages when evaluated at the reservation wage. Since the evidence of the Appendix shows wage distributions which are more spiked around the minimum wage for blacks than for whites, as well as reservation wages which are higher relative to received wages for blacks, this would imply a stronger effect of their reservation wages on durations. Of course, we would expect the offer probabilities to be lower for blacks, and it is not clear what the net effect on the relative magnitudes of the partials would be. However, as discussed below, it appears that the

probability of individuals obtaining some kind of job offer (albeit at the minimum wage) if desired may be quite high even for young nonemployed blacks; and thus the relatively high reservation wages for sought jobs of young blacks may have strong effects on their nonemployment durations.

Given the estimated elasticities of durations with respect to reservation wages as well as the estimated differences in these reservation wages when controlling for demand characteristics of blacks and whites, we can estimate the overall effect of these higher reservation wages on the nonemployment durations of blacks. The estimated elasticity for blacks of .585, together with a predicted reservation wage differential that was estimated to be as high as .135 relative to received wages for each group, imply that the higher reservation wages add as much as 7.9% to the nonemployment durations of blacks. Given the differences in mean durations between blacks and whites of 28% as reported in Table 8 and of over 30% in the dependent variable of the regression sample (see Note, Table 9), the results imply that a quarter to a third of the average racial difference in duration may be due to the relatively higher reservation wages for sought jobs of blacks.

Since durations of nonemployment appear to account for at least a third and probably over half of the higher nonemployment rates of young blacks than of young whites, the notion that the reservation wages of young blacks may significantly add to their nonemployment rates seems supported by the evidence. Furthermore, the estimated duration elasticity and racial differentials in reservation wages are even higher in the North than in the South, as is the difference in nonemployment durations. Although the estimated duration elasticity for the North seems implausibly high,²⁵ the effects of their reservation wages on their nonemployment rates may be considerable.

Of course, these calculations use the highest estimates of both the duration elasticities and the reservation wage differentials controlling for demand characteristics that were estimated. It has been argued in both cases that the higher estimates are the more believable ones because others are plagued by various downward biases discussed above. Still, it should be pointed out that the effects of reservation wages on overall nonemployment durations and nonemployment rates for young blacks which are calculated above are likely to be upper bounds to the true effects.

A final caveat must be mentioned here with regard to the above calculations that will be elaborated on below. These calculations assume that the elasticities of durations with respect to reservation wages would not change as the latter themselves changed; but, as the formula for the partial derivative implies, the elasticity is itself dependent on the reservation wage. More importantly, a general decline in reservation wages would presumably lower the probabilities of receiving offers facing individuals if the aggregate availability of jobs was less than the number of individuals seeking work. Thus the calculations presented above (of a quarter to a third of the racial differential explained by reservation wages) are even more likely to overstate the true contribution of reservation wages to the aggregate racial difference in durations. The predominance of factors determining labor demand in explaining racial differences in durations is clearly established despite the significant effects estimated for reservation wages.

Moving on to the discrete measures of reservation wages for sought and specified jobs, the results of Table 9 show that the former have greater explanatory power than any of the latter with regards to duration for both blacks and whites. However, the high joint significance level of the dummies

for sought jobs of whites masks the fact that the relative magnitudes of their coefficients are not "correct" -- since those with reservation wages above 5.00 have the shortest durations. For whites, only the reservation wages for neighborhood cleaning have coefficients with sensible magnitudes of which at least one is marginally significant; for blacks this is true of the reservation wages for neighborhood cleaning, cleaning, and factory jobs. But none of these other measures came close to having the predictive power or magnitudes of coefficients (both relative and absolute) which the measure for sought jobs has among blacks. The belief that the measures for sought jobs are less "valid" than those of specified jobs because the former represent a confounding of expectations and reservations may be partially true, but the strong behavioral implications of the former support the case for their validity.

Having evaluated the effects of reported reservation wages on subsequent durations of nonemployment, their effects on subsequent wages can now be addressed. Consistent with the notion shown above that received wages reflect a probability-weighted average of an offer wage distribution truncated by reservation wages, Equation (6) specifies that subsequent wages be estimated as a function of reservation wages and predicted wages, where the latter proxies for the mean of the offer wage distribution.

Table 10 presents the results of these equations for blacks and whites. The reservation wages for sought and specified jobs appear in the same format as in the duration equations, with separate equations and F-values presented for each measure, while the predicted wage is the same as that described above. The results show very significant effects of reservation wages for sought jobs on the received wages of both blacks and whites. The effect is a bit stronger for whites, and for both groups the effects in the North are

Table 10

Effects of Reservation Wages on Received Wages at Subsequent Jobs

<u>Equations for:</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Coefficient</u>	<u>F-Value</u>	<u>Coefficient</u>	<u>F-Value</u>
1. Reservations Wages for Sought Job, 1979				
Total	.554 (.091)		.252 (.106)	
North	.723 (.116)		.643 (.170)	
South	.145 (.092)		.101 (.141)	
<u>Percent Accepting Job at < 3.50:</u>				
2. Sought Job		21.05		5.68
3.50	-.551 (.085)		-.348 (.108)	
5.00	-.422 (.085)		-.171 (.112)	
3. Neighborhood Cleaning		1.78		7.51
3.50	-.104 (.074)		-.336 (.089)	
5.00	.032 (.088)		-.167 (.107)	
4. Cleaning		1.59		1.76
3.50	-.142 (.079)		-.161 (.089)	
5.00	-.072 (.082)		-.044 (.120)	
5. Dishwashing		3.93		7.66
3.50	-.220 (.079)		-.311 (.095)	
5.00	-.069 (.078)		-.026 (.121)	
6. Factory		2.73		2.35
3.50	-.189 (.083)		-.102 (.115)	
5.00	-.090 (.091)		-.113 (.133)	
Critical		3.05		3.10
F.05				

Note: Separate equations estimated for each reservation wage measure. F-Values are for pairs of dummies indicating willingness to work at given wages. Sample includes all those nonemployed in the 1979 panel of the NLS who reported wages for jobs obtained in the subsequent year. Predicted wages are included as a control variable. All equations are weighted by sample weights. Samples sizes are 143 for whites and 99 for blacks. Continuous reservation wages and received wages are in logs.

greater than in the South. In this equation, the effects of omitted components of the predicted wage should have a positive rather than negative effect on the estimated coefficients for reservation wages (since these components should be positively correlated with both reservation and received wages); and these effects could be causing the higher coefficient for whites observed here.

But an alternative explanation is that whites are more likely to obtain their sought jobs than are blacks, and hence their reported reservation wages for these jobs have more predictive power with regards to subsequent wages. This explanation is consistent with the results of Table 3 which show a greater consistency between occupations sought and those received or held for whites. It is also consistent with the higher estimated effects of these reservation wage measures on the nonemployment durations of blacks, which imply that their higher reservation wages relative to offer probabilities and offer wages often lead to higher nonemployment rather than higher wages for blacks.

Comparing the reservation wages for sought and specified jobs in their discrete forms, we find that the former totally dominate all of the latter for whites, in both magnitudes of coefficients and F-values. For blacks, the F-values for sought jobs are a little lower than those for neighborhood cleaning and dishwashing jobs; but the magnitudes of the coefficients for sought jobs are very similar to those for neighborhood cleaning and are greater than those for dishwashing (though their standard errors are greater). Thus the reservation wages on sought jobs do as well or better as those for specified jobs among both blacks and whites in explaining subsequently received wages; again, doubts about the validity of this measure are not supported by its strong ability to explain observed behavior. But the fact that reservation

wages for specified, low-skill jobs have relatively greater predictive power for the wages of blacks than of whites again suggests that blacks are more likely to have to accept these jobs in place of their preferred ones, even if only temporarily.

In an attempt to test for whether or not the explanatory power of the reservation wage measures for different jobs vary according to the nature of the job ultimately received, the same wage equations were estimated for two subsamples of blacks and whites: those whose jobs found were in the laborer and service category; and those whose jobs found were in the same broad category (i.e., white-collar, craft and operative, or laborer and service) as their job sought. It was hypothesized that reservation wages for sought jobs should have relatively more explanatory power in the latter group while those for the specified, low-skill jobs should do relatively well in the former.

The tests are rather crude because of the broadly-defined nature of the occupational aggregates and because of the much smaller sample sizes in the subsamples. Nonetheless, the tests were moderately successful, especially among whites. Table 11 shows the results for the group with laborer and service jobs. The results show a strong increase in the explanatory power of reservation wages for dishwashing and for cleaning among whites with a strong decline in those for jobs sought relative to the results for the total sample. Among blacks the changes are less pronounced, but there is a strong increase in the explanatory power of reservation wages for factory jobs. As for the results in Table 12 for those who obtained the kinds of jobs which they sought, the reservation wages for these jobs continue to have strong explanatory power among whites while those for the specified low-skill jobs have very little here. Among blacks the strongest decline is in that for factory jobs, though the magnitudes on the coefficients for this and some of

Table 11

Effects of Reservation Wages on Received Wages
at Subsequent Jobs - Laborers and Service Workers

<u>Equations for:</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Coefficient</u>	<u>F-Value</u>	<u>Coefficient</u>	<u>F-Value</u>
1. Reservations Wages for Sought Job, 1979				
Total	.735		.599	
	(.180)		(.175)	
North	-		-	
	-		-	
South	-		-	
	-		-	
<u>Percent Accepting Job at < 3.50:</u>				
2. Sought Job		7.59		4.92
3.50	-.565		-.463	
	(.159)		(.172)	
5.00	-.298		-.221	
	(.157)		(.122)	
3. Neighborhood Cleaning		1.35		6.75
3.50	-.135		-.418	
	(.120)		(.119)	
5.00	.059		-.219	
	(.146)		(.138)	
4. Cleaning		2.59		.45
3.50	-.232		-.071	
	(.118)		(.133)	
5.00	.007		.037	
	(.130)		(.155)	
5. Dishwashing		4.51		6.52
3.50	-.336		-.358	
	(.112)		(.143)	
5.00	-.180		.024	
	(.142)		(.125)	
6. Factory		2.07		5.77
3.50	-.143		-.183	
	(.165)		(.149)	
5.00	.085		.207	
	(.165)		(.211)	
Critical		3.15		3.20
F.05				

Note: Separate equations estimated for each reservation wage measure. F-Values are for pairs of dummies indicating willingness to work at given wages. Sample is subset of that for Table 10 and includes only those who obtained jobs as laborers and service workers in subsequent year. Sample sizes are 64 for whites and 47 for blacks. Continuous reservation wages and received wages are in logs.

Table 12

Effects of Reservation Wages on Received Wages at
Subsequent Jobs - For Those Obtaining Jobs Sought

<u>Equations for:</u>	<u>Whites</u>		<u>Blacks</u>	
	<u>Coefficient</u>	<u>F-Value</u>	<u>Coefficient</u>	<u>F-Value</u>
1. Reservations Wages for Sought Job, 1979				
Total	.402 (.148)		.643 (.306)	
North	-		-	
South	-		-	
	-		-	
<u>Percent Accepting Job at < 3.50:</u>				
2. Sought Job		5.29		3.64
3.50	-.486 (.157)		-.402 (.237)	
5.00	-.424 (.148)		.315 (.324)	
3. Neighborhood Cleaning		.73		4.67
3.50	-.090 (.203)		-.627 (.217)	
5.00	-.204 (.188)		-.200 (.243)	
4. Cleaning		1.13		4.00
3.50	.067 (.168)		-.648 (.229)	
5.00	-.139 (.152)		-.515 (.290)	
5. Dishwashing		.07		4.00
3.50	.024 (.175)		-.603 (.219)	
5.00	.054 (.150)		-.184 (.318)	
6. Factory		.30		.69
3.50	-.082 (.174)		-.368 (.355)	
5.00	-.124 (.160)		-.082 (.421)	
Critical		3.20		3.47
F.05				

Note: Separate equations estimated for each reservation wage measure. F-Values are for pairs of dummies indicating willingness to work at given wages. Sample is subset of that for Table 10 and includes only those who obtained jobs that they were seeking in subsequent year. Sample sizes are 40 for whites and 23 for blacks. Continuous reservation wages and received wages are in logs.

the other reservation wages for specified jobs actually increase.

To summarize, the reservation wages reported for sought jobs in the NLS have a large, significant effect on the duration of nonemployment for blacks and on subsequent wages for both blacks and whites. Reservation wages for the specified, low-skill jobs also have some effects on subsequent wages, particularly among those who obtain laborer and service jobs, and this is generally more true of blacks than of whites. The notion that reported reservation wages for sought jobs in the NLS are less valid than the others because the open-ended format of the questioning allowed confounding of expectations and reservations is not supported here, given the stronger behavioral implications of these measures. If anything, the results here suggest that young blacks truly aspire to the sought jobs and the reservation wages reported for them, and therefore these measures appear to contribute more to their nonemployment durations than do those for low-skill jobs. Perhaps the latter jobs are temporarily accepted only when the need for income is great or the spell has been quite long.

A final issue which needs to be addressed here is that of overall job availability for young blacks. The large observed effects of reservation wages for sought jobs on nonemployment durations of this group seem to imply that a reduction in the mean level of these reservation wages would reduce mean nonemployment durations and nonemployment rates. As noted above, the large estimated effects have the economic interpretation that offer probabilities are high with regard to lower wage jobs for nonemployed blacks, i.e., that jobs are relatively available to those who want them or who are willing to accept them at lower wages. Needless to say, this is a fairly controversial implication for a community of young blacks with such high rates of nonemployment. Before this strong implication is accepted, two questions

should be asked: 1) Is there other evidence of job availability which is more direct than simply drawing inferences from estimated duration elasticities? 2) Even if these jobs are currently available to individuals who are willing to accept them, are they available in the aggregate? Or is their only a small number of such jobs available which only seem plentiful to particular individuals because most other individuals will not accept them? This latter statement essentially means that the offer probabilities facing individuals may depend on the aggregate level of reservation wages, and that the elasticity of duration with respect to reservation wages may decline as well if there was an aggregate decline in those reservation wages.

This may be especially true because the available jobs (or those with vacancies) are likely to be concentrated among those with high turnover rates and which are not among those generally sought -- i.e., low-wage labor or service sector jobs. Those jobs considered menial or "dead-end" may be the most available of all because of the high turnover and the relatively high reservation wages for these positions. The important point here is that a general lowering of reservation wages and of the level of job sought (or even of the turnover rates out of these jobs) might substantially reduce the apparent availability of jobs to those who want them, leaving an aggregate shortage of jobs to be more salient to the nonemployed.

The empirical evidence which exists on these larger issues is not too comprehensive. Some unique evidence from the NBER survey appears in Table 13. The inner-city black youths were asked, "Suppose you were desperate for money. How easy would you say it would be for you to find a job working as/at _____?," and several jobs were listed afterwards. The results from this data indicate that over 70% of the nonemployed youth in the survey believe that it would be somewhat easy or very easy to obtain some sort of job

Table 13

Perceived Ability to Obtain Jobs
Among the Nonemployed

<u>NBER - Blacks</u>	<u>Very Easy</u>	<u>Somewhat Easy</u>	<u>Difficult</u>	<u>Impossible</u>
Working as a Laborer	.184	.276	.463	.077
Working at a Minimum Wage Job	.375	.328	.227	.071

at the minimum wage; while for other jobs, such as laborer work, the percentage is lower (46% for laborer work). These data indicate that on employed, inner-city young blacks perceive a fair amount of job availability at low wages, which is consistent with the high estimated elasticities of duration with respect to reservation wages for this group.

Several caveats must be mentioned with regard to these results. For one thing, the NBER survey was conducted in late 1979 and early 1980, which predated the recessions which have plagued the labor markets for the last three years. Also, these are subjective perceptions or expectations of what is available -- as noted above, such expectations may be overly optimistic. Finally, these perceptions are clearly individual rather than aggregate and tell us little about job availability if overall reservation wages were to change. Therefore, the extent to which the estimated effects of reservation wages on durations would hold for major changes in the aggregate remains unclear at this time.

IV. Conclusions and Implications

This paper has analyzed the relative levels of reservation wages of young blacks and whites, and their effects on nonemployment durations and subsequent wages for each. The results have shown that young blacks seek jobs and wages that are comparable to those of young whites, but which are higher than what the young blacks ultimately obtain. These relatively high expectations contribute somewhat to their nonemployment durations, which are already substantially higher than those of whites. On the other hand, young blacks appear at least if not more likely than whites to take specific low-skill jobs, though it seems that they take these only temporarily. Reluctance to take certain "menial" or dead-end jobs appears among both blacks and whites.

What all of this seems to imply is that young blacks have modelled their expectations and aspirations after those of the white society around them, although their means of achieving these ends are lower. To what extent the latter is true because of lower skills, fewer contacts, less information, or simple discrimination is unclear.

It does seem as though the concern expressed in recent years about a "Culture of Poverty" among poor blacks, whose main problem is their lack of middle-class aspirations are to be met.

The results also shed new light on the value of strategies which create only more low wage, "dead-end" jobs for young, nonemployed blacks in the public or private sector. To the extent that many young blacks appear willing to take these jobs temporarily, they may be useful in a limited sense as a means of providing income or training. But it is clear that young blacks, like their white counterparts, aspire to better positions than these, even in the short run. Unless accompanied by substantial training or some other means of achieving upward movement, public service jobs or private ones created by policies like a youth subminimum wage are unlikely to meet the hopes and needs of the young nonemployed.

Appendix

Table A.1

ln (Wage) and Weeks Worked Equations

NLS

	<u>Whites</u>		<u>Blacks</u>	
	<u>Wages</u>	<u>Weeks Worked</u>	<u>Wages</u>	<u>Weeks Worked</u>
Intercept	4.787 (.180)	17.235 (6.598)	5.116 (.245)	7.310 (10.522)
Age	.052 (.010)	.561 (.355)	.024 (.013)	.264 (.552)
Experience - Years	.021 (.011)	1.473 (.405)	.033 (.016)	3.880 (.716)
Urban	.085 (.020)	.144 (.736)	.038 (.042)	2.642 (1.832)
South	-.076 (.021)	2.381 (.759)	-.014 (.029)	5.243 (1.246)
KWW	.019 (.006)	.168 (.208)	.019 (.008)	.270 (.365)
Library Card at Home	.058 (.023)	1.309 (.853)	.027 (.070)	-1.816 (1.293)
H.S. Diploma	.086 (.023)	7.786 (.805)	.146 (.030)	5.976 (1.308)
Marital Status:				
Now Married	-.029 (.040)	3.522 (1.581)	-.007 (.062)	-.064 (2.443)
Was Married	.168 (.105)	5.572 (3.844)	.203 (.186)	-2.131 (13.337)
1950 Dummy	.061 (.018)	-.670 (.663)	.051 (.028)	-.192 (1.250)
H.H. Income	-.002 (.001)	-.016 (.037)	.003 (.002)	.083 (.079)
Excluding Own				
H.H. Income Listed < 0	.001 (.032)	5.600 (.947)	.173 (.046)	14.726 (1.764)
H.H. Income Missing	-.040 (.025)	1.041 (1.023)	-.024 (.036)	.666 (1.684)
R ²	.163	.160	.176	.256
N	1,891	1,936	737	832
Mean Dep. Var.	6.140	41.086	5.953	30.105

Note: Equations estimated using OLS. Samples include everyone reporting wages in previous year for wage equations and everyone (including those without work in previous year) in weeks worked equations. Household income (excluding own) in thousands of dollars. Knowledge of World of Work (KWW) ranges from 1 to 11 for number of questions answered correctly. Experience reflects number of years in which individual was employed as of one year before survey date, starting in 1975.

Table A.2

Characteristics of the Nonemployed -
Means and Standard Deviations

NLS

	----- Whites -----				----- Blacks -----			
	1979-80		1979		1979-80		1979	
	<u>Total</u>	<u>N</u>	<u>S</u>	<u>Total</u>	<u>Total</u>	<u>N</u>	<u>S</u>	<u>Total</u>
Predicted Wages	6.054 (.181)	6.105 (.157)	5.913 (.170)	6.007 (.168)	5.878 (.165)	5.898 (.158)	5.860 (.170)	5.816 (.145)
Predicted Weeks Worked	36.222 (5.687)	36.681 (5.718)	34.437 (5.397)	35.788 (5.497)	24.695 (7.506)	22.751 (7.102)	26.528 (7.415)	22.732 (6.298)
Age	19.200 (1.730)	19.387 (1.610)	18.677 (1.936)	19.145 (1.549)	19.496 (1.694)	19.688 (1.681)	19.315 (1.687)	19.214 (1.565)
Exerience	1.010 (1.152)	1.043 (1.204)	.777 (.950)	.785 (1.122)	.803 (1.508)	.926 (1.123)	.687 (.980)	.578 (.955)
Urban	.728 (.445)	.821 (.383)	.466 (.499)	.722 (.442)	.855 (.352)	.952 (.213)	.763 (.425)	.856 (.351)
South	.263 (.440)	- -	- -	.261 (.442)	.515 (.500)	- -	- -	.501 (.500)
KWW	5.589 (1.790)	5.723 (1.774)	5.213 (1.780)	5.625 (1.815)	4.793 (1.709)	4.863 (1.699)	4.727 (1.715)	4.953 (1.743)
Library Card at Home	.806 (.396)	.836 (.371)	.722 (.448)	.809 (.393)	.723 (.447)	.692 (.497)	.753 (.431)	.712 (.453)
H.S. Diploma	.499 (.500)	.593 (.491)	.236 (.424)	.439 (.496)	.452 (.498)	.442 (.497)	.462 (.499)	.370 (.483)
Marital Status Now Married	.051 (.220)	.053 (.224)	.046 (.209)	.042 (.201)	.073 (.261)	.036 (.187)	.109 (.312)	.071 (.257)
Was Married	.009 (.096)	.013 (.111)	.000 (.000)	.014 (.118)	.004 (.061)	.000 (.000)	.007 (.085)	.006 (.078)
H.H. Income	13249 (13005)	13862 (13201)	11374 (10302)	12503 (11170)	11267 (13428)	12333 (14506)	10435 (11443)	9884 (11056)
N	420	300	120	179	296	155	141	141

Note: All means are weighted using sample weights. Predicted wages and weeks worked calculated using means from these tables and coefficients from equations presented in the previous table. Sample sizes reflect those for whom reservations wages for sought jobs and all variables are defined.

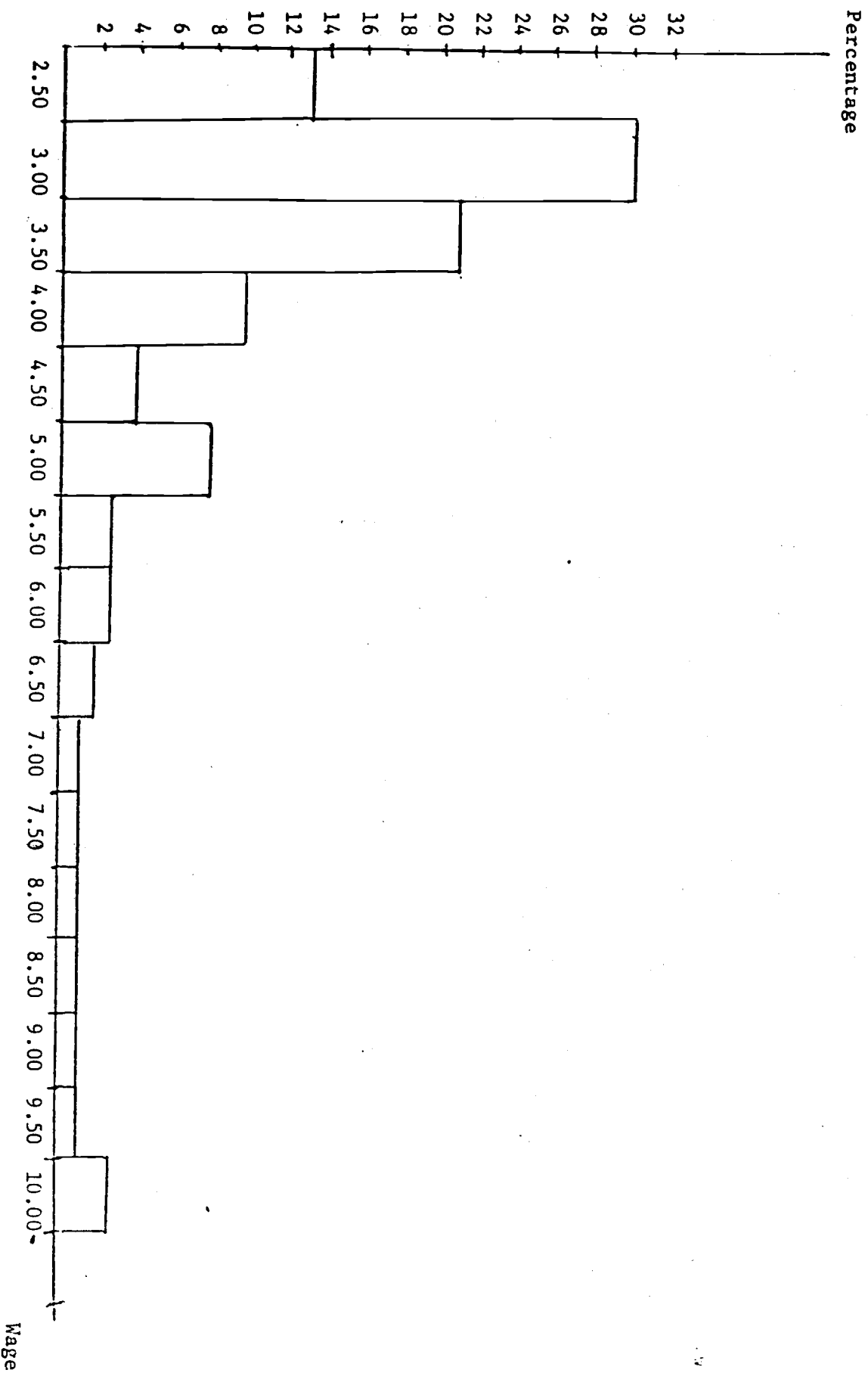


Figure A.1
 NBER-Nonemployed Blacks, Received Wages, Most Recent Job

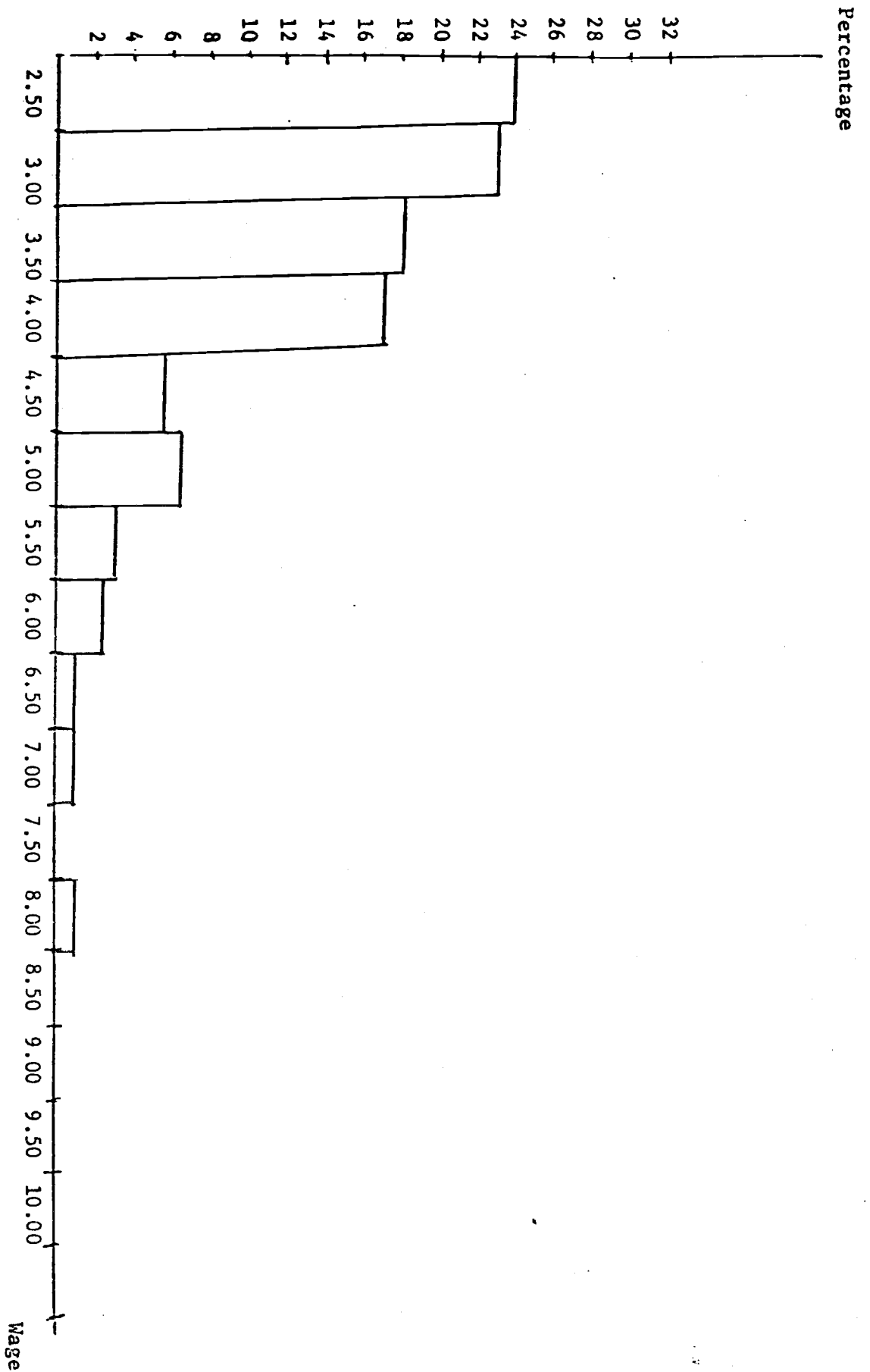


Figure A. 2

NBER-Nonemployed Blacks, Reservation Wages for Sought Jobs

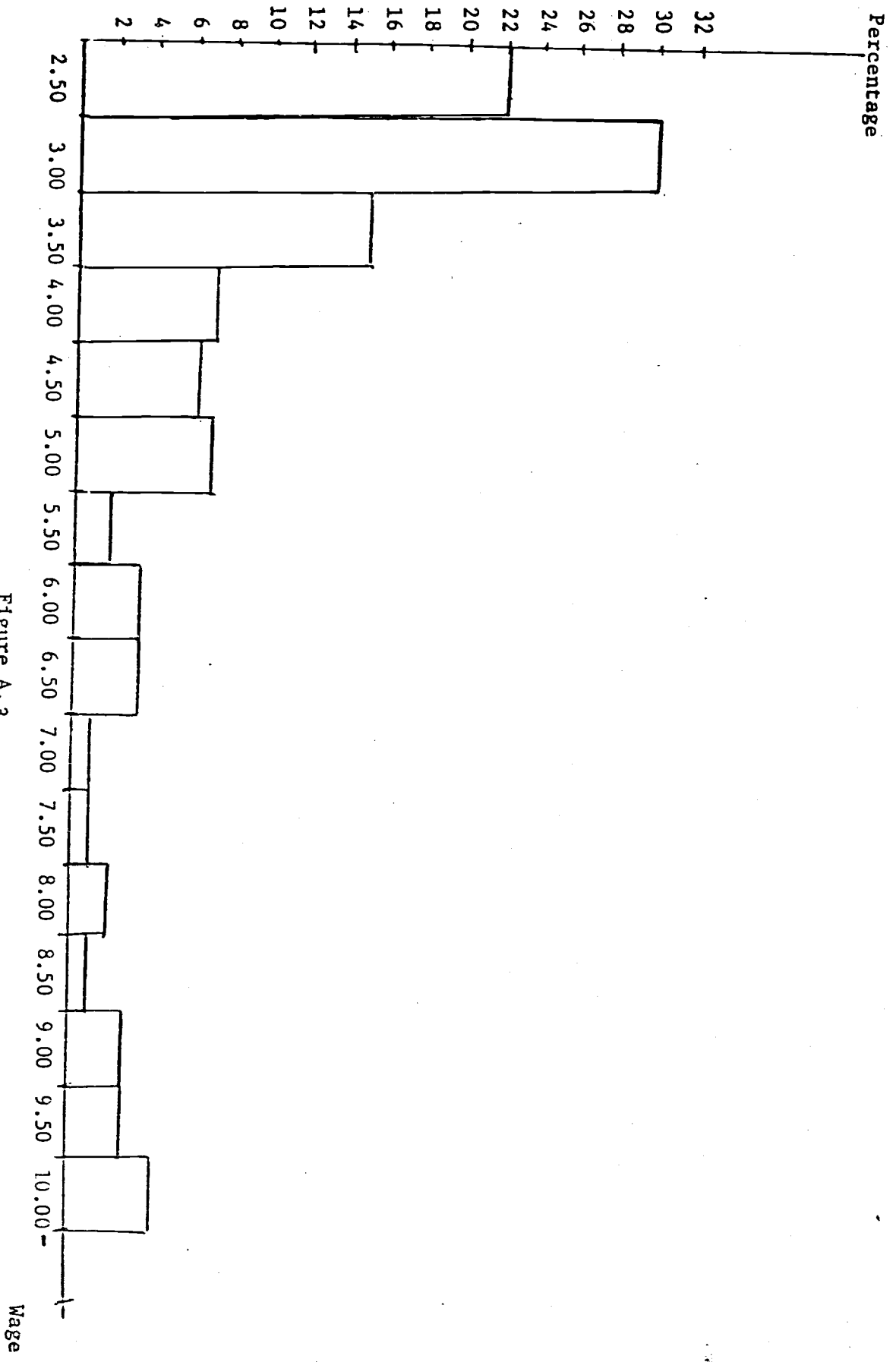


Figure A. 3
 NLS-Nonemployed Blacks, Received Wages, Most Recent Job

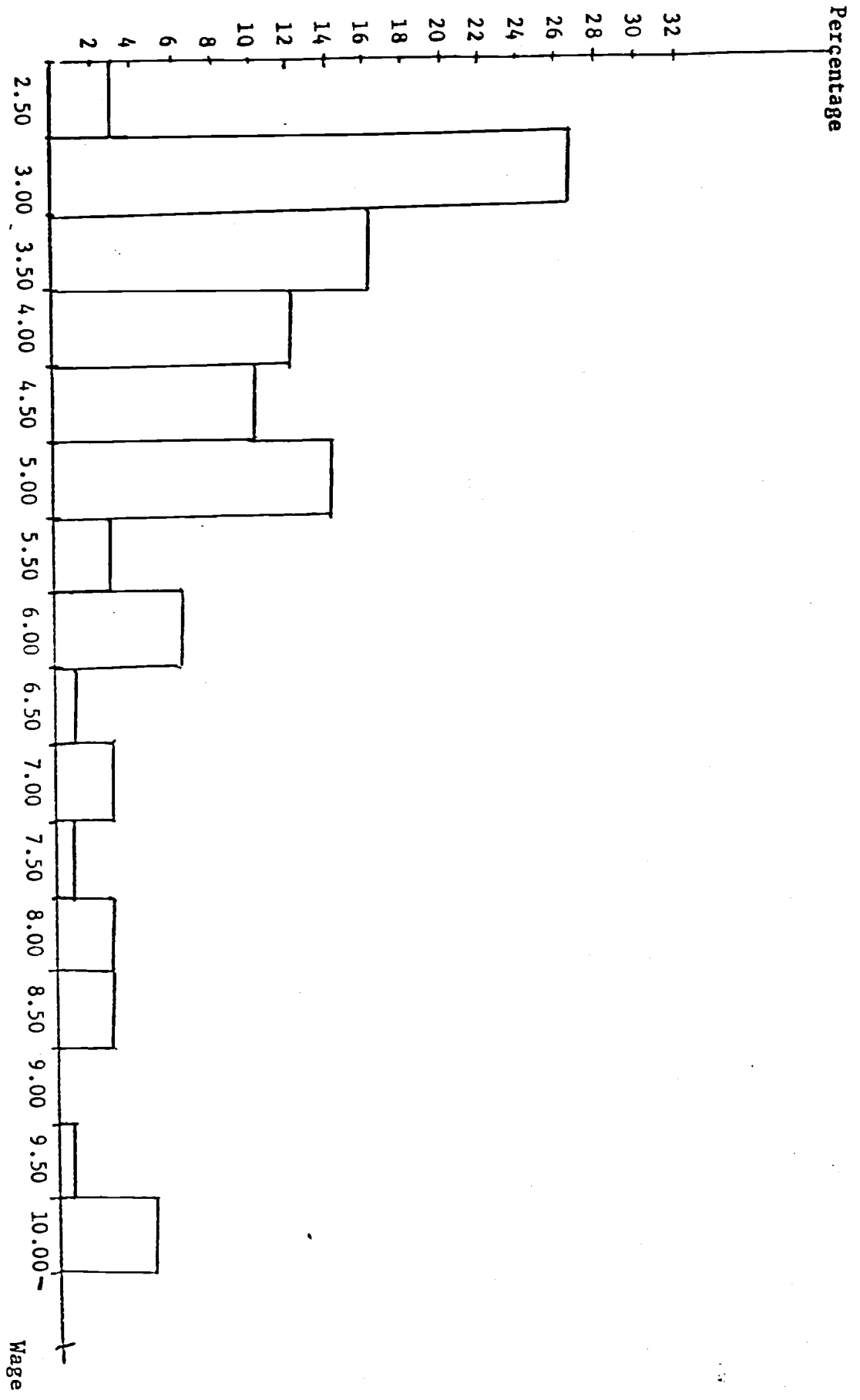


Figure A.6
 NLS-Nonemployed Whites, Reservation Wages for Sought Jobs

Notes

¹Recent work by economists on the reservation wages of blacks and whites includes a piece using only one of the available reservation wage measures in the NLS by Michael A. Borus (1982). Using these data, he finds blacks more willing to work, even after controlling for personal and local labor market characteristics. A piece from a more sociological perspective which stresses the reluctance of young blacks to do menial work is by Elijah Anderson (1980).

²See Richard B. Freeman (1979).

³For an excellent survey of the job-search literature, see S.J. Lippman and J.J. McCall (1976).

⁴For a search model based on utility-maximization which allows reservation wages to vary across jobs, see Harry J. Holzer (1983).

⁵See Lippman and McCall (1976).

⁶The endogeneity of nonwage income with regards to reservation wages derives from the fact that participation in illegal activities or government transfer programs will be affected by employment status which, in turn, may reflect reservation wages. The endogeneity of duration of preceding spells reflects the fact that an individual's reservation wage may not vary greatly over time and therefore current reservation wages reflect those in the past which are partly responsible for the preceding spell.

⁷The "Knowledge of the World of Work" variable reflects the number of questions out of eleven which were answered correctly where the questions involved choosing definitions of specified occupations.

⁸This possibility was first suggested to me in conversations with John Bound.

²⁰Since reservation wages directly determine transitional probabilities which, in turn, determine expected duration, several equations were estimated of the same form as Equation (5) but where the dependent variable was P_{ne} , a dummy variable for transition probability which equals one if the subsequent nonemployment duration was 30 days or less. Results of this equation were generally consistent with those of comparable duration equations, though coefficients were generally of comparable duration equations, though coefficients were generally less significant in the former. This appeared to be caused by a greater variation in reservation wages within the post 30-day spells (which accounted for over 80% of the sample for both groups) than between the two groups of spells.

²¹These extra variables were not included in the wage and weeks worked equations because these equations were estimated for both 1979 and 1980; and because, in each of these years, the missing value variables were endogenous with respect to wages and weeks worked. In other words, the missing value variables were always zero if wages were earned and were always one if weeks worked were zero. This problem was not encountered in the duration equation because the missing value variables for employment prior to 1979 are exogenous with respect to durations that occurred subsequent to 1979.

²²The formula for bias on the estimated coefficient of duration would be $b_{DN,xx} - b_{xx,w}$ where the former coefficient is the true regression coefficient on the omitted variable xx while the latter is the auxiliary regression of the omitted on the included variable. In this case, the former would be negative and the latter positive, creating a downward bias.

²³The coefficients for blacks on reservation wages for equations using predicted wages or the more limited set of demand-side determinants as controls generally ranged from .4 to .5.

²⁴For instance, the coefficients on KWW, household income, and experience were significantly smaller for blacks than for whites in the duration equations.

²⁵The estimated duration elasticity of 1.8, together with reservation wage differentials of .176 relative to mean received wages, imply an effect of .317, which accounts for most of the racial differential in the regression sample for that region. Since sample sizes were fairly small here (N=71), the results are subject to some doubt.

References

- Akerlof, George and Main, Brian 1980. "Unemployment Spells and Unemployment Experience." American Economic Review, 70:885.
- Anderson, Elijah, 1980. "Some Observations of Black Youth Unemployment," in Anderson, Bernard and Isabel Sawhill, Youth Employment Issues and Policy, New York: Prentise Hall.
- Borus, Michael A., 1982. "Willingness of Youth to Work." Journal of Human Resources, 17:581.
- Clark, Kim B. and Summers, Lawrence H., 1982. "The Dynamics of Youth Unemployment," in Freeman, Richard B. and Weise, David A., The Youth Labor Market Problem: Its Nature, Causes, and Consequences, Chicago: University of Chicago Press, p. 199.
- Dunlop, John T., 1957. "The Task of Contemporary Wage Theory," in Taylor, G.W. and Pierson, F.C., New Concepts in Wage Determination, New York.
- Freeman, Richard B., 1979. "Why Is There a Youth Labor Market Problem?" National Bureau of Economic Research Working Paper No. 365.
- Goodwin, Leonard, 1973. Do the Poor Want to Work? Washington, D.C.: Brookings Institution.
- Heckman, James J., 1979. "Sample Selection Bias as a Specification Error." Econometrica 47:153.
- Holzer, Harry J., 1983. Black Youth Nonemployment. Unpublished Ph.D. Thesis, Harvard University.
- Kaitz, Hyman B., 1970. "Analyzing the Length of Unemployment Spells," Monthly Labor Review 93:11.

Lippman, Steven J. and McCall, John J., 1976. "The Economics of Job Search:
A Survey." Economic Inquiry 14:155.

Marston, Stephen T., 1976. "Employment Instability and High Unemployment
Rates." Brookings Papers and Economic Activity, 1:169.