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LIFE-CYCLE JOBS, RACE, AND THE YOUTH LABOR MARKET

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ABSTRACT

Based on occupation and industry data from the 1% 1970 Public Use Sample, a life-cycle job typology is used to distinguish youthful "stopgap" jobs from career jobs. The data indicate that stopgap jobs represent a life-cycle phenomenon for both black and white male youths, although more so for whites. Education and experience variables make a substantial contribution to the steep age gradient of stopgap employment and are important in explaining black-white differences in this age pattern. Blacks are more likely to exhibit characteristics which lead to stopgap employment throughout adulthood, while whites' characteristics only encourage stogap employment when they are young. Implications of these differences for the youth labor market are explored. The extensive employment of more educated whites in low-level stopgap jobs places lower-status black youths at a competitive disadvantage. Furthermore, factors which negatively affect the labor-market position of non-disadvantaged white youths may indirectly affect the employment position of the lowest-skilled blacks.

LIFE-CYCLE JOBS, RACE, AND THE YOUTH LABOR MARKET

Introductory

There is a diverse sociological, demographic, and economic literature focusing on the early labor market position and behavior of young men. However, for a variety of reasons, more order is usually imposed on the career launching process than, in fact, exists. For example, a major concern of social mobility research has been to measure inter- and intragenerational social mobility via a comparison of occupational prestige or SEI scores of fathers and sons at two points in a son's career process--his current occupation and his first full-time civilian job after leaving school for the last time (Blau and Duncan, 1967, Featherman and Hauser, 1978). As a consequence of this definition of the first job, any period of protracted labor-market and job instability can easily be overlooked. However, research on youth labor market behavior indicates that young men's attachment to work is often highly unstable, particularly when they first leave school or the military, since a considerable amount of job search and job experimentation occurs during that period (Coleman, 1976; Mare, Winship, and Kubitschek, 1984; Osterman, 1980; Feldstein and Ellwood, 1982; Freeman and Medoff, 1982; Ellwood, 1982; Becker and Hills, 1983).

Because of its focus on the sequencing of role transitions, research on the transition to adulthood, like stratification research, has also had to tidy up the career-entry process. To establish time order between different types of transitions (leaving school, starting work, marriage, etc.) it must measure the timing of completed transitions, treating them as single concrete steps (Hogan, 1978, 1980, 1982; Marini, 1984). While valuable for a number of purposes, this approach cannot easily describe or analyze the often messy nature of the transition to adulthood and the demographic consequences of this messiness.

Researchers working in the youth labor-market area also frequently act as if young men's lives were neatly divided up into a "school-only" period followed by a "work-only" period, despite the evidence they have uncovered of the labor-market instability of youths and their growing tendency to combine schooling with work (Greenberger 1983; Ellwood and Wise 1983; Mare

and Winship 1984). For example, a common convention in youth labor-market studies is to limit the analysis to out-of-school youth because they are perceived as often providing the "problem" cases (Brown 1982; Barton et. al. 1985; Holzer 1986; Ballen and Freeman 1986; Datcher-Loury and Loury 1986). Such an approach implicitly assumes that those out of school at the time of observation have finished school rather than being out of school only temporarily. Once again, this fosters the notion of an orderly progression from school to work.[1] More importantly, this convention decreases the likelihood of viewing the youth labor market as shared by students and nonstudents alike. As a result, we are also less likely to try to define the nature of the youth labor market as a distinct phenomenon and to investigate the implications of job competition among highly diverse young people operating in the same job market. However, the evidence indicates that there has been an enormous postwar shift in the work propensities of students, particularly white students (Greenberger 1983, p. 103; Mare and Winship 1984). This is operating to blur the distincton between the life-cycle stages of school and work and hence to complicate our analysis of the career-entry process.

This study employs a somewhat different strategy to analyze the career-launching process. No assumptions are made that well-defined and distinct stages exist in the transition to adulthood or that there is little overlap between schooling and work. Rather, we use a typology of "life-cycle jobs," developed by the senior author to study the career-entry process and its relationship to schooling (Oppenheimer 1989). The basic idea behind the typology is that the young are often working at jobs that have little relationship to their "adult" occupational careers. Such jobs represent a particular type of "stopgap" job--those which tend to be dominated by workers who, for life-cycle related reasons, have marginal labor-market or job attachments--for example, the young or the elderly, or many women, particularly at certain stages of their family cycles. The youth in these jobs will ultimately have highly diverse occupational destinations. Hence, location in such stopgap jobs can be used as an independent indicator of an early career-cycle stage. It will then be possible to analyze the role of both work and school behavior, separately and combined, in the study of the career-entry process.

After a description of how the life-cycle job typology was created, there are two major tasks the paper seeks to accomplish. The first is to use 1970 census data to contrast blacks and nonhispanics whites on the extent to which stopgap employment is a life-cycle phenomenon and the degree to which relatively permanent, as opposed to age-varying factors, help explain such job attachments. Our general findings here are that stopgap employment represents a youthful life-cycle phase for both blacks and whites but that this is much more the case for whites. Nevertheless, school enrollment, time out of school, recent work experience and educational attainment have very similar effects on stopgap work for both employed blacks and whites. Moreover, these variables play a major role in the age pattern of stopgap job attachments, regardless of race. However, blacks are more likely to exhibit characteristics that lead to stopgap employment throughout adulthood, while whites are more likely to fall into categories that only encourage stopgap employment when they are quite young. As a consequence, the educational and experience variables make a substantial contribution to black-white differences in the age patterns of stopgap employment.

The paper will then go on to explore one important implication of the life-cycle nature of the stopgap job market. In general, we will argue that because of the short-term nature of stopgap jobs for many young whites, these youth represent a much higher status and more educated labor supply than would normally be attracted to such jobs. They are "over-educated" or "under-employed" as other researchers might put it (Sullivan 1978; Clogg and Shockey 1984). This places those blacks in the lowest socioeconomic groups at a serious competitive disadvantage. Hence, the existence of the life-cycle stopgap job market and shifts in factors which change the rate at which higher-status workers enter into or exit from such jobs will have an impact on the labor-market position of the lowest level workers operating in the market. The result is that some of these workers may be displaced from any employment at all.[2]

The Life-Cycle Job Typology

At the heart of the life-cycle job typology is the notion of "youthful stopgap" jobs. Such jobs represent the conjunction between the desires of both employers and youth for employment flexibility and/or limited

commitment. They provide many young men with the opportunity to earn money while in school (and hence support more extensive investments in formal schooling) or at a time when they are either not ready to make strong life-time work commitments or are unable to find attractive jobs requiring such commitments (Osterman 1980). In short, these are jobs that appeal to young people "in transit."

Youthful stopgap jobs also provide increased flexibility and limited commitment for employers as well as workers. The young provide a highly elastic labor supply, facilitating the rapid expansion or contraction of a firm's work force in response to short-term needs. Part-time workers also permit more flexible work schedules, thereby reducing or even eliminating the necessity of paying expensive overtime wages (though undoubtedly raising supervisory costs). Moreover, stopgap jobs do not require the employer to build an opportunity structure into the employment contract because it is generally understood that the job is short-term in nature. Hence, while, in actuality, an establishment can have a broadly based pyramid of employees it could still offer a relatively favorable opportunity structure for its more "permanent" career-oriented labor force. Furthermore, the employer may often be able to get higher "quality" (though perhaps more undependable) workers than he could otherwise afford because young people in high school and college are often willing to work at relatively menial jobs at lower wages in exchange for flexibility in the hours worked (Lazaer 1977). Physical strength is also an advantage of youth that can be utilized by employers.

Following Oppenheimer (1989), we will take age composition, in combination with one other feature of an occupation--the extent to which its workers are part-time--as indicators of an occupation's tendency to specialize in utilizing youthful workers seeking stopgap jobs. Then, the degree to which young males are concentrated in such jobs and the age at which they depart for other job types (and changes in this over time) will provide us with an additional measure of the nature and timing of the career-launching process.

Although the age composition and proportions working part-time in an occupation are the variables used to define youthful stopgap jobs, there is little doubt that such jobs will also tend to be low-level jobs, though there is no particular reason to believe that all low-level jobs will also

be youthful stopgap jobs. Stopgap jobs are likely to be low-level because of young men's low skill level, although employers may be able to reap some of the benefits of a higher socioeconomic background than they could obtain from workers who might be forced to consider such jobs as more long-term career option. Second, if such jobs represent short-term employment arrangements, then it is not economically feasible (for either employees or employers) to invest in much on-the-job-training, another reason for expecting such jobs to be low-level. However, many low-level jobs that had not originally been geared to youthful workers may become vulnerable to youth "take-overs." Hence, while youth may represent an important or dominant segment of such jobs, there is also likely to be a certain amount of worker heterogeneity--an issue which this paper will explore in some detail.

Obviously, some aspects of the stopgap job conceptualization bear a strong similarity to the secondary labor-market job concept (Doeringer and Piore, 1971; Althauser and Kalleberg, 1981; Rumburger and Carnoy, 1980; Wanner and Lewis, 1983; Pomer, 1986). However, the conceptualization of secondary labor market and youthful stopgap jobs differ in major respects, despite the fact that both are viewed as dead-end types of jobs that are not incorporated into any career ladder. First of all, the dualist position is that the nature of secondary labor-market jobs and their relationship to other jobs in the firm are mainly defined by employers (Granovetter 1981). Moreover, because secondary labor-market jobs are not included in any institutionalized internal labor markets, such workers have no access to ladders of upward mobility. As a result, dualists argue that workers get "trapped" in secondary labor markets.

The conceptualization behind youthful stopgap jobs is quite different. The characteristics of workers in stopgap jobs are considered a function of the nature of <u>both</u> labor supply and demand. For example, employers may desire part-time workers for flexibility but whether this demand can be satisfied will depend on the size and structure of the potential labor supply. On the other hand, workers may desire a part-time job but have to decide between no work and full-time work or they may desire full-time work but have to settle for part-time because of weak demand. In general, the extent of stopgap employment, and the characteristics of stopgap workers, will depend on a variety of demand and

supply factors. Cohort size will affect the supply of youth to the labor market; industrial change, such as shifts in the number of manufacturing job opportunities, affects employer demand and may lead to a pile-up in stopgap jobs while young people try to find a satisfactory "adult" occupation. More extensive schooling should increase the supply of those desiring stopgap jobs while they are completing their education and military service will affect the supply of youths to the civilian labor market. Hence, while institutional factors will affect the nature of stopgap jobs to some degree, demographic and market forces will also be at work.

The stopgap job type also differs from the dualist secondary labor-market segment in that it is based on the notion of an age-grading of jobs and the related idea that such jobs are considered temporary in nature. As a consequence, mobility out of stopgap jobs--especially mobility of the young--will be much greater than out of the career category.[3]

Operationalizing the Life-Cycle Job Typology

The life-cycle job typology was developed using data from the one percent sample (five percent state version) of the 1970 U. S. Census Public Use Samples. The census is used because it provides the only samples that are large enough to sustain a detailed occupational analysis. Just which jobs provide youthful stopgap employment will not, of course, be uniquely defined by any one census if stopgap employment, as hypothesized here, is partly a function of time-varying demand and supply factors and their demographic and socioeconomic determinants. Hence, it is not possible to define stopgap jobs on one census and then apply this categorization to other censuses. A better approach is to create the job typology on each census independently, though using the same criteria--age composition and part-time employment. In this study, the 1970 Census was selected initially because the 1965 occupational data provided an additional means of testing the validity of the life-cycle job typology.[4]

The 1970 typology is based on an analysis of detailed occupational groups using the characteristics and behaviors of all employed male workers, aged 14-74.[5] Female workers were excluded from the occupational

data because there is considerable evidence that men and women who appear to be working in the same job type actually are employed in sex-segregated jobs (Oppenheimer 1970, Ch. 3; Bielby and Baron 1984). Moreover, until recently, much of women's employment might be characterized as "stopgap" in the life-cycle sense employed here and there is little doubt that a lot of this persists. To have included women workers in the occupational analysis would have undoubtedly led to an overstatement of the number and type of jobs that provided youthful stopgap employment for young males.[6]

Since this is a life-cycle job typology, age composition was an essential variable for distinguishing between youthful stopgap jobs and those representing a more "mature" stage of the career cycle. As a first step, a "youthful" job category was defined, consisting of those occupations in which the percentage employed who were less than age 25 exceeded that among all employed males, aged 14-74. This was 17.8 percent in 1970. However, while age is essential in defining youthful stopgap jobs, it is not a sufficient criterion. As Kaufman and Spilerman point out (1982), youthful age structures will also be characteristic of a number of entry-level jobs that serve as portals to a well-established career ladder--for example, the craft apprenticeship occupations. The problem was how to distinguish jobs that might better be described as career-entry jobs from the youthful stopgap type. The 1970 census provides two variables that could be used to do this--hours and weeks worked.[7] The weeks-worked variable was rejected because it had substantial drawbacks as a measurement tool, although it would seem to be a very direct measure of whether some jobs are short-term in nature. First, a relatively high proportion of career-entry workers are likely to be recent entrants to either the labor force or regular employment and are, therefore, less likely to have worked a full year than men who have already established themselves in a stable occupational career. Second, some types of career-entry occupations are particularly sensitive to seasonal and business-cycle fluctuations in employment; yet one would not want to argue that they are therefore stopgap jobs. Major examples are jobs in construction as well as operative jobs in a number of cyclically sensitive durable goods industries. While it may be possible to identify particular occupations which are likely to be disqualified as stopgap, one disadvantage of a highly detailed classification system is that it was

difficult to do this systematically, given the large number of occupation/industry combinations being considered. Hence, utilizing the weeks worked variables as a means of identifying stopgap jobs would have required a substantial number of arbitrary judgements.

Given the problems with the weeks worked variable, the proportion of young males who were employed part time was used to distinguish between career-entry and stopgap jobs.[8] The rationale was that while career-entry, like stopgap, jobs should be heavily weighted toward younger workers, part-time work would be relatively rare for jobs offering the beginning of a stable occupational careers. If an occupation which was disproportionately youthful was also disproportionately part-time (more than 27.2 percent of those under age 29 working less than 35 hours) it was classified as "stopgap;" otherwise, it was classified as career entry.[9,10]

Occupations which were not disproportionately youthful but were disproportionately elderly (i.e., more than 17.8 percent of the employed males were aged 55-74, the proportions among the total employed male population, aged 14-74) were also considered as potential providers of youthful stopgap jobs, under the assumption that some older males have marginal labor market attachments and, therefore, some of the jobs they concentrated in may provide stopgap opportunities for youth as well. In order to exclude high-level occupations where males only gradually retire, such as the free professions, the part-time criterion was again employed--occupations with older age structures would be considered as providing youthful stopgap opportunities only if more than 27.2 percent of those under age 29 worked less than 35 hours in the census reference week.[11] Career jobs were defined in a residual fashion. The net result of this classification schema were 289 career jobs, 137 career entry, and 143 stopgap jobs.

Nature of Stopgap Jobs

Age Composition

Life-cycle jobs are partly defined in terms of the age composition of occupations. Stopgap and career-entry jobs are both job types which were disproportionately young. However, some stopgap job were those with a disproportionate number of older rather than younger workers. Since, the

cutoff criterion for being disproportionately youthful or elderly were rather low--17.8 percent in both cases--the question is how age-skewed are stopgap jobs for the young males in our under 35 sample? Are stopgap jobs only marginally youthful or do youths truly dominate these job types? The more they do, the more likely such jobs are to be generally perceived as a life-cycle job type. Furthermore, how much are the young under-represented in career jobs? In fact, employed youth under age 25 did dominate in the 14-34 age group in stopgap but but were very under-represented in career jobs. While 44 percent of all employed males under 35 were under age 25, the proportions for stopgap and career males were 70 and 28 percent respectively. For career entry it was 57 percent. In sum, while the age criterion for stopgap employment was not particularly extreme, these jobs do exhibit a very sharply skewed age distribution--much more so than do career-entry positions which did not even include any jobs with disproportionately elderly age compositions as did the stopgap.

Occupational Type

We have argued that stopgap jobs are typically low level, although this has not entered into the definition of such jobs. To what extent is this true? For both blacks and nonhispanic whites, Table 1 reveals

[Table 1]

distinctive occupational distributions by life-cycle job type. The great majority of stopgap workers, black as well as white, are found in a very few major occupational groups--clerical and sales within the white-collar category and laborers, service workers, and operatives within the blue-collar category. Laborers and service workers were particularly important as a source of stopgap employment. Whites are more likely to be in white-collar stopgap jobs than blacks but this is not too surprising given the substantial educational differences between the two races, as of 1970. On the other hand, although whites in career occupations are also much more heavily concentrated in white-collar occupations than blacks, for both races, craftsmen occupations become the most important in this life-cycle job type, although operatives are a close second for blacks. In the career-entry group operative occupations represent an important source of jobs, especially for blacks.

In short, young men in stopgap jobs are not only concentrated in a few occupational types but these are typically low-level jobs.[12] This is not to say that stopgap jobs monopolize all the low-level jobs for either whites or blacks, but such low-level jobs are poorly represented in the other life-cycle job types, particularly the career category. For example, while 35 percent of young black stopgap workers were laborers and 27.1 percent were service workers, only 1.5 percent of black career workers were in each of these occupational groups.

Stopgap Jobs as a Life-Cycle Phenomenon for Blacks and Whites

If stopgap jobs successfully represent a youthful life-cycle phenomenon, we should observe two types of mobility patterns for those in stopgap vs. career jobs. In the short run, those who find employment in stopgap jobs are more likely to exhibit labor-market instability--changing jobs frequently, dropping out of the labor-force, and so on. However, over a time period long enough to indicate growing career maturity there should be considerable movement out of stopgap jobs and into career entry or career jobs. The Census data are limited but nevertheless provide some evidence on both these types of mobility. For longer-run patterns we can look at age variations in stopgap job attachments in 1970 (a synthetic cohort approach). In addition, the 1965-70 occupational mobility data of this census provide a useful time interval for measuring career-cycle shifts, especially for males who were about 18 or older in 1965. Our options are more limited for shorter run patterns; however, data on the characteristics of the labor reserve have a bearing on the short-run instability issue.

Age Variation in Life-Cycle Job Type Among the Employed

For the life-cycle typology to provide a useful tool for the analysis of the career-launching process, stopgap employment must be most common among the young and decline sharply with age, though how much it declines will be a function of a variety of time-varying factors. However, stopgap and career-entry jobs are defined in terms of their age composition. Will not the age pattern of stopgap or career-entry employment of young men simply be a function of this definition? In fact, it will not since the typology was developed on the basis of the

characteristics of aggregate-level data--occupations--but is now being applied at the individual level.[13] Thus it is perfectly possible for there to be no occupation which is disproportionately youthful, as would be the case if the age distribution of every occupation were identical, empirically unlikely but theoretically possible. Or, alternatively, one could locate one or two occupations--e.g. newsboys and craft apprentices--that would be dominated by youth but, nevertheless, find a very small proportion of all employed youths in such jobs. In general, the extent of age-variation in youthful jobs (career-entry and stopgap jobs combined) as well as the maximum proportion which could be observed in these jobs, is a function of: (1) the extent to which (not just whether) the age composition of youthful jobs exceeds the defining proportion and (2) the size of the youthful job group. Neither of these is predetermined by the definition.[14]

Data on the life-cycle job distribution across single-year age groups show that for both blacks and nonhispanic whites there is a strong age-gradient in life-cycle job attachments. However, the relationship to age is far stronger for whites (Chart 1). Over 90 percent of employed

[Chart 1 about here]

nonhispanic white teenagers are found in stopgap jobs; this declines sharply reaching a floor of about 13 percent for men at age 31. Allowing for some inclusion of career-type jobs in the stopgap group, due to measurement errors, a floor of 13 percent is very low indeed. The proportion in the career-entry jobs increases with age and then decreases moderately while the career jobs show a sharp rise from very small proportions among teenagers, topping out at about 70% for white men in their late twenties.

While there is a sharp age gradient in stopgap employment for nonhispanic whites, this is much less true for blacks. The great majority of young employed blacks, as well as whites, are in youthful stopgap jobs and for blacks too there is a sharp drop in the proportions in stopgap jobs for those in their late teens. In fact, the age at which 50 percent of blacks are still in stopgap jobs (about age 20) is only a little higher than for whites. However, from this point on, the experience of the two racial groups diverges considerably. For whites, stopgap job employment continues to decline rapidly but for blacks the decline is gradual and the

proportions observed in such jobs at older ages is much higher than for whites--34 percent at age 31 as opposed to the 13 percent for whites. In sum, in 1970 a sizable proportion of employed blacks never seemed to have made the transition to career or career-entry jobs as defined here.

Five-Year Mobility Data: 1965 vs.
1970 Life-Cycle Job Attachments

If the typology does measure life-cycle job attachments, substantial differences in the holding power of the various job types should be evident over the 1965-70 five-year period. Stopgap jobs should exhibit relatively few stayers, although the proportions immobile will probably rise somewhat with age as the stayers begin to represent a progressively select group. On the other hand, if career jobs do provide life-time employment opportunities for "mature" workers we should observe very high retention rates, even among the young, as well as a considerable increase with age as young men establish stable "mature" career attachments. Both these patterns are observed for whites (Table 2). The proportions of whites in stopgap jobs in 1965 who were also found in this job type in

[Table 2 about here]

1970 ranged from 27 percent for males who were aged 16-21 in 1965 to 36 percent for those who were 22-29 years old. On the other hand, 61 percent of the younger group in career occupations in 1965 remained in this career type and 84 percent of the 22-29 year old group. The retention rate of the career-entry group was between that of the stopgap and career, presumably reflecting, in part, the tendency for males to move on to career-types of jobs (reducing the retention rate) and the possibility that the youthful age structure of career-entry jobs is also due to the rapid growth and good employment opportunities for some of the jobs in this group (increasing the retention rate).

If stopgap job attachments represent a career cycle stage, rather than economic marginality, then those who leave such jobs should primarily move into career and career-entry jobs. Moreover, the tendency to move into career or career-entry jobs should increase with age as greater maturity and labor-market experience is achieved. This is indeed the case. Seventy one percent of white stopgap leavers who were 16-21 in 1965 and 89.3 percent of those who were 22-29 moved into the carer/career-entry

groups. Only 11 percent of 16-21 year olds and 4.8 percent of 22-29 year olds actually left the labor force.

The mobility patterns are both similar and yet quite different for blacks. As in the case of whites, blacks in stopgap jobs in 1965 were less likely to be found in such jobs in 1970 than men in career jobs in 1965. In addition, the majority of those leaving stopgap jobs (59.9 percent of 16-21 year olds and 75.7 percent of 22-29 year olds) moved into career or career-entry employment. However, the more precarious labor-market position of blacks is indicated by their much greater propensity to remain in stopgap employment than whites combined with a somewhat lesser propensity to remain in career jobs. In addition, not only were black stopgap job leavers more likely to enter unemployment but a substantially higher proportion were more likely to leave the labor force entirely. Thus 42 percent of blacks who were 16-21 and in stopgap jobs in 1965 were also found in these jobs in 1970, compared to only 27 percent of whites. On the other hand, while 84 percent of whites who were 22-29 in 1965 remained in career jobs, the proportion of blacks remaining in the career group was 76 percent. Moreover, 20.7 and 14.6 percent respectively of black 16-21 and 22-29 years old in 1965 were likely to leave the labor force. In sum, the longitudinal data, like the cross-sectional, reveal that blacks are less likely than whites to make the transition out of stopgap jobs as they mature, have a less secure hold on "career" types of jobs and are more likely to have departed stopgap work for unemployment or nonlabor-force participation. Once, again, the life-cycle character of the job typology is not as marked for blacks as for whites.

Evidence of Short-Term Labor-Market Instability

If youthful stopgap jobs live up to their name, then stopgap workers should exhibit greater short-term labor-market instability than men in career or career-entry jobs. One measure of this labor-market instability is the ratio of the labor reserve who were last employed in a particular job to those still employed in it.[15] If those who are sometimes employed in stopgap jobs are more likely to drop out of the labor force than those working in career or career-entry jobs, this ratio will be greater for the stopgap group. This is indeed observed for blacks and whites alike (Chart 2).[16] In fact, for men in their late teens

[Chart 2 about here]

and early twenties, the ratios for the stopgap group are extraordinarily high--well over 50 percent and sometimes approaching 80 percent. If nothing else, such a large labor reserve in stopgap jobs illustrates how apt the stopgap label really is as a description of a type of employment that is essentially short-term and interim in nature. While the labor reserve/employed ratios are relatively high for all young teenagers, regardless of the job type and reflecting the weak labor-market attachments of the under 18 age group, after that age the ratios drop much more precipitously for the career and career-entry groups, particularly the latter.[17]

A Logit Analysis of Life-Cycle Job Attachments

Since stopgap jobs provide life-cycle job opportunities but are also low-level jobs, there are at least two important dimensions to try to tap in predicting stopgap employment. One is the skill level--the lower this is, the more marginal a young man's labor-market position and the more likely he is to be found in stopgap employment, as well as in other low-level types of jobs. Moreover, unless additional training is achieved, this effect should be relatively persistent over an individual's life-time, though mitigated by work experience. Second, there is the age-varying or life-cycle dimension. Age-related factors which particularly distract young people from paid employment, weaken their labor-market attachment, or lower the priority of work in their lives, should lead to stopgap employment (or even nonemployment). However, the positive impact of these factors on stopgap employment should only be temporary in nature. In order to sort out the influence of these two types of factors on stopgap employment, the SPSS* Loglinear program was used to conduct several logit analyses of employed black and nonhispanic white males, where the dependent variable is the log-odds of employment in stopgap job as opposed to a career or career-entry job. The independent variables are various measures of skill level and career "immaturity." Two major questions are addressed by the regression analysis. First, do these variables have an important impact on stopgap employment and are their effects similar for blacks and whites? Second, how well can they explain the race differences in stopgap employment?

Given the limitations of census data, there are only a few variables that have a bearing on the persistent and time-varying dimensions of stopgap employment and, even so, it is not always possible to distinguish them. To measure skill level, or labor quality, school years completed was used, grouped into three categories--0-11, 12-15, and 16+ years of schooling. The general hypothesis is that a low level of educational attainment increases the odds of working in stopgap jobs.

While education appears to be a direct measure of an unvarying component to labor quality, in a young sample such as this, school years currently achieved include age-related factors as well. What we have is a measure of school years attained at the time of the census. However, many of these young men are still in school and for them the low skill level is temporary in nature. Furthermore, if there are substantial black/white differences in the proportion finishing high-school and going on to college, then the positive effect of low schooling levels on stopgap employment are likely to be temporary for whites but relatively permanent for blacks.

Our major indicator of an age-related factor which affects stopgap employment is "time out of school," where still attending school is one option. This is essentially a slight variant of the "experience" variable commonly used by economists.[18] However, given the youthfulness of this sample, and its cross-sectional nature, work experience is only crudely measured. Many young men will have unstable labor-force attachments and hence time out of school will overstate the work experience achieved. This may be particularly the case for blacks since they are consistently less likely to be working than whites. Hence, this variable probably measures maturity as much as work experience, especially for younger males with lower educational attainments. We hypothesize that those employed who were still in school or only out of school a short time were more likely to be working at stopgap jobs than those who had been out of school for a longer period of time. The basic idea is that those out only a short time are still likely to have a weak attachment to work or may even be planning to go back to school in the near future. In addition, because they are less experienced, they will be less attractive workers to employers.

The third variable--whether the individual worked the previous year--

represents still another effort to measure recent work experience and/or the strength of the individual's labor-market attachment. The hypothesis here is that those who did not work in 1969 were more likely to be in stopgap jobs in 1970.

Interactions should help identify young men with particularly marginal labor-market attachments. For example, those who did not work the previous year but had been out of school five or more years are especially likely to have marginal labor market attachments. Interactions should also provide a test of the effect of the time-out-of-school variable on stopgap employment. Does the probably greater experience or maturity, indicated by being out of school longer, offset the hypothesized greater odds of being in stopgap jobs among the high-school dropouts (those will 0-11 years of schooling who were not attending)? If the poorly educated are trapped in such jobs, as is often argued, then time out of school might have no effect on job type. On the other hand, if experience or maturity compensates somewhat for low educational attainment, then time out of school will reduce the negative impact of low schooling levels.

Effect of Schooling and Experience on Stopgap Employment

The first set of logit regressions investigates the effect of these variables on stopgap employment for blacks and whites separately. Table 3 provides a description of the variables used in the analysis and Table 4 presents the logit parameters. The beta coefficients are presented in

[Tables 3 and 4 about here]

columns one and two. However, since log-odds parameters are not intuitively very meaningful, columns three and four transforms them into odds.[19]

In general, the analysis provides strong support for the hypothesized relationships. The small likelihood chi-square ratios indicate that the model fits the data well for both blacks and whites, although less well for blacks.[20] Taking the main effects first, what stands out is how similarly these variables behave for blacks and nonhispanic whites alike. For both, all three variables have a substantial impact on stopgap employment and in the directions hypothesized. In the case of educational attainment there is a very strong negative relationship--the greater the

number of school years attained, the less likely was a young man to be found in stopgap employment. However, despite the similarities in the direction and magnitude of the coefficients, the effects are somewhat stronger for whites--mainly because less than 12 years of school increases the odds of stopgap employment more for whites than blacks.

With regard to the effect of age-varying factors on stopgap employment, years-out-of-school also exhibits a strong negative relationship. School enrollment more than doubled the odds of being in a stopgap job, slightly more so for whites, and being out less than a year increases the odds by 52 percent for whites but only 35 percent for blacks. On the other hand, for those out 3-5 years, the odds of being in a stopgap job are considerably reduced. For whites, this negative effect is even greater for those out five or more years but not for blacks. As hypothesized, not having worked in 1969 significantly raised the odds of being in a stopgap job--increasing them by 34 percent for whites and 28 percent for blacks.

The interactions are also interesting and, by and large, support the hypotheses--for whites, at least. In the case of the interaction between work in 1969 and time out of school, our hypothesis was that an individual probably had some serious labor-market problems if he had not worked in 1969, despite having been out of school five or more years, and this would be reflected in a greater likelihood of being employed in a stopgap job. This combination of characteristics did indeed substantially increase the odds of being in a stopgap job for whites--by 34 percent. However, not working in 1969 actually slightly <u>decreases</u> the odds of being in a stopgap job for those still in school or out less than a year. Why this is so is unclear, however. None of the coefficients for blacks were sizable and none achieved significance.

For young men with less than a high school degree, school attendance increased the odds of being in a stopgap job, especially for whites. For dropouts, increased time out of school did seem to compensate partially for their low-level of schooling though the effect of this variable was again much more pronounced for whites than blacks. For example, school attendance for those with 0-11 years of schooling increased their odds of stopgap employment by 58 percent for whites and 19 percent for blacks. This positive impact turns to a negative one with time out of school: for

those out five or more years, the odds of stopgap employment are only 70 percent as great for whites and 78 percent for blacks. [21]

In sum, the logit analysis shows that educational attainment has a strong effect on stopgap employment. These are, after all, low-level jobs. However, age-related factors, indicative of career "immaturity" also had a substantial impact, net of educational attainment and interacting with it. Attending school and being out only a short-time considerably increased stopgap employment while being out several years decreased the odds of being in a stopgap job. Not having worked the previous year also raised the odds of stopgap employment. Moreover, the education variable itself has a life-cycle component since a high proportion of the teenagers (and even those in their early twenties) had not completed their schooling so that their educational attainment at the time of the census underestimated the number of schools years they would ultimately complete. We take all this as evidence of a major life-cycle component to stopgap employment.

Accounting for the Age Pattern of Stopgap Employment

In order to assess more directly the degree to which the schooling and experience variables explain the age gradient in stopgap employment, two additional sets of regressions were run for the black and white samples separately and then combined. The first model includes only one independent variable--age, treated as a covariate--while the second model adds educational attainment, school attendance, and whether worked in 1969.[22] Table 5 reports the beta coefficients for these regression

[Table 5 about here]

models. When age alone is entered into the equation, it has a strong negative effect on stopgap employment, particularly for the white sample. However, when the control variables are added to the equation, there is a substantial reduction in the beta coefficients. For the pooled sample, beta drops by 39 percent; for blacks it is reduced by 34 percent and for whites it decreases by 38 percent. Hence, a substantial proportion of the age effect on stopgap employment is due to the effect of these three variables. Moreover, this analysis understates their effect, partly because time out of school was eliminated from the equation due to its

strong relationship to age. For the same reason, no interaction terms were included either. All in all, then, the inclusion of just a few schooling and work experience variables, as main effects, has met with considerable success in explaining the age pattern of stopgap employment for both blacks and whites.

Explaining Overall Race Differences in Stopgap Employment

When we compared blacks and whites, we saw that the main effects of the independent variables were quite similar, which is rather surprising, given the substantial racial differences in stopgap employment revealed by Table 3 and Chart 1. How then can we account for the much higher proportion of blacks in stopgap jobs?

Given the similarities in the main effects of the independent variables for blacks and whites, we first investigated the role of compositional differences and interaction effects. To do this, we ran three logit regressons on a pooled black-white sample (Table 6). In the first, Model A, stopgap employment was regressed on race alone, resulting

[Table 6 about here]

in a black/white odds ratio of stopgap employment of 1.8. In the second model, called the baseline model, the main effects of educational attainment, time out of school, and whether worked in 1969 were added to those of race; in addition, the important interaction of educational attainment by time out of school was also included. Model B did achieve a significantly improved fit over model A. Although 27 degrees of freedom were lost, there was a 98.8 percent reduction in the likelihood χ^2 ratio--i.e., the improvement in fit was over 2.5 times the loss of degrees of freedom. However, adding the control variables actually slightly raises the effect of race on stopgap employment, the odds ratio increasing from 1.8 to 1.96. Since we know these variables affect stopgap employment for both racial groups, the lack of any decrease in the race coefficient, once the control variables are introduced, is indicative of offsetting compositional factors. As Table 3 showed, blacks have lower levels of educational attainment than whites (50 vs. 30 percent, respectively, had only 0-11 years of schooling while only 4 vs. 15 percent had 16 or or more years) and were more likely not to have worked in 1969 (4.7 vs. 2.5

percent). Both these compositional differences increase the black odds of stopgap employment. However, these effects were more than offset by the much smaller proportion of blacks in school compared to whites (12 vs. 21 percent) and by the higher proportions out three or more years (78 vs. 68 percent). The net effect of these opposing compositional factors was to depress the effect of race until the experience and education variables were included in the equations.

In Model C--the race-interaction model--the following three-way interactions were added to the baseline model: race by time out of school by work status in 1969 and race by time out of school by educational attainment. The goal here was to assess the contribution these three-way interactions make to the racial difference in stopgap employment, without the confounding influence of compositional factors. Since no new variables were added to Model C, no additional compositional effects should be operating and any change in the race effect will be due to the different effects of the two three-way interactions. And, in fact, there is a substantial reduction in the black/white odds ratios from Model B to Model C; they decrease from 1.96 to 1.36, a 31 percent reduction. Moreover, there is a 92 percent reduction in the χ^2 ratio, resulting in a model that fits. In this case, the improvement in fit is more than triple the loss of degrees of freedom.

In sum, although they are not always so easily interpretable, the interactions of work in 1969 by time out of school and of educational attainment by time out of school do have different effects for blacks and whites--their differential impact actually reduces the effect of race on stopgap employment (as measured by the odds ratio) by almost one third. Substantively, one thing these findings indicate is that, for whites, maturity or work experience does compensate more for low educational attainment than it does for blacks.

Examining Race Differences in the Age Pattern of Stopgap Employment

As we have just seen, apparently the experience and schooling variables do not explain much of the black-white differences in stopgap job attachments--only the interaction factors seem to help in this respect. This is not highly satisfactory since it does not tell us why

the effects are different for the two racial groups. However, if we consider the schooling and experience variables in life-cycle terms, it may still be possible for them to play a significant role in the racial differences in stopgap employment. Given their higher educational attainment, the variables promoting white stopgap employment were much more likely to be temporary in nature--being in school or out only a short time--while those promoting stopgap employment among blacks were more likely to be persistent--i.e., low educational attainment. Hence, although, for the sample as a whole, compositional differences in school enrollment and educational attainment between blacks and whites offset each other in their impact on stopgap employment, the effects should differ across age groups and, as a result, these factors may still play an important role in the substantial black/white differences in stopgap employment.

To investigate this issue, we ran separate logit regressions for three age groups in the black-white pooled sample--ages 14-19, 20-25, and 26-34. Table 8 reports the results of these regressions while Table 7 shows the distribution of blacks and whites, within each age group. Two models were run for each age category--in one, race alone was the

[Tables 7 and 8 about here]

independent variable, and, in the other, the main effects of educational attainment, time out of school, and work status in 1969 were added to race.

For 14-19 year olds, when race alone is entered into the equation, employed blacks are apparently less likely to be in stopgap jobs than whites, as indicated by an odds ratio of only .89. However, when the education and experience variables are included in the equation, the generally higher propensity of blacks for stopgap employment reasserts itself. The apparent reversal of the typical black/white differences in stopgap employment was because the substantially lower school enrollment rates of blacks (which reduces stopgap employment) more than offset their lower probability of employment in 1969 (which increases stopgap job attachments). Moreover, at this young age, there are few educational attainment differences between blacks and whites so that the potentially strong impact of education had little influence on the black/white differences in stopgap employment (Table 7). The net result of these

compositional differences was that, until these factors where controlled, black teenage stopgap employment was reduced below that of white.

For 20-25 year olds, since blacks continue to have much higher proportions out of school, this variable also continues to depress black stopgap employment rates. However, the proportion of both blacks and whites in school declined greatly for this age group so the negative impact of these compositional differences declined. On the other hand, although the effect of not working in 1969 increased for this age group (and race differences in composition remained), the proportions of either blacks or whites employed in 1970 who did not work in 1969 declined to trivial proportions. Hence, the role of this variable in black/white differences in stopgap employment decreased substantially. Furthermore, education emerged as a very important source of black/white differences in type of job held. Not only did the effect of education continue to be very strong but, as Table 7 shows, substantial black/white differences in educational attainment existed. On the one hand, only 19 percent of whites had achieved as little as 0-11 years of schooling compared to 41 percent of blacks. On the other hand, 13 percent of whites had achieved 16 or more years of schooling compared to 3.3 percent of blacks. The net result is that, for the equation with only race included, the compositional effects of lower school attendance of blacks were just offset by their lower educational attainments. Hence, there was no change in the coefficients when the control variables were introduced. The odds ratio remained at 1.79.

When we turn to the 26-34 age group, a very interesting pattern emerges. First of all, the contribution of both time out of school and employment status in 1969 to race differences in stopgap employment virtually disappears. In the case of time out of school, none of the coefficients achieve significance in this age group. Furthermore, very few blacks or whites were in school--i.e., this independent variable exhibits very little variability for this age group, which may, in part, account for the poor performance of its coefficients. Work experience in 1969 also drops out of the picture as a possibly significant source of black/white differences. The coefficients for this variable are actually increasing in size across age groups and remain significant. However, the proportion of the employed in 1970 who had not worked the previous

year was only 0.4 percent for blacks and 1.3 percent for whites. Hence, compositional differences would have little impact in this case.

As a result of these shifts in the importance of the experience variables, the only variable that could make an important contribution to black/white differences in stopgap employment for 26-34 year olds was educational attainment. Education continued to have a substantial effect on stopgap employment and exhibits strong black/white differences in composition. The net result is that for this age group, educational differences, when not controlled for, greatly increased the black/whites odd ratio; however, when the control variables were entered into the equation, the odds ratio dropped from 3.26 to 2.56.

Another way of assessing the impact of the schooling and experience variables on racial differences in the age pattern of stopgap employment is to compare the age changes in the odds ratios for the two regression models. When race alone is entered into the equation, the black/white odds ratios increase from 0.89 for 14-19 year olds all the way up to 3.26 for 26-34 year olds--an increase of 266 percent. However, when the schooling and experience variables are included, the odds ratios increase is much lower--from 1.18 for 14-19 year olds up to 2.56 for 26-34 year olds, a relative increase of only 116 percent. In short, with the controls, the increase in the odds ratios across ages is less than half of what it was without these variables. Hence, when we conceptualize the problem in life-cycle terms, it is clear that schooling and experience factors, and particularly the schooling factor, do play a substantial role in racial differences in stopgap employment. In essence, schooling has two opposing effects on stopgap employment. In the short run, for the young, it increases employment in stopgap jobs because those attending school or who have only recently finished school (especially below the level of a college degree), are likely to work in stopgap jobs on an interim basis. More extended schooling therefore increases stopgap employment and extends it over a longer period in the teenage and young adult years. However, once school is completed, these short-run factors encouraging stopgap employment disappear and the "permanent" effects of whatever educational level is attained start to have their long-run impact on job type.

Implications of the Life-Cycle Stopgap Job Market for the Black Youth Employment Ratio

Normally we assume that labor markets are roughly structured by skill level--more skilled workers are not usually competing with less skilled workers for the same job. However, the fact that stopgap job attachments were much more of a life-cycle phenomenon for whites than blacks implies a rather heterogeneous supply of labor to the stopgap job market. This should have some impact on the black youth employment rate, the issue we now want to explore, admittedly in a somewhat speculative fashion.

In contrast to whites, the percentage of black teenagers who are employed has undergone a substantial decline in the postwar period--for 18-19 year olds, the nonwhite employment-population ratio dropped from 66 percent in 1955 (as compared to 64 percent for whites) to 47 percent in 1970 (vs. 59 percent for whites), and on down to 33 percent in 1984 (compared to 60 percent for whites) (Rees 1986, p. 616). One popular explanation for this trend is the spatial mismatch hypothesis which argues that the postwar exodus of manufacturing to the suburbs has deprived central cities of good blue-collar jobs (Kain 1968; Kasarda 1983, 1985; Wilson 1987). As a consequence, the major job opportunities in central cities increasingly consist of either skilled white-collar employment in what Kasarda calls "information processessing" industries or else very low-level blue-collar jobs. This leaves black urban youths, trapped in the ghettos, to struggle in weak secondary labor markets (Kain 1968; Kasarda 1983, 1985; Wilson 1987).

There is little doubt that industry has been leaving central cities at a fast pace since 1950;[23] nevertheless, the spatial mismatch theory has run into some empirical difficulties. For one thing, as the work of Cogan (1982) has shown, the apparent equality of the black/white employment rates in 1950 was entirely the result of the high agricultural employment rates of black youths in the South. Outside the South, the 1950 employment rates of young blacks were much below those of whites.[24] Furthermore, most of the 1950-1970 decline in the black employment rate was due to decreasing agricultural employment, primarily, Cogan argues, due to the increased mechanization of Southern agriculture during the 1950-1970 period; employment ratios changed little in other regions, despite the substantial exodus of manufacturing from central cities during

this period (Cogan 1982). Hence, the relatively poor employment prospects of nonfarm black youths preceded the flight of industry from the central cities. In fact, there is some danger of viewing the 1950s situation in an overly rosy light. Not only were over 50 percent of employed black Southern teenagers agricultural laborers in 1950, but, as Cogan mentions somewhat in passing, over half of these were unpaid family workers (Cogan 1982, p. 625). And while mechanization may have been a major factor in the decline in agricultural employment of black teenagers, this period also saw a precipitous decline in the number of black farmers--a decline so large that by 1970 their numbers were less than 10 percent of what they had been in 1950.[25] The number of black male unpaid family laborers on farms correspondingly decreased enormously--from 114,825 to 2,150--a decline from 3.3 percent of black male workers to 0.05 percent (U.S. Bureau of the Census 1953, p. 1-277; 1973, p. 1-744). Hence, the high Southern agricultural employment in 1950 largely reflected the existence of a substantial number of black farmers in that period, as well as the persistence of traditional family farming practices, not a favorable competitive labor-market position for black teenagers. However, the substantial post-1970 decline in black youth employment cannot be explained by further decreases in agricultural employment since, by 1970, very few black youths remained in farm occupations.

A recent analysis, focusing on Chicago, by Ellwood also calls into question the validity of the spatial mismatch hypothesis (Ellwood 1986). He found that no measure of accessibility had any predictive power in employment equations for young people and that black/white differences were totally unaffected by their inclusion.[26] Moreover, he found that most teenagers, black and white alike, commute out of their neighborhoods to work (Ellwood 1982, p. 148).[27]

A somewhat different approach to the deteriorating employment prospects of young black males has been taken by Mare and Winship (1984). They argue that some of the declines are compositional in nature--namely that because of black/white differences in recent trends in military service and schooling, the employability of young out-of-school civilian blacks has deteriorated relative to that of whites. Attending school temporarily removes potent lly higher quality labor, leaving less employable out-of-school youths in the labor market. Since school

attendance has been rising more rapidly among blacks than whites in recent years, this has led to a relative increase in the number of less employable out-of-school blacks youths in the labor market during the teenage years. Furthermore, with the abolishment of the draft, white participation in the military has declined while black has risen. Here too selectivity operates, since the services reject the lowest-level applicants, fostering a further rise in the relative number of less employable out-of-school civilian black youths. Finally, the more delayed entry into the civilian labor force (because of more extended schooling and increasing military service) leads to a postponement of the labor-market instability characteristic of this transitional period, increasing unemployment at a somewhat later age.

While Mare and Winship provide convincing evidence that selectivity factors are important components of the recent trend in black/white differences in the youth employment rate, this explanation is incomplete, as they themselves point out, because a major factor in the growing employment differentials has been the rising employment of white teenage students, indicating that more is going on than just changes in the composition of the black out-of-school civilian teenage population (Mare and Winship 1984). We believe that the youthful stopgap job phenomenon can also make a contribution to this debate.

As we have seen, life-cycle stopgap employment is a somewhat more accurate description of white than black labor market behavior. This suggests that the existence of a life-cycle pattern of stopgap employment for whites may impact on the labor market opportunities of young black males, especially blacks from lower socioeconomic groups who are presumably at the bottom of the job queue and who are just the youths whose representation in the out-of-school civilian population has been rising, according to Mare and Winship. If white males from higher socioeconomic origins and with relatively brighter occupational futures use a number of low-level jobs as youthful stopgap employment, then they represent a higher status and more educated labor supply than would typically be attracted to such jobs as career or career-entry positions. What attracts whites to such employment is not the wages but the flexibility of working hours and, above all else, the opportunity to work part-time (Lazear 1977). If the youthful white labor supply to stopgap

jobs is large, as the evidence indicates, then it should provide severe competition to those young blacks who are from lower socioeconomic backgrounds, perhaps severe enough to make it difficult for some of them to be employed at all.[28] Moreover, the fact that a much higher proportion of adult blacks remain in stopgap jobs limits the available job opportunities of black youth still further. As Freeman and Holzer (1986) point out, dead-end jobs are in a sense "shared" among youths. If turnover were reduced, the ease of obtaining such jobs would also be reduced. Hence, even if some stopgap jobs were monopolized by blacks, the persistence of older blacks in such jobs makes it more difficult for younger blacks to share them in the way whites apparently do.

For the hypothesis that higher status white labor is competing with lower status black labor for stopgap jobs to have any credibility, one must show first that young whites do indeed numerically dominate the labor-market of youthful stopgap jobs. Second, white males in stopgap jobs must be of a higher socioeconomic status and with higher levels of human capital attainments than the blacks in them.

Density of Blacks in Stopgap Jobs

Blacks are a small minority of young employed males, aged 14-34--only 9.5 percent in 1970. Not surprisingly, they were a somewhat higher proportion of those employed in stopgap jobs--12.4 percent--but still were very much outnumbered by nonhispanic white males. Moreover, an analysis of the black density in individual stopgap jobs reveals that there are few where black males amount to even a substantial minority (Table 9). For

[Table 9 about here]

example, 60.5 percent of blacks were found in the 103 stopgap jobs where blacks constituted less than 20 percent of the employed and another 30.2 percent of blacks were in the 27 stopgap jobs where blacks were 20-29 percent of the employed. In all these cases, nonhispanic whites were the great majority of workers in these jobs and for the stopgap group as a whole, nonhispanic whites were 80.5 percent of all stopgap workers under age 35. In short, stopgap jobs are not minority dominated.

It may not seem remarkable that there were no stopgap jobs in which blacks made up a high proportion of the workers since blacks represent such a low proportion of all young employed or even of all young stopgap

workers. Yet, given the substantial differences in the black-white occupational distributions, one might have expected more racially segregated occupations to show up in the analysis, analogous to the sex-segregated pattern that has been so well documented over the years, especially for low-level jobs such as the stopgap jobs. Thus even when women were a very small percentage of the labor force, there were a number of occupations which were predominantly composed of female workers. For example, in 1900, women were only 18 percent of gainful workers; yet 42 percent of them were found in occupations that were 80 percent or more female; 54 percent were in occupations that were 70 percent or more female (Oppenheimer 1970, pp. 69 and 71). However, there seem to be few even low-level stopgap jobs which are "owned" by blacks and whose growth might positively affect black employment opportunities in the same way that the expansion of female occupations did for women in the postwar period (Oppenheimer 1970; 1973).[29]

In short, these data suggest that in 1970 young nonhispanic white males numerically dominated the youthful male labor market in stopgap jobs and that, as a result, the employment opportunities for young blacks in such low-level jobs might be substantially affected by white labor-market behavior. Moreover, this does not take into account the competition for many of these jobs coming from women who, in retail sales especially, have provided a major source of labor.

There are three variables we will use to assess whether whites in stopgap jobs are from higher socioeconomic backgrounds than blacks and are also likely to represent a higher "quality" (i.e., more educated) labor supply--these are the relationship of family income to the poverty cutoff, school-enrollment, and educational attainment of those in stopgap jobs.

Relationship of Family Income to the Povery Cutoff

Blacks are much more likely than whites to be in blue-collar and service rather than white-collar stopgap jobs. Since these stopgap job types also differ on other socioeconomic characteristics of their workers, observed differences in variables such as school enrollment, educational attainment and family income position may exaggerate the competitive disadvantage of blacks in the same type of stopgap job. Hence, we will

compare blacks and whites in blue- and white-collar stopgap jobs separately.

Our indicator of family income position is the Census Bureau's variable on the ratio of the family's income to the poverty cut-off because this measure takes into account family size and age composition--a major advantage given the much higher proportion of female-headed families among blacks.[30] The disadvantage in this approach is that a measure based on family income includes the income of the young man and hence is not a pure measure of the economic position of the family, independently of the young man's "contribution." Since black families are likely to have lower incomes than white, the relative contribution of earnings of young black males in stopgap jobs will be greater so that the comparisons will bias downward the differences between the two racial groups, a conservative bias from our standpoint.[31]

Table 10 shows the median ratio of family income to the poverty line,

[Table 10 about here]

by race, for males aged 14-19 who were sons or relatives of the heads of their households.[32] For males in this age group 89 percent of black and 88 percent of nonhispanic white youths were in families where they were either the son or other relative of the head.

Stopgap jobs are low-level jobs and, for this reason alone, one might expect them to disproportionately utilize workers from lower socioeconomic groups. On the other hand, to the extent they are also life-cycle jobs, appealing to young men from higher socioeconomic groups as interim employment arrangements, then a substantial proportion of stopgap workers will not come from lower socioeconomic groups. Given these countervailing tendencies, what is their net effect on the socioeconomic composition of stopgap jobs?

The income ratio data indicate that neither blacks nor whites employed in stopgap jobs were, compared to all males, aged 14-19, predominantly recruited from lower income groups. In fact, the family income ratios are slightly higher for white males in both blue- and white-collar stopgap jobs than for all nonhispanic white males. Thus the income ratio for whites in blue-collar stopgap jobs is 2.96 compared to 2.86 for all white youths living at home, and is even somewhat higher than the ratio for the families of white teenagers who were not working. The ratios are slightly

higher for white males in white-collar stopgap jobs, though the the differences are not very impressive. The ratio of family income to the poverty cutoff of black teenagers in blue-collar stopgap jobs is also slightly higher than that of all black youths and is markedly greater than that of nonworking black youths. Whether this indicates that those not in the labor force are from the lowest socioeconomic groups or simply that those with any jobs have enough earnings to produce the slightly higher family income ratios is difficult to determine. The family income ratio of blacks in white-collar stopgap jobs is substantially higher than that of all black families of teenagers and certainly of those not in the labor force. This suggests that, as with whites, white-collar employment (whether stopgap or not) pulls in youths from higher socioeconomic backgrounds.

Since youthful stopgap workers did not disproportionately come from families at the lower end of the income distribution and since the income ratio of families of white teenagers was, on average, considerably higher than that of black families, the black/white income ratio differences were large for all categories considered. For example, for all 14-19 year-olds, the median family income ratio was 2.86 for whites but only 1.31 for blacks; for families of youths in blue-collar stopgap jobs, the median ratio was 2.96 for whites but only 1.45 for blacks. The income ratio difference for those in white-collar stopgap jobs was also substantial, though not as great as for the other groups. And the family income ratio for black youths not working was the lowest of all--only 1.24. All this suggests that black youths may be operating at a serious competitive disadvantage compared to white youths for such low-level jobs.[33]

School Enrollment of Blacks vs. Nonhispanic Whites

The second indicator used to assess socioeconomic status and, in addition, levels of human capital is school enrollment. Once again, we need to ask whether a disproportionate number of either whites or blacks in stopgap jobs come from families who produce less educated children and, concomittantly, whether blacks are at a socioeconomic disadvantage compared to whites in blue-collar stopgap jobs. Table 11 shows that,

[Table 11 about here]

for each age group, a substantial proportion of nonhispanic whites employed in both blue- as well as white-collar stopgap jobs were also enrolled in school--a much higher proportion than for blacks employed in these job types. For 16-17 year olds, for example, 87 percent of whites in blue-collar stopgap jobs were attending school, compared to 66 percent of blacks; for 18-19-year olds, the contrast is between 58 percent for whites and 32 percent for blacks. For 20-21-year olds, especially, the differences are substantial--41 percent of whites but only 13.8 percent of blacks in blue-collar stopgap jobs were in school. The black-white differences are sizable for those in white-collar stopgap jobs as well, even though, for both races, higher proportions were in school.

The table also shows that, for whites, the proportion in white-collar stopgap jobs who were in school was substantially greater than that for all white males combined, indicating once again, the tendency of whites from higher socioeconomic groups to combine stopgap employment with school attendance. The proportions in blue-collar stopgap employment is roughly equivalent to that of all white males. For blacks, the proportion in white-collar stopgap employment enrolled is greater than for all blacks but only for those 18 or older. School enrollment for blacks in blue-collar stopgap jobs is generally much below that of all blacks. Hence, blue-collar stopgap employment seems to be a more common strategy for whites attending school than for blacks.

In sum, these finding document that a much higher proportion of whites than blacks in stopgap jobs are using them as interim measures while they finish their education. This suggests that it is probably unwise to limit the analysis of youth labor market behavior and problems to those not enrolled in school, a common practice in the labor market literature (Holzer 1986; Ballen and Freeman 1986; Ornstein 1976; Ellwood 1982). Those in school are an important segment of the stopgap job market and will therefore influence its operation; to ignore them provides a distorted view of the nature of this market and of the position of blacks in it.[34]

Educational Attainment of Black and White Stopgap Workers

If whites are more likely than blacks to use stopgap jobs as a temporary youthful expediency, then whites in such jobs will have more schooling than blacks[35] and the racial differences should be greater than for those in career jobs, though this may be offset by the more socially heterogeneous character of career jobs which will include quite high- as well as low-level positions. Moreover, the black/white differences in schooling should be related to age for those in stopgap jobs but not in career jobs. The likelihood that whites in stopgap jobs will be more highly educated than blacks should be greater for younger males still in the early career-entry period; with time, these more educated males will depart for higher-level career or career-entry positions, leaving a less-educated residual of whites in the older stopgap group.

We have investigated these somewhat more complex hypotheses via logit analysis. One set of logits is of the likelihood of having less than 12 years of schooling and the other is of the likelihood of having completed 13 or more years of schooling. Each analysis is done separately for blue-collar stopgap and blue-collar career jobs. Race and race interacted with age are the right-hand side variables. The analysis is limited to blue-collar stopgap and career jobs because the white-collar career category is so heterogeneous.[36] The findings, reported as odds, are presented in Table 12.

[Table 12 about here]

Whether in a stopgap or career job, whites are less likely than blacks to have under 12 years of school; moreover, the difference is larger in the stopgap group. Similarly, whites in blue-collar stopgap jobs are much more likely than blacks to have completed 13 or more years of schooling and here the difference is substantially greater in the stopgap than the career group--an odds of 1.85 vs. 1.33 respectively. As hypothesized, race also interacts with age in the stopgap category.[37] For 20-21 year olds in blue-collar stopgap jobs, the white odds of having less than 12 years of schooling are only 77 percent of the overall white odds. On the other hand, for males 25-29 and 30-34 the odds are 14 and 16 percent higher respectively. The odds for age are all near unity for the career group and none are significant.

In the case of the likelihood of having completed 13 or more years of schooling, if a white were 20-21 or 22-24 years old, this increased the odds (compared to blacks) by 32 and 12 percent respectively. For older males, the situation was reversed. For career males, the odds for 20-21 year olds were also significantly increased and those for 30-34 year olds reduced but in neither case was it as much as in the stopgap group.

In sum, this analysis supports the position that white stopgap employment, much more than black, consists of those using such jobs as a youthful life-cycle expediency and this is reflected in the greater racial discrepancy in educational attainment in stopgap than career jobs, a discrepancy which was particularly characteristic of the younger males in the sample.

To sum up, the data on the family's economic position, school enrollment, and educational attainment of males in stopgap jobs all support the idea that the competition for relatively low-level stopgap jobs is not just between lower-level whites and blacks but is partly between lower status blacks and higher status more educated whites who are only temporarily operating in such a low-level job market. The net effect, however, is that the labor supply to the stopgap job market is highly heterogeneous. The result may be that some young lower status black youths have particular difficulty obtaining a toe-hold in many types of low-level jobs--jobs which might not represent even the first rung on a career ladder but still provide work experience and earnings early in the career cycle.

If higher status whites dominate the stopgap job market, then conditions which increase the rate of entry of young whites into that market, and/or impede their early exit, should intensify the labor-market difficulties of lower-status black youth. By the nature of this argument, factors which negatively affect the labor-market position of youth may have different labor market consequences for whites and blacks. For whites, a relative decrease in career or career-entry job opportunities should increase stopgap job attachment for a variety of reasons. More whites enter the stopgap job maket on an interim basis rather than going directly from school to career or career-entry positions and exits from this market are delayed by a lack of expansion of career positions

relative to the labor supply. Furthermore, if the number of jobs in attractive career or career-entry positions is not expanding relatively rapidly, then increased investments in schooling have often been an option; however, school attendance encourages stopgap employment. The net result of all this may not be a decrease in white youths' labor-market position as measured by the employment ratio but a deterioration instead in their relative earnings position vis-a-vis older whites. This has been observed and may be one factor in the closing gap between black/white wages. On the other hand, if higher quality labor "displaces" (i.e., substitutes for) blacks at the lowest skill levels, and the extent of this displacement increases when the labor-market situation of whites deteriorates, then the result will be declining employment rates for those at the end of the job queue--the lowest-skilled blacks. Hence, one key to understanding the deteriorating labor-market position of poor black youths may lie in a better understanding of what is happening to the labor-market position of non-disadvantaged white youths.

While the empirical investigation of these issues awaits the expansion of this research to more recent data,[38] we can still outline how a number of current explanations for labor-market change might be informed by a stopgap job analysis and how these processes can also be used to test the stopgap job hypotheses just outlined. For example, take the argument that the relatively large size of the baby boom cohort has had a deleterious effect on the labor-market position of its male members (Al-Salam, Quester and Welch 1981; Welch 1979; Wachter 1982). Some criticism of this hypothesis has been expressed by Ellwood and Wise (1983) who argue that if a sudden excess supply of young workers had developed, all groups should suffer to some degree; however, the trend in the employment rate for white youths has been stable but for blacks it has been down. However, such a differential impact between the races would be predicted using a stopgap job argument.

If, as we have seen in Table 1, life-cycle jobs are closely associated with certain occupations and, hence with certain industries, then changes in the occupational-industrial structure should also have an impact on the transition to adult occupational careers. If job opportunities in career or career-entry jobs are not expanding rapidly, then the availability of stopgap employment provides a temporary solution but one that delays adult

occupational attachments. Aside from any direct effects this would have on employment opportunities for blacks, it should indirectly impact on lower-skilled blacks in particular if, once again, there is pile up of whites and middle-level blacks in stopgap employment.

Data on the numbers employed, by job type, in the major industries are presented in Chart 3. Absolute numbers are used because they indicate which industries are the major employers of those in different life-cycle job types. However, the bar chart format also provides a good visual estimate of the relative importance of different types of career-cycle jobs within an industry. The chart indicates that there are marked industrial and occupational variations in life-cycle job types, just as there were marked occupational differences. Service industries have relatively high proportions in stopgap jobs while manufacturing industries do not, particularly durable goods industries which, in 1970, were almost entirely made up of career and career-entry jobs.

Employment in service industries has grown rapidly since the early 1970s while it has declined in manufacturing, particularly in durable goods manufacturing (Table 13). As a consequence of these different

[Table 13 about here]

industry growth rates, the share of manufacturing in total employment has declined substantially, from 25.1 percent of the total in 1969 to 18.5 percent in 1984 (Kutscher and Personick, 1986: 5). This suggests that both young blacks and whites may be experiencing delays in finding employment in career or career-entry types of jobs and that lower-level blacks might, in addition, be indirectly affected by the lower rates of exiting from stopgap employment of higher-level workers. The result would be, once again, a decline in the employment ratio for the lowest level workers.

Conclusion

This paper has compared black and white male youths on the extent to which stopgap employment represents a life-cycle phenomenon. It finds that life-cycle employment in stopgap jobs is characteristic of both blacks and whites; however, for the period covered, blacks are much less likely than whites to exit jobs of this type as they mature.

Nevertheless, factors such as school enrollment, time out of school, educational attainment and work experience the previous year have very similar effects on stopgap employment and make a substantial contribution to the age gradient of stopgap employment for blacks and whites alike. For both, the likelihood of employment in a stopgap job is strongly positively related to school enrollment but negatively related to time out of school. Low levels of educational attainment increase the likelihood of employment in stopgap jobs but this is partially counteracted by relatively extensive work experience. Differences between blacks and whites in compositional factors offset each other in this analysis. The much lower educational level of blacks increases their likelihood of stopgap job attachments while decreasing it for whites. On the other hand, whites are much more likely to be enrolled in school than blacks, increasing the likelihood that whites will be in stopgap jobs but reducing that of blacks. However, looked at another way, blacks, much more than whites, exhibit characteristics--namely, low educational attainment--that will continue to promote stopgap employment throughout their lives. Moreover, whites exhibit characteristics--high enrollment rates--that only <u>temporarily</u> encourage stopgap employment. Hence, the substantial black/white differences in the age-pattern of stopgap employment is, in fact, partly an outcome of these differences in school enrollment and educational attainment.

If white youths constitute the major source of labor for the stopgap job market but also represent an "over-educated" labor supply for such jobs, then the competitive economic position of the least educated black youths will suffer and this may be one factor in the lower employment ratios of black youths. In addition, factors which affect the rate of entry of whites into the stopgap job market and the rate and timing of their exit from this market should also impact on lower-skilled black youths. For example, if large cohort size directly impeded the early transition of white (and black) youths into career and career-entry jobs, then the additional indirect effect of this would be to reduce job opportunities for lower-level black youths. Similarly, the decline in employment in durable goods manufacturing has directly limited what used to be attractive and relatively well-paying career employment opportunities for both black and white high-school graduates. However,

the indirect effect of this may have been a rise in the number of white youths who are "marking time" in stopgap jobs, thereby reducing the job opportunities for those workers operating at the end of the labor queue. In sum, this paper suggests that the use of the life-cycle job concept might offer an additional analytical tool for understanding the youth labor market and, in particular, the much lower and declining rates of employment for black youths.

FOOTNOTES

1. Another potentially troublesome aspect of this approach is the age-varying selectivity biases that are introduced by virtue of this sample restriction. For example, youths from somewhat higher-level socioeconomic backgrounds who not only complete high school but also go on to varying number of years of college can only enter the sample when they are out of school. They may never be included if the age cut-off is quite low. It is hard to believe that this does not bias black/white comparisons of labor-market characteristics and outcomes.

2. Hence, this is basically a job-queuing hypothesis. For other research in this area see Hodge 1973 and Shulman 1987.

3. However, empirical research on mobility out of secondary vs. primary labor market segments also provides little support for the dualist position that workers are trapped in secondary labor markets (Rumberger and Carnoy, 1980; Jacobs, 1983; Wanner and Lewis, 1983; D'Amico and Brown, 1982).

4. It would <u>not</u> be appropriate to use the 1965 occupational data to create the typology since it would then be impossible to replicate this procedure on other censuses since only the 1970 census obtained information on a past occupation.

5. The three-digit occupational codes were used but, in addition, some of the more heterogeneous occupations were cross-classified by industry and, in some cases, by class of worker as well. The result was a classification system of 569 job categories.

6. However, this still permits a later analysis of the extent to which youthful stopgap jobs are also important occupations for women and may even be typed as "female" jobs.

7. Another possibility was school enrollment but this was rejected because it would have introduced a socioeconomic bias into the measurement process.

8. However, using the proportion of the young who were working part-time in an occupation seems to tap the same features as the proportions working part-year. Thus the correlation between the proportions of young men working less than 35 hours (during the census reference week) in an occupation and the proportions working less than 40 weeks in 1969 was 0.85. Of the 143 stopgap jobs, only 10 had less than 25.5 percent working under 40 weeks--the proportion for all employed young men.

9. The base for the percentage working part time was expanded to those under 29 so that the percentages were not so heavily weighted by the behavior of teenagers.

10. Career-entry jobs will also include career occupations that have a relatively youthful age structure because of rapid growth in the recent past. However, as the major goal was to distinguish youthful stopgap jobs from all the others, this is not a serious problem.

11. If an occupation had relatively high proportions in the 55-74 age group, it also had to have at least 5 percent of the workers under age 25. This was primarily to insure a sufficiently large sample size in the younger age group so the proportions part-time could be computed.

12. See Oppenheimer (1989) for a discussion of the empirical differences between the stopgap job type and the secondary labor market segment of the dualist literature.

13. The procedure is analogous to that used by Blau and Duncan (1967). The SEI was created using aggregate-level characteristics of occupations--education and income--but then the individual's SEI is regressed on his educational attainment as one predictor. Here,

stopgap employment is partially defined in terms of an occupation's age composition and then we examine how an individual's age affects whether he is employed in a stopgap job.

14. See Oppenheimer (1989) for a more detailed discussion of this issue.

15. The labor reserve consists of those not in the labor force during the census reference week but who had worked at some time since 1960.

16. A large labor-reserve in stopgap jobs should also keep wages relatively low, reducing their attractiveness to those with more "mature" labor-force commitments.

17. It is also interesting that this ratio is lowest for the career entry rather than the career group, indicating the strong attachment of career entry males to the labor force as well as the probably substantial contribution of attractive new and rapidly expanding occupations to this category.

18. Those still in school were assigned the zero category. For those not in school, time out was measured by subtracting 5.5 + school years completed from the individual's age. The results were collapsed into the five-category variable described in Table 2.

19. In this specification, the intercept represents the overall average effect of the logits for all the specified combinations of the different independent variables and each parameter provides the estimated effect for each catagory compared to the <u>overall</u> average effect rather than compared to the <u>omitted</u> category for each qualitative variable. For this reason, where it is substantively interesting, the coefficients have been calculated for the ommitted categories. When transformed into odds, the effects become multiplicative.

20. However, none of the coefficients for the interaction between work in 1969 and time out of school were significant for blacks. When this

interaction is dropped from the model, the fit of the model improves; the likelihood χ^2 ratio increases to 15.4 (with 14 d.f.) and has a P-value of .348, a better fit than before but still not as good as for whites.

21. An interesting anomaly in this interaction is the positive effect of time out of school for those with 16 or more years of schooling, a pattern observed for both races, although it is only statistically significant for whites. This may, in part, reflect a certain measurement error in the stopgap categorization. White stopgap workers, aged 14-34, out 5+ years and with 16+ years of schooling were only 1.4% of all white stopgap workers. Besides 72% of them were either professional, sales, or clerical workers, similar to the 75% of comparable males in career jobs.

22. No interactions were included because of their high collinearity with age.

23. For example, Kasarda points out that the number employed in manufacturing and construction in New York City declined from 40 percent of total employment in 1953 to 29 percent in 1970; it declined to 23 percent by 1980 (Kasarda 1983, p. 24). Note that the greatest decline had already occurred by 1970.

24. For example, while the Southern black teenage employment ratio was 54.8 percent in 1950, compared to 42.5 percent for whites, in the Northeast the ratio was only 23.5 percent for blacks but 33.2 percent for whites; a similar discrepancy existed in the West. In the Northcentral region the gap was even greater--an employment ratio of 28.1 percent for blacks but 46.7 percent for whites (Cogan 1982, 623).

25. In the 1950-1970 period, the total number of employed black males who were farmers or farm managers decreased from 464,419 to 36,651--a 92 percent decrease, representing a decline in the proportion who were farmers from 13.3 percent 0.9 percent (U.S. Bureau of the Census 1953, pp. 1-276; 1973, pp. 1-744).

26. See Ellwood for a discussion of a number of additional studies which challenge the mismatch hypothesis. In addition, we included a central city vs. outside central city variable in the logit analysis and it had no effect for either blacks or whites.

27. On the other hand, using 1980 census data, Lewin-Epstein (1986) found that the employment ratio of black but not white youths was substantially affected by the availability of youth jobs in Chicago neighborhoods. Such jobs were, in turn, less available in predominantly black neighborhoods. Whether the greater sensitivty of blacks to local labor-market conditions was due to their greater immobility or to their relatively poor position in the labor queue could not be determined, however.

28. A large, but itinerant, labor supply of young white workers will also tend to keep wages down and, perhaps even more importantly, obviate the necessity for employers to offer any long-term advancement opportunities for such low-level workers.

29. In fact, the reverse has been the case for young blacks, given the substantial decline in employment opportunities in Southern agriculture because of increased mechanization (Cogan 1982).

30. See Dictionary item 105 for a description of the poverty level and the matrix from which the poverty cutoffs were drawn from (U.S. Bureau of the Census 1972).

31. In any event, the bias is not likely to be large. Ellwood and Wise report that "even out-of-school youth living with families in poverty or near poverty provide, on average, only 10 percent of family income." (1983, p. 80).

32. The comparisons are limited to males, aged 14-19, because departures from the parental home start to increase sharply in the late teens.

33. One facet of this disadvantage will also be the probably greater prevalence of youthful stopgap jobs in predominantly white neighborgoods and the comparative advantage this provides white youths (Lewin-Epstein 1986).

34. Comparisons of out-of-school youth across age groups (i.e., a synthetic cohort analysis) also introduces a number of selectivity biases. For a discussion of issues of this kind, see Mare, Winship and Kubitschek 1984 and Mare and Winship 1984.

35. That this is the case is already indicated by the much higher proportions of whites than blacks who were enrolled in school in their late teens and early twenties as revealed in Table 11.

36. The findings are similar, but less pronounced, for white-collar workers as compared to blue-collar workers.

37. The coefficients for the 18-19 year olds are not too meaningful as most were too young to have achieved 13 or more years of school and many will not have yet graduated from high school.

38. Work on the 1980 data is in progress, however.

APPENDIX
LIFE-CYCLE STOPGAP JOBS

Occupation	Occupation Code Number	Industry Code Number
STOPGAP JOBS[1]		
Librarians, archivists	32,33	
Health workers, n.e.c	73,74,81,82, 84,85	
Clinical laboratory technicians	80	
Recreation workers	101	
Physical education teachers	124	
Teachers, except college	145	
Actors, writers, artists, entertainers	175, 182, 194	
Athletes	180	
Musicians and composers	185	
Building managers	216	
Peddlers	264	
Newsboys	266	
Retail clerks (all except those in tire and accessories dealerships and gas stations)	283	607-609,617-619 627-629,637-639, 649,657,658,667-669,677-679,687-689,697-699
Salesmen, allocated	296	
Cashiers	310	
Counter clerks	314	
Interviewers	320	
File clerks	325	
Library attendants	330	
Mail handlers, exc. post office	332	
Messengers	333	
Billing machine operators	341	
Calculating and tabulating machine operators	342	
Dublicating machine operators	344	
Office machine operators	355	
Receptionists	364	
Shipping clerks, n.e.c.	374	017-078,407-499 707-947
Stock clerks	381	
Wholesale trade		507-599
Retail trade		607-699
Other		017-078,407-499, 707-947

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[1]Some job categories have been collapsed where industry made little difference. Hence, the total number of stopgap jobs will differ from the numbers listed in Table .

Teacher's aide	382	
Telephone operator	385	
Typist	391	
Clerical, n.e.c.	394, 395	
Retail trade		607-699
Professional services		828-899
Other		017-078,727-817
Clerical,allocated	396	
Decorators & window dressers	425	
Motion picture projectionists	505	
Painters, construction & maintenance	510	
Roofers and slaters	534	
Sign painters	543	
Assemblers, n.e.c.	602	017-078,407-947
Chainmen, rodmen, surveying	605	
Gas station attendants	623	
Produce graders and packers	625	
Laundry & dry cleaning operatives	630	
Packers & wrappers, except meat	643	
Miscellaneous operatives, other	694,695	017-078,407-947
Operatives, except transp., allocated	696	
Boatmen & canalmen	701	
Busdrivers	703	
Deliverymen	705	
Parking attendants	711	
Animal caretakers, except farm	740	
Carpenters' helphers	750	
Construction laborers	751	
Fishermen & oystermen	752	
Laborers, freight	753	
Paper and printing		328-339
Transportation		407-429
Wholesale trade		507-599
Retail trade, building supplies		607-608,679
Retail trade, n.e.c.		649,609-678 687-699
N.e.c.		017-078,447-499 707-947
Gardener, private wage & salary	755	
Gardener, state government	755	
Gardener, self-employed	755	
Lumbermen	761	
Stockhandlers, except those in manufacturing	762	
Vehicle washers	764	
Warehousemen, n.e.c.	770	
Misc. laborers, other	780	017-078,407-947

Unspecified laborers	785	
Lumber & wood		107-118
Stone & clay		119-138
Fabricated metal		157-169
Transport equipment		219-238
Durable goods, n.e.c.		239-267
Food & kindred products		268-299
Paper & printing		328-339
Wholesale trade		507-599
Retail trade		607-699
Other		017-078,707-947
Laborers, allocated	796	
Farm laborers, wage workers	822	
Farm laborers, unpaid	823	
Farm laborers, allocated	846	
Chambermaids and maids	901	
Cleaners	902	
Janitors	903	
Bartenders	910	
Busboys	911	
Cooks	912	
Retail trade		607-699
Personal service		769-817
Professional service		828-947
Dishwashers	913	
Food counter workers	914	
Waiters	915	
Food service workers, n.e.c.	916	
Health aides & trainees	921-923	
Recreation attendants	932	
Personal attendants	933	
Bellhops and porters	934	
Personal service, n.e.c.	941,945,952	
Childcare workers	942	
Housekeepers, exc. private household	950	
Ushers	953	
Service workers, allocated	976	
Childcare workers, private home	980	
Maids, private home	984	

Table 1.-Current Occupation by Life-Cycle Job Type: Employed Black and Nonhispanic White Males, Aged 14-34, 1970

Occupation	Stopgap Whites	Stopgap Blacks	Career Entry Whites	Career Entry Blacks	Career Whites	Career Black
	(46,413)	(7,121)	(31,499)	(4,162)	(84,024)	(5,710)
Total	100.0	100.0	100.0	100.0	100.0	100.0
White Collar	27.2	17.3	32.3	18.7	51.2	29.6
Professionals	3.5	1.8	19.9	8.8	22.6	10.7
Managers	0.2	0.1	0.9	0.1	14.3	6.3
Sales	12.3	4.5	1.7	0.3	8.0	2.8
Clerical	11.2	10.9	9.8	9.5	6.3	9.8
Blue Collar	72.9	82.7	67.6	81.4	48.8	70.4
Craftsmen	2.6	1.6	22.4	11.0	27.4	32.4
Operatives	19.1	19.0	37.4	53.4	14.4	29.7
Laborers, all	31.2	35.0	6.4	12.6	0.3	1.5
Farmers	-	-	-	-	2.5	0.9
Protective Service	-	-	-	-	3.4	4.4
Other Service	20.0	27.1	1.4	4.4	0.8	1.5

Source: 1970 Public Use Samples

Table 2.-Mobility Behavior, by Age and Job Type in 1965: Blacks and Nonhispanic Whites, 1970

Race and Age in 1965	Percent Remaining in Same Job Type, by Job Type in 1965		
	Stopgap	Career Entry	Career
Nonhispanic whites			
16-21	27.3	42.9	61.1
22-29	36.0	53.0	83.9
Blacks			
16-21	41.8	52.2	56.9
22-29	56.7	56.7	76.4

Race and Age in 1965	1970 Destination of Those Exiting Stopgap Jobs					
	Total	Career	Career Entry	Armed Forces	Unemployed	Not in Labor Force
Nonhispanic whites						
16-21	100.0	49.8	21.2	12.8	5.1	11.0
22-29	100.0	72.9	16.4	0.5	5.5	4.8
Blacks						
16-21	100.0	30.4	29.5	9.4	10.1	20.7
22-29	100.0	47.8	27.9	0.7	9.0	14.6

Source: 1970 Public Use Samples

Table 3.-Description of Variables Used in Logit Analysis: Employed Black and Nonhispanic White Males, Aged 14-34 Years Old: 1970

Variable	Percentage Distribution[a]	
	Whites	Blacks
Sample Size	161,859	16,979
Stopgap Employment		
Stopgap	28.7	41.9
Career or career entry	71.3	58.1
Educational Attainment		
0-11 years	30.4	49.8
12-15 years	54.6	45.8
16+ years	15.0	4.4
Time Out of School		
In school	21.2	12.1
Out less than 1 year	3.4	3.0
Out 1-3 years	8.1	7.2
Out 3-5 years	9.0	9.6
Out 5+ years	58.3	68.1
Worked in 1969		
No	2.5	4.7
Yes	97.5	95.3

[a]Percentages refer to employed black and nonhispanic white males, aged 14-34 years old.

Source: 1970 Public Use Sample

Table 4.-A Logit Analysis of the Determinants of Stopgap Employment: Employed Nonhispanic White and Black Males aged 14-34, 1970

	β Whites	β Blacks	Odds Whites	Odds Blacks
Intercept	-0.67**	-0.38**	0.51	0.69
Years of schooling completed				
0-11	1.17**	1.12**	3.23	3.08
12-15	0.18**	0.16**	1.20	1.18
16+	-1.35**	-1.29**	0.26	0.28
Time out of school				
In school	0.83**	0.74**	2.29	2.09
Out < 1 year	0.42**	0.30*	1.52	1.35
Out 1-3 years	-0.04	0.08	0.96	1.08
Out 3-5 years	-0.52**	-0.69**	0.59	0.50
Out 5+ years	-0.67**	-0.42**	0.51	0.65
Did Not Work in 1969	0.29**	0.25**	1.34	1.28
Interaction of time out of school and not working last year				
In school	-0.12**	0.11	0.89	1.11
Out < 1 year	-0.12**	-0.04	0.88	0.96
Out 1-3 years	-0.03	0.01	0.97	1.01
Out 3-5 years	-0.03*	-0.13	0.97	0.88
Out 5+ years	0.30**	0.05	1.34	1.06
Interaction of educational attainment and time out of school				
0-11 years: In school	0.45**	0.17*	1.58	1.19
Out < 1 year	-0.03	-0.24	0.97	0.79
Out 1-3 years	0.01	0.07	1.01	1.07
Out 3-5 years	-0.07*	0.25*	0.93	1.28
Out 5+ years	-0.36**	-0.25**	0.70	0.78
12-15 years: In school	-0.11**	-0.25**	0.89	0.78
Out < 1 year	0.08*	0.04	1.08	1.04
Out 1-3 years	0.12**	-0.08	1.13	0.92
Out 3-5 years	-0.04	0.18	0.96	1.19
Out 5+ years	-0.04**	0.12	0.96	1.12
16+ years: In School	-0.34**	0.08	0.71	1.09
Out < 1 year	-0.04	0.20	0.96	1.22
Out 1-3 years	-0.13**	0.01	0.88	1.01
Out 3-5 years	0.11**	-0.43*	1.12	0.65
Out 5+ years	0.41**	0.14	1.50	1.15
Likelihood ratio χ^2	6.8	12.0		
Degrees of freedom	10	10		
P	.748	.284		

*Significant at the .05 level
**Significant at the .01 level

Table 5.-Evaluating the Contribution of Educational Attainment, School Enrollment and 1969 Employment to the Age Effect on Stopgap Employment

Linear Age Effect[a]	β Pooled Sample	Blacks	Whites
Model with Age only	-1.26*	-0.64*	-1.36*
χ^2, d.f. = 34	13,992.5	1085.1	12,120.8
Model with age, education, school enrollment, and employment in 1969	-0.77*	-0.42*	-0.83*
χ^2, d.f. = 30	1320.4	155.0	1233.0
% change in effect of age	-38.9	-34.4	-39.0
% change in χ^2	90.6	85.7	89.8

[a]Age was treated as a covariate where 1 = 14-19, 2 = 20-25, and 3 = 26-34.

*Significant at the .01 level.

Table 6.-Evaluating the Importance of Interaction Effects on the Main Effects of Race on Stopgap Employment: Pooled Black-White Samples

	Models		
	A	B	C
Odds and Odds Ratios	Race Only	Baseline	Race Interactions
Intercept	0.54*	0.68*	0.60*
Black odds	1.34*	1.40*	1.60*
% change	-	+4.5	-17.1
Black/White Odds Ratio	1.80	1.96	1.36
% change	-	+8.9	-30.6
χ^2 likelihood ratios	46,710.5	553.8	41.8**
d.f.	70	43	31
% change	--	-98.8	-92.4
% change in χ^2 relative to % change in d.f.	--	2.6[a]	3.3[a]

A--Race is the only independent variable.

B--Educational attainment, time out of school, employment in 1969, race, and education by time out of school

C--Same as Model B with the addition of race by education by time out of school, and race by time out of school by employment in 1969

[a]Changes relative to previous model.

*Significant at the .01 level.

**P = .093

Table 7.-Percentage Distribution of Schooling and Experience Variables, by Age and Race

	Age					
	14-19		20-25		26-34	
	Black	White	Black	White	Black	White
Educational Attainment						
0-11 years	72.9	68.6	40.8	19.0	48.2	23.4
12-15 years	27.1	31.4	55.8	68.1	45.3	54.7
16+ years	-	-	3.3	12.9	6.6	21.9
Time out of school						
In school	45.2	67.4	8.5	18.9	3.4	5.4
Less than 1 year	14.6	11.6	1.8	4.1	-	-
1+ years	40.2	21.1	89.7	77.0	96.6	94.6
Worked in 1969						
No	15.9	8.8	4.0	2.0	1.3	0.4

Source: 1970 Public Use Sample.

Table 8.-Evaluating the Contribution of Schooling and Experience Variables to Race Differences in in the Age Pattern of Stopgap Employment

	Odds Age					
	14-19		20-25		26-34	
Odds and Odds Ratios	A	B	A	B	A	B
Intercept	2.45*	1.51	0.49*	0.72*	0.29*	0.54
Educational Attainment						
0-11 years		2.02*		1.89*		2.09*
12-15 years		0.93		1.27*		1.14*
16+ years		0.53		0.42*		0.42*
Time Out of School						
In school		2.42*		1.82*		0.82
Less than 1 year		0.80*		1.04		a
1+ years		0.52*		0.53*		0.65
Worked in 1969						
No		1.16*		1.31*		1.64*
Race						
Black	0.94*	1.09*	1.34*	1.34*	1.80*	1.60*

Black/White Odds Ratios	14-19	20-25	26-34
Model A	0.89	1.79	3.26
Model B	1.18	1.79	2.56
% change	+32.6	-	-22.1
χ^2 likelihood ratio			
Model A, d.f. = 34	4,835.0	3,669.6	2,720.3
Model B, d.f. = 29	65.1	180.3	51.8
% decrease	98.6	95.1	98.1

Model A includes only the main effects of race.

Model B includes main effects for race, education, time out of school, employment in 1969. Time out of school has been collapsed to: in school, out less than 1 year, and out 1+ years.

aAll cells were assigned a value of .01; hence,although there were no cases of males, 26-34, who had been out of school less than one year, a logit coefficient was estimated. It was not statistically significant and is not reported here.

*Significant at the .01 level.

Table 9.-Racial Composition of Stopgap Jobs, Classified by the Proportion of Workers, Aged 14-74, Who Were Black: Young Men, Aged 14-34, 1970

Percentage of Total Males, Aged 14-74, Who Were Black	Number of Occupations	Percent of 14-34-Year-Olds Who Were: Black	Nonhispanic Whites	Black Percentage Distribution
Less than 10	53	6.2	88.3	21.1
10-19	50	14.2	77.4	39.4
20-29	27	19.9	73.3	30.2
30-39	10	26.1	66.2	8.4
40-49	2	32.3	50.8	0.6
50+	1	32.5	61.2	0.4
Total	143	12.4	80.5	100.0 (7,121)

Source: 1970 Public Use Samples

Table 10.-Median Ratio of Family Income to the Poverty Cutoff, By Race and Selected Activity Statuses: Males Aged 14-19 Who Were Sons or Relatives of the Household Head, 1970

	Nonhispanic Whites	Blacks
All males	2.86	1.31
Males in blue-collar stopgap jobs	2.96	1.45
Males in white-collar stopgap jobs	3.10	1.97
Males not working[1]	2.77	1.24
Percent who were the son or relative of the head	87.6	89.1

[1]Combines the unemployed and those not in the labor force.

Source: 1970 Public Use Samples.

Table 11.-School Enrollment, by Age, Race, and Selected Activity Statuses: Nonhispanic White and Black Males, 1970

			Those in Stopgap Jobs					
	All Males		White Collar		Blue Collar		Not Working[1]	
Age	Whites	Blacks	Whites	Blacks	Whites	Blacks	Whites	Blacks
14-15	94.6	88.2	95.7	79.2	91.8	74.3	95.2	89.5
16-17	87.7	78.3	91.4	76.3	87.1	65.9	90.2	81.8
18-19	57.1	40.6	66.0	51.4	58.5	32.0	77.0	52.8
20-21	38.1	17.6	58.3	28.8	41.2	13.8	67.2	29.5
22-24	21.5	10.8	40.0	19.0	22.2	6.0	49.5	21.0
25-29	9.0	4.9	14.5	9.8	6.1	2.6	25.5	8.8
30-34	4.3	3.0	5.2	4.6	2.4	2.9	9.1	3.9

[1]Combines the unemployed and those not in the labor force.

Source: 1970 Public Use Sample

Table 12.-A Logit Analysis of Educational Attainment, by Age and Race: Males in Stopgap and Career Jobs, 1970

Age and Race	Odds of Having Less than 12 Years of Schooling	
	Stopgap Jobs	Career Jobs
White	0.61**	0.70**
White		
18-19	1.03	1.06
20-21	0.77**	0.96
22-24	0.95	0.98
25-29	1.14**	1.04
30-34	1.16**	0.97

Age and Race	Odds of Having Less 13 or More Years of Schooling	
	Stopgap Jobs	Career Jobs
White	1.85**	1.33**
White		
18-19	0.88*	1.12
20-21	1.32**	1.20*
22-24	1.12*	0.95
25-29	0.97	0.91
30-34	0.79**	0.86**

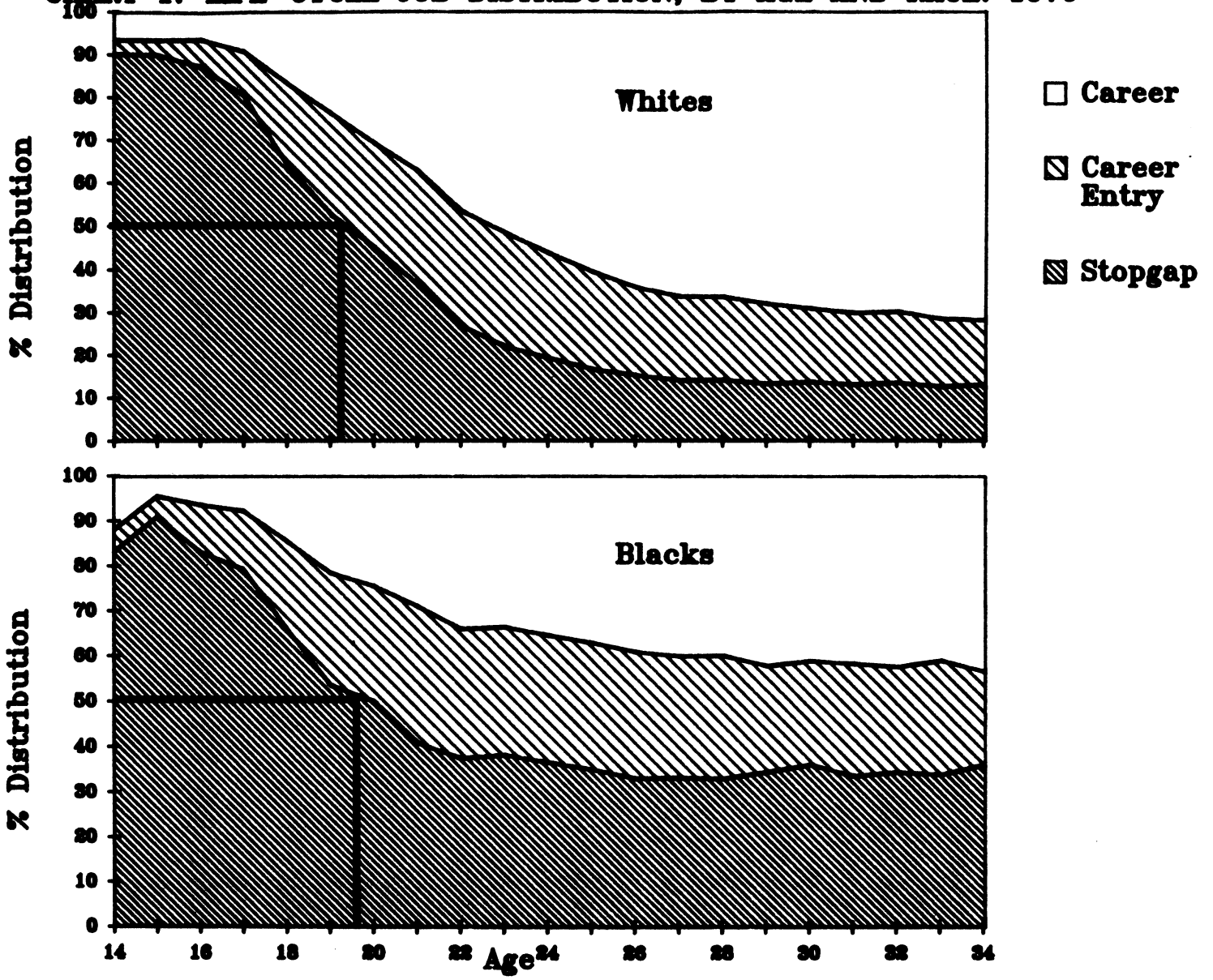
*Significant at the .05 level
**Significant at the .01 level

Table 13.-Average Annual Rate of Change in Employment, by Major Industrial Sector: U.S. 1959-1984

Sector	Year 1959-1984	1959-1969	1969-1979	1979-1984
Total	1.8	1.9	2.2	1.0
Goods-producing	0.4	0.7	0.8	-1.1
Agriculture	-2.1	-4.2	-0.8	-0.3
Mining	0.2	-2.0	3.5	-1.6
Construction	1.7	1.1	3.0	0.1
Manufacturing	0.6	1.9	0.4	-1.6
Durable	0.8	2.3	0.7	-2.0
Nondurable	0.3	1.2	0.0	-0.9
Service-producing	2.6	2.6	2.9	1.9
Government	2.8	4.2	2.7	0.0
Private	2.6	2.2	3.0	2.5

Source: Ronald E. Kutscher and Valerie A. Personick. 1986. "Deindustrialization and the Shift to Services." Monthly Labor Review. 109(June 1986, Table 1.

CHART 1.-LIFE-CYCLE JOB DISTRIBUTION, BY AGE AND RACE: 1970



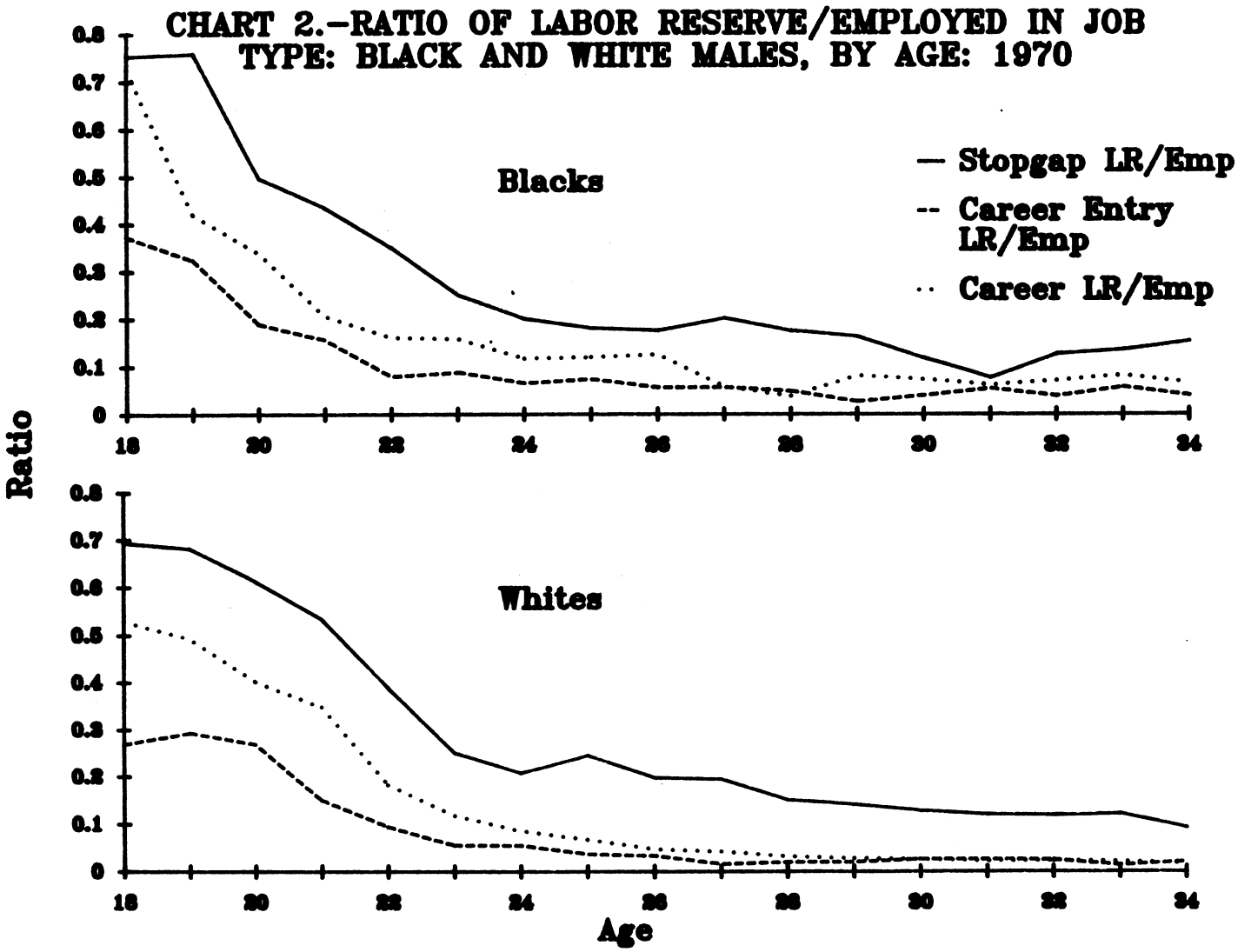
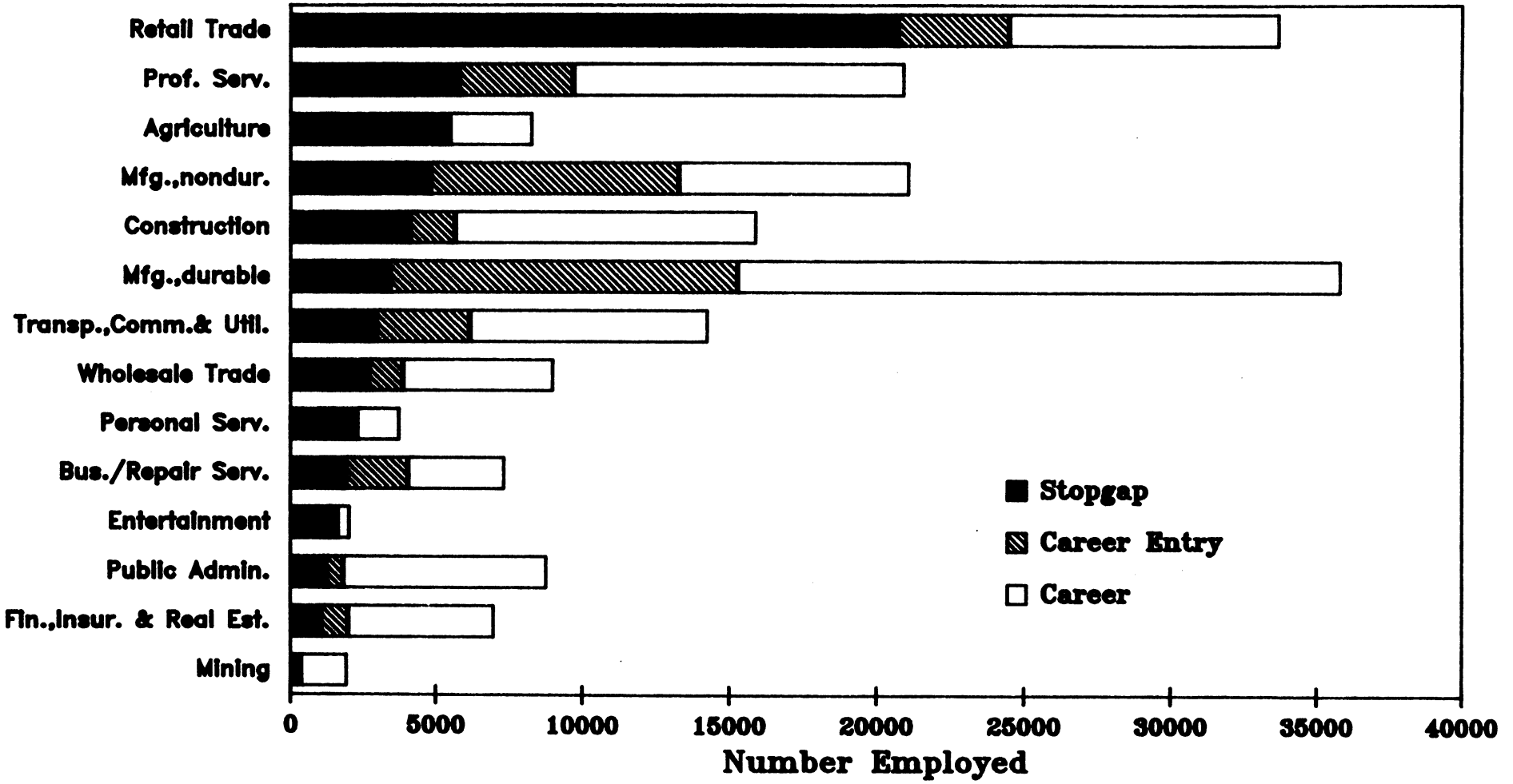


CHART 2.–RATIO OF LABOR RESERVE/EMPLOYED IN JOB TYPE: BLACK AND WHITE MALES, BY AGE: 1970
Blacks
Whites
— Stopgap LR/Emp
-- Career Entry LR/Emp
·· Career LR/Emp
Ratio
Age
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
18
20
22
24
26
28
30
32
34

CHART 3.—LIFE-CYCLE JOB TYPE, BY INDUSTRY: MALES UNDER AGE 35, 1970



Source: 1970 Public Use Samples