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LIFE-CYCLE JOBS AND THE TRANSITION TO
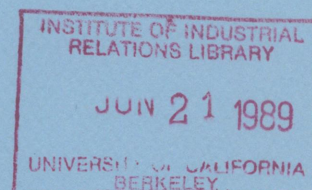ADULT OCCUPATIONAL CAREERS

by

Valerie K. Oppenheimer*

*Valerie K. Oppenheimer
 Professor
 Department of Sociology
 U.C.L.A.
 Los Angeles, California 90024

 213/825-3113

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INSTITUTE OF INDUSTRIAL RELATIONS (Los Angeles)

UNIVERSITY OF CALIFORNIA

LOS ANGELES

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Valerie K. Oppenheimer
University of California
Los Angeles

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ABSTRACT

Using the 1% 1970 Public Use Sample, a life-cycle job typology is developed. The long-run goal is to distinguish youthful "stopgap" jobs from career jobs in order to improve our understanding of young men's career launching process and to relate it to changes in the industrial-occupational structure, on the one hand, and to changes in marriage timing, on the other. An evaluation of the typology for nonhispanic whites shows that it captures a distinctive life-cycle phenomenon: there is a strong age-gradient to stopgap and career job employment; the likelihood of stopgap employment is strongly negatively related to school enrollment and time out of school; stopgap workers are more likely to drop out of the labor force and those in stopgap employment in 1965 were much more likely to be outwardly mobile and, if they moved, to enter career or career-entry employment. Shifts in the industrial-occupational structure since 1970 suggest that entry into career jobs may be increasingly delayed in favor of more extensive stopgap employment.

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Introductory

The postwar period has seen substantial changes in marriage timing.
First, the age at marriage of both men and women dropped considerably.
However, in recent years, marriages are increasingly being delayed, so
much so that the median ages at marriage for both women and men rival
those of the 1890s (U.S Bureau of the Census, 1986). A popular
explanation of this trend, as well as of the accompanying increases in
marital instability, is that the transformation of women's economic roles
has reduced their economic dependence on marriage, thereby reducing the
gains to marriage (Becker 1981; Cherlin 1979, 1981, pp. 51ff; Preston and
Richards 1975; Waite and Spitze 1981; Fuchs 1983; Espenshade 1985;
Goldscheider and Waite 1986; Farley 1988). As a result, less attention is
being paid to the economic characteristics of **males** as an important factor
in marriage behavior.[1] This is unfortunate since young men's economic
position has been deteriorating in recent years and there is a substantial
theoretical and empirical demographic tradition that leads us to expect
these changes will have an impact on marriage formation (Oppenheimer 1988;
Easterlin 1987). The research reported here is part of a larger project
focusing on just these issues, emphasizing particularly the relationship
between young men's career-launching process and marriage timing.

Based upon an adaptation of job-search theory to the analysis of
searching in marriage markets, I have hypothesized that assortative mating
is hindered--and hence marriages delayed--by a relatively high degree of
uncertainty about the important long-run attributes which people attempt
to match (Oppenheimer, 1988). A major source of this uncertainty for
young people stems from inadequate information about the nature of their
adult economic roles. Work has a profound influence in structuring a
couple's life style and in determining its socioeconomic status but the
nature of an individual's long-run work career is often very unclear in
youth. Hence, exogenous factors--such as changes in the condition and

structure of the economy--affecting the timing of the transition to a relatively stable work role should have an impact on marriage timing. This paper represents the first stage of investigating these questions. Its goal is to improve our measurement of young people's career-launching status by using data on occupation and industry to develop a life-cycle job typology. Because women's occupational careers have been undergoing major transformations in the postwar period, however, the initial focus is on studying the life-cycle job phenomenon for males. If this proves to be fruitful, then the analysis can be extended to young women.

There is a diverse sociological, demographic, and economic literature concerned with the early labor market position and behavior of young men. Nevertheless, for a variety of reasons, much of this research tends either to assume or impose more order on the career launching process than, in fact, exists. For example, Richard Easterlin's analysis of the effect of relative cohort size on young men's relative earnings position argues that male jobs can be divided into two types--"career entry" and "career" jobs. Because of the poor substitutability between the two types, as relatively large cohorts reach working age, they depress the wages of males in career entry jobs (Easterlin, 1978). Regardless of the merits of the relative cohort size argument, it implicitly views males as being involved in a neat career progression from school to career entry to career jobs. What varies is the wage rates for these jobs, not apparently the type of jobs in which larger vs. smaller cohorts of young men find employment.[2]

The social mobility research of sociologists also tends to tidy up the career launching process. Its concern has typically 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 the latter's career process--the son's 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).[3]

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 is necessary to 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.

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, using U.S. census
data, I develop a typology of "life-cycle jobs," to study the career-entry
process and its overlap with schooling. The basic idea behind the
typology is that the young are often working at jobs that have little
relationship to their "adult" occupational careers. This is because some
jobs represent a particular type of "stopgap" employment--that which tends
to be dominated by workers who, for life-cycle related reasons, have
marginal labor-market or job attachments--for example, the young, 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, such occupational attachments will
provide few clues about the long-run socioeconomic characteristics of
young people--characteristics that are frequently important in assortative
mating. Moreover, while stopgap jobs, in general, are likely to be low
level, where the job is also perceived in life-cycle terms, then the low
socioeconomic status of the stopgap job is less likely to rub off on the
individual worker. In those cases, such low-level employment is just
considered a temporary expedient by both the worker and those he
encounters or who subsequently learn of his employment history (e.g.,

future employers). Youthful life-cycle job attachments represent, in a
sense, a "legitimate" career discontinuity.

If we can identify jobs which are stopgap in the sense just described,
a number of potentially interesting analytical possibilities arise.
First, job type, as an indicator of a young man's career-launching status,
can be used as a predictor of marriage timing in micro-level analyses.
Second, the extent to which young men are concentrated in such jobs and,
in particular, how this changes over time, will provide macro-level
indicators of the timing of the career-entry process and how this is
changing and hence tell us whether such shifts are important enough to
affect aggregate-level changes in marriage timing. Third, to carry this
one step further, such a typology can also provide us with a means of
relating the career-entry process to changes in our
occupational/industrial structure. Thus, I see a life-cycle job typology
as a potentially useful means of linking micro-level demographic behavior,
such as marriage formation and early marital instability, with macro-level
changes in our economy. The immediate goal of the present paper, however,
is to describe the development of the typology and to ascertain whether it
represents a major life-cycle pattern for young men.

This paper will first discuss the development of the life-cycle job
typology--its conceptualization and measurement. Then, applying the
typology to a sample of young males, it will go on to explore several
questions. First, what kinds of jobs are youthful stopgap jobs? Second,
does the evidence indicate that young men exhibit the weak attachment to
youthful stopgap jobs that are supposed to be characteristic of workers in
such positions? For example, is mobility out of these jobs much more
likely than out of other job types and where do the stopgap leavers go?
How stable is stopgap employment? Are youthful stopgap workers more
likely than others to drop out of the labor force?

The employed in stopgap jobs may exhibit all the characteristics
hypothesized, but there still may be relatively few young males in these
jobs. Hence, a third question is the extent to which stopgap employment
is a life-cycle phenomenon. A final question is the implications of the
life-cycle typology for understanding the effects of shifts in the
industrial and occupational structure? If some types of occupations and

industries are major sources of stopgap jobs while others are largely composed of career or career-entry jobs, what might be the effect of recent changes in the relative growth rate of different occupations and industries on the career-launching process?

Development of Life-Cycle Job Typology

Conceptualization

Just as it is meaningful to talk about "sex-typed" jobs, I am hypothesizing that it also makes sense to conceive of "life-cycle" jobs—specifically jobs that tend to specialize in using workers in particular age ranges.[4] At the heart of this age-graded 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 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, or are unwilling or unable to make strong life-time work commitments (Osterman 1980).

Hence, for some, such jobs make it possible to postpone the growing-up process, of "marking time," especially when the kinds of "adult" jobs available at any given moment seem relatively unattractive. In short, these are jobs that appeal to young people "in transit," so to speak.

Youthful stopgap also have advantages of 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.

While my primary goal is to concentrate on the age-grading factor,
there is little doubt that youthful stopgap 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.[5] Youthful stopgap
jobs are likely to be low-level because of young men's low skill level.
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 certain amount of worker heterogeneity.

In addition to human capital factors, the low level of youthful
stopgap jobs may also be a reflection of their secondary labor-market
status. In fact, Kaufman and Spilerman argue that occupations with a
U-shaped age distribution are "'secondary labor market' positions, which
are, descriptively, 'dead end' jobs" (Kaufman and Spilerman, 1982, p.
839). Moreover, there is considerable overlap between the youthful
stopgap jobs defined by my procedures and several secondary labor market
typologies--for example, Rosenberg's and Osterman's and probably Kaufman
and Spilerman's as well since they use age to construct their
typology.[6] 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. The dualist position is that the nature of secondary
labor-market jobs and their relationship to other jobs in the firm is
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, leading to little mobility out of such markets.

The conceptualization behind youthful stopgap jobs is quite different. I consider the characteristics of workers in stopgap jobs as 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 more 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's 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, far from being trapped in such jobs, mobility out of stopgap types of jobs--especially by the young--should be much greater than out of the career category.

Operationalization

The life-cycle job typology is developed using data on occupation and industry 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. Second, the long series of censuses provides the potential opportunity to conduct a comparative historical analysis, an option not usually available with other data sets. This is hampered, however, by intercensal changes in the occupational/industrial

classification system. 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. One must then select
criteria that are available in all the censses and are measured
consistently. 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.

A sample of all males, aged 14-74 was drawn off from the 1970 census
micro sample.[7] In order to reduce the heterogeneity of some of the
three digit occupational categories, a detailed occupational
classification system was created, incorporating industry and sometimes
class-of-worker for selected occupations. The result was a classification
system of 569 job categories. A macro-level file was then created, where
occupation was the unit of analysis and the variables were the
characteristics of employed males, aged 14-34, in these occupations--e.g.,
age structure, proportions working part-time, part-year, and so on.

Female workers were excluded from the occupational data as well as
from the analysis of the career-launching process. 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. For example, Oppenheimer
found that increasingly fine occupational breakdowns, as well as the
cross-classification of occupations by industry, tended to divide up
apparently integrated occupations into ones where one sex or the other
predominated (Oppenheimer 1970, Ch. 3). More recently, Bielby and Baron's
(1984) findings indicate that, within detailed occupational categories,
considerable sex-segregation existed in firms but that this is blurred by
aggregating across establishments into the three-digit occupational
codes. Hence, it was doubtful that I would be observing the same job for
both sexes if women were included in the analysis. In addition, 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. In sum, to have included women 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.[a] Hence, the occupational analysis was limited to employed men as the group whose career-launching process is under investigation.

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 a number of variables that could conceivably be used to do this--the proportions of workers enrolled in school, hours, and weeks worked are the three major ones. However, two of these variables had substantial drawbacks.

Utilizing school enrollment as a stopgap criterion would have introduced a socioeconomic bias into the measurement process for young men of college age. The conception of stopgap jobs is that they provide interim employment opportunities for young men who, for whatever reason, have not established themselves in an "adult" occupational career. One reason for this may be school attendance, but stopgap employment may also be attractive to high-school graduates or dropouts who are not yet ready to make a serious employment commitment. Hence to use school enrollment as a criterion might arbitrarily eliminate some kinds of youthful stopgap jobs.

The weeks worked variable also involves serious drawbacks as a means of distinguishing stopgap from career-entry jobs, although one might suppose that it would represent a very direct measure of whether some jobs are short-term in nature. First of all, a relatively high proportion of

career entry workers are likely to be _recent_ entrants to either the labor
force or regular employment. Hence, they are 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 these problems, the proportion of young males employed part time
was used to distinguish between career-entry and stopgap jobs. The
rationale is that while career-entry, like stopgap, jobs should be heavily
weighted toward younger workers, part-time work would be relatively rare
for entry-level 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." [9,10]
Moreover, 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. For example, the correlation between the proportions of young
men working less than 35 hours in the week in an occupation and the
proportions working less than 40 weeks in the year was .85. And, of the
143 stopgap jobs, only 10 had less than 25.5 percent working under 40
weeks--the proportion for all employed young men.

Since the "career-entry" category (young occupations where the young
were _not_ disproportionately part-time) was primarily created to improve
the measurement of "stopgap" jobs, it will not represent a complete
demarcation of career-entry positions. It also will be "contaminated" by
career occupations that have a relatively youthful age structure because
of rapid growth in the recent past. However, as the major goal is to

distinguish youthful stopgap jobs from all the others, this is not a serious problem.

Occupations which were not disproportionately <u>youthful</u> but were disproportionately <u>elderly</u> were also considered as potential sources of youthful stopgap jobs, under the assumption that some older males have marginal labor market attachments and jobs and, therefore, some of the jobs they concentrated in may provide stopgap opportunities for youth as well. Occupations where more than 17.8 percent of the male workers were aged 55-74 (the proportions among the total employed male population, aged 14-74) were included in this category. 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 <u>youthful</u> 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.

The approach just outlined can lead to two sorts of measurement error--one a "misclassification" of <u>occupations</u> and the other of <u>individuals</u>. Occupational misclassification will necessarily occur because of the impossibility of eliminating job heterogeneity, despite the highly detailed occupation-industry categories forming the building blocks of this typology. For example, some particular jobs classified as stopgap may include a subset of jobs that provide life-time career opportunities for some men. However, the characteristics of those in such "career" stopgap jobs may be swamped by the characteristics of those appropriately designated as stopgap workers, especially for youths in their teens and early twenties.[12] Only when the temporary workers depart for more "adult" occupational attachments, may the career residual emerge.[13] For this reason, there will necessarily be a misclassification of some jobs in the stopgap category. One result will be to bias upward the minimum level of life-cycle stopgap employment--presumably reached by males in their mid-late twenties. If despite such errors, the minimum is still quite low, then this type of measurement error is probably not highly important. However, one reason for using a highly detailed occupation classification system was to reduce this type of error.

One can also misclassify <u>individuals</u>. For example, while particular jobs may, in <u>general</u>, offer full-time long-term employment opportunitites for most men working in them, some young males will still be able to utilize them for short-term work goals. This problem cannot be handled by adjusting the <u>typology</u> but rather requires a more extensive analysis of individual-level behavior--preferably using longitudinal data. This is a logical extension of the present analysis which was, however, necessarily limited to the census because of the large sample size required to create the typology.

Once created, the life-cycle job designation was, depending on the individual's occupation, attached to the individual record of a Census Public Use Sample of males, aged 14-34 years old. Although the typology was developed from data on <u>all</u> employed males and will be used to compare the career-entry process of both black and white males, <u>this</u> paper's application of the typology is primarily limited to the analysis of nonhispanic white males since the black experience is expected to be so different that it requires a more lengthy consideration than would be possible here.

Nature of Stopgap Jobs

Extent of Youth Domination

The life-cycle job typology is partly defined in terms of the age composition of occupations. Stopgap and career-entry jobs are both job types which were disproportionately young, although 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 the 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?

Table 1 shows the age composition of these different job types for employed males, aged 14-74, and for young males, aged 14-34. Males

[Table 1 about here]

aged 14-34 are particularly of interest because this age range starts with the age at which any kind of employment is likely to start and ends up with the age at which most males, who are ever going to, will have settled down to a stable occupational career. Moreover, the 14-34 age groups will not be extensively influenced by employment patterns that are more characteristic of older cohorts and hence of types of careers that are becoming less and less realistic options for new generations of workers. The table reveals that the age distributions of the job types, especially with respect to the young, differ sharply. In the case of males, aged 14-74, while 17.8 percent of all employed males were aged 14-24, 36.2 percent of the stopgap group were under 25 compared to only 9.2 percent of the career males. When we just concentrate on young males, aged 14-34, the contrasts are even greater and here we see that youth truly dominate the stopgap group but are extremely under-represented in the career category. Thus 69.5 percent of stopgap workers in all ethnic groups combined were under age 25 while only 28 percent of the career group were so young. Furthermore, there is a substantial difference in age compositon between stopgap and career-entry jobs in this young subgroup despite the fact that both stopgap and career-entry jobs were defined in terms of a youthful age composition. Among nonhispanic whites, just 47.6 percent of the career-entry group were under 25, only slightly higher than the 44.5 percent for all employed nonhispanic white males aged 14-34. These proportions compare sharply with the 72.8 percent of the stopgap who were so young. This provides strong support for the idea that stopgap jobs primarily attract males in a very circumscribed age range while career-entry jobs draw in males entering into more "mature" phase of the career cycle, as well as probably also including rapidly growing occupations.

Occupational Type

I have hypothesized that stopgap jobs would be at a low level, although this has not entered into the definition of such jobs, and, as Table 2 reveals, this is indeed the case. Most young white males (75 percent, in fact) who are employed in stopgap jobs are found in a very few occupational categories--sales and clerical occupations in the white-collar

[Table 2 about here]

group and laborers (farm and nonfarm) and service workers in the blue-collar group. Laborers (farm and nonfarm combined) account for 31.2 percent of white stopgap workers, aged 14-34 years old (vs. 0.3 percent for career workers) and service workers for another 20 percent (vs. 0.8 percent for the career group) with 23.5 percent in clerical or sales occupations (vs. 14.3% for the career group). In short, nonhispanic white men in stopgap jobs are not only concentrated in a few occupational types but these are typically low-level jobs.

The low level of stopgap jobs raises the issue of the relationship of the stopgap job type to the secondary labor-market segment of the dual labor market literature. Is there much overlap between the two? Unfortunately, researchers have not always published their classification systems in full (Kaufman and Spilerman 1981; Rumberger and Carnoy 1980).[14,15] However, it was possible to compare the youthful stopgap category to two published classification systems. The first is Osterman's (1974/75) and the second is Rosenberg's (as reported by Schervish 1981).

Osterman placed 43 occupations in the secondary labor market segment. Actually, this represents a larger number of occupations since several of his categories are combinations of three-digit census codes.[16] Osterman assigned occupations to one of three segments on the basis of his subjective assessment as to the distinctive character of the occupation: "the secondary sector contains occupations characterized by low wages, instability of employment, and similar factors..." (Osterman 1974/75, p. 513).

Of Osterman's 43 jobs in the secondary sector, 36 are included in the stopgap job designation.[17] Three of his secondary labor-market jobs fell into the career-entry group--hospital attendants, manufacturing graders and sorters, and textile knitters. The remaining four occupations went into the career category--bridge tenders; elevator operators; guards, watchmen and doorkeepers; and telegraph operators. In addition, a substantial number of jobs that he placed in other sectors were also included in the stopgap job group since the stopgap group included 143 occupational categories.[18]

Rosenberg's secondary labor-market classification schema is reported by Schervish (1981, pp. 183-184) and included 71 occupational categories.[19] The criteria used to classify occupations into either the primary labor market or the secondary were: (1) DOT information on the Special Vocational Preparation required in the occupation; (2) DOT information on the General Education Development required; and (3) Hourly wages, as estimated from the 1976 Census Employment Survey (Rosenberg 1980, p 36). The overlap of the stopgap and secondary labor market jobs is also considerable for Rosenberg's schema. Forty nine (or 69 percent) of Rosenberg's 71 secondary labor-market jobs fall into the stopgap group. Twelve are classified into the career-entry category.[20] Ten of Rosenberg's secondary labor-market occupations fell into the career group.[21] In part, these discrepancies reflect the fact that life-cycle job typology is based only on the characteristics of the **male** employed workers in the various occupations. However, eight of the 12 secondary labor-market jobs in the career-entry group and three of the ten secondary labor-market jobs in the career group had a very substantial female component--ranging from 45 percent female for textile operatives to 94 percent female for sewers and stichers (U.S. Bureau of the Census, 1973, table 223). The different categorization of these jobs may thus reflect differences in the nature of the job between men and women. All in all, 31,711 of the 50,832 stopgap males (62 percent) under age 35 would be classified in secondary labor-market jobs under Rosenberg's definition.

In general, then, it is clear that, for males at least, most of the jobs placed in the secondary labor-market group by both Osterman and Rosenberg fall into the stopgap group of the life-cycle job typology. In addition, a substantial number of other jobs also fall into the stopgap category. What are the implications of this overlap between the stopgap job type and the secondary segment as defined, at least, by the work of these two researchers? This depends, in part, on the extent to which young males dominate such jobs and on whether stopgap/secondary labor-market employment merely represents a relatively brief episode in young men's career cycle. We have already seen that males under age 25 are not just moderately but extremely over-represented in stopgap employment and, in fact, for the career launching ages of 14-34, youth under age 25 constituted 70 percent of all stopgap workers compared to 57

percent for the career-entry group, 28 percent for the career group and 44 percent for all job types combined. We will explore how temporary the sojourn in stopgap employment is below. However, if it does represent only a transitional phase in the career cycle of young males, this suggests that concerns about the negative long-run consequences of secondary labor-market employment may not be as great as feared. Moreover, the life-cycle nature of these jobs for many of the incumbents is often obscured in dual labor-market research by restrictions on the samples which are analyzed. For example, Rosenberg's sample is limited to males aged 21-64 who were living in selected low-income areas in 51 major cities in 1970 (1980, p. 36). Osterman limits his sample from the Survey of Economic Opportunity (SEO) even further--to urban males who were heads of families (Osterman 1974/75). The experience of men in such samples is unlikely to be representative of all those who, at one time or another, engage in stopgap/secondary labor-market employment and hence does not accurately reflect the general effect of secondary labor-market employment.

While the itinerant nature of the employment of youth (or the elderly) may dominate stopgap jobs, the job type is still likely to represent some mix of stopgap workers with those whose long-term career options are not much better.[22] Recognizing that this is likely to be the case, however, should encourage us to focus on the implications of very different types of workers competing in similar labor markets.

Evaluation of Life-Cycle Job Typology

There are two related issues to consider in evaluating the life-cycle job typology. First, do those in stopgap, career entry, and career jobs behave in ways that are consistent with the basic conceptualization of the various job types? For example, what evidence do we have that young men in stopgap employment have weak labor-market attachments and are only temporary workers in such jobs? Most importantly, are stopgap jobs the kinds of jobs people leave frequently? A second issue is whether stopgap employment represents an important life-cycle phenomenon for young men. It is perfectly possible to define one or more stopgap jobs with employees exhibiting all the hypothesized behaviors but still find that such jobs do not provide an important life-cycle experience for most American youth.

If that is the case, the typology will be of limited utility in the analysis of young men's career launching process and its determinants and consequences. These two issues will be handled separately, though in some cases, the pertinent data are the same for both.

Validity of Stopgap Classification

If the life-cycle job typology has validity, two types of mobility patterns should be observed 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 (for involuntary as well as volunatry reasons)--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 or career-entry jobs. The Census data are limited but still can provide some evidence on both these types of mobility. For longer-run patterns we can use the the 1970 Census' 1965-70 occupational mobility data which provide a useful time interval for measuring career-cycle shifts, especially for males who were about 23 or older in 1970. In addition, the age variation in stopgap employment in 1970 (using a synthetic cohort approach) will provide information on long-term mobility in and out of different life-cycle job types. Our options are more limited for shorter run patterns; however, data on weeks worked in 1969 and on the characteristics of the labor reserve have a bearing on the short-run instability issue.

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. Those in stopgap jobs should have very low proportions remaining in this job type, though the proportions will probably rise somewhat with age as the stayers start to represent an increasingly select group. On the other hand, if career jobs provide life-time employment opportunities for "mature" workers, very high proportions will remain in this job type, even among the young. though increasing sharply with as young men establish stable "mature" career

attachments. These mobility expectations, however, are considerably at variance with dual labor-market predictions of little intersectoral mobility. Hence, to the extent youthful stopgap jobs overlap with secondary labor-market jobs, the mobility patterns actually observed should be a test of the utility of the stopgap job concept. As Chart 1 reveals, both the expected low retention rates of stopgap jobs[23] and the high

[Chart 1 about here]

retention rates of career jobs are observed. [24] The percentages remaining in stopgap jobs tend to hover at a low figure of about 30-odd percent--well below that of the career entry group. Furthermore, this pattern is not just limited to the very young age groups. On the other hand, for those in the career category, the proportions rise very early to above 70 percent.[25] Moreover, as Chart 2 shows, for those who do move out of the stopgap group, the great majority moved into either career or career-entry jobs--around 90 percent of those aged 22 or older in 1965.

[Chart 2 about here]

Evidence of Short-Term Labor-Market Instability

Labor Force Withdrawal

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. 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 should be greater for the stopgap group. This is indeed observed (Chart 3).[26] In fact, for men in their teens and early twenties, the ratios for the stopgap group are

[Chart 3 about here]

extraordinarily high--well over 50 percent and sometimes over 90 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, regardles 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.

Weeks Worked

A basic idea behind the stopgap concept is that employment in such jobs is usually short-term in nature, as indicated by the label for this job type--stopgap. However, weeks worked was rejected as a criterion of the stopgap job type because of the difficulty of interpreting the variable in a systematically unambiguous fashion for highly detailed occupational categories. Nevertheless, if the stopgap job type does reflect the peripatetic nature of the stopgap labor force, as well as its greater vulnerability to unemployment, then such workers a more likely to have worked less than a full year. This does seem to be the case as is indicated by the consistently lesser tendency of men in stopgap jobs to have worked 50-52 weeks in 1969 (Chart 4). How much this reflects the

[Chart 4 about here]

weak labor-market attachments of the labor supply to these occupations and how much it can be attributed to lack of employer commitment cannot be determined, of course.

Stopgap Employment as a Life-Cycle Phenomenon

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 factors which should vary over time. 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 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.[27] While the definition of stopgap jobs does precludes a positive relationship with age (at least for a sample of males under age 35), it does not require a negative relationship and, indeed, 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 a very small number of 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 <u>extent</u> 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.

Table 3 shows how the age pattern and extensiveness of employment in youthful jobs can vary, depending on these two factors. Although employing

[Table 3 about here]

hypothetical proportions in youthful jobs, the approximate number of employed males, aged 14-34 (185,000), in my sample and the proportion of these under age 25 (44 percent) are used. The table presents the proportion of males aged 14-24 and 25-34 who would be found in youthful jobs under 4 different combinations--where the size of the youthful group is either small or large (1,000 or 60,000) and where the age compositon of the youthful group slightly or substantially exceeds the defining proportion of 44 percent (either 45 or 60 percent under age 25).

Table 3 shows is that the age gradient will be substantial <u>only</u> if the age distribution of the youthful group is quite young--i.e., the younger it is, the steeper the age gradient. Thus, even if the size of the youthful group were equal to 60,000, if only 45% were under 25 (<u>just</u> above the definition of a proportion "greater than 44%") 33.2% of the 14-24 age group will be in the youthful category but approximately the same proportion (31.8%) of the 25-34 year olds will be. This would not be very supportive of an hypothesis that such jobs are a life-cycle phenomenon. Furthermore, if the youthful occupation group were very small, whether or not there is a steep age gradient will not matter much since, for each age group, less than <u>one</u> percent would be found in the youthful job category. Hence, in only <u>one</u> of the four scenarios--where the percentage under age 25 was 60 percent and the number in the youthful group was equal to

60,000--would the youthful job typology depict a highly age-related phenomenon and one that involved enough young people to be sociologically and demographically interesting. In general, the range of variation in the age pattern will be between, at one extreme, a roughly equal percent in the youthful job category for each age group and, at the other, a sharp decline to asymptote at 0. The maximum proportion in the youthful job category will be a function of the size of the youthful occupation group.

Age Variation in Life-Cycle Job Type Among the Employed

Data on the life-cycle job distribution across single-year age groups[28] show that there is, in fact, a strong age-gradient in life-cycle job types for nonhispanic whites (Chart 5). Over 90% of employed teenagers

[Chart 5 about here]

are found in stopgap jobs; this declines sharply reaching a floor of about 13% for men in their mid- to late twenties. 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 proportions 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 men in their late twenties. In sum, the sharp age gradient of these distributions indicates that the typology is successful in distinguishing life-cycle career patterns, especially given the relative crudity of the variables used. What is particularly interesting is that such high proportions are still in an early career-launching stage in their early twenties. Hence, the typology should be useful in investigating the effect of career-cycle stage on marriage formation and perhaps marital instability as well.

Implications for the Timing of the Transition to Stable Occupational Careers

While the data on young employed civilian white males indicate that they are prodominantly found in stopgap jobs in their teens but then rapidly move into career entry and particularly career jobs, this is only a partial indicator of the timing of a (synthetic) cohort's launching process since, so far, we have not considered substantial and age varying

numbers of young men--the unemployed, civilians not in the labor force and young men in the armed forces. Except for a relatively small group of career soldiers, military service is a life-cycle job, largely limited to those between the ages of 19 and 24. While some military occupations may prepare men for specific civilian jobs, military service will primarily just postpone the transition to a stable civilian occupational career and, hence, for most of those involved, being in the armed forces signifies an early career launching status (Mare, Winship and Kubitschek, 1984). As for young men who are not in the labor force, it seems safe to argue that this also reflects an early career-launching status, particularly since a high proportion of them will be in school and, if they are not, they have a weak labor-market attachment anyway.

The 1970 Census PUS does not include data on men serving overseas in the armed forces; however, it does provide information on the resident U.S. armed forces. Hence, it is possible to expand the population base in order to obtain a more realistic estimate of the timing of the transition to more "adult" occupational careers (Chart 6). However, by not including those

[Chart 6 about here]

overseas we will understate the delays in the transition to a more stable occupational career, especially if we take into account a period of possible job instability while these young men adapt to a return to civilian life (Mare, Winship, and Kubitschek, 1984). Even so, it is clear that the career launching process takes substantially longer than first appears by looking at the employed alone. While a little over 19 was the age at which 50 percent of employed males were not yet in either career or career-entry positions, the median age goes up to about 22 when all resident males are considered. A similar increase for the 25 percent point is also observed. And while armed forces participation is an important factor in this delay in the entry into a mature civilian occupational commitment, as others have emphasized, it is clear that this is not the only one (Winsborough, 1978, 1979; Hogan, 1982). The numbers of young men aged 18-25 who were not in the labor force was always in excess of those serving in the military. Moreover, many of those out of the labor force will have had some labor-market experience as the large numbers in the labor reserve who last worked in stopgap or other types of

jobs indicates. In short, the timing of the establishment of a young man in an "adult" occupational career will be highly sensitive to such factors as school enrollment (a major determinant of young men's labor-force participation and stopgap job attachment), armed forces participation, and the relative availability of career, career entry, and stopgap job opportunities. Looking at the currently employed population only gives us a very partial view of the nature of the career-launching process.

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 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."

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 separate 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.

The 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.[29] 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, consequently, time out of school will overstate the work experience achieved. Hence, this variable probably measures maturity as much as work experience, especially for younger males with fewer years of schooling. I 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 also 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.

Table 4 provides a description of the variables used in the analysis and Table 5 presents the logit parameters for the model described above.

[Tables 4 and 5 about here]

The small likelihood ratio chi-square indicates that the model fits the data well and the parameters provide strong support for the hypothesized relationships. The beta coefficients are presented in column one. However, since log-odds parameters are not, in themselves, intuitively very meaningful, column two transforms them into odds. This is easily done by taking the antilogs of the beta coefficients. In this specification, the intercept represents the overall average effect of the logits for all the specified combinations of the different independent variables. For example, the estimated odds of being in a stopgap job vs. a career or career-entry job is only .51--i.e., the chance of being in a stopgap job is only 51 percent of that of being in a career or career-entry job. The beta coefficient is simply the log of these odds, -.67. In addition, each parameter provides the estimated effect for each category compared to the <u>overall</u> average effect rather than compared to the omitted category for each qualitative variable.[30] For example, a beta coefficient of 1.17 for those with less than 12 years of schooling tells us that we increase the overall average effect by 1.17; a coefficient of -1.35 tells us to decrease the overall effect by 1.35. When transformed into odds, the effects become multiplicative.

Taking the main effects first, 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 employment stopgap. For example, having less then 12 years of schooling more than tripled the odds of being in a stopgap job. On the other hand, having 16 or more years of schooling substantially reduced the odds; the result is to multiply by .26 the already low odds represented by the intercept. As hypothesized, not having worked in 1969

significantly raised the odds of being in a stopgap job--increasing them
by 34 percent. The years-out-of-school variable also exhibits a strong
negative relationship to stopgap employment. Thus still being in school
more than doubles the odds of being in a stopgap job and being out less
than a year increases the odds by 52 percent. On the other hand, for
those out 3-5 years, the odds of being in a stopgap job are considerably
reduced and this negative effect is even greater for those out five or
more years.

The interactions are also interesting and, by and large, support the
hypotheses. In the case of the interaction between work in 1969 and time
out of school, an individual who had been out of school five or more years
but had not worked the previous year probably has some serious
labor-market problems and, indeed, this combination of characteristics did
substantially increase the odds of being in a stopgap job--a 34 percent
increase in the odds is predicted. However, not working in 1969 actually
slightly decreases 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.

For young men with less than a high school degree, increased time out
of school did seem to compensate partially for their low-level of
schooling. For those out five or more years, the odds of being in a
stopgap job were only 0.7 and multiplying this by the odds of having 0-11
years of schooling, reduces the latter odds from 3.23 to 2.25. On the
other hand, for those still in school, the odds of being in a stopgap job
were increased substantially. This probably also reflects an age
factor--young males with only 0-11 years of schooling who are still
attending will fall into the youngest age groups in the sample.[31]

In sum, the logit analysis indicates that stopgap employment and the
timing of the transition to adult occupational careers should be quite
sensitive to school enrollment and the age at leaving
schooling--especially for those who do not complete college, even if they
do complete high school. It also shows that leaving school and going to
work does not in itself mean that young men have made the transition to
adult occupational careers. Even if they are currently working full time,
men in stopgap jobs seem to be operating in an occupational milieu
dominated by workers and employers who are weakly committed to each other.

Life-Cycle Jobs and the Industrial-Occupational Structure

This paper has shown that young employed nonhispanic white males are heavily concentrated in stopgap jobs. Moreover, a preliminary consideration of the occupational structure of different life-cycle job types suggested that stopgap jobs themselves seem to be heavily concentrated in a few low level occupational groups. However, if life-cycle jobs tend to be closely associated with certain occupations and, hence with certain industries, then changes in the occupational-industrial structure should have an impact on the transition to adult occupational careers. A rapid expansion of opportunities in career or career-entry jobs should speed up the transition while the expansion of opportunities in stopgap jobs provides the option of postponing more serious occupational commitments, ceteris paribus. In addition, 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. Hence, focusing on life-cycle jobs and their relationship to changes in the structure of the economy provides a means of linking the transition to work and other transitions as well (such as marriage timing) to economic change.

Since this paper is primarily limited to the analysis of 1970 data, it cannot directly explore the effect of the changes in the economy on life-cycle job employment. However, we can take a first step in this direction by examining the life-cycle job composition of different industries and occupations and briefly considering how recent changes in the growth of various industries will impact on life-cycle job opportunities. For this analysis, we will not limit ourselves to nonhispanic white males but will expand the data to include all employed males aged 14-34.

Data on the numbers employed, by job type, in the major industries and occupations are presented in Charts 7 and 8. Absolute numbers are used

[Charts 7 and 8 about here]

because they indicate which industries or occupations 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 or

occupation. The charts indicate that there are marked industrial and
occupational variations in life-cycle job types. 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. In fact, not only are
the majority of workers in retail trade in stopgap jobs but this industry
alone provides about three times the number of stopgap jobs than the next
substantial employer of stopgap workers--professional services.
Occupational differences in life-cycle job distributions are even more
pronounced. Stopgap job employment predominated among laborers,
nonprotective service jobs and provided a substantial proportion among the
sales, clerical and operatives groups but were almost absent among other
major occupational groups.

Employment in service industries has grown rapidly since the early
1970s while it has declined in manufacturing, particularly in durable
goods manufacturing. This suggests that young men are now probably making
the transition to more "career" oriented jobs at an older age than is
observed in the 1970 Census. Table 6 shows the average annual rate of
change in

[Table 6 about here]

employment for different industries in various periods between 1959 and
1984. Throughout the entire time, the rate of growth of employment in the
service-producing sector was substantially greater than that of the
employed population as a whole. Growth in government was both an examplar
and a partial exception to this trend--its average annual growth rate was
particularly great in the 1959-1969 period but plummeted to zero between
1979-1984. The reversal in growth trends in manufacturing has been
especially characteristic of durable goods industries which had an annual
average growth in employment of 2.3 percent between 1959 and 1969 (vs. 1.9
percent for total employment); however, the rate shrank to 0.7 percent
between 1969 and 1979 and declined to an annual average decrease of 2.0
percent between 1979 and 1984. Employment in the nondurables sector has
also been decreasing recently. As a consequence of these industry
differentials in 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). [32]

In sum, many of the industries which have traditionally been the m..jor source of stopgap jobs have been expanding rapidly in recent years while a number of industries which used to provide attractive career-entry positions to high-school graduates have not experienced employment growth, most notably, durable goods manufacturing which, in 1970, was the only major industry to offer more jobs than retail trade to young males and most of these were in career or career entry positions.

Conclusion

This paper has reported on the development of a life-cycle job typology. Its goal is to expand our understanding of young men's career launching process. In general, the analysis provides substantial evidence that the typology captures an important life-cycle phenomenon, at least for nonhispanic white males. For this group the likelihood of employment in a stopgap job is strongly positively related to school enrollment and 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 (as indicated by time out of school). There is a strong age gradient to stopgap and career job employment, indicative of a life-cycle phenomenon. In addition, those employed in stopgap jobs are much more likely to drop out of the labor force, providing evidence of the greater short-term labor-market instability of youths in such jobs. Finally, stopgap jobs exhibit low retention rates over a five-year period and the great majority of leavers move to career or career-entry jobs. On the other hand, career jobs show a very high retention rate.

In sum, the life-cycle job typology provides a valuable additional tool for studying the career-launching process of young men. Because of its occupational and industrial derivation, the typology provides a means of studying the effect of macro-economic change on the career entry process of young men and, via this, assessing the effect of economic change on demographic behavior. The social demographer is perennially seeking "intermediate" variables that will help spell out causal sequences that incorporate macro-
level variables such as economic structure and economic change with micro-level decision making variables involved in marriage behavior. A life-cycle job typology should make a useful contribution to this important type of multilevel research endeavor.

1. Exceptions to this are Easterlin's continued emphasis on the importance of males' relative income on marriage and fertility behavior and Wilson and Neckerman's argument that the employment problems of black males is an important factor in delayed marriage and marital instability among blacks (Easterlin 1987; Wilson and Neckerman 1987). Note the contrast between Wilson and Neckerman's thesis and that of Farley who places great emphasis on the relative earnings power of black women (Farley 1988).

2. Easterlin does conceive of a "noncareer" job type but this only includes women's jobs; no male jobs seem to fall into this category (Easterlin, 1978: 403).

3. However, the youth labor-mark literature itself also imposes an artificial order on the career entry process since, so often, the analyses are limited to out-of-school youth, thereby implicitly assuming that youth labor-market dynamics can still be adequately understood even though an important type of participant in that labor market is excluded from the analysis (Holzer 1986; Ballen and Freeman 1986; Ornstein 1976; Ellwood 1982).

4. See Kaufman and Spilerman, 1982, for a typology which is also based on age composition.

5. A measure of an occupation's socioeconomic standing--e.g., income or schooling levels of workers--was purposely not used in the definition of youthful stopgap jobs so as not to preclude the inclusion of any relatively higher level jobs in the stopgap category.

6. However, they do not provide a list of the occupations fitting into each of their types so that it is impossible to compare their U-shaped jobs with my youthful stopgap group.

7. Although this study, like Kaufman and Spilerman's uses 1970 PUS data and develops a typology based on age composition, the samples chosen

differ. Kaufman and Spilerman's is limited to all males, aged 18 and older who were employed "full-time," defined as employed 40 or more weeks in 1969 and having earned at least $2,000 in that year (1982, p. 834). Their goal seems to have been to obtain a sample of "serious" workers; however, this is not the best approach for identifying occupations which rely heavily on young workers with marginal labor-market attachments.

8. 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.

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. If they were also disproportionately youthful, these occupations had the U-shaped distribution discussed by Kaufman and Spilerman (1982).

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. For example, 41 percent of musicians and composers were under the age of 25. What appears to be the case is that this occupation includes a large number of part-time youths, playing in rock or other types of bands. However, also included in this occupational group are the musicians who will spend their adult lives working as musicians.

13. Of course, some jobs may provide stopgap employment opportunities for men and women throughout the life cycle and these too will contribute a residual number of stopgap workers in the older ages. Offsetting this will be the number of workers in youthful stopgap jobs which, because of their small size, were not detected.

14. In addition, most dual labor market analysts use industry rather than occupation to stratify their samples.

15. However, Rumberger and Carnoy's (1980) secondary job segment must be very young. Using 1970 census data, they show that the percentage of the male labor force staying in secondary jobs between 1965 and 1970 rises sharply with age (p. 121). Their sample includes all labor-force males aged 14 and older but their tables start only with the 20-24 age group. However, the proportions of total nonmobile blacks is less than for 20-24 year groups, indicating the young age composition of the segment. For total whites, it is slightly higher than for 20-24 year olds but less than for those 25-34. Hence, the behavior of the young must heavily influence their results for all males, aged 14 and older.

16. Osterman used the detailed occupational codes of the 1960 Census. Hence, there is some mismatch in the occupational classification he uses in comparison to 1970; however, the changes were not extensive between 1960 and 1970, especially in the occupations falling into the seconary labor-market segment.

17. Because of the much greater occupational detail in the present study and the use of industry to supplement the occupational information, some of the occupations Osterman classified as in the secondary labor-market segment were only partially in the stopgap group. For example, Osterman put all laborers in the Secondary category while some of the detailed laborer categories fell into career-entry or career occupations in life-cycle job typology.

18. However, this exaggerates the number of different occupational categories falling into the stopgap group since a number of occupations were also cross-classified by industry; on the other hand, several occupational categories were also combined because of small sample size. The net result was that 100 distrinct occupational categories are represented in the stopgap group--significantly more

than fell into the secondary labor-market segment, even taking into account Osterman's higher level of aggregation.

19. Here the 1970 Census occupational classification system was utilized, as in the present study.

20. Millers (501), assemblers (602), meat wrappers (634), graders and sorters, manufacturing (624), sailors and deckhands (661), sewers and stichers (663), spinners (672), textile operatives, n.e.c. (674), teamsters (763), nursing aides, orderlies and attendants (925), and welfare service aides (954).

21. Clothing ironers and pressers (611), heaters, metal (626), oilers and greasers (642), carding, lapping and combing operatives (670), longshoreman and stevedores (760), self-employed farm service laborers (824), boarding and loddging housekeepers (940), elevator operatores (943), crossing guards and bridge tenders (960), and guards and watchmen (962).

22. For example, Piore argues that "secondary jobs can be filled by labor drawn from the lower class, or by workingand middle-class youth" (Piore 1975, p. 144).

23. 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).

24. These mobility data permit people employed in one job type in 1965 to move into the unemployed or not-in-the-labor-force categories in 1970. The latter two groups substantially diminish in size with age, however.

25. The tendency for young males to remain in career jobs does not signify a lack of <u>any</u> occupational mobility, only mobility outside the career group. Thus occupational mobility from one detailed career category to another varied between 30 and 40 percent for men in their twenties, indicating a considerable amount of career experimentation and perhaps career advancement within the career category but a marked disinclination to move of this job type.·

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

27. 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.

28. Using single-year age groups has two main advantages, sample size permitting. It makes it possible to detect rapid age shifts in job type and the ages at which such changes occur. Second, it reduces the liklihood that changes observed to occur in a narrow age range can be a product of cohort rather than age effects.

29. 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.

30. For this reason, where it is substantively interesting, the coefficients have been calculated for the omitted categories.

31. An interesting anomaly in this interaction is the positive effect of
    time out of school for those with 16 or more years of schooling.
    Being out five or more years actually offsets the very low odds of
    being in a stopgap job characteristic of this highly educated
    group--increasing them from .26 to .39.

32. Kutscher and Personick are actually arguing that "the United States is
    not losing its industrial base "since the "relative shift to services
    has been far less pronounced for ouput than for employment (p. 12)."
    However, it is _employment_ which is at issue here, and these data show
    that new young male labor-force entrants were much less likely to find
    expanding job oppor tunities in manufacturing in the 1970s and 1980s
    than earlier cohorts, particularly in durable goods manufacturing
    which has traditionally offered the highest wages.

REFERENCES:

Al-Salam, Nabeel Aline Quester and Finis Welch. 1981. "Some Determinants of the Level and Racial Composition of Teenage Employment." 124-154 The Economics of Legal Minimum Wages, edited by Simon Rottenberg. Washington, D.C.: American Enterprise Institute.

Althauser, Robert P. and Arne L. Kalleberg. 1981. "Firms, Occupations, and the Structure of Labor Markets: A Conceptual Analysis." Ch. 5 in Sociological Perspectives on Labor Markets, edited by Ivar Berg. New York: Academic Press.

Ballen, John Richard B. Freeman. 1986. "Transitions between Employment and Nonemployment." 75-112 The Black Youth Employment Crisis, edited by Richad B. Freeman and Harry J. Holzer. .

Barton, Margaret George Farkaset. al. 1985. "White, Black, and Hispanic Male Youths in Central City Labor Markets." Social Science Research 14: 266-286.

Becker, Brian E. and Stephen M. Hills. 1983. "The Long-Run Effects of Job Changes and Unemployment Among Male Teenagers." Journal of Human Resources 17: 197-212.

Bielby, William T. James N. Baron. 1984. "A Woman's Place Is With Other Women: Sex Segregation Within Organizations." Sex Segregation in the Workplace, edited by Barbara Reskin. Washington, D.C.: National Academy Press.

Blau, Peter M. Otis Dudley Duncan. 1967. The American Occupational Structure. New York: John Wiley & Sons, Inc.

Blumstein, Alfred. 1982. "On the Racial Disproportionality of United States' Prison Populations." The Journal of Criminal Law and Criminology 73: 1259-1281.

Brown, Charles. 1982. "Dead-end Jobs and Youth Unemployment." The Youth Labor Market: Its Nature, Causes, and Consequences, edited by Richard B. Freeman and David Wise. Cambridge, Mass.: National Bureau of Economic Research.

Clogg, Clifford C. James W. Shockey. 1984. "Mismatch Between Occupation and Schooling: A Prevalence Measure, Recent Trends and Demographic Analysis." Demography 21: 235-257.

Cogan, John. 1982. "The Decline in Black Teenage Employment: 1950-70." American Economic Review 72: 621-638.

Coleman, James S. 1976. "The School to Work Transition." Pp. 35-40 in The Teenage Unemployment Problem: What are the Options?, edited byWashington, D.C.: Congressional Budget Office.

Datcher-Loury, Linda Glenn Loury. 1986. "The Effects of Attitudes and Aspirations on the Labor Supply of Young Men." 377-399 The Black Youth Employment Crisis, edited by Richard B. Freeman and Harry Holzer. .

Doeringer, Peter B. and Michael J. Piore. 1971. Internal Labor Markets and Manpower Analysis. Lexington, MA.: Heath.

REFERENCES:

Easterlin, Richard A. 1978. "What Will 1984 Be Like? Socioeconomic
Implications of Recent Twists in Age Structure." Demography 15: 397-432.

Ellwood, David T. 1982. "Teenage Unemployment: Permanent Scars or Temporary
Blemishes?" Ch. 10 in The Youth Labor Market: Its Nature, Causes, and
Consequences, edited by Richard B. Freeman and David Wise. Cambridge,
Mass.: National Bureau of Economic Research.

Ellwood, David T. 1986. "The Spatial Mismatch Hypothesis: Are There Teenage
Jobs Missing the Ghetto?" The Black Youth Employment Crisis, edited by
Richard B. Freeman and Harry J. Holzer. Chicago: University of Chicago
Press.

Ellwood, David T. David A. Wise. 1983. "Youth Employment in the 1970s: The
Changing Circumstances of Young Adults." 59-102 American Families and the
Economy: The High Cost of Living, edited by Richard Nelson and Felicity
Skidmore. Washington, D.C.: National Academy Press.

Featherman, David L. Robert M. Hauser. 1978. New York: Academic Press.
Opportunity and Change. .

Feldstein, Martin and David T. Ellwood. 1982. "Teenage Unemployment: What
is the Problem?" Ch. 2 in The Youth Labor Market: Its Nature, Causes, and
Consequences, edited by Richard B. Freeman and David Wise. Cambridge,
Mass.: National Bureau of Economic Research.

Freeman, Richard B. Harry J. Holzer. 1986. "The Black Youth Employment
Crisis: Summary of Findings." The Black Youth Employment Crisis, edited by
Richard B. Freeman and Harry J. Holzer. Chicago: Unviersity of Chicago
Press.

Freeman, Richard B. and James L. Medoff. 1982. "The Youth Labor Market
Problem in the United States: An Overview." Pp. 35-74 in The Youth Labor
Market: Its Nature, Causes, and Consequences, edited by Richard B. Freeman
and David Wise. Cambridge, Mass.: National Bureau of Economic Research.

Granovetter, Mark. 1981. "Towards a Sociological Theory of Income
Differences." Ch. 2 in Sociological Perspectives on Labor Markets, edited
by Ivar Berg. New York: Academic Press.

Greenberger, Ellen. 1983. "Discussion of `Youth Employment in the 1970s'"
102-104 American Families and the Economy: The High Cost of Living, edited
by Richard Nelson and Felicity Skidmore. Washington, D.C.: Nartional
Academy Press.

Haugen, Steven E. 1986. "The Employment Expansion in Retail Trade, 1973-85."
Monthly Labor Review 109: 9-16.

Hodge, Robert W. 1973. "Toward a Theory of Racial Differences in Employment."
Social Forces 52: 16-31.

Hogan, Dennis P. 1978. "The Effects of Demographic Factors, Family
Background, and Early Job Achievement on Age at Marriage." Demography 15:
161-175.

REFERENCES:

Hogan, Dennis P. 1980. "The Transition to Adulthood as a Career Contingency." American Sociological Review 45: 261-276.

Hogan, Dennis P. 1982. Transitions and Social Change: The Early Lives of American Men. New York: Academic Press.

Holzer, Harry J. 1986. "Black Youth Nonemployment: Duration and Job Search." 23-70 The Black Youth Employment Crisis, edited by Richard B. Freeman and Harry J. Holzer. Chicago: University of Chicago Press.

Kain, John. 1968. "Segregation, Negro Employment, and Metropolitan Desegregation." Quarterly Journal of Economics 82: 175-197.

Kasarda, John D. 1983. "Entry-Level Jobs, Mobility, and Urban Minority Unemployment." Urban Affairs Quarterly 19: 21-40.

Kasarda, John D. 1985. "Urban Change and Minority Opportunities." 33-67 The New Urban Reality, edited by P.E. Peterson. Washington, D.C.: The Brookings Institute.

Kaufman, Robert L. and Seymour Spilerman. 1982. "The Age Structure of Occupations and Jobs." American Journal of Sociology 87: 827-851.

Kutscher, Ronald E Valerie A Personick. 1986. "Deindustrialization and the Shift to Services." Monthly Labor Review 109: 3-13.

Lazaer, Edward. 1977. "Schooling as a Wage Depressant." Journal of Human Resources 12: 164-176.

Lewin-Epstein, Noah. 1986. "Effects of Residential Segregation and Neighborhood Opportunity Structure on the Employment of Black and White Youth." The Sociological Quarterly 27: 559-570.

Mare, Robert D. and Christopher Winship. 1984. "The Paradox of Lessening Racial Inequality and Joblessness Among Black Youth: Enrollment, Enlistment, and Employment, 1964-1981." American Sociological Review 49: 39-55.

Mare, Robert D. Christopher Winship and Warren N. Kubitschek. 1984. "The Transition from Youth to Adulthood: Understanding the Age Pattern of Employment." American Journal of Sociology 90: 326-358.

Marini, Margaret Mooney. 1984. "The Order of Events in the Transition to Adulthood." Sociology of Education 57: 63-84.

Miethe, Terance D. Charles A. Moore. 1986. "Riacial Differences in Criminal Processing: The Consequences of Model Selection on Conclusions About Differential Treatment." The Sociological Quarterly 27: 217-237.

Oppenheimer, Valerie Kincade. 1970. The Female Labor Force in the United States: Demographic and Economic Factors Governing Its Growth and Changing Composition. Population Monograph Series, No. 5Institution of International Studies, University of California, Berkeley.

REFERENCES:

Oppenheimer, Valerie Kincade. 1973. "Demographic Influences on
   Female Employment and the Status of Women." American Journal of Sociology
   78: 946-961.

Oppenheimer, Valerie Kincade. 1982. Work and the Family: A Study in Social
   Demography. New York: Academic Press.

Oppenheimer, Valerie K. 1989. "Life-Cycle Jobs and the Transition to Adult
   Occupational Careers." Revised paper read at the 1988 Annual Meetings of
   the Population Association of America.

Oppenheimer, Valerie Kincade. 1988. "A Theory of Marriage Timing." American
   Journal of Sociology 94: .

Ornstein, Michael D. 1976. Entry into the American Labor Force. New York:
   Academic Press.

Osterman, Paul. 1980. Getting Started: The Youth Labor Market. Cambridge,
   Mass.: The MIT Press.

Pomer, Marshall I. 1986. "Labor Market Structure, Intragenerational Mobility,
   and Descrimination: Black Male Advancement Out of Low-Paying Occupations,
   1962-1973." American Sociological Review 51: 650-759.

Rees , Albert. 1986. "An Essay on Youth Joblessness." Journal of Economic
   Literature 24: 613-628.

Rumberger, Russell W. and Martin Carnoy. 1980. "Segmentation in the US Labour
   Market: Its Effects on the Mobility and Earnings of Whites and Blacks."
   Cambridge Journal of Economics 4: 117-132.

Shulman, Steven. 1987. "Discrimination, Human Capital, and Black-White
   Unemployment." Journal of Human Resources 22: 361-376.

Sullivan, Teresa A. 1978. Marginal Workers, Marginal Jobs. Austen:
   University of Texas Press.

Tillman, Robert. No date. "The Prevalence and Incidence of Arrest Among Adult
   Males in California." Forum.

U.S. Bureau of the Census, . 1953. U.S. Census of Population. 1950. Vol. 2.
   Characteristics of the Population. Part 1, U.S. Summary, Chapter C.
   Washington, D.C.: Government Printing Office.

U.S. Bureau of the Census, . 1972. Public Use Samples of Basic Records from
   the 1970 Census: Description and Technical Documentation. Washington, D.C.:
   Government Printing Office.

U.S. Bureau of the Census, . 1973. U.S. Census of Population. 1970. Detailed
   Characteristics. U.S. Summary. Washington, D.C.: Government Printing
   Office.

Viscusi, W. Kip. 1986. "Market Incentives for Criminal Behavior." The Black
   Youth Employment Crisis, edited by Richard B. Freeman and Harry J. Holzer.
   Chicago: University of Chicago Press.

REFERENCES:

Wachter, Michael L. Choongsoo Kim. 1982. "Time Series Changes in Youth Joblessness." 155-185 The Youth Labor Market Problem: Its Nature, Causes, and Consequences, edited by Richard B. Freeman and David A. Wise. Cambridge, Mass.: National Bureau of Economic Research.

Wanner, Richard A. Lionel S. Lewis. 1983. "Economic Segmentation and the Course of the Occupational Career." Workd and Occupations 10: 307-324.

Welch, Finis. 1979. "Effects of Cohort Size on Earnings: The Baby Boom Babies' Financial Bust." Journal of Political Economy 87: 565-597.

Wilson, William Julius. 1987. The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy. Chicago: The University of Chicago Press.

Winsborough, Halliman H. 1978. "Statistical Histories of the Life Cycle of Birth Cohorts: The Transition from Schoolboy to Adult Male." Ch. 2 in Social Demography, edited by Karl E.Taeuber, Larry L. Bumpass and James A. Sweet. New York: Academic Press.

Winsborough, Halliman H. 1979. "Changes in the Transition to Adulthood." Pp. 137-152 in Aging from Birth to Death, edited by Matilda W. Riley. Boulder, Colorado: Westview Press.