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ABSTRACT

Data drawn from the Sophomore Cohort of the High School and Beyond study, also known as the Class of 1982 data, were studied to provide baseline data on the early careers of noncollege-bound (NCB) men. The analysis used data primarily from two post-high school interviews in 1984 and 1986. This report also focuses on restaurant employment, an important source of jobs for young workers. Findings indicated that NCB men experienced fairly high turnover and a substantial amount of time without work. As youths became more firmly attached to the labor market, employment grew rapidly. Not only were NCB men more likely to be employed 4 years after high school, they were also more likely to move from part-time to full-time employment. Young NCB men were represented in all five broad occupation groups (white collar, high skill; white collar, low skill; blue collar, high skill; blue collar, low skill; service) and in all four broad industry categories (primary, manufacturing, trade and transportation, service). In general, the net effect of these youths' substantial sectoral mobility was to move them up the occupational ladder. Although only 4.3 percent of all first jobs were in high-skill, white-collar occupations, these jobs accounted for nearly 1 in 10 of all final jobs. The fraction of jobs in low-skill, blue-collar and service occupations each fell by nearly 7 percentage points. The wages paid to NCB men tended to be fairly low. Over the first 4 years of their careers, their real wages grow an average of 17 percent, or about 4 percent per year. One-eighth of all jobs held by NCB men during their early careers were restaurant jobs, and over one-fourth of all NCB men held at least one restaurant job during their first 4 years after high school. Most restaurant jobs were in service occupations and offered lower pay. Wage growth was lower in restaurant jobs but still averaged 6.4 percent. (YLB)

EMPLOYMENT POLICIES INSTITUTE

THE EARLY CAREERS OF NON-COLLEGE-BOUND MEN

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May 1994

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EXECUTIVE SUMMARY

The conventional wisdom on the earnings prospects of non-college-bound youths portends a bleak future. These youths are thought to be trapped in "dead-end" jobs which do not impart useful skills and hence do not lead to earnings growth. The lack of skills acquisition in turn leads only to more dead-end jobs. In this paper Jeff Grogger examines the reality behind such a perspective. He finds that, contrary to conventional wisdom, non-college-bound youths actually experience both wage growth and significant job and industry mobility in their early work years. In their first four years after leaving high school, non-college-bound men see their earnings grow by 17 percent, measured in constant dollars—an average annual growth rate of 4 percent. Earnings growth in a particular job is even higher than this and averages 7.9 percent (earnings growth in a job is higher than average annual earnings growth due to multiple and overlapping job holding).

Non-college-bound men hold an average of three and a half jobs in their first four years after leaving school—almost one a year. They are quite mobile when they change jobs: 78 percent of all changes entail a change of either occupation or industry, while 41 percent involve a change in both occupation and industry. Grogger's research reveals that non-college bound youths are not "stuck" in their jobs.

Moreover, job mobility among non-college-bound men does not, as policy makers sometimes assume, translate into a series of meaningless jobs. Instead, this research indicates that these young workers build on the skills they acquire in entry-level jobs to move on to higher-skilled, "better" jobs. Although only 4.3 percent of all first jobs were in high-skill, white-collar occupations, these jobs accounted for nearly one in ten of all final jobs. While the fraction of low-skill, white-collar jobs remained roughly constant, high-skill, blue-collar jobs accounted for 40.7 percent of all last jobs, compared with 33.1 percent of all first jobs. The fraction of jobs in low-skill, blue-collar and service occupations each fell by nearly 7 percentage points.

The classic example of a "dead-end" job is one in the food service industry. Grogger finds that twenty-seven percent of all non-college-bound youths work in at least one restaurant job after they finish high school. Unlike the common stereotype, however, restaurant workers are not drawn disproportionately from the bottom of the skill distribution; about 19 percent of all restaurant workers are high school dropouts, compared with 17 percent of non-college-bound men who never work in restaurants. Overall, one-eighth of all jobs held by non-college-bound men during their early careers are restaurant jobs.

Based on overall employment—defined as the number of months working divided by the number of months between the time they left school and the 1986 interview—restaurant workers have employment records that are no spottier than non-restaurant workers. Restaurant workers do hold more jobs on average than their counterparts, 4.16 versus 3.32. Moreover, a higher fraction of restaurant workers' jobs are part-time, and on average they are about three months shorter than jobs held by non-restaurant workers.

Restaurant workers' wage growth over the course of their early careers is moderately lower than that experienced by their peers: 14.4 percent, compared to 17.9 percent for those without restaurant experience. In part, this is because wage growth on restaurant jobs is lower than wage growth on other jobs. However, much of this differential may be attributable to differences in work experience that stem from differences in part-time work: 19.6 percent of all jobs held by restaurant workers were part-time jobs, compared to only 12.8 percent of the jobs held by non-restaurant workers.

Although some characteristics of restaurant employment are consistent with popular notions—most such jobs are in service occupations—other characteristics of restaurant work and restaurant workers are much less consistent with the notion of dead-end jobs and dead-end careers. For example, almost half hold at least one high-skill, blue-collar job in their early careers.

Moreover, there is no difference between restaurant and non-restaurant workers in their proclivity to change labor market sectors when they change jobs. This suggests either that job shopping is no less important to restaurant workers than to non-restaurant workers, or that restaurant workers receive no less valuable sector-specific training on their various jobs than their counterparts.

Carlos Bonilla
Employment Policies Institute

Data Sources

The data used in this study was drawn from the *High School and Beyond Survey*. The sample studied was first interviewed in 1980 and had an expected graduation date in 1982. They were re-interviewed in 1984 and again in 1986. Over the sample period the federal minimum wage rose only once—in 1981. Consequently, earnings gains reported by the sample in the years after they left school reflect an increase in the labor market's valuation of the skills they acquired during their employment and not from exogenously imposed increases.

1 This study is restricted to the labor market behavior of men because the post-schooling choices of women are more complex.

INTRODUCTION

Despite the substantial postwar growth in college enrollments, more than half of all labor force entrants still begin their working careers without ever attending college. Until recently, these non-college-bound (NCB) youths received little attention from either policy makers or researchers. Recent changes in the labor market, however, have stimulated new interest in the economic status of this substantial segment of the population. Concern has been raised that the increasing service orientation of the U.S. economy, the increasing technological sophistication of the workplace, and the recent rise in wage inequality, all bode poorly for the economic well-being of workers with relatively low levels of education.

For all the recent discussion, however, there appears to be little hard data on the early careers of NCB youths. Basic information, such as aggregate employment rates and wages, is of course readily available from standard labor market surveys. Relatively little is known, however, about the early career progress of young workers, such as their labor force attachment, their mobility across different industries and occupations, and their wage growth. This study provides such essential baseline data on the early careers of NCB men.

Two other recent studies, by Topel and Ward (1992) and Light and McGarry (1993), also have analyzed young men's school-to-work transitions, although their emphases were quite different from mine. Neither of those studies focused on NCB youths; both included college graduates in their analyses. Moreover, neither of those papers discussed young workers' mobility between various sectors of the labor market, whereas I focus on sectoral movements in order to draw inferences about the nature of training that young workers receive. Finally, although Light and McGarry analyzed a cohort that entered the labor market at roughly the same time as the group I study, Topel and Ward studied a much older group: men who entered the labor market during the 1960s, a time of rapid productivity growth and decreasing wage dispersion (Levy 1988; Juhn, Murphy, and Pierce 1993).

Unlike the other studies, this report also focuses on restaurant employment, which is an important source of jobs for young workers. Restaurant jobs are thought by many to typify "dead-end" employment—with rapid turnover, low wages, little wage growth, and little chance of advancement—which has become increasingly prevalent in recent years. I compare restaurant jobs to other jobs, and the early careers of young restaurant workers to those of other young workers.

THE DATA

I analyze data drawn from the Sophomore Cohort of the High School and Beyond (HSB) study, also known as the Class of 1982 data. This survey began with a stratified national probability sample of students who were in the 10th grade in the spring of 1980. Survey respondents were then re-interviewed in 1982 as high school seniors, then again in 1984 and 1986. I restrict the study to men because the post-schooling choices of women tend to be substantially more complicated.

My analysis uses data primarily from the two post-high school interviews. In both 1984 and 1986 respondents were asked detailed questions about all the educational institutions that they had attended after leaving high school. I use this information to define respondents as non-college-bound if, by spring of 1986, when they had been out of high school for nearly four years, they had never attended a four-year college. A total of 4,404 men met this criterion.

The post-high school interviews also asked detailed questions about jobs. The 1984 questionnaire asked respondents about all jobs held since high school; the 1986 questionnaire covered jobs roughly since the 1984 interview. The questions solicited information about starting dates and wages, usual hours on the job, the industry of employment, and the type of occupation. The questionnaire also asked whether the job was ongoing at the interview date, about its ending date if not, and about the current or final wage on each job.

This extensive longitudinal information about individuals' work histories potentially provides an ideal basis to study NCB youths' employment, mobility, and wage growth during their early careers. Like all panel studies, however, the HSB has a fair amount of missing data. Roughly one-fourth of all NCB men failed to provide any work history data whatsoever; many others gave beginning dates for their jobs, but no ending dates. Even fewer provided complete information about their wages.

A further problem with the HSB stems from the seam in the work history information that exists between the 1984 and 1986 interviews. The 1986 interview posed questions about all jobs held since March 1984, which was roughly the time at which the 1984 questionnaire had been administered. The 1986 interview, however, did not specifically ask whether any job held in March 1984 was the same as any job reported as ongoing at the 1984 interview. Thus, for respondents who were working at the 1984 interview date, the seam between the interview dates had to be stitched together by comparing the beginning dates, ending dates, occupations, and industries of the last job reported on the 1984 interview with the first job held on the 1986 interview.

After deleting missing data and matching job records across interviews, I constructed two samples, which are the basis for most of my analysis. The first I refer to as the *employment sample*, which consists of all individuals who provided ending dates and beginning dates for all jobs, and for whom there was sufficient information to reliably stitch together the seam between the interviews. There were 2,209 such individuals, who held a total of 7,769 jobs over the four-year sample period. The second sample, which I refer to as the *wage sample*, is the subset of the employment sample who provided complete wage data for all jobs. There are 1,175 individuals in the wage sample, who held a total of 4,052 jobs. I use the wage sample to examine wage growth and the larger employment sample to provide information about employment rates, sectoral mobility, and job duration.

One might question whether the employment patterns of such a small group indeed are representative of the behavior of the universe of all NCB men. Fortunately, the HSB asked a separate set of questions designed to assess respondents' job status shortly before each interview. Missing data are less of a problem for this survey. These questions asked whether the respondent was working, in school, looking for work, or engaged in other activities. Because multiple responses were permitted, I collapsed them into a hierarchical measure that indicates whether the respondent was: (1) employed, regardless of his other activities, if he held any job; (2) in school, if he was enrolled but not working; (3) looking for work, if he was looking but neither working nor enrolled; (4) other, if he was not working, enrolled, or looking for a job.

I then tabulated this measure for February 1984 and February 1986, and compared my anlysis samples with the full sample of NCB men.[1] I also compared high school dropout rates across the samples. The first row of Table 1 shows that the high school dropout rate differs little between the universe of NCB men and the employment sample, and is only slightly higher for the wage sample. The status of

1 Because the HSB is a stratified random sample, all statisitcal results presented in this report are based on weighted data.

the various sample members in 1984 was also quite similar to that of other NCB men in the HSB study. Irrespective of the sample, about 70 percent were employed, between 7 and 8 percent were in school, and 11 to 12 percent were looking for work. Again in 1986, the different samples give a very similar view of their members' activities. It thus would appear that the employment patterns of the employment and wage samples are reasonably representative of the behavior of the universe of NCB men, even though the samples are substantially smaller.

Table 1
Sample Comparisons

Variable(%)	Universe of NCB Men	Employment Sample	Wage Sample
Dropouts	16.8	17.3	18.7
Status in February 1984			
Employed	69.9	70.5	68.6
In School	6.9	7.6	7.4
Looking for Work	11.0	10.8	11.7
Other	12.2	11.1	12.3
Status in February 1986			
Employed	78.2	78.8	77.9
In School	3.7	3.6	4.1
Looking for Work	7.6	7.5	9.0
Other	10.6	10.1	8.9
Sample Size	4,404	2,209	1,157

Note: Percentage may not add up to 100 due to independent rounding.

THE EARLY LABOR MARKET EXPERIENCES OF NCB MEN

The samples provided quite a bit of information about the early careers of non-college-bound men. As would be expected, NCB men experience fairly high turnover and a substantial amount of time without work. Table 2 shows, on average, these young workers hold 3.55 jobs during their first four years out of high school, or almost one job per year. They spend a fair amount of time not working as well. Their mean employment rate—defined as the number of months working divided by the number of months between the time they left high school and the 1986 interview—is 0.74. In other words, the average NCB youth spends the equivalent of one out of the first four years of his career doing something besides working.

But, as Table 1 illustrates, employment grows rapidly as youths become more firmly attached to the labor market. For the employment sample, between 1984 and 1986 the fraction of youths employed rose from 70.5 to 78.8 percent. At the same time, fewer were enrolled in school or looking for work. Only the fraction engaged in other activities remained roughly constant between interviews.

Not only were NCB men more likely to be employed four years after high school, they were also more likely to move from part-time work to full-time employment. The first panel of Table 3 shows that right out of high school, almost one-fifth of all sample members who worked held a part-time job, defined as a job on which the worker's usual hours were 30 or less per week. By the end of the sample period, part-time work had become substantially less prevalent, accounting for only 13.2 percent of all final jobs.

Mobility Between Economic Sectors

Young NCB men work in every segment of the economy. They are represented in all five broad occupation groups, from high-skill, white-collar jobs to service jobs, and in all four broad industry categories. These occupational groups cut across industry lines. Table 2, Panel B presents the fraction of young men that ever holds a job in each of these occupation groups and industry categories.[2]

Table 2
Characteristics of Early Careers

Variable	Mean	Standard Deviation
Employment		
Number of Jobs	3.55	1.76
Employment Rate	0.74	0.27
Occupations and Industries		
Proportion of Workers Ever Working in Occupation		
White Collar, High Skill	0.19	
White Collar, Low Skill	0.26	
Blue Collar, High Skill	0.64	
Blue Collar, Low Skill	0.52	
Service	0.38	
Proportion of Workers Ever Working in Industry		
Primary	0.37	
Manufacturing	0.37	
Trade and Transportation	0.64	
Service	0.52	
Occupation and Industry Changes		
Number of Job Changes Involving a Change of Either Occupation or Industry	1.98	1.55
Number of Job Changes Involving a Change of Both Occupation and Industry	1.04	1.15

Note: Sample size is 2,209.

About one in five holds a high-skill, white-collar job—such as managerial or administrative work—at some point in his early career; about one-fourth hold at least one low-skill, white-collar job, such as clerical work or sales. Given the educational attainment of this group, it is not surprising that large numbers spend at least some time working in blue-collar and service occupations. Nearly two-thirds hold at least one high-skill, blue-collar job—a craftsman for example—and over half hold a blue-collar job that is low skill, such as truck driving or farm labor. About two in five hold at least one job in a service occupation—such as computer services and repair services.

The industrial distribution of these workers' experience is also fairly broad. Thirty-seven percent hold a least one job in the primary industries (agriculture, mining, or construction); 37 percent hold at least one manufacturing job as well. Almost two-thirds work in the trade and transportation industry at some point (a category that includes the restaurant industry), and over half spend some time in service industries (which include a range of activities from personal services to entertainment to public administration).

2 There are too few observations to use the usual major occupational and index categories as a basis for analysis. Definitions of the broad groups employed here are provided in the Appendix.

These percentages add to more than 100 because NCB workers generally hold several jobs during their early careers, and these jobs may be in different occupational and industrial sectors. Nonetheless, because the figures add to well more than 100 percent, they suggest that young NCB men are quite mobile across sectors of the labor market. On average, these workers change either occupation or industry at least twice; half of these changes involve changing both occupation and industry. Since the number of job changes is equal to one less than the number of jobs (*i.e.*, 3.55-1), these figures indicate that 78 percent (1.98/[3.55-1]) of all job changes entail a change of either occupation or industry; 41 percent involve a change of both (Table 2, Panel C).

Table 3
Early Career Progress

A. Employment			
Variable	First Job	Last Job	Change
Percentage Part-Time	18.4%	13.2%	-5.2%
B.Occupation			
Category	First Job	Last Job	Change
White-Collar, High Skill	4.3%	9.6%	+5.3%
White-Collar, Low Skill	10.9	11.6	+0.7
Blue-Collar, High Skill	33.1	40.7	+7.6
Blue-Collar, Low Skill	29.6	22.9	-6.7
Service	22.1	15.2	-6.9
C. Industries (%)			
Category	First Job	Last Job	Change
Primary	20.0%	19.2%	-0.8%
Manufacturing	13.8	17.7	+3.9
Trade and Transportation	43.3	33.3	-10.0
Service	22.9	29.8	+6.9
D. Wages	Beginning Wage, First Job	Ending Wage. Last Job	Change
	$4.99	$5.84	$0.85
Standard Deviation	(3.87)	(4.84)	(5.12)

Notes: Percentages in Panels A and B may not add up to 100 due to independent rounding. Sample sizes are 2,209 for Panels A and B, 1,157 for Panel C.

The willingness of these young workers to change sectors may indicate the nature of the training they receive. If jobs offered a substantial amount of valuable sector-specific training, then the opportunity cost of a job change across sectors would presumably be greater than that of a job change within the same sector. The substantial proportion of job changing across sectors therefore suggests that the training these young men receive is either very broad, or so specific to the particular job that it is of little value on other jobs in the same sector. Alternatively, it may indicate that young men place a high value on job shopping, that is, on sampling several different jobs in different sectors of the economy.

Career Progress

In general, the net effect of these youths' substantial sectoral mobility was to move them up the occupational ladder, as seen in Table 3. This table focuses on several measures of career progress, that is, on differences between the first job held after high school and the last job held as of the 1986 interview.

Although only 4.3 percent of all first jobs were in high-skill, white-collar occupations, these jobs accounted for nearly one in ten of all final jobs. While the fraction of low-skill, white-collar jobs remained roughly constant, high-skill, blue-collar jobs accounted for 40.7 percent of all last jobs, compared with 33.1 percent of all first jobs. The fraction of jobs in low-skill, blue-collar and service occupations each fell by nearly 7 percentage points.

There was a smaller change across industries (Table 3, Panel C), although there was some net movement from trade and transportation into manufacturing and service industries.

One of the most important measures of early career progress is wage growth. Table 3, Panel D shows that, on average, beginning wages on the first job out of high school paid $4.99/hour.[3] The last wage on the last job averaged $5.84, for an increase of $0.85. Thus, real wage growth over the first four years of NCB men's careers averages 17 percent, which gives an average rate of 4 percent per year. Light and McGarry found a similar annual growth rate even though their study included college graduates.

Job Characteristics

Table 4 examines characteristics of the jobs that make up NCB men's early careers. The first panel presents data on hours, job durations, and wages. Part-time jobs are fairly common during the school-to-work transition, accounting for 15 percent of all jobs. The duration of a job is defined as the length of the job spell up to the 1986 interview date: no attempt is made to account for censoring of job spells that were ongoing at that time. Thus the mean duration should be interpreted as the number of months that the average job lasted between the time the respondent left high school and the 1986 interview. The table shows that most jobs are fairly short-lived, with a mean duration of just over one year.

Table 4
Characteristics of Jobs

A. Job Spells and Wages		
Variable	Mean	Standard Deviation
Percent Part-Time	15.0%	
Job Duration	12.2 months	14.1
Beginning Wage	$5.09	3.41
Ending Wage	$5.49	4.08
Wage Change	+$0.41	2.75
B. Occupation and Industries (%)		
Occupation		
White-Collar, High Skill	8.1	
White-Collar, Low Skill	11.0	
Blue-Collar, High Skill	35.1	
Blue-Collar, Low Skill	26.9	
Service	18.9	
Industry		
Primary	19.8	
Manufacturing	17.3	
Trade and Transportation	38.2	
Service	24.7	

Note: Column percentage in panel B may not add up to 100 due to independent rounding. For wage data, sample size is 4,052 jobs. For all other data, sample size is 7,769 jobs.

3 All wages are measured in constant 1986 dollars, deflated by the CPI.

The mean employment rate is less than the rate one would calculate by multiplying the average number of jobs by the average job duration. This is because of substantial job overlap: multiple job-holding is a common feature of NCB men's early careers. The employment rate adjusts for the double-counting that would occur by simply summing all job spells.

The mean starting wage on all jobs is $5.09. The mean ending wage is $5.49, for a mean change of $0.40. Thus real wage growth on the average job is 7.9 percent. Again, career wage growth is smaller than the product of mean wage growth on the job multiplied by the number of jobs. The reason again has to do with multiple job-holding. When two jobs overlap, wage growth between the beginning of the first job and the end of the second job will be less than the sum of job-specific wage growth on both jobs. In the sample, moreover, the beginning wage on the new job is often lower than the last wage on the old job, further reducing career wage growth relative to the sum of job-specific wage growth on all jobs.[4]

Table 5
Early Career Characteristics for Restaurant Workers and Non-Restaurant Workers

Variable	Restaurant Workers	Non-Restaurant Workers
Population Percentage of All workers	27.0%	73.0%
Dropouts	18.8%	16.8%
Number of Jobs	4.16	3.32
	(1.66)	(1.74)
Percentage Part-Time	19.6%	12.8%
Job Duration	10.2 months	13.1 months
	(11.6)	(15.0)
Employment Rate	0.72	0.75
	(0.26)	(0.27)
Percentage Ever Working in Occupation		
White-Collar, High Skill	25.8%	17.1%
White-Collar, Low Skill	26.8	25.7
Blue-Collar, High Skill	48.6	69.9
Blue-Collar, Low Skill	46.8	54.4
Service	90.8	18.5
Percentage Ever Working in Industry		
Primary	22.9	42.5
Manufacturing	31.5	38.9
Trade and Transportation	100.0	51.1
Service	53.5	52.6
Number of Sector Changes (Occupation or Industry	2.42	1.81
	(1.56)	(1.51)
Number of Sector Changes (Occupation and Industry)	1.32	0.93
	(1.21)	(1.12)

Note: Standard deviations in parentheses. Sample sizes are 584 restaurant workers and 1,625 non-restaurant workers.

4 This does not necessarily imply that the beginning wage on the new job was lower than the wage on the old job at the time the new job began. In fact, average wage growth between two jobs that did not overlap was 4 percent.

The bottom panel of Table 4 shows the occupational and industrial distribution of jobs. About 20 percent of all jobs involve white-collar work; about one-third of all jobs involve high-skill, blue-collar work. About one-fourth of all jobs are in low-skill, blue-collar occupations, while almost 20 percent are in service occupations. As for the industry breakdown, the trade and transportation industries supply about 40 percent of all jobs; the remainder were fairly evenly divided across the other three industrial sectors.

THE ROLE OF RESTAURANT EMPLOYMENT IN THE EARLY CAREERS OF NCB MEN

About one-fourth of NCB men work in restaurants at some time during their early careers. Although restaurant work is often thought to exemplify the stereotypical dead-end job, the data are at odds with the stereotype on several important counts. Table 5 compares the early careers of restaurant workers and non-restaurant workers. (I define a restaurant worker as anyone who ever works in a restaurant after leaving high school.[5]) Contrary to the stereotype, restaurant workers are not drawn disproportionately from the bottom of the skill distribution: about 19 percent of all restaurant workers are high school dropouts, compared with 17 percent of NCB men who do not work in restaurants.

Restaurant workers do hold more jobs on average than their counterparts, 4.16 versus 3.32. A higher fraction of restaurant workers' jobs are part-time, and on average they are about three months shorter than jobs held by non-restaurant workers. Nonetheless, restaurant workers' employment rate of 0.72 is only slightly lower than that of their counterparts. By this measure, restaurant workers have employment records that are no spottier than non-restaurant workers.

There are differences in the occupational and industrial sectors in which they hold jobs, however. One-fourth of all restaurant workers hold at least one high-skill, white-collar job during their early careers, compared to only 17.1 percent of non-restaurant workers. However, more non-restaurant workers hold at least one high-skill, blue-collar job (69.9 percent versus 48.6 percent). Almost all restaurant workers have at least one service-occupation job, which is not surprising given that all of them work in a restaurant at least once, and most restaurant jobs are in service occupations.

As for breakdown by industrial sector, restaurant workers are only about half as likely as their counterparts to hold a job in a primary industry, and are somewhat less likely to work in the manufacturing industry as well. By definition, all restaurant workers work at least once in the trade and transportation industry, as do half of all non-restaurant workers. Half of all NCB men work at some time in the service industry, irrespective of whether they ever work in a restaurant.

High Mobility for Restaurant Workers

Restaurant workers make more sector changes, that is, changes between occupation level or industry of employment, than non-restaurant workers. On average, restaurant workers make 2.42 changes involving either occupation or industry, and 1.32 changes involving a change of both, compared to 1.81 and 0.93, respectively, for non-restaurant workers. Of course, restaurant workers change jobs more often as well. As a fraction of job changes, both types of workers change sectors nearly equally often: 77 percent versus 78 percent of all job changes involve a change of occupation or industry, 42 percent versus 40 percent involve both. If willingness to change sectors is indicative of the value of the sector-specific

5 Specifically, a restaurant worker is defined as anyone who holds at least one job in industry 699 (1970 Census industry code).

Table 6

Early Career Progress for Restaurant Workers and Non-Restaurant Workers

	Restaurant Workers			Non-Restaurant Workers		
	First Job	Last Job	Change	First Job	Last Job	Change
Employment						
Percentage Part-Time	28.4%	17.4%	-11.0%	17.8%	13.3%	-4.5%
Occupations						
White-Collar, High Skill	5.5%	10.3%	+4.8%	3.9%	9.3%	+5.4%
White-Collar, Low Skill	7.8	10.9	+3.1	12.1	11.8	-0.3
Blue-Collar, High Skill	10.1	24.4	+14.3	41.7	46.9	+5.2
Blue-Collar, Low Skill	16.6	17.0	+0.4	34.5	25.2	-9.3
Service	60.0	37.5	-22.5	7.8	6.8	-1.0
Industries						
Primary	7.0%	8.0%	+1.0	24.9%	23.5%	-1.4%
Manufacturing	5.1	10.8	+5.7	17.1	20.4	+3.3
Trade and Transportation	72.0	54.9	-17.1	32.5	25.1	-7.4
Service	15.9	26.4	+10.5	24.6	31.0	+5.4
Wages						
	Restaurant Workers			Non-Restaurant Workers		
Beginning Wage, First Job	$4.58 (2.62)			$5.15 (4.24)		
Ending Wage, Last Job	$5.24 (2.86)			$6.07 (5.39)		
Wage Change	$0.66 (2.75)			$0.92 (5.78)		

Note: Standard deviations in parentheses. For wage data sample sizes are 319 restaurant workers and 838 non-restaurant workers. For all other data, respective sample sizes are 564 and 1,625.

training that workers receive, then restaurant workers would appear to fare no worse in this regard than their counterparts.

Table 6 presents several dimensions of career progress for restaurant and non-restaurant workers. Among restaurant workers, 28.4 percent of first jobs were part-time, over 10 percentage points higher than the 17.8 percent for non-restaurant workers. By the last job, however, the gap had narrowed substantially: 17.4 percent of restaurant workers worked part-time, compared to 13.3 percent of their counterparts.

Panels B and C show changes in occupation and industry during the first four years after high school. Roughly equal proportions of restaurant and non-restaurant workers were working in white-collar occu-

pations by the end of their early careers, and they were roughly evenly divided between high- and low-skill jobs. The proportion of workers ever employed in a restaurant whose last job was in high-skill, blue-collar occupations more than doubled to 24.4 percent, although this fraction was less than the 46.9 percent of such jobs held by non-restaurant workers. The fraction of low-skill, blue-collar jobs was roughly stable for restaurant workers; it fell from 34.5 percent to 25.2 percent among non-restaurant workers. The largest change was the exodus of restaurant workers from service occupations. The proportion of restaurant workers in service occupations fell from 60 percent to 37.5 percent; among non-restaurant workers the fraction was roughly constant at about 7 percent. Similarly, large numbers of restaurant workers left the trade and transportation industries, largely for jobs in manufacturing and the service industries. Non-restaurant workers showed smaller changes, with roughly equal numbers working in each of the four industries.

Table 7
Characteristics of Restaurant and Non-Restaurant Jobs

Variable	Restaurant Jobs	Non-Restaurant Jobs
Population Percentage of Jobs	12.5%	87.5%
Job Duration	11.29 months (12.09)	12.30 months (14.31)
Percentage Part-Time	26.9%	13.3%
Beginning Wage	$4.16 (2.11)	$5.22 (3.54)
Ending Wage	$4.41 (2.22)	$5.65 (4.27)
Wage Change	$0.25 (1.11)	$0.43 (2.92)
Occupations (%)		
White-Collar, High Skill	9.9	7.8
White-Collar, Low Skill	2.1	12.3
Blue- Collar, High Skill	0.7	40.1
Blue-Collar, Low Skill	3.9	30.2
Service	83.5	9.6
Industries (%)		
Primary	0.0	22.8
Manufacturing	0.0	19.9
Trade and Transportation	100.0	29.0
Service	0.0	28.3

Note: Standard deviations in parentheses. Percentages may not add up due to independent rounding. For wage data, sample sizes are 529 restaurant jobs and 3,523 non-restaurant jobs. For all other data, respective sample sizes are 959 and 6,810.

The bottom panel of Table 6 compares beginning and ending wages between restaurant and non-restaurant workers. Restaurant workers earn less than their counterparts, at both the beginning and end of their early careers. Restaurant workers' ending mean wage of $5.24 is about 86 percent of their counterparts' ending wage of $6.07.

Restaurant workers' wage growth over the course of their early careers is somewhat lower, too; 14.4 percent, compared to 17.9 percent for non-restaurant workers. Much of this differential may be attributable to differences in work experience that stem from differences in part-time work. Table 5 reveals that 19.6 percent of all jobs held by restaurant workers were part-time jobs, compared to only 12.8 percent of the jobs held by non-restaurant workers. Work experience is an important determinant of wages, and necessarily accumulates more slowly on part-time jobs than on full-time jobs. Therefore the difference in wage growth between restaurant and non-restaurant workers may reflect merely the difference in labor market experience that they accumulate during the first few years after high school.

Restaurant Jobs

The characteristics of restaurant jobs themselves are presented in Table 7. The first row of the table shows that restaurants supply one-eighth of all jobs held by NCB men. On average, these restaurant jobs last about 11 months, one month less than the average duration of non-restaurant jobs. In contrast, Table 5 shows a three-month differential between the average job held by restaurant workers and the average job held by non-restaurant workers. This indicates that the non-restaurant jobs held by restaurant workers have much shorter durations than either their restaurant jobs or the jobs of non-restaurant workers.

The next row of Table 7 reveals that 26.9 percent of all restaurant jobs are part-time, more than twice the 13.3 percent of all non-restaurant jobs. Restaurant jobs also pay less on average than non-restaurant jobs: the $4.16 mean starting wage of restaurant jobs is 80 percent of the starting wage of $5.22 that is the average for non-restaurant work.

On-the-job wage growth also differs across job types. Whereas mean growth on restaurant jobs is 6 percent, wage growth on non-restaurant jobs averages 8.2 percent. Part of this differential reflects the difference in mean job durations; when growth rates are calculated on an annualized basis, restaurant jobs' wage growth amounts to 6.4 percent, compared to 8 percent for non-restaurant jobs. Another portion of the difference in growth rates may be explained by the greater prevalence of part-time jobs in the restaurant sector, because workers accumulate less work experience over a given period working part-time than they accumulate over the same period working full-time.

The rest of Table 7 provides occupation and industry breakdowns for both types of jobs. It is no surprise that the vast majority of restaurant jobs are in service occupations, although roughly one in ten restaurant jobs is a high-skill, white-collar job. Most non-restaurant jobs are in blue-collar occupations, with 20 percent in white-collar and 10 percent in service occupations. As for industry breakdown, by definition, all restaurant jobs are in the trade and transportation industries; non-restaurant jobs are roughly evenly distributed throughout the four industry groups.

CONCLUSIONS

The employment of NCB men grows rapidly in their first few years after high school. Two years after graduation, their employment rate is 70 percent; two years later, it is 79 percent. Their transition from school to work involves numerous job changes: in the first four years after high school, they hold an average of 3.55 jobs, each of which lasts for an average of about one year. Most of these jobs fall into blue-collar and service occupations, and many jobs are in the trade and transportation industries. Almost four out of five job changes involve a change of sector, however, which suggests that the value of job shopping may exceed the value of any sector-specific training that they may receive.

The wages paid to young NCB men tend to be fairly low. On average, their first job pays $4.99 hour, which amounts to $9,980 per year of full-time employment. Over the first four years of their careers, their real wages grow an average of 17 percent, or about 4 percent per year.

One-eighth of all jobs held by NCB men during their early careers are restaurant jobs, and over one-fourth of all NCB men hold at least one restaurant job during their first four years after high school. Some characteristics of restaurant employment are consistent with popular notions. Most restaurant jobs are in service occupations, and on average they offer lower pay: beginning wages on restaurant jobs average about 80 percent of the beginning wages on other jobs.

Other characteristics of restaurant work and restaurant workers are much less consistent with the notion of dead-end jobs in dead-end careers, however. The employment rate of restaurant workers is nearly

the same as that of their counterparts, and the duration rate of restaurant jobs themselves is only slightly less than that for jobs in other sectors.

Despite the stereotypes, restaurant workers do not seem to get "stuck" in a series of low-skill jobs. Almost half hold at least one high-skill, blue-collar job. Moreover, there is no difference between restaurant and non-restaurant workers in their proclivity to change labor market sectors when they change jobs. This suggests either that job shopping is no less important to restaurant workers than to non-restaurant workers, or that that restaurant workers receive no less valuable sector-specific training on their various jobs than their counterparts.

Finally, although wage growth is lower on restaurant jobs than other jobs, it still averages a fairly robust 6.4 percent. Furthermore, the greater prevalence of part-time work in the restaurant sector may well explain part of the difference in wage growth rates, because work experience accumulates more slowly at a part-time job than a full-time job. Indeed, restaurant workers' generally greater reliance on part-time work may well explain why their wages grow more slowly than non-restaurant workers over the first few years of their careers.

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APPENDIX

Occupation and Industry Definitions

The broad occupation and industry groups I employ correspond to major occupations and industries as follows:

Occupations	
White-Collar, High Skill	Professional and Technical; Managers and Administrators
White-Collar, Low Skill	Sales; Clerical
Blue- Collar, High Skill	Craftsmen; Operatives except Transport; Farmers and Farm Mangers
Blue-Collar, Low Skill	Transport Operatives; Laborers Farm Laborers and Foremen
Service	Service, except Household; Private Household
Industries	
Primary	Agriculture; Mining; Construction
Manufacturing	Durables and Non-Durables Manufacturing
Trade and Transportation	Wholesale and Retail Trade (Including Restaurant; Transportation)
Service	Finance, Insurance and Real Estate; Business and Repair Services; Professional Services; Entertainment Professional and Related Services; Public Administration

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Jeff Grogger is an assistant professor of economics at the University of California, Santa Barbara. His research focuses on workers in the lower tail of the income distribution; his recent work has analyzed the relationship between crime and youth labor markets and the economic consequences of early childbearing. He has also written on school quality and the economics of education.

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