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WHY IS THERE A YOUTH LABOR MARKET PROBLEM?

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Why Is There a Youth Labor Market Problem? SUMMARY

This paper examines what is known about the causes of the high and increasing levels of youth joblessness and related problems in the youth labor market. Partly because of inconsistencies in reported rates of youth employment across surveys and partly because of problems in measuring key social variables, it is difficult to reach firm conclusions. As far as can be told, much of the relatively high rate of youth joblessness can be attributed to turnover and mobility patterns that are normal in the U.S. economy, but much is also directly related to a dearth of jobs. Demand forces, which have come to be neglected in favor of supply in much popular discussion of youth joblessness, are major determinants of variation in youth employment over time and among areas. For groups facing the most severe joblessness problems, however, the difficulty due to lack of jobs appears to be compounded by problems of employability related to deleterious social patterns. Surprisingly, perhaps, the factors that determine the probability that young persons end up employed or jobless differ substantively from those that determine wages.

The paper explains the decline in the earnings of young workers relative to old workers in terms of the increased number of young persons. It speculates that the decline in relative wages may have contributed significantly to the stable ratio of employment to population among young whites. The causes of the downward trend in youth employment for nonwhites -- which constitute one of the major developments of the period -- remain a conundrum.

Richard B. Freeman National Bureau of Economic Research 1050 Massachusetts Ave. Cambridge, MA 02138 (617) 868-3915 Jobless youths have replaced the unemployed breadwinner as the focus of concern about unemployment in the United States. Rates of unemployment are higher and ratios of employment to population lower for young persons, including those out of school, than for older persons. Why? Youth unemployment rates have risen relative to adult unemployment rates while youth employment to population rates have fallen for some groups. Why? What are the underlying causes of the youth joblessness problem?

There are two basic views about the causes of high youth joblessness. According to the demand view, the principal reason for high and increased joblessness is the lack of adequate demand for young workers due to such factors as slow economic growth, cyclical weaknesses in the economy, changes in the mix of jobs which alter the level of demand, and minimum wages which reduce employment due to high costs of labor. According to the supply view, the principal reason for high and increased youth joblessness is a lack of skills, incentives and/or aspirations on the part of the young. The two views, while not antithetical, stress different economic forces and lead to different policy recommendations. If the problem is lack of demand, policies to stimulate demand are needed. If the problem lies on the supply side, policies to influence the behavior of youth are needed.

This chapter reviews briefly the patterns and changes in the youth labor market which define the problems to be explained, enumerates the supply and demand factors alleged to underly the problems, and then examines evidence regarding the quantitative importance of the factors.

The principal results of the analysis can be summarized in five basic propositions:

- 1. Youth joblessness is concentrated among minority youth and a small segment of white youth and has increased most among minorities, making the problem of causality largely one of explaining the reduced employment of minority youth.
- 2. Alternative surveys report strikingly different levels of youth work activity, raising major questions about our understanding of the magnitude, much less the nature of the problem, and hampering explanations of causality.
- 3. Much of the high level of unemployment and nonemployment among young persons can be attributed to normal 'life-cycle' patterns of work activity, in which young persons "shop" for appropriate jobs at the outset of working careers, and to institutions which place the burden of adjustment to economic declines on new entrants and persons with low tenure in firms.
- 4. Because trends in youth joblessness vary by measure and group, it is difficult to determine the causes of the changes in the youth market in the 1970s. On the demand side, employment of youth appears to be highly sensitive to aggregate economic swings, the industrial composition of employment, and somewhat sensitive to the minimum wage, but changes in these forces fail to account for much of observed developments. On the supply side, increased numbers of young persons relative to older persons tend to create problems in the youth market, which show up largely in reductions in the wages of younger as opposed to older workers.
- 5. While problems with available data leave some issues in doubt, youth joblessness appears to be due more to lack of jobs than to poor work attitudes or unrealistic wage expectations.

Dimensions of the problem

Young workers have traditionally exhibited lower levels of work activity than older workers. Labor force participation and employment to population rates are lower for youths than for those 25 and over, while rates of unemployment are higher. The earnings and occupational position of the young fall short of the earnings and occupational attainment of older workers. While some of the youth differential is attributable to enrollments in school, out-of-school youth also tend to evince lower propensities to work than adults.

Several important changes in the traditional pattern of youth/adult labor market differentials in the 1970s have brought the problem of youth joblessness to the center of national attention. Before seeking to explain the causes of the high and/or increasing rate of joblessness among youth, it is important to delineate briefly the principal changes of concern.

Table 1 summarizes developments in the youth labor market in terms of several measures of activity: the percentage of persons with a job (i.e. the employment/population ratio) and the percentage of persons unemployed, disaggregated by age, school status, and race; the ratio of the median weekly earnings of full-time young workers to comparable white male workers 25 and over; and the percent of young workers obtaining white collar jobs. For comparative purposes, the employment/population rate and unemployment rate for older workers are also shown in the table. The table reveals three important aspects about the changing labor market for youth:

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			hite or	total Ma	le#	19.1	الا ـ ماموا			
		1954	1964	1969	1977	1954		Otner Ma		
,	Personal and a first of the second se			-,0,	1,,,	1734	1964	1969	1977	
1.	Percent with Job, by age and education									
	16-17	40.6	36.5	42.7	44.3	40.4	27.6	28.4	10	
	18-19	61.3	57.7	61.0	65.2	66.5	51.8		18.5	
	20-24	77.9	79.3	78.8	80.5	75.9	78.1	51.1 77.3	36.4	
	High school graduates 16-24		0.C E	00.1		, 5.,		//.3	61.2	
	High school dropouts 16-24		86.5	88.1	87.0		75.8	81.6	67.3	
	25-54		76.1	74.7	71.1		70.3	72.7	59.4	
	23-34	93.8	94.4	95.1	91.3	86.4	87.8	89.7		
2.	Percent of Jahan Barra					00.1	07.0	05.7	81.7	
۷.	Percent of Labor Force Unemployed, by age and education				1					
	16-17									
	18-19	14.0	16.1	12.5	17.6	13.4	25.9	24.7	20 -	
	20-24	13.0	13.4	7.9	13.0	14.7	23.1	19.0	38.7	
	20-24	9.8	7.4	4.6	9.3	16.9	12.6	8.4	36.1	
	High school graduates 16-24					201)		0.4	21.7	
	High school dropouts 16-24		8.9	6.0	8.9		18.8	11.3	22.0	
			13.6	10.8	19.7		18.1	12.4	31.5	
	25–54	3.9	2.8	1.5	3.9	9.5	6.6	2.0		
3.	Potto of U. 11 B			_		,,,	0.0	2.8	7.8	
٥.	Ratio of Weekly Earnings of Full-time		•		•					
	Young Men to Weekly Earnings of									
	White Men 25 and Over By Age			(1967)						
	18	·		.54	.49					
	20			.66	.58			. 44	. 44	
	22			.79				.63	•52	
	24			.87	.63 .75			.59	•54	
				•07	./3			.60	-63	
4.	Percent of Employed High School							•		
	Graduates Not in College of Employed Dec 20	T5								
•	in white Collar Jobs, by year of									
	school leaving, 16-24 years old			(1967)						
	graduate			-						
	dropout	-		20.2	13.2					
				17.2	7.9					
	•	White.	0 0 Tab	-1 70 1						
		1954		al Female		Blac	k and Ot	her Femai	r Female	
		1934	1964	1969	1977	1954	1964	1969	1977	
5.	Percent with Job, by age									
	16-17	25.8	25.2	20.0						
	18-19		25.3	30.3	37.5	19.8	12.5	16.9	12.5	
	20–24	47.2	43.0	49.2	54.3	29 .9	32.9	3 3.7	28.0	
	25- 54	41.6	45.3	53.3	61.4	43.1	43.7	51.5	45.4	
		40.1	41.0	46.2	54.1	49.0	52.7	56.3	57.4	
,	_									
6.	Percent of Labor Force Unemployed, by age									
	16-17	12.0	17 1	12.0						
	18-19	9.4	17.1	13.8	18.2	19.1	36.5	31.2	44.7	
	20-24	9.4 6.4	13.2	10.0	14.2	21.6	29.2	25.7	37.4	
		0.4	7.1	5.5	9.3	13.2	18.3	12.0	23.6	
					*					
	25·54	5.0	4.3	3.2	E 0					
	, -	3.0	7.5	3.2	. 5.8	8.3	8.4	5.0	9.8	
	•			(1967)				•		
7. 💂	Percent of Employed High School				E = A					
	Graduates Not in College in White			65.8	57.0					
	Collar Jobs, by year of									
	school-leaving 16-2/ wooms									

Sources: Lines 1 and 5 from U.S. Department of Labor, Employment and Training Report of the President, 1978, Tables A-3, A-4 and A-14 (pp. 183-185, pp. 186-188 and pp. 202-204); Line 6 from U.S. Department of Labor, Employment and Training Report of the President, 1978, Tables A-20 and A-3 (pp. 213-214 and pp. 183-185); Line 3 from U.S. Bureau of Census, May CPS tapes unpublished tabulation; Lines 4 and 7, U.S. Department of Labor ... Handbook of Labor Statistics 1977, and

*White in all lines except lines 4 and 7

school-leaving, 16-24 years

- 1. The divergent movement of employment/population and unemployment rates for whites. Line 1 shows that despite great concern with joblessness the percent of white youth holding jobs did not decline absolutely or relative to the percent of adults holding jobs in the 1970s. By contrast, line 2 shows an upward trend in rates of unemployment among white youth. Underlying the divergent patterns is an increase in the participation of young whites, especially those in school, in the labor force. One of the principal phenomena to be explained is the concordance of stability of employment/population ratios among white youth with an upward trend in unemployment rates.
- 2. The racial dimension of joblessness. For nonwhite youth both the percent without jobs and the percent unemployed increased in the 1970s, while the rate of labor force participation dropped. The remarkable decline in the labor force activity of nonwhite youth constitutes the core of the youth joblessness problem.
- 3. The earnings and occupation dimension. While public attention has focused on the joblessness issue, there have also been major changes in the earnings and occupational position of the young. As line 3 shows, the <u>earnings of young white men have fallen sharply relative to the earnings of older workers</u> while those of young blacks have been roughly maintained relative to the earnings of older workers. The drop in the relative earnings of the young constitutes a major shift in age-earnings profiles, with major implications regarding the substitutability between older and younger employees and the flexibility of the wage structure. By contrast, it should be noted that female age-carnings profiles have not undergone much change, possibly because older and younger women are more likely to perform the same type of work.

Finally, line 4 shows that the fraction of young persons obtaining white collar jobs has dropped in the 1970s, reversing a long upward trend in white collar employment.

What factors explain the higher rates of joblessness among the young and the 1970s changes in youth joblessness and earnings shown in Table 1?

Supply and demand factors

The potential causes of high or increasing youth joblessness can be fruitfully analyzed in terms of factors likely to affect joblessness by altering the supply of labor and those likely to affect joblessness by altering the demand for labor. While most measured variables affect both sides of the market, the simple dechotomization provides a useful framework for analysis.

Figure 1 sets out the "demand" and supply views of the effect of major economic variables on employment of youth.

The essential theme of the demand view is that youth joblessness results from a shortage of jobs either in total or of the "appropriate" type.

One reason for the lack of jobs is that demand is depressed by legislated minima and other noncompetitive forces which raise youth wages above market clearing levels. The minimum is alleged to have an especially deleterious effect on the availability of "learning jobs," defined as those providing on-the-job training, since youths cannot "purchase" training with low wages.

Another potential reason for a job shortage is the sluggish growth of the aggregate economy which, given institutions like seniority that protect older workers from layoffs, takes an especially harsh toll of employment of new, younger workers.

Changes in the structure of demand, ranging from technological developments to the declining share of agriculture, which traditionally employs relatively many young men, are also likely causes of inadequate demand.

Figure 1: Two Views of the Causes of Youth Joblessness

Youth joblessness is high because of:	Demand View	Supply View
Availability of jobs	There is a shortage of jobs for young persons due to aggregate economic forces.	There are lots of un- filled low-level jobs.
Wages •	Minimum wages and other rigidities reduce the number of low-level jobs.	Young persons have un- realistic wage aspirations.
Turnover	Short-term temporary jobs underly high rates of joblessness.	Young workers are unstable and highly mobile.
Attitudes	Youth desire jobs with a future. Employer discrimination reduces demand for young workers.	At current levels of income, youth prefer leisure and lack the work ethic.
Skills	Skills are learned on the job.	Youth lacks education and skills.
The Baby Boom Cohort	The labor market generates many new jobs for young persons, as occurs each summer.	Youth joblessness is due partly to the enormous increase in the size of the youth population.
Alternative "work" activities	Youth have earnings fr illegal "ur ground" ecc activity.	rom ader-

With respect to types of jobs, the existence of many short-term but temporary jobs, including those on short term work projects, is alleged to contribute to high youth unemployment rates. This is because when short term jobs end some employees become unemployed while searching for new positions.

Finally, employer discrimination against youth, particularly minority youth is another potential cause of joblessness.

The supply view stresses the attitudes and skills of youth in the job market. It is not the lack of jobs but the unwillingness of the young to accept those that are available for persons of their skills that is the prime cause of the joblessness problem. Youths are alleged to have excessive wage aspirations, high turnover, poor education and skill, and to lack the work ethic.

Excessive wage aspirations imply that young persons reject low-wage jobs, preferring to be unemployed than to work, say as a \$3.50/hr. dishwasher or busboy, despite lack of skills. If youth have excessive wage aspirations, increases in the minimum wage might increase youth participation rates and possibly youth employment as well--contrary to the prediction of the demand analysis.

The "naturally" high turnover of young workers is a key element in the supply analysis. On the one hand, the young are expected to exhibit high rates of mobility as they "shop" for jobs in what some view as an efficient way of searching for a relatively permanent career. On the other, some of the high turnover is alleged to reflect unstable work habits, partially induced by the nature of low-level labor markets.

The supply analysis also puts great weight on the inadequate education, skill, and motivation of the young. Some stress the quality of formal education, in particular the often outmoded and weak vocational courses.

Others focus on the failure of the educational system to provide adequate counseling and placement. Others stress the poor cognitive skills of the young and the absence of the work ethic.

While by no means necessarily antithetical and indeed in some cases complementary, the demand and supply views offer very different perspectives on the youth labor market problem and on the policies that might improve the situation. From the demand perspective, what is needed is to generate additional jobs for youth by stimulating the employer side of the market. From the supply perspective, the need is to alter youth attitudes and skills by activities that affect the youth themselves.

One additional potential cause of high youth joblessness, which could be classified as reflecting demand for youth services in other markets or reduced supply in the labor market, also deserves attention. This is the possibility that joblessness is high because youth face attractive alternatives in illegal or "underground" economic activities.

Causes of increasing problems

The evidence in Table 1 shows not only that youth have higher rates of joblessness and lower pay than older workers but that their disadvantage has increased in several respects: the percentage without jobs has grown among black and white high school dropouts; the percentage unemployed has risen modestly; while the relative earnings of the young have dropped sharply. What might explain these trends?

There are three major explanatory hypotheses relating to demand forces:

 The demand for young workers has increased too slowly because of: slow economic growth, cyclical conditions, and structural changes in the mix of jobs by industry, occupation, and area.

- 2. Expanded coverage of the minimum wage and related increases in the cost of hiring labor have reduced the number of youth jobs along given demand curves.
- 3. Increased supplies of competitive labor, notably adult women and illegal aliens, have reduced the demand for young workers.

On the supply side, the trends in youth employment and joblessness may be attributable to:

- 4. The enormous increase in the relative number of young workers due to the "baby boom" cohort has required sizeable market adjustments, some of which are not attainable in the relevant period.
- 5. Increased family incomes and welfare funds and greater willingness of parents and community to support not employed youth have induced the young to choose "leisure."
- 6. Deleterious social developments--increased one parent/female homes, inner city community problems, deteriorated quality of schooling, drug usage and crime--have made the young less employable than in the past.

To offer a valid explanation of youth market developments, these hypotheses must explain the strikingly different levels and trends in joblessness and relative earnings among young blacks and whites. As there is probably some truth to each hypothesis, the problem is not one of determining which is "right" or "wrong" but rather of evaluating their quantitative contribution to the observed changes.

Evidence

Several sources of data on the youth labor market can be used to analyze the causes of high or increasing rates of joblessness:

- time series evidence, published by the Bureau of Labor Statistics, which shows how youth employment, wages, or unemployment and various explanatory factors vary on an annual, quarterly, or monthly basis.

- cross-sectional data on individuals from the major governmental survey of households, the Current Population Survey, which provides the basic economic intelligence used to evaluate youth joblessness but suffers from being based on the responses of adults in the households rather than on the responses of the young persons themselves.
- longitudinal data on individuals from panel surveys, which are obtained from interviews with the youths and which follow the progress of an individual over time. The longitudinal data has the advantage of permitting the analyst to isolate the effect of social factors of concern from 'unmeasured' attributes of individuals by comparing the behavior of the same individuals over time.
- cross-area evidence, which shows how differences in city or state characteristics lead to bigger or smaller youth labor market problems.

 A standard research strategy is to estimate the effect of explanatory factors on a particular outcome using cross-area data and then to use the estimates and evidence on changes in the explanatory factors to try to account for changes over time in the dependent variables.
- evidence from firms, which provides information on the personnel and employment practices of firms and thus on demand behavior, but which is gathered only relatively infrequently, and used sparsely in analyses of youth labor market problems.

Comparisons of the picture of the youth labor market given by the different sources of data have turned up one major problem that significantly mars efforts to measure the magnitudes, much less the cause, of high or rising joblessness. The problem is that the fraction of youths employed differs greatly between the Current Population Survey

and the longitudinal surveys. In particular, the percent of youth with jobs is much higher in the longitudinal surveys than in the Current Population Survey (Borus, Mott, Nestel). The National Longitudinal Survey, for example, shows 46% of 16-17 year old men employed in 1966 compared to a 36% figure for the CPS. (Freeman and Medoff in Freeman and Wise) The longitudinal surveys also show smaller black-white differences in the percent with jobs than are shown in the CPS.

One reason for this divergence appears to be differences in who responds to the survey. When young persons respond themselves, they are more likely to report working than when their parent or other adults tell an interviewer about youth activity. Another reason may be that the longitudinal surveys contain a more stable group of young persons. What is important to remember is that until the discrepancy in survey results is resolved and the 'correct' rate of youth employment determined there will be ambiguity about the causes of the problem as well.

Given this proviso, what can be said about the reasons for high rates of joblessness among youth and for increases in the severity of the problem over time?

Why youth joblessness is high

Annual rates of activity, such as the percentage of the labor force that is unemployed or the percentage of the population with a job, depend on three factors: the fraction of persons in the state over a year; the average number of spells or times each of those persons is in the state; and the average length of spells measured as a percentage of time over the year. When the fraction of persons in the state rises; or when the number of times a person is in the state rises; or when the length of time in the state rises, the annual rate rises. Algebraically this is stated as:

Х

Annual percentage of
Rate in = persons in
State state over year

number of spells per person in state

average length
x of spells as
 fraction of year
(= average weeks/52)

Analyses of the difference between the rates of unemployment of young and older persons show that most of the differences in unemployment rates is attributable to differences in the percentage of persons who experience unemployment over the year rather than to differences in spells per person or in the length of spells. In 1974, for example, 32% of 16-19 year olds out of school experienced some unemployment, averaging 19 weeks over the year compared to 13% of workers 20 years and over who had some unemployment for an average of 16 weeks of unemployment over the year (Clark & Summers). Understanding teenage unemployment requires an explanation of: (a) why young persons are so much more prone to being in the state of unemployment and (b) why they do not spend that much more time in unemployment than other workers.

One major reason for teenagers having such a high probability of being unemployed over the year is that they are new entrants to the labor force (see table 2). In 1978 47% of unemployed white 16-17 year old and 54% of unemployed black 16-17 year olds never worked before compared to just 3% of unemployed men 20 years and over. An additional third of unemployed 16-17 year olds were categorized as re-entrants--persons who were reported to have left the labor force in one month, returning for work in the next. Among 18-19 year olds, the proportion of entrants and reentrants among the unemployed was smaller but still sizeable. By contrast, the rates of unemployment of teenagers due to having lost their job via a layoff or having left a job via a quit are more moderately above the rates for adult men. Part of the high unemployment rate is due to the process by which young persons enter the world of work for the first time. In the U.S., but not in all countries, entry into the work force often involves a period of unemployment while searching for work. In the United Kingdom, by contrast, institutional factors--the Career Services system for young persons and apprenticeship programs--tend to produce low entry rate unemployment.

Table 2: Direct Causes of Youth Unemployment^a

		Whi	ite		Black			
Age & Status	196 9	<u>1975</u>	1978 ^b	1978	1969	1975	1978 ^b	1978
<u>16–17</u>	Rates o	f Unemp1	oyment	Fraction of un- employment	Rates	of Unemp		Fraction of un- employmen
Total Unemployment	12.5	19.7	19.7	100.0	24.6	39.2	46.4	100.0
losers	1.6	3.4	3.2	16.2	2.1	4.8	4.5	9.7
leavers	1.0	1.4	1.2	6.1	1.6	1.1	1.4	3.0
total entrants	9.9	15.0	15.3	77.7	20.9	33.9	40.8	87.9
re-entrants	4.3	5.9	6.1	31.0	10.2	15.3	15.7	33.8
new entrants	5.6	9.0	9.2	46.7	10.7	18.5	25.1	54.1
18-19								
Total Unemployment	7.9	17.1	13.4	100.0	18.8	32.9	33.5	100.0
losers	2.0	8.1	5.4	40.3	5.9	13.0	10.2	30.4
leavers	1.5	1.7	1.8	13.4	3.3	2.3	2.6	7.8
total entrants	4.5	7.2	6.2	46.3	10.0	17.9	20.7	61.8
re-entrants	3.0	4.3	3.7	27.6	7.0	10.1	10.6	32.5
new entrants	1.5	3.0	2.5	18.7	3.0	7.5	10.2	30.4
20-24								
Total Unemployment	4.6	13.0	10.7	100.0	8.4	23.0	22.8	100.0
losers	1.8	8.6	6.2	57.9	3.9	14.9	11.4	50.0
leavers	0.9	1.4	1.9	17.8	1.7	1.4	1.6	7.0
total entrants	1.9	3.2	2.6	24.3	2.7	6.7	9.8	43.0
re-entrants	1.7	2.7	2.2	20.6	1.8	4.8	7.3	32.0
new entrants	0.3	0.5	0.4	3.7	0.9	1.9	2.5	11.0

Notes: aUnemployment weighted counts are taken from unpublished data provided by BLS. Labor Force numbers are taken from Employment and Training Report of the President, 1977, Table A-8, (p. 139-143).

^b1978 percentages are unweighted averages of percentages for the first three months of 1973.

The reason why young persons have about as lengthy spells of unemployment as older persons is, as Marston and Clark and Summers have pointed out, due to the fact that teenagers tend to drop out of the labor force, or be reported as dropping out, when they become unemployed. When spells out of the labor force and spells of unemployment are added together to obtain spells of nonemployment, young persons are found to be out of work for longer periods than adults.

Decomposition of employment/population ratios for younger and older workers show even greater differences in the lengths of employment spells between young and older workers, with an average completed spell of employment of teenagers (which may include changes in jobs without moving into nonemployment) much below those for all workers 20 and over.

An alternative way of demonstrating the way the short length of youth jobs contributes to the age differential in unemployment is to decompose the rate of unemployment for persons in the work force into the probability of unemployment given a job change multiplied by the probability of a job change. The chances of being unemployed, given a change, are the same as for older workers. Differences in unemployment reflect differences in the proportion of persons who are job changers: about one-fourth of men 18-24 change jobs in a year compared to less than one-tenth of 35-54 year olds (see Mincer, in Freeman and Wise, table 3). The differential proportion of job changers by age is itself largely attributable, according to Mincer's calculations, to differences in seniority by age. Low-seniority workers, of necessity primarily young workers, change jobs frequently while high-seniority workers, of necessity primarily older workers, change less frequently and are as a result less likely to be unemployed.

We conclude that one of the key factors behind high youth joblessness is the high mobility and short tenure of the young.

Incidence

Joblessness is concentrated among certain groups of young persons and is relatively infrequent among others. Studies of the effect of diverse socioeconomic factors on the probability that a young persons will be employed show that with diverse other factors held fixed:

- black youth have a lower probability of employment. Among teens this is largely due to problems in obtaining a first job upon entry into the market. Among 20-24 year olds higher chances of being laid off contribute to the lower probability.
- youths from disadvantaged areas, notably those where relatively many families have incomes below the poverty level, also have lower probabilities of employment
- youths with less schooling, such as high school dropouts, tend to be markedly prone to joblessness
- youths living in areas where there are relatively many young persons tend to suffer greater joblessness than other youths
- youths living in areas where the mix of industries is favorable to employment of the young (i.e. with many service and trade establishments); where economic growth is rapid; and where adult unemployment is relatively low tend to have higher rates of employment than other youths
- surprisingly, perhaps, with the exception of those from homes below the poverty level, youths from low income families do not have noticeably lower chances of holding a job than youths from high income families
- youths working in certain occupations, those with high initial wages but slow wage growth, and in industries in which the work force tends to be highly mobile, have higher rates of unemployment.

As a result of the high concentration of youth joblessness among blacks and selected groups of whites, much youth joblessness is attributable to a small 'hard core' of young people who experience many weeks without work. Over half of unemployment among male teenagers out of school has been estimated as due to the unemployment of persons with more than 6 months of unemployment. (Clark and Summers in Freeman and Wise)

The factors that are associated with youth joblessness are not, it is important to recognize, the same factors that determine the wages of young workers. Being black in particular reduces the probability of holding a job but does not substantially affect the wages of the young. The major economic surveys of youth in the 1970s, ranging from the Survey of Income and Education, based on an expanded Current Population Survey sample, to the National Longitudinal Survey of the High School Class of 1972 show that, conditional on other factors, white and black youth have essentially the same wages:

Estimated Percentage Effect of Being Black on Wages 1972-76

All young men, from Survey of Income and Education, 1975

16-17	•		.14
18-19		•	06
20-24			05

Young men in high school Class of 1972, by year

1972	.02
1973	.02
1974	.01
1975	.05
1976	.04

Source: from Freeman and Wise: Meyer and Wise Freeman

Other measures of family background which appear to reduce employment probabilities—such as coming from homes on welfare—also have little impact on wages. By contrast, parental income, which is only weakly associated with youth unemployment, has a sizeable effect on youth wages, suggesting that the wealthy are able to help their children obtain better jobs.

Jobs vs. people

To what extent is youth joblessness due to lack of jobs as opposed to lack of skills or motivation among people?

Since employment and wages depend both on supply and demand forces the job vs. people question, which dominates much popular discussion of youth unemployment, is in one sense poorly posed. What can be examined is the extent to which variation in some of the supply and demand factors listed in figure 1 affect the level of joblessness, conditional on the level of the other factors.

With respect to jobs, a strong case can be made that <u>lack of jobs is</u> a major contributor to youth joblessness, in the sense that increased demand for youth labor, at existing wages, or possibly even at lower wages, will in fact greatly increase youth employment. The evidence for this claim is several fold.

First, virtually every study of youth employment show substantial responsiveness of the number working to aggregate economic conditions. Changes in the unemployment rate of prime age men are invariably found to have enormous effects on the employment/population ratio, participation rate, and unemployment rate of youth, especially nonwhite youth. As an example of the magnitude of the response to cyclical changes, consider the following estimates of the effect of a change in the total male unemployment rate on youth male employment/population ratios:

Effect of Percentage Point Increase in Total Male Unemployment on Youth Employment/Population Ratios, by Age

		16-17 year olds	18-19 year olds	20-24 year olds
Based on	time series	-2.1	-1.7	-3.4
Based on	cross-section	-2.4	-2.3	-1.5
Source:	Freeman, in Freem	an and Wise, table	e 5.	

Estimates of the cyclic responsiveness of black youth employment/population ratios suggest responsiveness about 50 percent higher than the figures for all youth. Such significant cyclic responsiveness would be unlikely in the absence of a substantial shortfall of youth jobs when the economy is in a downturn. Corroboratory evidence from comparisons of SMSAs shows a similar pattern: the major determinant of employment/population differences across SMSAs is the level of aggregate demand in the SMSA.

Second, several studies of unemployed youth (as well as of other unemployed workers) have found that virtually no unemployed young job seeker reports having rejected a job offer during the period of search. If there were not a shortage of jobs, we would expect the unemployed to be picking and choosing, engaged in the process of searching for the best offer, but in fact that does not appear to be the case: most get no job offers at all. Similarly, comparisons of the 'reservation wage' of young workers—the wage at which the young claim they would accept a job—with actual wages received gives little indication that, were additional youth jobs available, there would be insufficient applicants.

One frequent objection to the shortage of jobs hypothesis is that newspapers, store windows, employment agencies and the like are often bursting with help-wanted ads. A 1978 Fortune Magazine study of actual want-ads has effectively demolished this argument. The Fortune researchers found that of 228 ads in the help-wanted section of a newspaper, only 142 represented real job offerings within commuting range of the city and, of those only 42 did not require special skills. The employers offering those 42 jobs were 'fairly swamped by a tidal wave of applicants'. While turnover of workers and jobs guarantees continual openings, the number of jobs falls far short of the number of plausible applicants.

To what extent can the lack of jobs for youth be attributed to the minimum wage? With rare exception, studies of the effect of the minimum

on youth employment suggest that existence of the minimum reduces youth employment by moderate amounts but may have larger effects on black than white youth.

A 10% increase in the minimum relative to average wages is usually found to reduce youth employment by somewhere between 1% to 4% (Gramlich, Mincer, Ragan). This implies that recent increases may have reduced youth employment by perhaps 2% to 6%. Because reduction in the minimum would raise the labor force as well as employment, however, the effects on youth unemployment rates are much less; the recent increases may have increased the youth unemployment rate by no more than 2-3 percentage points.

The nature as well as the number of jobs available to youth also appears to affect the rate of joblessness. Analysis of the effect of occupation on youth unemployment shows that, with diverse personal characteristics fixed, youths in what may reasonably be characterized as 'dead end' jobs tend to have higher rates of unemployment than other youths (Brown, in Freeman and Wise). Increasing the number of youth jobs with a future is likely to have a greater impact on youth joblessness than increasing the number of dead end jobs.

Finally, it is important to recognize that at least some of the lack of jobs for youth may be attributed to explicit employer personnel policies. Surveys of company hiring practices in the past have revealed definite employer preferences against younger workers, which may or may not be economically justifiable on the basis of differential productivity, wage, and turnover costs. One study, for example, found that in 1970 about 80-90% of employers preferred workers 22 years or older, compared to those under 22, even for relatively low level jobs (Diamond and Bedrosian). While age discrimination laws have induced some firms to drop age from application forms, it is still likely that most enterprises prefer older employees. At present we lack the detailed information on productivity, labor costs, and turnover and training to determine whether these preferences are rational or discriminatory.

For black youths, of course, there is an additional problem: that, despite the equal opportunity laws, at least some employers may be less willing to hire black than white youth, possibly for reasons of communication across cultural lines as well as prejudice. High levels of youth crime in some inner cities could also lead to employers being fearful of hiring black youth.

That there is a definite shortage of jobs for young persons does not mean that there are no 'people' problems. Youth joblessness is, as noted earlier, concentrated among a small group of persons, a large fraction of whom are black. Expansion of aggregate demand would raise their employment, but levels of joblessness are so high as to suggest other problems as well. While definitive evidence is lacking, many believe that broad socioeconomic community problems in inner cities—where poverty, poor schooling, broken homes, drug and alcohol abuse, out—of—wedlock births and crime are rampant—contribute significantly to the problem of youth employment. On the one hand, many of these youths lack the affective and cognitive skills required for jobs in the regular economy. On the other, various illegal activities may offer a sizeable source of potential earnings. Even at cyclical peaks, these youth tend to have relatively high joblessness and unemployment rates.

In sum, the empirical evidence suggests that while much of youth joblessness is associated with turnover and mobility, alternative institutional arrangements could reduce unemployment due to initial job search, and that while lack of jobs is critical, for the groups with the highest rate of joblessness there are additional "people" problems.

Causes of change

Because of the diverse developments in the youth labor market documented in table 1, it is more difficult to explain changes over time. Some of the

observed patterns of change appear to be explicable by the hypotheses outlined earlier. Others, however, remain a mystery.

The change that seems to be the easiest to explain is the decline in the wages of young workers relative to older workers. Estimates of the substitutability of workers by age suggest that large increases in the relative number of young men (but not young women) will reduce their wages compared to those of older workers. On the basis of these estimates, much of the decline in the relative earnings of the young can be attributed to the enormous influx of the "baby boom" generation onto the job market. If this interpretation is correct, the relative wages of the young will rise in the 1980s as their relative supply declines.

The decline in youth wages relative to adult wages (see line 3, table 1) may help explain one of the puzzles of the 1970s: the fact that despite such adverse developments as a rise in the adult male unemployment rate, increased relative numbers of some young age groups (20-24 year olds) and extended coverage of the minimum rate, youth employment and employment/population rates rose in the 1970s. From 1969 to 1977, for example, the number of teenage employed workers increased by 28% while the number of 20-24 year olds employed increased by 38%. One possible explanation consistent with the observed wage patterns is that the minimum nothwithstanding, the relative wages of youth fell sufficiently as to generate a sizeable number of jobs. Because youth participation rose (for reasons that have not been explored in detail), the rate of youth unemployment increased despite the growth of employment.

While analytically intriguing, the greater-than-expected 1970s increase in youth employment is not of course the reason for societal concern with youth joblessness. The reason for concern is the increased relative

joblessness among black youth. From 1969 to 1977, while white teen employment increased, black teenage employment actually fell by 3.1%. Which of the hypotheses described earlier account for the reduction in the ratio of the employment/population rate for black youths and for the increase in the ratio of black to white youth unemployment rates?

No clear answer exists at present. Extant studies suggest that some of the proposed factors have contributed to the change but the studies fall far short of explaining the striking deterioration in the position of black youth.

On the demand side, sluggish aggregate conditions, as reflected in the prime age male unemployment rate, have added to black youth joblessness. Roughly, the 2.0 point increase in the prime age (35-44 year old) male rate from 1969 to 1977 lowered the employment/population rate of black youth by 12 points and by 7 points relative to its impact on the comparable ratio for white youth. Similarly, the increased relative number of black youth may have reduced their employment/population ratio in the 1970s. The puzzle remains, however, as to why white youth employment managed to rise despite these developments while black youth employment did not.

The hypothesis that some of the black youth employment reflects suburbanization of jobs has some validity. High rates of joblessness among black youth in suburbia, however, shows that this factor can only be a minor contribution to the adverse trends. Only 24% of black teenagers living in suburbs held jobs in 1975 compared to 47.2% of white teenagers. Teenage unemployment rates for blacks outside of central cities, while smaller than those in central cities, exceeded those of white teenagers in central cities. If all blacks lived outside metropolitan areas, their

unemployment rate would still be in the 30% range (Westcott).

Reduction in the size of the military, which can be viewed as a drop in demand for labor which makes extensive use of blacks, represents another possible cause of the downward trend in the percent of black youths with a job. Because the black share of the military rose sharply after Vietnam, however, it is difficult to attribute more than a small fraction of the seventies downward trend in black youth employment to the drop in the size of the military.

The possibility that black youth employment has been adversely affected by wage developments deserves greater attention. As shown in table 1, the decline in the relative wages of youth was concentrated among whites. To the extent that the increased wage of blacks is due to the minimum wage or increased antibias governmental activity which raises wages along existing demand curves, some of the reduced black employment could be attributed to the improved wages. What proportion is so attributable has not yet been determined.

While often cited as a possible cause of increased youth unemployment, the influx of illegal aliens, who might be especially good substitutes for less skilled minority youth, has also not been evaluated quantitatively. Limited work on the effect of increased female participation on youth employment shows little evidence that youths have been adversely affected by the growth of the female work force. (Freeman in Freeman and Wise) This raises doubts that increased numbers of aliens have reduced youth employment as well.

Inability to explain the pattern of black youth joblessness in terms of changes in labor demand has directed attention toward supply side hypotheses.

The major supply side development -- the enormous increase in the relative number of young workers due to the 'baby boom' cohort has been cited by some as an important factor in the reduced employment chances of young blacks, largely because of the greater increase in the number of black than of white youth. If employers discriminate on the basis of race, the greater increase in the number of young blacks could be expected to have an especially adverse effect on their employment chances, particularly given the increase in the wages of black relative to white youth. Calculations by Wachter (in Freeman and Wise) show sizeable effects of the increased number of young persons on black employment/population ratios. While the population trend appears to contribute to explaining the observed drop in employment/population for blacks, Wachter does not believe that it accounts for the bulk of the change.

Considerable attention has been given to the effect of the other more sociological supply side forces. Unfortunately, however, quantitative information about their impact is seriously lacking.

With respect to parental and community support of jobless youth, the evidence does not tell a clear story. On the one hand, while there is some support for the argument that increased welfare funds have reduced employment of inner city youth, and while families on welfare have increased, the effect of being on welfare on youth employment is not large enough to account for the trend in joblessness. Similarly, given the rough stability in real family incomes -- as distinct from individual earnings -- it is difficult to argue that increased affluence among the poor accounts for reduced youth work.

On the other hand, part of the reduction in the black employment/
population ratio is related to the increase in the proportion of blacks
enrolled in school shown below:

Patterns	of	Enrollment	Among	Young Ma	les

•	Percent	Enrolled :	in School	Percent Enrolled in So White			
	16-17	18-19	20-24	16-17	18-19	20-24	
1964	84.3	39.9	8.3	90.4	52.4	25.6	
19 69	87.4	49.5	20.5	92.2	60.9	33.2	
197 7	92.5	50.6	26.1	89.5	47.7	25.7	

As a result of the increased enrollment of blacks, the employment/
population rate of 16-17 year old blacks would have fallen (assuming no
change in participation rates of enrolled and not enrolled youths) by
2 points from 1969 to 1977; the employment/population rate of 18-19 year
old blacks would have fallen by 1 point while the rates for 20-24 year
olds would have fallen by 2 points. Since the white enrollment ratios
fell over this period, the increased tendency for blacks to choose school
helps explain the differential pattern of change by race.

Evidence on the effect of deleterious social developments on the employability of inner city youth, while scattered, tends to suggest a major problem. There is no doubt that drug abuse, alcoholism, youth crime, and related activities which reduce employability plague inner city youth. Limited time series data show marked upward trends in these and other indicators of the status of youth. Similarly few would disagree with the oft-expressed complaint that quality of education is often quite

poor in inner cities, although whether quality has deteriorated in recent years is open to question. Limited evidence on attitudes shows that black youths from Northern urban backgrounds are less committed to work than black youths from Southern backgrounds and that these differences are a factor in labor market achievement.

While it is difficult to differentiate cause from effect, there does appear to be a significant employability problem among inner city youths which contributes to the trend in joblessness.

Conclusion

The preceding analysis of the causes of youth joblessness and related labor market problems suggests that much remains to be learned. Partly because of inconsistencies in reported rates of youth employment across surveys and partly because of problems in measuring key social variables, it is difficult to reach firm conclusions. As far as can be told, much of the relatively high rate of youth joblessness can be attributed to turnover and mobility patterns that are normal in the U.S. economy, but much is also directly related to a dearth of jobs. Demand forces, which have come to be neglected in favor of supply in much popular discussion of youth joblessness, are major determinants of variation in youth employment over time and among areas. For groups facing the most severe joblessness problem, however, the difficulty due to lack of jobs appears to be compounded by problems of employability related to deleterious social patterns. Surprisingly, perhaps, the factors that determine the probability that young persons end up employed or jobless differ substantively from those that determine wages.

While we have been able to explain the decline in the earnings of young workers relative to the earnings of older workers in the 1970s, the causes of the divergent trend in youth employment between all young persons and nonwhites remains a conundrum. For reasons that are unclear, white youth employment/population ratios have stabilized or risen in the period, despite adverse economic developments, while black youth employment/population ratios have been dropping since the mid 1950s. While these trends are likely to have been influenced by the wage patterns, shifts in demand, and various social developments, no definitive accounting exists at present. The causes of the divergent trends have been illuminated but not resolved by existing work.

Bibliography

- Adie, D.K., "The Lag in Effect of Minimum Wages on Teenage Unemployment,"

 Proceedings, Industrial Relations Research Association (December, 1971).
- _____ and L. Galloway, "The Minimum Wage and Teenage Unemployment,"
 Western Economic Journal, 11 (December 1973).
- Barton, Paul E., "Youth Employment and Career Entry," <u>Labor Market Information</u>
 <u>for Youths</u>, Seymour L. Wolfbein (ed.), Temple University School of
 Business Administration (Philadelphia, 1975).
- Borus, Michael E., Mott, Frank L. and Nestel, Gilbert. "Counting Youth:

 A Comparison of Youth Labor Force Statistics in the Current Population

 Surveys," from Conference Report on Youth Unemployment: Its Measurement and Meaning, pp. 15-34.
- Coleman, James S., "The School to Work Transition," The Teenage Unemployment

 Problem: What are the Options?, Congressional Budget Office (October 14, 1976).
- Cotterhill, Philip G. and Walter J. Wadycki, "Teenagers and the Minimum Wage in Retail Trade," Journal of Human Resources, vol. II (winter, 1976).
- Diamond, Daniel E., and Bedrosian, Hrach, <u>Industry Hiring Requirements and</u>
 the Employment of Disadvantaged Groups, New York: New York University
 School of Commerce, 1970.
- Duncan, Beverly, "Dropouts and the Unemployed," <u>Journal of Political Economy</u>
 (April, 1965).
- Fearn, Robert M., "Labor Force and School Participation of Teenagers,"
 Ph.D. dissertation, University of Chicago, 1968.
- Folk, Hugh, "The Problem of Youth Unemployment," The Transition from

 School to Work, A Report Based on the Princeton Manpower Symposium

 (May 9-10, 1968), (Industrial Relations Section, Princeton University).
- Fortune Magazine Jobs and Want Ads: A Look Behind the Words, by H. E. Meyer, 11/20/78.

- Freeman, Richard B., "Youth Employment Opportunities: Changes in the

 Relative Position of College and High School Graduates," Labor Market

 Information for Youths, Seymour L. Wolfbein (ed.), Temple University

 School of Business Administration (Philadelphia, 1975).
 - Resources Help?" The Teenage Unemployment Problem: What Are the Options?

 Congressional Budget Office (October, 1976).
 - Freeman, Richard B., "The Effect of Demographic Factors on Age-Earnings Profiles," Journal of Human Resources (spring 1979).

and D. Wise (eds.) <u>National Bureau of Economic Research</u>

Conference on Youth Unemployment:

Brown, Charles, "Dead-End Jobs and Youth Unemployment";

Clark, Kim and Lawrence Summers, "The Dyanmics of Youth Unemployment";

Corcoran, Mary, "Attitudes of Women and Changing Employment Patterns";

- Ellwood, David, "Teenage Unemployment: Permanent Scar or Temporary Blemish";
- Freeman, Richard and James Medoff, "Why Does the Rate of Youth Labor Force Activity Differ Across Surveys?";
- Hall, Robert, "The Minimum Wage and Job Turnover in Markets for Youth Workers";

Layard, Richard, "Youth Unemployment in Britain and the U.S. Compared";

Mincer, Jacob and Linda Leighton, "Turnover and Unemployment";

Rees, Albert and Wayne Gray, "Family Effects in Youth Unemployment";

Wachter, Michael and Chongsoo Kim, "Time Series Changes in Youth Joblessness";

Wise, David and Robert Meyer, "High School Preparation and Early

Labor Market Experience."

- Gass, Ronald, "Approaches to the Transition from School to Work," <u>Labor</u>

 <u>Market Information for Youths</u>, Seymour L. Wolfbein (ed.), Temple University

 School of Public Administration (Philadelphia, 1975).
- Gavett, Thomas, et al., Youth Unemployment and the Minimum Wage, BLS (Bulletin 165), 1970.
- Goldfarb, Robert S., "The Policy Content of Quantitative Minimum Wage Research," in Industrial Relations Research Association, <u>Proceedings of the Twenty-Seventh</u>
 Annual Meeting (1974).
 - Goldstein, Harold, "Youth in the Labor Market: Trends in Employment and Unemployment," <u>The Transition from School to Work</u>, A Report Based on the Princeton Manpower Symposium (Industrial Relations Section, Princeton University), May, 1968.
 - Gramlich, Edward M., "Impact of Minimum Wages on Other Wages, Employment, and Family Incomes," <u>Brookings Papers on Economic Activity</u> (2: 1976).
 - Kalachek, Edward, "Determinants of Teen Age Employment," The Journal of Human Resources (winter, 1969).
 - National Manpower Task Force, 1969.
 - Katz, Arnold, "Teenage Employment Effects of State Minimum Wages," <u>Journal</u> of Human Resources, vol. 8 (spring, 1973).
 - King, Allan G., "Minimum Wages and the Secondary Labor Market," <u>Southern</u> Economic Journal, vol. 41 (October, 1974).
 - Leigh, Duane E., "The Occupational Mobility of Young Men, 1965-1970,"

 Industrial and Labor Relations Review (October, 1976).
 - Levitan, Sar A., "Coping with Teenage Unemployment," The Teenage Unemployment

 Problem: What Are the Options? Congressional Budget Office (October, 1976).
 - Lovell, Michael C., "The Minimum Wage, Teenage Unemployment, and the Business Cycle," Western Economic Journal, vol. 10 (December 1972).
 - Marston, Stephen, "Employment Instability and High Unemployment Rates,"

 Brookings Paper on Economic Activity, 1976: 1, p. 169.

٤

- Meyer, Herbert E., "Jobs and Want Ads: A Look Behind the Words," Fortune (November 20, 1978).
- Miljus, Robert C. et al., "Some Correlates of the Labor Market Status of Male Youth," The Transition from School to Work, A Report Based on the Princeton Manpower Symposium (Industrial Relations Section, Princeton University), May, 1968.
- Mincer, Jacob, "Unemployment Effects of Minimum Wages," <u>Journal of</u>
 Political Economy vol. 84 (August 1972).
- Moore, Thomas G., "The Effect of Minimum Wages on Teenage Unemployment Rates," <u>Journal of Political Economy</u>, vol. 79 (July/August 1971).
- National Child Labor Committee, <u>Rite of Passage: The Crisis of Youth's</u>

 Transition from School to Work, New York (1976).
- Perrella, Vera C., "Employment of School Age Youth," BLS, Special Labor Force Report, No. 87.
- Ragan, James J. Jr., "Minimum Wages and the Youth Labor Market," The
 Review of Economics and Statistics, vol. 59 (May 1977).
- Silberman, Charles, "What Hit the Teenagers," Fortune (April 1965).
- Singell, Larry D., "Some Private and Social Aspects of the Labor Mobility of Young Workers," The Quarterly Review of Economics and Business, vol. 6, no. 1.
- Smith, Ralph, "The Teenage Unemployment Problem: How Much Will Macro Policies Matter?" The Teenage Unemployment Problem: What Are the Options? Congressional Budget Office (October 1976).
- Stevenson, Gelvin, "Determinants of the Occupational Employment of Black and White Male Teenagers," Ph.D. dissertation, Washington University (June, 1973).
- Taggart, Robert, "Employment and Training Programs for Youth," (published ms., December 1975), From School to Work.
- Westcott, D., "Youth in the Labor Force: An Area Study," Monthly Labor Review, July 1976, vol. 99, no. 7, pp. 3-9.