Recent data on job prospects of college-educated youth

Evidence reveals a slight shift on the part of young, college-educated workers toward technical, sales, and administrative occupations and toward lower paying service-producing industries; whether this represents permanent change in their job prospects remains to be seen

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Media reports of poor employment prospects for college-educated youths are among the many disturbing stories to have emerged from the past recession. For example, Kevin Phillips, writing recently in *The New York Times Magazine,* referred to the poor job market for college graduates in New York City as one of the "economic circumstances" threatening the prosperity of the middle class.[1]

Many of these reports are largely anecdotal. For instance, references abound to the "boomerang kids"—the young college graduates that come back to their mothers and fathers because they are unable to find jobs. And few of us have not heard some account of how the past recession took a heavy toll on white-collar workers—especially highly paid corporate executives laid off because of "downsizing" and "restructuring." As a result, the notion has emerged that even for the brightest and most promising young persons, a cloud of economic uncertainty has rolled in.

Recently, this general impression became more concrete. In testimony before the House Committee on Ways and Means, Lawrence Mishel, research director of the Economic Policy Institute, produced statistical evidence showing that "the trend towards higher wages for college graduates ended in 1987, when the wages of college graduates began falling."[2] Much has been made, of course, about the growing pay gap between college-educated and high school-educated workers during the 1980's and its impact on income inequality. But according to Mishel, all was not well with the economic situation for college graduates either.

The following descriptive analysis examines the kinds of jobs young, college-educated persons have moved into in recent years and discusses whether those jobs have indeed changed in a qualitative sense. Data are analyzed from two nationally representative surveys: the monthly Current Population Survey (CPS) (including the March supplement on income and work experience), collected by the Census Bureau for the Bureau of Labor Statistics, and the Survey of Income and Program Participation (SIPP), another Census Bureau survey. The CPS data are used first, to set the stage—that is, to examine various aspects of the work activities of college-educated young persons. For example, what do the data show regarding their unemployment situation, their rates of labor force participation, their earnings experience, and so on? Then, data from the SIPP are presented to examine the kinds of jobs such individuals have moved into during recent years. The SIPP is a longitudinal survey that follows persons for approximately 2-1/2 years. Data from the SIPP's 1984 panel (covering the 1984–86 period), the 1987 panel (covering the 1987–89 period), and part of the 1990 panel (covering the 1990–91 period) are analyzed. Job quality is examined from several different perspectives.

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Symptoms of a problem

From the CPS, bits and pieces of data relating to college-educated young persons can be assembled which suggest that their job market situation deteriorated as the Nation's economy entered the 1990–91 recession.[3]

As table 1 shows, joblessness among college-educated men aged 16 to 24 who were not enrolled in school rose sharply between 1988 and 1991, from 4.8 percent to 7.9 percent.[4] Among women, the rate rose from 4.7 percent to 6.1 percent.[5]

As is well known, one alternative for young people when the job market grows tight is to stay in school or return to school. This phenomenon is typically reflected in declining rates of labor force participation. While information is not available on the labor force participation of young college graduates, we can examine the rates for all young persons aged 20 to 29 at all educational levels. As shown in table 2, between 1989 and 1991, the overall participation rate of these individuals fell from 81.3 percent to 80.2 percent, while the percentage reporting that they were not in the labor force, but rather in school, increased from 5.2 percent to 5.8 percent. Obviously, not all of this increase in school attendance was due to returning college graduates, but nevertheless, it is highly likely that some of it was.

Another fragment of evidence that young, college-educated persons may be having trouble finding jobs they judge to be of good quality is the occupational distribution of those who were employed. As expected, a large proportion of these individuals are in executive, administrative, managerial, and professional specialty occupations. (See table 3.) These are typically high-paying occupations, and a college education is usually a requirement for entry into them. The table indicates, however, that the proportion of young persons with college educations who were employed in these occupations fell from 53.6 percent to 48.4 percent between March 1989 and March 1991, a period that encompasses the recent economic downturn. At the same time, the proportion of young, college-educated workers in the technical, sales, and administrative support (including clerical) occupations—occupations that pay far less than the aforementioned occupations—increased from 33.4 percent to 38.2 percent.[6]

Table 1. **Unemployment rates during the 1985–91 period for persons aged 16 to 24 who completed 4 or more years of college and were not enrolled in school**

[Percent]

Year	All persons 16 and older	Men 16 to 24	Women 16 to 24
1985	7.2	7.0	5.2
1986	7.0	6.0	5.9
1987	6.2	5.7	5.3
1988	5.5	4.8	4.7
1989	5.3	6.1	4.2
1990	5.5	5.5	5.1
1991	6.7	7.9	6.1

SOURCE: Current Population Survey.

Table 2. **Labor force participation of persons aged 20 to 29, 1989 and 1991**

[Numbers in thousands]

Labor force status	1989	1991
Civilian noninstitutional population	39,171	38,122
Civilian labor force	31,864	30,581
Participation rate	81.3	80.2
Not in labor force	7,307	7,541
In school	2,056	2,202
Enrollment rate (percent of population)	5.2	5.8

SOURCE: Current Population Survey.

The earnings of young, college-educated workers in recent years have also reflected a deteriorating labor market situation. As is well known, the real earnings of college-educated workers increased rapidly during the 1980's, compared with those of high school-educated workers.[7] Chart 1 shows this change for 25- to 29-year-old men.[8] However, as Mishel pointed out, toward the end of the decade, wages for these workers began to decline.[9] Indeed, he refers to this decline as the end of the "white-collar" employment boom. Chart 1 reveals that the mean earnings of 25- to 29-year-old college-educated men dropped from $31,829 in 1989 to $27,782 in 1991, about the same as they were in 1983.

Chart 2 presents the trends in real mean earnings for two age groups of men and women from 1983 to 1991. Among college-educated men aged 18 to 24, as well as aged 25 to 29, the drop in earnings from 1989 to 1991 was substantial. For college-educated women aged 18 to 24, the decline in real earnings was not statistically significant, but it was for similarly educated women aged 25 to 29.

Given all of this admittedly fragmentary evidence, one should at least be curious about the kinds of jobs college-educated young persons have been moving into in recent years. Are they commensurate with the skill and education levels these individuals bring to the labor market? Are they adequate for establishing a foothold on a career path? Are they further evidence of an economy with serious problems creating jobs?

Job accessions and job quality

A recent Census Bureau report examined the kinds of jobs persons of all ages and educational backgrounds had moved into during the 1987–89 period.[10] The data for the report were obtained from the 1987 panel of the SIPP, the longitudinal survey designed to monitor the economic well-being of persons, families, and households over periods of approximately 2–1/2 years. In this survey, it is possible to identify individuals who did not have a job in one month, but did in the following month—an instance of a *job accession*. In other words, the report focused on only one aspect—the "inflow"—of the dynamic process of job creation. The report was concerned solely with wage and salary jobs that may have been either full time (35 or more hours a week) or part time (fewer than 35 hours a week) and concentrated primarily on the first job accession persons had experienced during the 2–1/2 year period. Many persons, of course, "job shop" and experience a number of job accessions, even in that short a period.

Although numerous jobs that workers move into last for just a short while, this job "inflow" provides another perspective from which the issue of how good a job is can be addressed. Most studies rely on cross-sectional estimates over time, which represent net changes in the "stocks" of employed persons; in other words, the changes are the result of the job accession and job separation processes. But even these estimates include persons who have just moved into jobs that last for only a short period.

For the purposes of this article, similar data on job accessions were obtained from the 1984 SIPP panel, which covers the 1984–86 period, and the 1990 SIPP five-wave longitudinal panel, which covers all of 1990 and the first half of 1991.[11] Along with data from the 1987 panel, these two sources yielded some insights into the kinds of jobs college-educated young persons accepted during the business expansion of the 1980's and the recession of 1990–91.[12]

Compared with the CPS, the SIPP is a small sample survey.[13] Consequently, when analyzing a small subgroup of the SIPP population, such as college-educated young persons, great care must be taken regarding the reliability of the estimates. For this reason, we define the age cohort of college-educated young persons rather broadly: individuals aged 21 to 29 who have attended 4 or more years of college. As will be shown, the standard errors of the estimates are relatively large, and in a number of instances, while intuition suggests that the estimates are plausible, little confidence can be placed in them. Nevertheless, some of the SIPP data relating to the kinds of jobs college-educated young persons moved into are reliable.

Assessing the quality of the kinds of jobs persons moved into, of course, is no easy matter, and many factors are involved. While pay or remuneration is perhaps the first to come to mind, other elements, such as fringe benefits, working conditions, and job security, are no less important. In addition, assessing how good a job is can be very subjective: different persons place different values on the various elements that make up a job.

The following analysis examines the jobs that college-educated young persons moved into in the 1984–86, 1987–89, and 1990–91 periods. Five different characteristics are used to assess the quality of a job: *payment provisions, the occupation, the industry, health insurance benefits,* and *pay.* Clearly, many more could be included.

Table 3. **Occupational distribution of employed persons aged 18 to 24 who completed 4 or more years of college and were not enrolled in school, March 1989 and March 1991**

[Numbers in thousands]

Age and occupation group	March 1989		March 1991	
	Number	Percent	Number	Percent
Both sexes, aged 18 to 24	1,586	100.0	1,498	100.0
Executive, administrative, managerial, and professional specialty	850	53.6	726	48.4
Technical, sales, and administrative support (including clerical)	530	33.4	572	38.2
All other occupations	206	13.0	200	13.4

SOURCE: Current Population Survey.

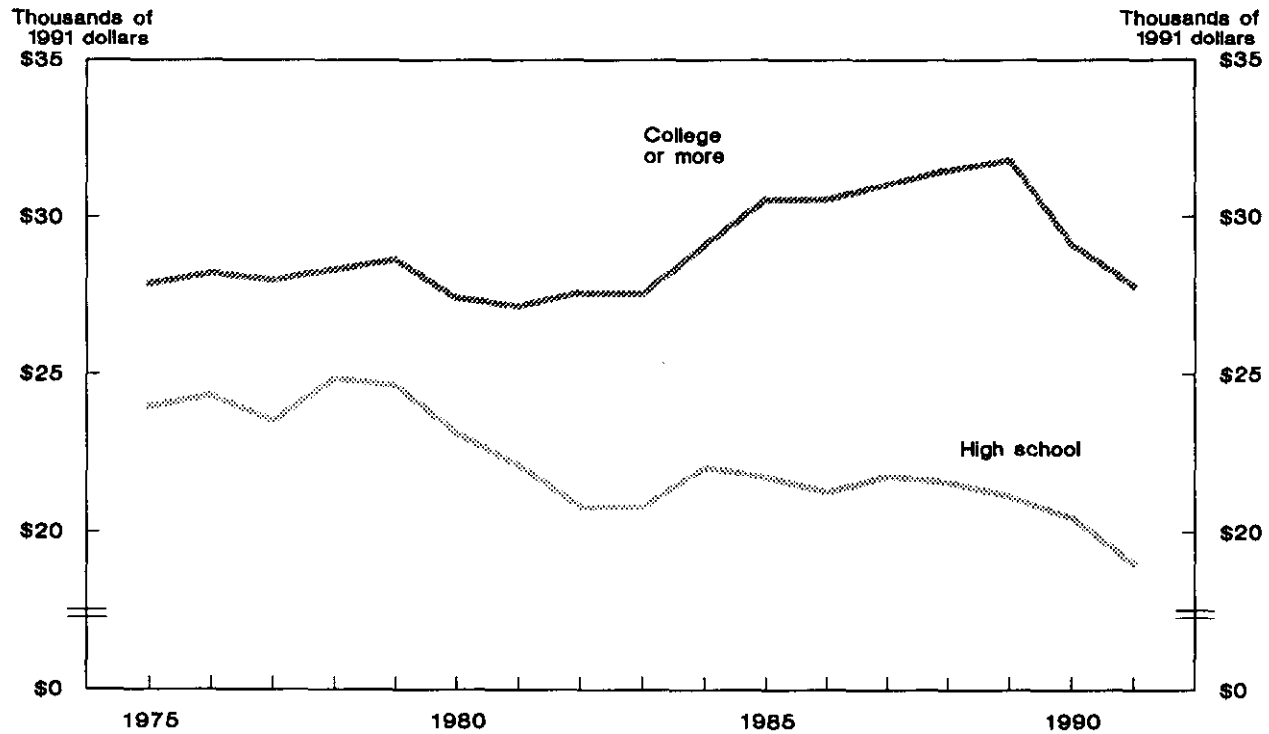
Job characteristics

Table 4 shows the number of persons who moved into jobs during the 1984–86 period, the 1987–89 period, and the 1990–91 period, as well as the number of college-educated persons aged 21 to 29 finding jobs. Some of these persons had more than one job accession during the survey period, but in the following analysis, only the first such accession is examined.

Over the three periods, young, college-educated persons with job accessions made up a small, but constant, proportion of all adult job accessions—about 6.0 percent. Total job accessions, of course, are greatly affected by the numerous youths moving into and out of jobs, a significant number of whom—even college graduates—"job shop." It is assumed, however, that the first job taken by college graduates would not differ substantially from their subsequent job accessions.

Payment provisions. Workers who are paid by the hour typically have lower annual earnings than

Chart 1. **Real mean earnings of college- and high school-educated men aged 25 to 29, 1975-91**



SOURCE: Current Population Survey.

do workers who are salaried. Hourly paid workers are employed most often in the blue-collar and service occupations, although significant proportions are employed in the technical, sales, and administrative support (including clerical) occupations.[14] The lowest proportions are found among the executive and professional specialty occupations. If, indeed, young, college-educated workers were experiencing greater difficulty in finding what they deemed to be good jobs in the executive and professional specialty occupations, one might anticipate a shift in the proportions of those workers moving into salaried jobs versus those moving into hourly paid jobs.

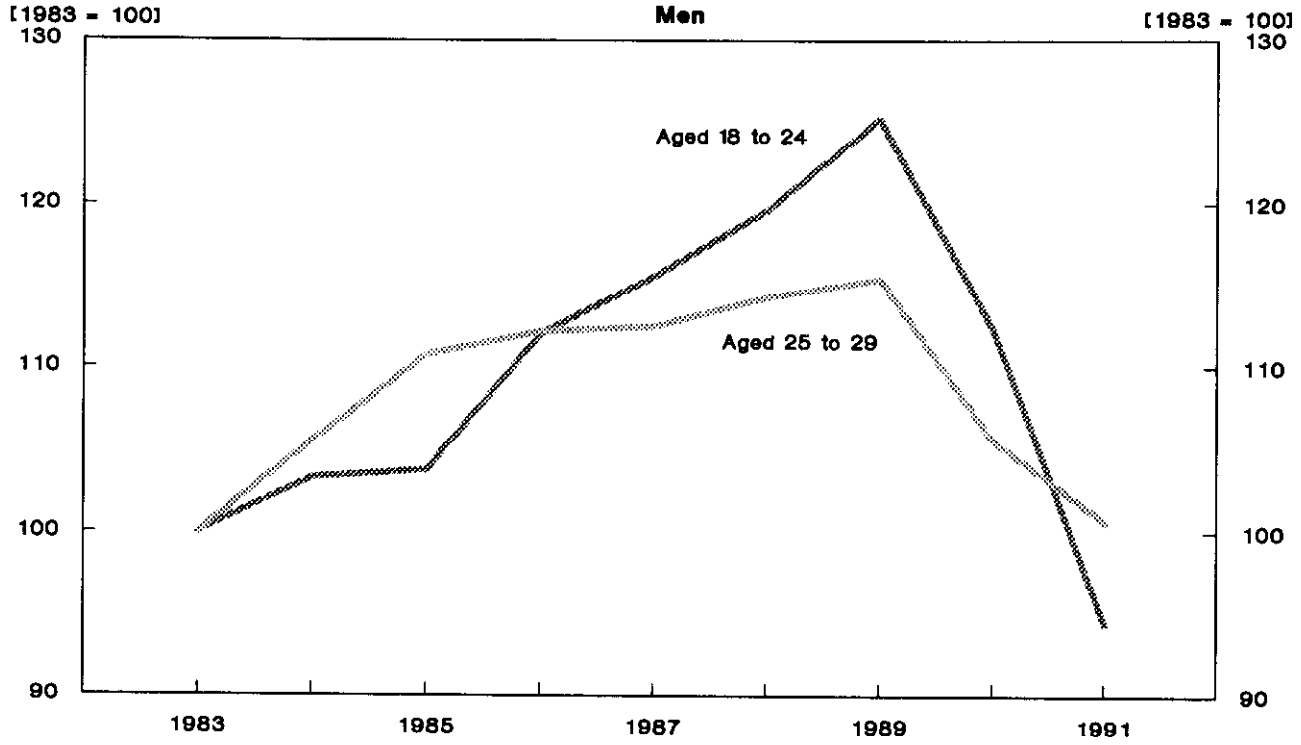
The estimates shown in table 4 of the percentages of college-educated persons aged 21 to 29 with job accessions in 1984–86, 1987–89, and 1990–91 who were on hourly or salaried pay support this hypothesis, in the absence of any statistical testing: it would appear that a greater proportion of the jobs young, college-educated persons were moving into during the 1990–91 period tended to be hourly paid rather than salaried, compared with earlier periods. However, at the 90-percent confidence level, the proportions of workers who were paid by the hour in 1990–91 were not statistically different from those in the earlier periods. Consequently, this evidence is not very reliable.

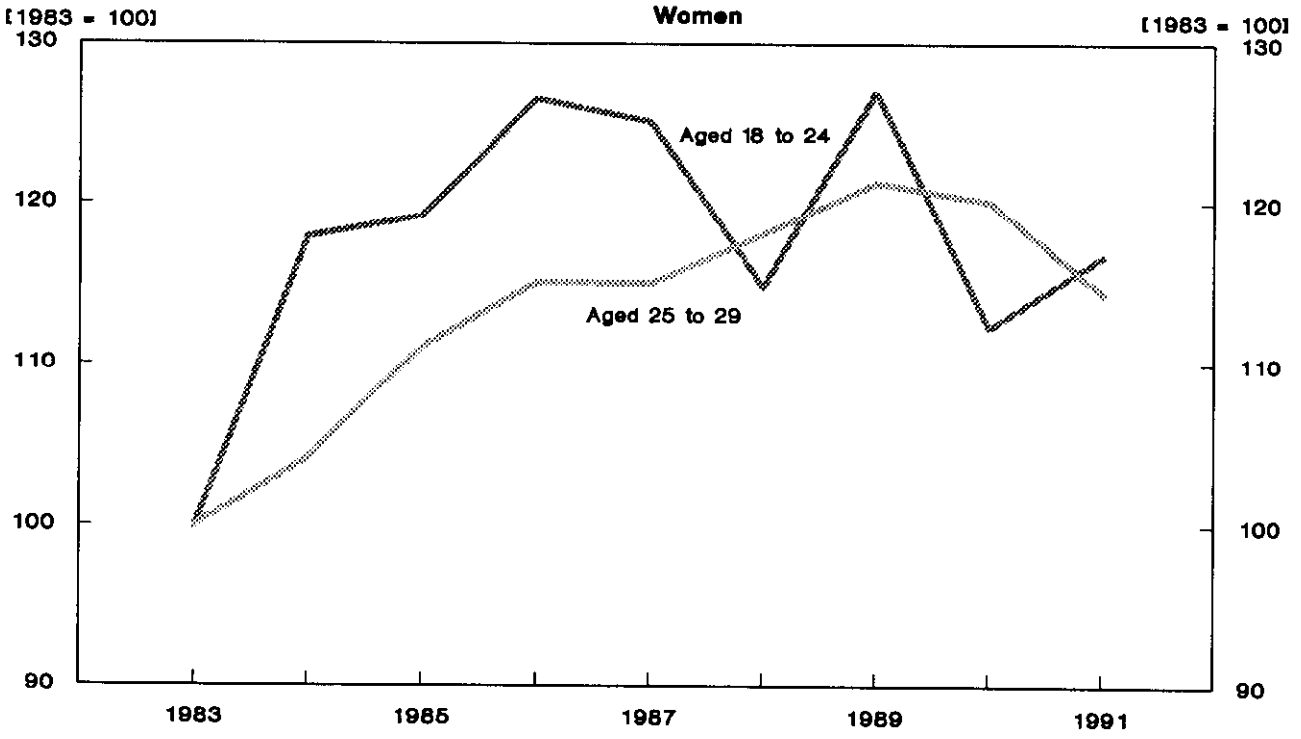
Related to the issue of hourly versus salaried method of payment is whether the job was part time or full time. Here, too, the data (not presented) showed no statistically significant changes across the periods. In each period, roughly one-third of the jobs that young, college-educated persons were moving into were part time, that is, fewer than 35 hours a week.

Occupation. As the CPS data showed earlier, college-educated workers aged 18 to 24 tend to be employed in executive, managerial, and professional specialty occupations. Chart 3, panel 1, presents the occupations that college-educated workers aged 21 to 29 *moved into* during the 1987–89 period. The chart shows, not unexpectedly, that almost half of all the job accessions these workers experienced during the 1987–89 period were in the executive, managerial, and professional specialty occupations. These are such jobs as purchasing agent, personnel manager, account executive in advertising, health director, accountant, securities trader, loan officer, electrical engineer, computer scientist, physician, lawyer, teacher, editor, and so on. They tend to be regarded as well paying and the domain of highly skilled and educated persons.

A second large proportion of these individuals' job accessions—more than one-third—occurred

Chart 2. **Indexes of real mean earnings of college-educated men and women, aged 18 to 24 and 25 to 29, 1983-91**





SOURCE: Current Population Survey.

in the technical, sales, and administrative support (including clerical) occupations. Such jobs tend to pay somewhat less than the former, but are often a stepping-stone to the higher level occupations. They are represented by numerous diverse occupations, such as air traffic controller, computer programmer, stockbroker, legal assistant, cashier, ticket and reservation agent, and payroll clerk.

The remaining job accessions of college-educated young persons—only about 16 percent—were in the service and blue-collar occupations. While there are many high-paying jobs among these occupations—for example, in the protective service, craft, and supervisory areas, college-educated workers typically do not seek employment in these fields.

By comparing the occupational distributions of the job accessions of these workers from the three SIPP panels, it is possible to obtain some idea as to whether the occupations young, college-educated persons were moving into have changed in recent years. As shown in table 5, when the detailed occupations are collapsed into the three broad groups just discussed, some interesting patterns emerge between the 1984–86 and the 1990–91 periods. Among men, there was a greater proportion of job accessions in the executive, managerial, and professional specialty occupations and a smaller proportion in the service and blue-collar occupations. These proportions, however, were not statistically different from one another over the aforementioned periods.

For young, college-educated women, however, there were a couple of statistically significant shifts: almost 60 percent of the women moved into the executive and professional occupations in the 1984–86 period, but by 1990–91, the proportion had dropped to 47 percent; and over the same two periods, the proportions moving into the technical, sales, and clerical occupations rose from 29 to 41 percent. Clearly, job openings had changed for women from the one period to the other.

Industry. In recent years, considerable attention has been directed at the industrial restructuring of the economy from goods-producing industries to service-producing industries and the resulting impact on job creation. Chart 3, panel 2, presents the distribution of job accessions of young, college-educated workers by the detailed industries comprising both sectors as of the 1987–89 period. One industry group stands out as the source of more than one-third of all the job openings of these workers during the period: professional and related services. This large component of the service-producing industries consists of a variety of institutions and enterprises: hospitals and health care facilities, schools and universities, libraries, social service agencies, engineering and architectural firms, and accounting and bookkeeping services. Other relatively large employers of young, college-educated persons were retail trade (13 percent), finance, insurance, and, real estate (11 percent), business and repair services (11 percent), and manufacturing (10 percent).

Table 4. **Job accessions[1] of college-educated persons aged 16 and older, by selected characteristics, 1984–86, 1987–89, and 1990–91**

Characteristic	1984–86	1987–89	1990–91
Number (thousands):			
Both sexes, 16 and older	46,839	41,485	30,061
Both sexes, 21 and older	34,146	30,277	20,549
Both sexes, 21–29 and college educated	2,027	1,868	1,234
Men	942	735	597
Women	1,085	1,134	637
Method of payment (percent):			
Both sexes, 21–29	100.0	100.0	100.0
Hourly	40.6	42.9	46.0
Salaried	59.4	57.1	54.0
Men, 21–29	100.0	100.0	100.0
Hourly	35.7	31.3	40.2
Salaried	64.3	68.7	59.8
Women, 21–29	100.0	100.0	100.0
Hourly	44.9	50.5	51.4
Salaried	55.1	49.5	48.6

[1] A *job accession* is a move into a job during a given month by a person who did not have a job the previous month.

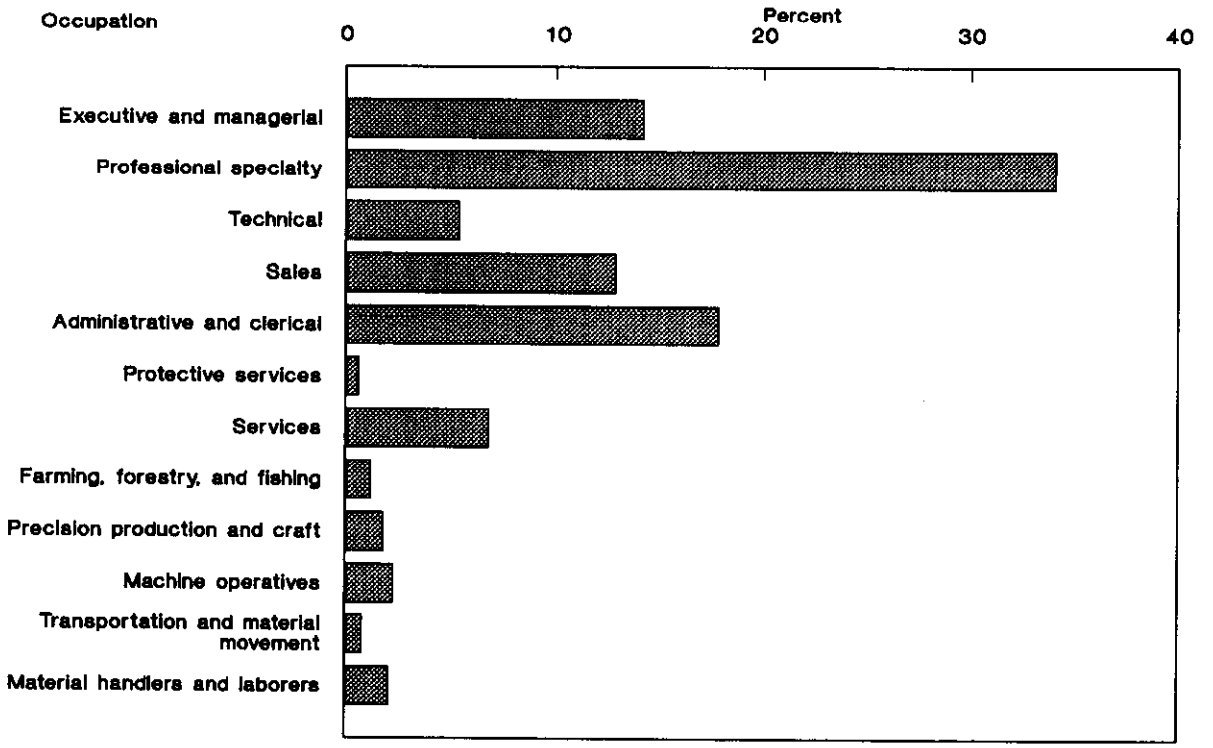
NOTE: The numbers and percentages shown represent only the first job accession. Some individuals may have had more than one job accession during any or all of the periods listed.

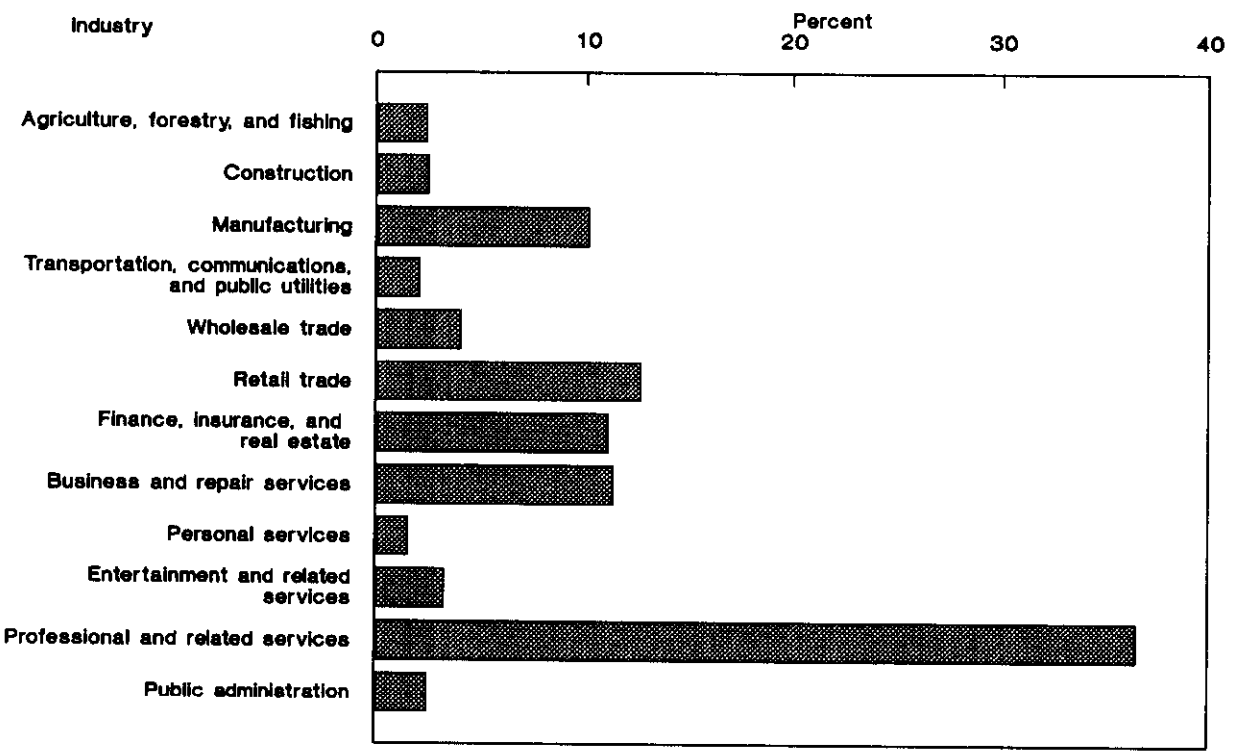
SOURCE: Survey of Income and Program Participation.

Just as there is a wide diversity in average pay received by workers across occupations, there is also such a diversity across the goods-producing and service-producing industries. Indeed, for many years, there was a general impression that goods-producing industries paid more than service-producing industries. More recently, however, it has been recognized that many of the service-producing industries have relatively high average earnings as well. To examine whether there have been any significant changes for young, college-educated workers in the industrial distribution of their job accessions, the detailed industries were divided into goods-producing industries, high-paying service-producing industries, and low-paying service-producing industries. The average earnings of men employed full time, year round in 1987 were used to classify these industries.[15]

Table 5 shows that there has been a significant shift in the industrial distribution of job accessions for college-educated young workers in recent years: a smaller proportion moved into the high-paying service-producing industries in 1990–91 (49.1 percent) than in 1984–86 (58.1 percent), and

Chart 3. **Percent of college-educated persons aged 21 to 29 with first job accession in various occupations and industries, 1987-89**





SOURCE: Survey of Income and Program Participation.

a greater proportion moved into the low-paying service-producing industries in 1990–91 (27.7 percent) than in 1984–86 (36.1 percent). Although similar shifts were also occurring among men and women over the two periods, the proportions were not significantly different from one another at the 90-percent level.

When individual industries are examined (data are not shown), one change in particular stands out: a decline in young, college-educated workers entering professional and related services. This single industry accounted for 41 percent of all the job accessions of those workers in the 1984–86 period; by the 1990–91 period, in contrast, the proportion had dropped to 32 percent, and much of this drop was accounted for by the declining accessions of men into the industry.

Health insurance benefits. A job that provides some sort of health insurance coverage is often thought of as a good job. The SIPP collects much information on health insurance provided through the private and public sectors. In an analysis of the kind presented in this article, where the emphasis is on the movement of persons into jobs, it is difficult to see clearly the relationship between changes in health insurance coverage and job accessions. This is because a person's health insurance coverage is often taken care of by someone else's plan (a parent, a wife, or a husband, for example), or it may be provided by a previous employer or through some other arrangement that is not related to the job accession.

The data presented in table 6 show the health insurance coverage arrangements for young, college-educated workers aged 21 to 29 who moved into jobs during the 1984–86, 1987–89, and 1990–91 periods. Among men who found jobs in the 1990–91 period, a larger proportion—54 percent—had health insurance coverage in their own name than in the 1984–86 period, when only 43 percent had. (This may have been related to a greater increase in persons moving into jobs in which the employer provided coverage; however, the data would not support that conclusion at the 90-percent confidence level, and furthermore, the increase could have been related to factors not associated with job accessions.)

Perhaps a more interesting development was the increase in the proportion of young men who experienced job accessions and had no private health insurance coverage—from 16 percent in the 1987–89 period to 30 percent during the 1990–91 period. This sharp increase appears to be associated with a decline in the proportion of young men who had health insurance coverage provided through someone else, most likely a parent or wife.

According to the SIPP data, the situation among young women appeared more sanguine. A greater proportion of women's job accessions in the 1990–91 period than in the 1984–86 period involved health insurance coverage through an employer—31 percent versus 17 percent. In addition, the proportion of women with job accessions who had no private health insurance coverage fell from 23 percent in the first half of the 1980's to 12 percent in the 1990–91 period.

Earnings. One of the more commonly held measures of job quality is the pay or remuneration the job provides the worker. Earnings data associated with job accessions for college-educated

Table 5. **Occupational and industrial distribution of college-educated persons aged 21 to 29 with job accessions[1] in 1984–86, 1987–89, and 1990–91**

[Percent]

Occupation or industry group and gender	1984–86	1987–89	1990–91
Occupation group			
Both sexes	100.0	100.0	100.0
Executive, managerial, and professional specialty	47.1	48.4	44.8
Technical, sales, and administrative	34.7	36.1	40.4
All other occupations	18.2	15.5	14.8
Men	100.0	100.0	100.0
Executive, managerial, and professional specialty	33.2	42.2	42.1
Technical, sales, and administrative	40.9	38.0	39.5
All other occupations	25.9	19.8	18.4
Women	100.0	100.0	100.0
Executive, managerial, and professional specialty	59.1	52.3	47.3
Technical, sales, and administrative	29.3	34.9	41.2
All other occupations	11.6	12.8	11.5
Industry group			
Both sexes	100.0	100.0	100.0
Goods-producing industries	14.2	15.0	14.8
High-paying service-producing industries	58.1	56.2	49.1
Low-paying service-producing industries	27.7	28.8	36.1
Men	100.0	100.0	100.0
Goods-producing industries	20.3	21.0	21.8
High-paying service-producing industries	53.8	46.8	43.9
Low-paying service-producing industries	25.9	32.2	34.3
Women	100.0	100.0	100.0
Goods-producing industries	8.9	11.0	8.2
High-paying service-producing industries	61.8	62.4	54.0
Low-paying service-producing industries	29.3	26.7	37.8

[1] A *job accession* is a move into a job during a given month by a person who did not have a job the previous month.

NOTE: The percentages shown represent only the first job accession. Some individuals may have had more than one job accession during any or all of the periods listed.

SOURCE: Survey of Income and Program Participation.

young persons are available from the SIPP. It should be remembered that these individuals, at this point in their lives, have undergone, or are continuing to undergo, transitions in their lifestyles. That is, many have just left college to take "career"-path jobs, others are in the process of "job shopping" and trying to find the right job, and still others are well established in their careers and are "stepping up" to better jobs. Consequently, it is not surprising to see a wide range in their earnings.

Table 7 presents mean weekly earnings, in 1990 dollars, of young, college-educated workers who found full-time (35 or more hours a week) jobs in the 1984–86, 1987–89, and 1990–91 periods.[16] It also presents a distribution of these individuals' earnings that identifies how many were working in jobs which paid weekly earnings that, when annualized, either would have fallen below the Federal Government's poverty level for a four-person family or would have been in a range bounded by several multiples of that level.[17] Those persons moving into jobs with annualized earnings below the poverty level are referred to as workers in low-paying jobs.

As shown in the table, the mean weekly earnings of college-educated persons aged 21 to 29 who found jobs in the 1987–89 period was just shy of $400, or around $20,000 annually. The average at that time was not statistically different from mean weekly earnings in the earlier part of the 1980's ($403) and during the recession years of 1990–91 ($469).

The proportions of young, college-educated persons who entered low-paying jobs also did not change over these three periods. In 1984–86, 32.2 percent entered low-paying jobs, approximately the same proportion as in the 1990–91 period. The one statistically significant change that occurred between the 1984–86 and 1990–91 periods was an increase in the proportion that entered jobs paying 3 or more times the "low pay level"—from 6.4 percent to 14.2 percent. In 1990–91, this threshold was $795 a week, and in 1984–86, it was $630 a week.

Table 6. **Private health insurance coverage of college-educated persons aged 21 to 29 with job accessions[1] in 1984–86, 1987–89, and 1990–91**

[Percent]

Gender and coverage	1984–86	1987–89	1990–91
Men	100.0	100.0	100.0
Own coverage	43.2	56.3	53.7
Through private employer	30.8	34.3	37.2
Coverage in other person's name	26.2	27.8	16.8
No coverage	30.6	15.9	29.5
Women	100.0	100.0	100.0
Own coverage	28.3	39.1	44.1
Through private employer	16.9	22.8	31.2
Coverage in other person's name	48.9	44.6	43.5
No coverage	22.7	16.3	12.2

[1] A *job accession* is a move into a job during a given month by a person who did not have a job the previous month.

NOTE: The percentages shown represent only the first job accession. Some individuals may have had more than one job accession during any or all of the periods listed.

SOURCE: Survey of Income and Program Participation.

Table 7. **Distribution of mean weekly earnings, in 1990 dollars, of young, college-educated workers who found full-time jobs,[1] 1984–86, 1987–89, and 1990–91**

Category	1984–86	1987–89	1990–91
Number of workers (thousands)	985	1,097	606
Percent of workers	100.0	100.0	100.0
Low pay level or less[2]	32.2	32.8	33.1
1.01–2.00 × low pay level	43.2	44.7	37.6
2.01–3.00 × low pay level	18.1	15.2	15.1
3.01 × low pay level or greater	6.4	7.3	14.2
Mean weekly earnings	$403	$395	$469

[1] A full-time job is a job at which the person worked 35 or more hours a week on a regular basis.

[2] The low pay level is defined as that of a wage or salary job which paid weekly earnings that, when annualized, would have fallen below the Federal Government's poverty level for a four-person family. The poverty level for a four-person family, in nominal dollars, was $10,527 (or $210 a week for 50 weeks of work) in 1984, $11,519 (or $230 a week) in 1987, and $13,254 (or $265 a week) in 1990.

NOTE: The figures shown represent only the first job accession. Some individuals may have had more than one job accession during any or all of the periods listed.

SOURCE: Survey of Income and Program Participation.

Conclusions

Although this article opened with a simple question (Are college-educated young persons finding what they consider to be good jobs?), it is obvious from what has proceeded that a simple answer is not possible. And if one thinks about it for a moment, that should not be surprising. First, there is the normative issue: what is a good job? In this discussion, a number of dimensions of what might make up a good job have been mentioned, but by no means is the list comprehensive. Many other factors are associated with job quality. A second, more practical, issue concerns data: ideally, to address this issue, one would like a large longitudinal data base that focuses just on recent college graduates. As has been mentioned, the SIPP sample relating to college-educated persons aged 21 to 29 is very small, which creates problems of statistical reliability.

Despite these problems, the foregoing descriptive analysis of the job accession patterns of young, college-educated workers has uncovered some interesting findings. As the CPS indicated, toward the end of the 1980's and into the 1990's, the job market for these workers began to change, as it did for other workers. Their unemployment rate began to rise, and their real earnings began to fall. It is likely, therefore, that there were some changes in the kinds of jobs these persons moved

into as well, changes that might be suggestive of a qualitative deterioration.

As the CPS data suggested, the occupational distribution of young, college-educated persons was shifting toward technical, sales, and administrative support types of occupations and away from the executive, managerial, and professional specialty occupations. This development is seen quite clearly in the SIPP data on job accessions for young women, especially between the 1984–86 period and 1990–91 period. Plainly, the enterprises encompassing professional and related services activities were shrinking from one period to the other as a primary source of jobs for young, college-educated workers of both sexes. More generally, job accessions in the high-paying service-producing industries became proportionally less important, while those in the low-paying service-producing industries grew in importance. Consequently, some restructuring of job opportunities had taken place between the 1980's and early 1990's.

Whether or not the restructuring represented a decline in the quality of jobs available to this group of individuals, however, is still open to debate. As was indicated, the proportion of young men without private health insurance coverage increased, but the proportion of young women without such coverage decreased. However, the relationship between the SIPP information on health insurance coverage and job accessions is weak at best. And the proportion of young, college-educated persons moving into "low-paying" jobs in general did not change significantly either; indeed, there was some evidence of a greater proportion of these individuals finding jobs at the upper end of the earnings distribution in the early 1990's, compared with the late 1980's.

Based on the evidence presented in this article, a judgment about the quality of the jobs young, college-educated persons have been moving into in recent years should be deferred until the economy begins experiencing sustained rates of growth like those of the mid-1980's. Much of the restructuring along occupational and industrial lines may only reflect the economic downturn in 1990 and 1991. But if the pattern of job accessions for these workers remains as it was in the 1990–91 period, and their entry pay levels do not increase, the case for declining employment prospects of college-educated young men and women will become more credible. □

Footnotes

[1] Kevin Phillips, "Down and Out: Can the Middle Class Rise Again?" *The New York Times Magazine* (Section 6), Jan. 10, 1993.

[2] Lawrence Mishel, testimony before the Committee on Ways and Means, U.S. House of Representatives, Subcommittee on Human Resources, "Hearing to Examine the Recent Changes in the Poverty Rate and Distribution of Income," Sept. 10, 1992.

[3] At this stage of the research, no conclusions are reached as to whether the deterioration has been worse relative to past recessions or worse relative to other groups in the population.

[4] All changes have been tested at the 90-percent confidence level and are statistically significant unless otherwise indicated. Standard errors for the CPS estimates were obtained from the "Explanatory Notes" section of *Employment and Earnings* (Bureau of Labor Statistics, January 1992), pp. 252–57. Variance parameters for the SIPP estimates were obtained from "Source and Accuracy Statements for the Survey of Income and Program Participation (SIPP) 1984 (and 1987) Longitudinal Panel File," an internal document of the Demographic Statistical Methods Division of the Bureau of the Census. (Preliminary parameters for 1990–91 SIPP estimates were provided by the same organization.)

[5] Another indication of the sharp rise in unemployment for the college educated during the period was the increase in the rate for men aged 25 to 34 who had completed 4 or more years of college. Between March 1989 and March 1991, their unemployment rate rose from 2.3 percent to 3.6 percent, or 57 percent. Although these absolute rates are very low, the increase was larger than for any other group categorized by education and age.

[6] In 1989, men employed full time (35 hours or more) and year round (50 to 52 weeks) had the following average earnings in the occupations listed: executive, administrative, and managerial occupations, $40,189; professional specialty occupations, $38,791; and technical, sales, and administrative support occupations, $25,198.

[7] See Daniel E. Hecker, "Reconciling conflicting data on jobs for college graduates," *Monthly Labor Review*, July 1992, pp. 3–12.

[8] These historical earnings series were deflated by the Bureau of Labor Statistics' CPI-U-X1, an experimental Consumer Price Index for All Urban Consumers that incorporates a rental equivalence measure for homeowner costs in its housing component for the entire period shown in the chart. In addition, the CPS earnings data by educational attainment for 1991, unlike those for earlier years, relate to specific levels of education or degrees completed. Before 1991, educational attainment classifications were based only on years of school completed.

[9] As mentioned before, Mishel says that the trend toward higher wages for college graduates ended in 1987, when their wages began to fall.

[10] Paul Ryscavage, *Job Creation during the Late 1980's: Dynamic Aspects of Employment Growth*, Current Population Reports, Series P–70, No. 27 (Bureau of the Census, January 1992).

[11] Specifically, the 1984 longitudinal file covers the period from June 1983 to July 1986, the 1987 longitudinal file covers the period from October 1986 to April 1989, and the 1990 five-wave longitudinal file covers the period from October 1989 to August 1991. Data from the full 1990 panel were not available at the time of this writing. All estimates have been weighted to represent the noninstitutional population. Estimates from the 1984 file and 1987 file use longitudinal panel weights, while estimates from the 1990 panel use 1990 calendar-year weights.

[12] According to the National Bureau of Economic Research, the peak of the last business cycle was reached in July 1990 and the trough in March 1991.

[13] The 1984 SIPP longitudinal file contained data on approximately 32,000 individuals aged 15 and over who were fully interviewed. The 1987 panel file had data on 24,000 individuals, the 1990 five-wave panel data on 36,000. In contrast, the CPS sample contains data on approximately 60,000 *households*.

[14] See Earl F. Mellor and Steven E. Haugen, "Hourly Paid Workers: Who They Are and What They Earn," *Monthly Labor Review*, February 1986, pp. 20–26.

[15] According to the March 1988 CPS, in 1987, the mean annual earnings of men employed full time, year round was $29,866. The comparable mean earnings levels for men in the component industries are as follows: goods-producing—agriculture, forestry, and fisheries, $17,261; mining, $35,800; construction, $25,960; manufacturing (durable goods), $31,049; manufacturing (nondurable goods), $29,863; high-paying service-producing industries—transportation, communication, and other public utilities, $31,547; wholesale trade, $30,352; finance, insurance, and real estate, $41,211; professional and related services, $36,413; public administration, $30,898; low-paying service-producing industries—retail trade, $23,242; business and repair services, $28,390; personal services, $19,485; entertainment and recreation services, $26,257.

[16] The CPI-U was used to deflate the nominal weekly earnings. The proportions of these persons moving into full-time jobs over the three periods did not vary significantly and averaged approximately 66 percent.

[17] Single-year poverty levels were chosen, rather than attempting to average the levels in accordance with the lengths of the SIPP panels. The poverty level for a four-person family, in nominal dollars, was $10,527 (or $210 a week for 50 weeks of work) in 1984, $11,519 (or $230 a week) in 1987, and $13,254 (or $265 a week) in 1990.

A note on communications

The *Monthly Labor Review* welcomes communications that supplement, challenge, or expand on research published in its pages. To be considered for publication, communications should be factual and analytical, not polemical in tone. Communications should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212-0001.