

The employment situation in 1981: new recession takes its toll

*By yearend, joblessness had surged, propelled
by cutbacks in housing, auto, and related industries;
employment was back to its year-ago level;
the employment-population ratio was at a 4-year low;
and the number of discouraged workers and
involuntary part-timers topped previous records*

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The labor market turned sour in mid-1981 as the economy entered its eighth postwar recession following a rather weak and brief recovery. High interest rates continued to plague the housing and automobile industries, which never totally recovered from 1980, and the weakness of these two critical industries had begun to spread to related industries as 1981 unfolded. Product orders were reduced, leading to increased inventories, sharp cutbacks in production, and eventually to increased layoffs and other job losses.

The labor market, which received its second jolt in as many years, was experiencing precipitous declines by the final quarter of 1981. The number of unemployed reached 9.6 million—8.8 percent of the work force—by the end of the year. There were also large increases in the number of persons reporting discouragement over job prospects and the number still employed but reporting reduced workweeks.

Although by the end of 1981 total employment was near its year ago level, the pattern during the year was one of growth through spring, stagnation in the summer, and pronounced cutbacks at the end of the year. The percentage of the population employed was at a 4-year low by December.¹

Unemployment rises sharply at yearend

The recovery from the 1980 recession had only a marginal impact on the Nation's unemployment rate, which never dipped below the 7.2-percent mark (seasonally adjusted) during 1981. Despite an increase in total employment of 1.8 million between the second quarters of 1980 and 1981, the growth was insufficient to have a marked improvement on joblessness, as the unemployment rate only dropped from the 1980 high of 7.8 percent to 7.2 percent in July 1981. As economic activity declined in the second half, the number of jobless persons jumped by nearly 2 million from July to December, and the overall unemployment rate reached 8.8 percent, very close to the post-World War II high of 9.0 percent recorded in May 1975.

Given the persistently high rates of unemployment

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since mid-1980, the fourth quarter surge pushed the unemployment rates for many worker groups beyond those reached during the 1980 recession and, in some cases, exceeded the postwar records of the 1973-75 recession. The following tabulation shows the peak monthly jobless rates (seasonally adjusted) for major demographic groups in 1975, 1980, and 1981:

	1975	1980	1981
All workers . . .	9.0 (May)	7.8 (July)	8.8 (Dec.)
Men, age 20 and over	7.3 (May)	6.7 (July)	7.9 (Dec.)
Women, age 20 and over	8.5 (Apr.)	6.7 (July)	7.4 (Dec.)
Teenagers	20.9 (June)	19.1 (July)	21.5 (Dec.)
White	8.4 (May)	6.9 (July)	7.7 (Dec.)
Blacks	15.4 (Sept.)	15.2 (July)	17.3 (Dec.)

Joblessness among men (20 years and over), which had shown some improvement early in the recent recovery period, increased 2.2 percentage points between July and December 1981 to 7.9 percent, exceeding the postwar high reached in 1975. The rate for women showed virtually no improvement in the recovery period, remaining at about 6.7 percent before rising to 7.4 percent by December. While this was more than half a point above the 1980 high for women, it was still more than a point below the 1975 record. The greater increase in unemployment among men was primarily due to their predominance in industries experiencing extensive job cutbacks. In December, the rate for men actually exceeded that for women, an unusual labor market occurrence.

The employment situation for teenagers continued to worsen; their unemployment rate has shown a step-like pattern of deterioration since mid-1979. By the end of 1981, the teenage rate of 21.5 percent was the highest ever recorded, more than half a point above that reached in 1975. Joblessness among women who maintain families followed a similar pattern, rising from 8.1 to 9.1 percent between the third quarters of 1979 and 1980 before leaping to 10.7 percent in the third quarter of 1981, about a point above their 1975 peak.

The rise in unemployment among blacks² affected both adults and teenagers and occurred earlier in the year than was the case for white workers. Indeed, unemployment among blacks showed virtually no recovery from the 1980 recession and their jobless rate was hitting new records by summer. Their overall rate was 17.3 percent by December. The black share of total unemployment was 21 percent in 1981, double their labor force share. This was little changed from 1980, but higher than their share during the early 1970's. Unemployment for Hispanic workers seesawed over the year, ending the year at slightly above 11 percent, about a point higher than a year ago. Most of the increase was accounted for by women age 20 and over. Persons of

Puerto Rican origin experienced the highest rate of joblessness in 1981, averaging 13.6 percent for the year; the unemployment rate for persons of Mexican origin averaged 10.5 percent and those of Cuban origin, 9 percent.

Industry and occupation. Substantial fourth quarter increases pushed joblessness among workers in most major industry groups above 1980 recession rates by yearend.³ (See table 1.) Attention during the year was focused on those industries directly affected by continued high interest rates, most notably housing construction, automobile manufacturing, and related industries.

There was some slight improvement in the unemployment rate for workers in the construction industry from the third quarter of 1980 to the first quarter of 1981. The rate moved steadily higher, as the year progressed, reaching 18.1 percent in December. The patterns for the housing-related lumber and wood products, furniture and fixtures, and stone, clay and glass industries were similar. Two of the three detailed manufacturing industries whose 1981 peak jobless rates exceeded those reached in both 1980 and in 1975 were housing related; the other, food processing, has undergone several technological changes in recent years to better insulate itself against inflationary pressures. The following tabulation show peak monthly unemployment rates in selected manufacturing industries:

	1975	1980	1981
Lumber and wood products	16.0 (May)	17.0 (June)	22.0 (Dec.)
Stone, clay and glass	11.8 (Apr.)	10.7 (May)	12.7 (Dec.)
Food processing	11.5 (June)	10.4 (Dec.)	12.1 (Dec.)

Except for furniture and fixtures, the manufacturing industries whose 1981 peak jobless rates exceeded those attained in 1980, but not those in 1975, were auto related:

	1975	1980	1981
Furniture and fixtures	16.4 (Feb.)	11.3 (Sep.)	13.2 (Dec.)
Textiles	17.9 (Jan.)	11.9 (Oct.)	14.1 (Dec.)
Chemicals	7.9 (May)	5.3 (Aug.)	6.2 (Dec.)
Rubber and plastics	15.5 (Mar.)	12.9 (July)	15.1 (Jan.)

December unemployment rates for workers in primary and fabricated metals, machinery, and electrical equipment, while up from earlier in the year, were still below 1980 highs.

Joblessness among workers in the automobile industry showed improvement between the third quarter of 1980 and the second quarter of 1981, dropping from 22.4 percent to 11.8 percent, but hit 21.7 percent in December. Most of the reduction was due to workers finding jobs elsewhere (although some auto workers were

Table 1. Selected unemployment indicators, seasonally adjusted quarterly averages, 1980-81

[Unemployment rates]

Category	1980				1981			
	I	II	III	IV	I	II	III	IV
Total, 16 years and over	6.3	7.3	7.6	7.5	7.4	7.4	7.4	8.3
Men, 20 years and over	4.9	6.2	6.6	6.3	6.0	6.1	6.0	7.2
Women, 20 years and over	5.8	6.4	6.5	6.7	6.6	6.7	6.7	7.2
Both sexes, 16 to 19 years	16.4	17.9	18.7	18.2	19.1	19.2	19.1	21.1
White	5.5	6.5	6.8	6.6	6.5	6.5	6.4	7.3
Black	12.8	14.3	15.0	15.1	14.6	15.1	15.8	17.0
Hispanic origin	9.1	10.1	10.9	10.1	11.0	9.8	9.8	11.1
Married men, spouse present	3.4	4.4	4.8	4.4	4.1	4.0	4.1	5.2
Married women, spouse present	5.3	5.9	6.1	5.9	5.9	5.8	5.7	6.4
Women who maintain families	8.8	8.7	9.1	10.1	9.9	10.3	10.7	10.6
Full-time workers	5.9	7.0	7.5	7.3	7.1	7.1	7.0	8.1
Part-time workers	8.7	8.9	8.7	8.7	9.1	9.3	9.5	9.6
White-collar workers	3.4	3.7	3.8	3.9	3.9	4.0	4.0	4.3
Blue-collar workers	8.2	10.5	11.1	10.6	10.1	9.8	9.7	11.8
Service workers	7.2	8.0	8.3	8.2	8.4	9.0	8.6	9.5
Farmworkers	4.3	4.8	4.9	4.3	5.0	5.1	4.7	6.3
Nonagricultural private wage and salary workers ¹	6.3	7.7	7.9	7.7	7.5	7.4	7.4	8.5
Construction	12.0	15.3	16.1	14.2	14.0	15.4	15.9	17.8
Manufacturing	6.8	9.0	9.4	9.0	8.4	7.6	7.4	9.7
Durable goods	6.7	9.8	10.1	9.2	8.4	7.3	7.1	10.0
Nondurable goods	6.9	8.0	8.3	8.6	8.4	8.1	7.9	9.2
Transportation and public utilities	4.2	4.9	5.6	5.2	5.7	5.4	4.4	5.5
Wholesale and retail trade	6.6	7.5	7.7	7.9	7.7	7.8	8.1	8.6
Finance and service industries	4.8	5.4	5.6	5.6	5.8	5.8	5.8	6.2
Government workers	4.0	4.0	4.2	4.3	4.4	4.7	4.6	5.0
Agricultural wage and salary workers	10.0	11.4	11.7	10.8	11.8	11.2	11.3	14.1

¹Includes mining, not shown separately.

recalled to their jobs), because employment growth in the industry was essentially nonexistent after mid-1979.

The dramatic yearend surge in joblessness brought the jobless rate for all factory workers to 11.0 percent in December, 11.8 percent for those in durables and 9.6 percent for nondurables.

Among the major occupational groups, the jobless pattern showed generally little or no improvement for the first three quarters followed by a surge in the fourth, especially among blue-collar workers. Their jobless rate was up to 12.7 percent by December, as craftworkers, operatives, and nonfarm laborers all recorded increases. White-collar unemployment was also up in December to 4.5 percent, with the sharpest increase occurring among professional and technical workers, whose December rate of 3.4 percent almost equaled its previous high in 1975. Unemployment among clerical workers was also up at yearend.

Reasons for unemployment. In the household survey, jobless persons are categorized according to whether they lost their last job (due to either a layoff or a permanent separation), voluntarily left a job, entered the labor force for the first time, or began to search for work after a period of absence from the labor market. The distribution of total unemployment by these groups changes over the business cycle. During economic contractions, there, of course, are sharp increases in job-loss unemployment, especially in that due to layoff. In

contrast, there is normally a decline in the number of persons who began looking for work because they quit their last job.

As a result of the weak recovery from the 1980 recession, job losers' share of total unemployment remained high throughout the year. (See table 2.) The first quarter level of 4 million, the low for the year, was still more than a million above pre-1980 recession levels. While historically the percentage of job losers usually drops to around 40 percent during recoveries, in 1981 they represented about 50 percent of total unemployment through the third quarter. At 56 percent in December, the percentage of job losers was very close to the 58-percent high reached in the 1973-75 recession.

The number of persons on layoff, a very sensitive cyclical measure, did show a decline of a half million between the third quarters of 1980 and 1981, before rising sharply in the final quarter. At 2 million in December, the number on layoff was at the peak level reached in the 1975 recession.

Duration of unemployment. An important consideration in the evaluation of overall unemployment is the average duration of joblessness. Short spells of unemployment are often considered to be only a result of frictions in the labor market, as workers move from job to job and labor supply adjusts to changes in demand. The longer a period of unemployment, the greater the economic hardship that is normally associated with it.

Table 2. Reason for and duration of unemployment, seasonally adjusted quarterly averages, 1980-81

(Numbers in thousands)

Reason and duration	1980				1981			
	I	II	III	IV	I	II	III	IV
Reason								
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lost last job	47.4	52.4	54.2	53.2	50.4	50.5	51.3	54.1
On layoff	16.9	21.6	21.9	19.0	16.5	16.5	16.3	20.1
Other	30.4	30.7	32.4	34.2	33.9	34.1	34.9	34.0
Left last job	12.6	12.0	11.0	11.0	11.5	11.6	11.3	10.3
Reentered labor force	27.6	24.9	23.7	24.6	25.8	25.7	25.5	24.7
Seeking first job	12.5	10.8	11.1	11.2	12.4	12.1	11.9	11.0
Duration								
Less than 5 weeks	3,132	3,498	3,351	3,196	3,278	3,290	3,393	3,865
5-14 weeks	2,163	2,636	2,685	2,455	2,370	2,500	2,455	2,861
15 weeks and over	1,385	1,745	2,146	2,347	2,327	2,260	2,212	2,343
15-26 weeks	825	1,012	1,229	1,235	1,084	1,112	1,107	1,195
27 weeks and over	560	733	917	1,113	1,243	1,148	1,105	1,148
Median duration, in weeks	5.7	6.1	7.3	7.4	7.2	7.2	7.0	6.8
Average (mean) duration, in weeks	10.7	11.2	12.4	13.4	14.1	13.8	14.0	13.2

The two average measures of unemployment duration—the mean and the median—differ in regard to their sensitivity to changes in the number of persons experiencing either short- or long-term joblessness, the median being less sensitive to extreme values. While both generally move in the same direction as the overall unemployment rate, there is a definite lagged response at economic turning points. For example, during the 1980 recession, very long-term unemployment (27 weeks or longer) continued to increase—from 915,000 in the third quarter of 1980 to more than 1.2 million in the first quarter of 1981. (See table 2.) Due to the brevity of the recovery, such joblessness declined only slightly in the subsequent two quarters before increasing again in the last quarter.

The lag in the response of long-term joblessness to an economic upturn has different implications for the mean and median duration figures. For example, although the rate of unemployment in the 1980 recession never exceeded the 7.8-percent figure attained in July, the mean duration of unemployment continued upward through the first quarter of 1981. In economic downturns, the mean duration will frequently decline for a few months, as the newly unemployed enter the jobless stream. Thus, in 1981, mean duration actually fell in the fourth quarter. The median duration measure, by contrast, usually responds much faster to changing economic conditions and moves more in tandem with overall unemployment, because it is dominated by the movement of the shorter-term duration groups. During the 1980 recession, for example, the increase in the median generally followed that of the overall rate, though lagging somewhat in the recovery phase. In 1981, however, the yearend rise in unemployment was so steep that median duration also declined a bit in the fourth quarter. Both measures can be expected to increase in the months ahead.

Shortened workweeks and discouragement

Just as the health of the economy influences unemployment, it similarly influences the number of people who report that they want a job but are not looking for one because they believe no work is available—so-called “discouraged workers.” In addition, as the Nation enters a recession, employers frequently reduce hours where possible before laying off employees. Persons on such shortened workweeks are termed involuntary part-time workers. They, along with discouraged workers, are not reflected in the official count of unemployment, although information on both groups is important in achieving a full appreciation of the nature and magnitude of the underutilization of human resources.

Nonagricultural workers involuntarily on part-time schedules totaled more than 5 million, or 5.6 percent of the nonfarm “at-work” population, in the fourth quarter of 1981. This was the highest level recorded since collection of the data began in 1955. Slack work, the most cyclical component of involuntary part-time work, accounted for half of this total. The following tabulation shows the distribution of involuntary part-time workers (seasonally adjusted quarterly averages):⁴

	Number	Percent	Part time due to—	
			Slack work	Could find only part time
1980:				
I	3,546	3.9	1.9	1.5
II	4,171	4.6	2.5	1.7
III	4,290	4.8	2.5	1.8
IV	4,216	4.7	2.3	1.9
1981:				
I	4,323	4.7	2.4	2.0
II	4,166	4.6	2.2	2.0
III	4,460	4.9	2.4	2.1
IV	5,108	5.6	2.8	2.3

The number of persons on shortened workweeks had remained high during the recovery period between the 1980 and 1981 recessions, perhaps an indication of the general sluggishness and weakness in the labor market that prevailed at that time. There has been a growing tendency in recent years for employers to keep workers on a shortened workweek for a longer spell than in earlier years.⁵ Also, as shown above, the proportion of involuntary part-timers who reported they could only find part-time work has continued to grow in recent years, as it has for the last decade. Thus, just as the job picture is now characterized by higher overall average unemployment, it is also characterized by a higher proportion of involuntary part-time work.

Discouraged workers have neither worked nor have they looked for work during the 4-week period prior to enumeration. Historically, the number of such workers tends to move in tandem with overall unemployment.⁶ Given the generally weak economy and higher than average unemployment during 1981, the number of discouraged workers remained above the million mark throughout the year. (See table 3.) Even the deep 1973-75 recession did not result in such consistently high levels. The increase in the number of discouraged workers in the fourth quarter of 1981 brought the level to 1.2 million, slightly above the previous high recorded in the third quarter of 1975 and about 140,000 above the level of a year earlier. Nearly three-fourths of the recently discouraged cited job market factors as the reason for not looking for work, the component which gives discouragement its cyclical nature. Most of the 1981 increase occurred in the last quarter. Women and blacks are disproportionately represented among the discouraged. They made up 64 and 30 percent of these workers

Table 3. Discouraged workers, seasonally adjusted quarterly averages, 1980-81

[In thousands]

Category	1980				1981			
	I	II	III	IV	I	II	III	IV
Total	948	955	1,006	1,063	1,093	1,043	1,094	1,199
Job-market factors ..	601	648	687	720	849	718	801	883
Personal factors	347	307	319	343	244	325	293	316
Men	358	332	382	361	375	414	383	435
Women	591	623	624	702	718	630	711	764
White	670	640	699	684	744	708	744	807
Black and other ...	301	309	310	356	387	326	351	364

in the last quarter of 1981, compared with 43 and 12 percent of the labor force.

The employment picture

With strong growth during the first half of 1981, total employment, as measured by the survey of households, appeared to have regained much of the momentum lost during the 1980 downturn. The number of persons employed rose by 2.1 million between June's 1980 low and July 1981, reaching the 100.9-million mark in July. As the economy turned downward again in the third quarter, however, it was evident that a new recession was at hand. Especially sharp declines in the fourth quarter resulted in cutbacks totaling 1.3 million between July and December. Table 4 traces these developments on a quarterly basis for a number of worker groups.

The employment-population ratio, which measures the proportion of the population that is employed, is a useful statistic for putting these changes into perspective.⁷ It is particularly helpful in discerning the cyclical

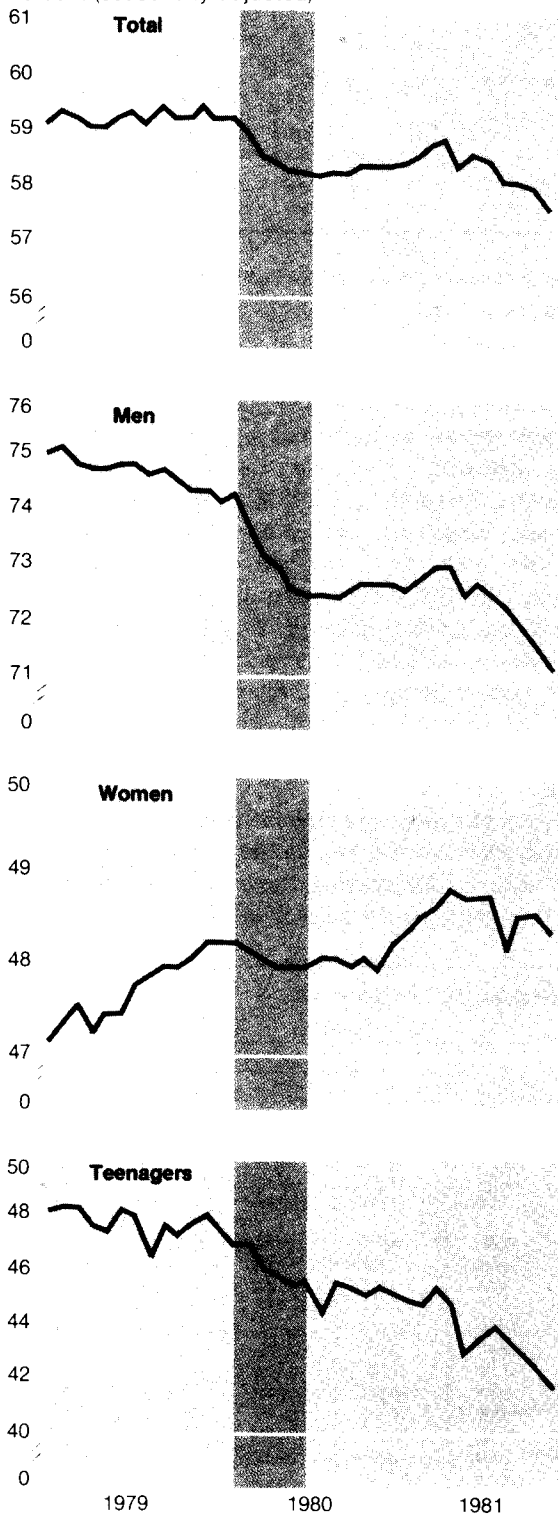
Table 4. Employed persons by selected categories, seasonally adjusted quarterly averages, 1980-81

[In thousands]

Selected categories	1980				1981			
	I	II	III	IV	I	II	III	IV
Total, 16 years and over	99,784	98,953	99,006	99,498	100,125	100,784	100,654	100,043
Men, 20 years and over	53,478	52,887	52,849	53,211	53,448	53,767	53,786	53,327
Women, 20 years and over	38,351	38,349	38,564	38,714	39,202	39,677	39,692	39,802
Both sexes, 16 to 19 years	7,955	7,717	7,593	7,573	7,476	7,341	7,176	6,914
White	88,183	87,466	87,388	87,846	88,381	89,039	89,006	88,414
Black	9,370	9,267	9,305	9,312	9,387	9,419	9,308	9,304
Hispanic origin	5,028	5,066	5,156	5,257	5,277	5,336	5,349	5,431
White-collar workers	51,408	51,680	52,177	52,280	52,754	52,943	52,985	53,123
Professional and technical workers	15,738	15,967	16,015	16,161	16,225	16,227	16,528	16,704
Managers and administrators, except farm	10,954	11,067	11,255	11,287	11,638	11,505	11,524	11,500
Sales workers	6,363	6,162	6,329	6,357	6,384	6,455	6,435	6,423
Clerical workers	18,353	18,485	18,578	18,475	18,506	18,756	18,499	18,496
Blue-collar workers	32,397	31,325	30,860	31,297	31,211	31,673	31,486	30,860
Craft and kindred workers	13,029	12,759	12,653	12,724	12,710	12,828	12,675	12,434
Operatives, except transport	10,875	10,507	10,343	10,540	10,556	10,703	10,634	10,266
Transport equipment operatives	3,650	3,529	3,463	3,484	3,439	3,481	3,521	3,462
Nonfarm laborers	4,844	4,529	4,401	4,549	4,505	4,661	4,656	4,497
Service workers	13,247	13,213	13,253	13,209	13,358	13,384	13,400	13,611
Farmworkers	2,756	2,712	2,720	2,793	2,748	2,761	2,741	2,744

Chart 1. Employment-population ratios for selected workers, 1979-81

Percent (seasonally adjusted)



Note: Shaded area indicates the 1980 recession.

impact of an economic downturn on workers. Because the population is continually growing for most worker groups, a decline in the overall employment population ratio, even while employment is showing some growth, clearly reflects the inability of the economy to generate enough jobs.

From a record high of 59.4 percent in late 1979, the ratio dropped to 58.3 percent by the end of 1980, reflecting the recession and an initially weak recovery. Some improvement occurred in the first half of 1981—as the ratio inched up to 58.8 percent—but with the precipitous decline of the economy in the second half, the ratio was down to 57.5 percent by December, its lowest level in more than 4 years. During the second half, declines in the ratio were heavy among men and teenagers, while the proportion of women who were employed dipped slightly.⁸ (See chart 1.)

During the first half of 1981, strong job growth was evident among men, as they regained the job losses experienced during the 1980 downturn. By midyear, this group had registered a 550,000 advance in employment. However, employment rose only marginally during the third quarter, and then dropped by more than 400,000 in the closing months of 1981. These developments, when coupled with an increase in population, caused the employment-population ratio for men to decrease by 1.1 percentage points over the year, to 71.5 percent, a new low for this group. As industrial production declined in response to an involuntary build-up in inventories, the demand for labor in the goods-producing sector slackened accordingly. Because roughly 7 of 10 workers in the goods-producing sector are adult men, it is not surprising that they were severely affected by production cutbacks.

By contrast, women increased their employment over the year despite the recession. Their jobs are concentrated in the service-producing sector, which historically has been less responsive to cyclical movements in the economy than the goods sector. However, employment among women grew very little in the second half of the year as the downturn became more broadly based. By the fourth quarter, employment among women stood at 39.8 million, up 1.1 million from its year-earlier level. The employment-population ratio for women reached a new high of 48.7 percent in the second quarter and then slipped a bit in the last half of the year to 48.4 percent. However, this figure was still above the year-earlier level, as the percentage of employed working-age women continued its secular uptrend.

Employment among teenagers declined throughout 1981, as it has every quarter since the end of 1979. These reductions stem largely from a diminishing population, but they also reflect a marked vulnerability to cyclical fluctuations. Being less skilled and lacking the work experience of adults, teenagers suffer greater employment declines in economic downturns than the oth-

er major age-sex groups. (See chart 1.) By the end of 1981, the teenage employment-population ratio had fallen nearly 3 percentage points from the fourth quarter 1980 level and more than 5 percentage points over the 2-year period.

Employment of black workers, at 9.3 million in the fourth quarter, was unchanged from a year earlier and, in fact, has fluctuated within the narrow range of 9.2 to 9.5 million since the last quarter of 1978, while the population for this group has continued to grow. As a result, the employment-population ratio for blacks declined 3 percentage points over the last 2 years, to 50.7 percent. Inadequate job growth has also affected whites, especially men, although to a considerably lesser extent. At 58.8 percent, the ratio for all whites was down slightly over the year, while their employment rose by 600,000.

The situation facing black teenagers grew bleaker in 1981, as their employment declined by 60,000 over the year to 480,000 in the last quarter. The result was a further decline in their employment-population ratio, from 23 to about 21 percent between the fourth quarters of 1980 and 1981. The ratio had been 25 percent in the late 1970's.⁹ In contrast, almost half of all white teenag-

ers were working in the last quarter of 1981.

Hispanic employment increased gradually over the year and by the fourth quarter was about 175,000 above the level of a year earlier. Gains were about equally split among men and women, while teenage employment was down slightly. However, these gains did not keep pace with the growth of the Hispanic population and their employment-population ratio declined 0.7 point during the year, to 56.9 in the last quarter.

Industry employment. During the first half of 1981, nonfarm payroll employment showed some improvement from the recessionary levels of 1980. However, employment growth slowed markedly during the third quarter. By the fourth quarter, the weakness which had been visible all year in the housing and automobile industries had clearly spread, and nonfarm employment dropped by almost half a million. (See table 5.) The Bureau of Labor Statistics' diffusion index of private nonagricultural payroll employment provides further evidence of the pervasiveness of the 1981 decline¹⁰. In the last quarter, job gains were registered in only one-third of the 172 industries included in the index, compared to more than three-fifths a year earlier.

Table 5. Nonagricultural payroll employment, seasonally adjusted quarterly averages, 1980-81

[Numbers in thousands]

Industry	1980				1981			
	I	II	III	IV	I	II	III	IV _p
Total nonagricultural payroll employment	90,808	90,450	90,213	90,820	91,232	91,546	91,938	91,483
Goods-producing industries	26,329	25,678	25,306	25,594	25,670	25,741	25,933	25,399
Mining	999	1,017	1,012	1,051	1,091	1,006	1,148	1,170
Construction	4,527	4,381	4,319	4,385	4,398	4,345	4,273	4,226
Manufacturing	20,803	20,280	19,976	20,158	20,181	20,390	20,512	20,003
Durable goods	12,603	12,165	11,911	12,060	12,086	12,246	12,325	11,925
Lumber and wood products	738	672	671	683	691	704	688	635
Furniture and fixtures	487	471	455	463	466	483	487	472
Stone, clay, and glass products	694	663	651	656	653	657	658	633
Primary metal industries	1,217	1,156	1,080	1,124	1,139	1,144	1,142	1,088
Fabricated metal products	1,682	1,612	1,562	1,580	1,579	1,601	1,610	1,545
Machinery, except electrical	2,533	2,510	2,460	2,487	2,483	2,508	2,542	2,520
Electric and electronic equipment	2,141	2,106	2,072	2,095	2,112	2,142	2,164	2,119
Transportation equipment	1,968	1,845	1,841	1,854	1,841	1,879	1,888	1,777
Instruments and related products	708	708	708	711	712	716	726	719
Miscellaneous manufacturing industries	436	423	412	407	410	414	421	417
Nondurable goods	8,201	8,115	8,064	8,098	8,095	8,144	8,187	8,078
Food and kindred products	1,721	1,704	1,713	1,706	1,697	1,691	1,676	1,673
Tobacco manufactures	68	70	69	70	72	71	72	70
Textile mill products	874	855	838	844	839	844	851	823
Apparel and other textile products	1,285	1,266	1,259	1,253	1,243	1,257	1,274	1,248
Paper and allied products	706	694	686	692	690	693	699	686
Printing and publishing	1,256	1,256	1,257	1,265	1,272	1,282	1,295	1,301
Chemicals and allied products	1,115	1,112	1,099	1,103	1,108	1,109	1,109	1,105
Petroleum and coal products	176	194	208	209	210	212	212	210
Rubber and miscellaneous plastics products	761	731	706	725	732	751	761	733
Leather and leather products	238	233	229	231	231	232	237	229
Service-producing industries	64,479	64,772	64,907	65,227	65,562	65,805	66,005	66,084
Transportation and public utilities	5,178	5,153	5,123	5,120	5,133	5,153	5,174	5,141
Wholesale and retail trade	20,370	20,303	20,406	20,465	20,588	20,689	20,843	20,826
Wholesale trade	5,285	5,269	5,275	5,297	5,311	5,343	5,368	5,353
Retail trade	15,085	15,034	15,131	15,168	15,277	15,346	15,475	15,473
Finance, insurance, and real estate	5,104	5,142	5,189	5,237	5,281	5,324	5,355	5,361
Services	17,656	17,796	17,988	18,162	18,338	18,525	18,694	18,825
Government	16,170	16,377	16,201	16,242	16,222	16,114	15,938	15,931
Federal	2,832	3,004	2,828	2,797	2,792	2,776	2,771	2,748
State and local	13,338	13,373	13,373	13,445	13,431	13,338	13,167	13,183

p = preliminary

The economy's slow recovery from the recession of 1980, which halted before all industries had rebounded fully, was largely due to the extremely high interest rates prevailing throughout most of 1981. The major victims of the 1980 recession were concentrated in the goods-producing sector—primarily in construction and automobile manufacturing and supplier industries tied to these two industries. As the cost of borrowing remained high, these highly interest-rate sensitive industries, after showing slightly higher employment in the first part of 1981, fell to more depressed levels than those experienced in 1980. The major source of employment strength during the year was generally in industries less sensitive to rising interest rates, such as services and mining. However, in the closing months of the year, the recession had begun to adversely affect virtually all industries. The goods-producing sector was clearly the hardest hit, notably manufacturing and construction. (See chart 2.) But even the service-producing sector felt the impact of the recession, as reflected in the considerably reduced pace of employment growth for some industries and sizable declines in the usually robust retail trade industry as the year drew to a close.

Employment in construction deteriorated significantly in 1981, following steady growth in the last half of 1980 and a modest increase in the first quarter. Mortgage interest rates remained high throughout most of the year, and the resulting sharp contraction in residential construction activity gave rise to steep job declines in construction employment. Housing starts, falling below 900,000 units in the last quarter, were the lowest since 1966; building permits, which provide an indication of future construction activity, declined steadily from April to November. By the third quarter of 1981, employment in the industry had plummeted to a level that was below its July 1980 recession low, and an additional 47,000 jobs were lost in the last quarter. The job loss totaled 192,000 from April's employment high. Moreover, the situation would have been worse were it not for relative continued strength in heavy construction.

After rising 350,000 in the first three quarters of 1981, the number of jobs in manufacturing declined by 500,000 in the final quarter to 20 million, almost 1.2 million below the all-time high reached in July 1979. More than two-thirds of this decrease was in durable goods, where every industry experienced a decline in employment in the fourth quarter. By December, durable goods manufacturing employment was 11.7 million, a level below its 1980 recession low.

The hardest hit manufacturing industry was transportation equipment, where the deterioration in the job situation has continued for nearly 3 years. After reaching a high of more than 2 million workers in early 1979, more than 330,000 jobs were lost by the end of 1981. The small recovery which took place in the first part of

1981 was due to automobile buyer and dealer incentive programs such as rebates, discounts, and low-interest financing that served to temporarily boost sales; however, automobile sales virtually collapsed in the fourth quarter, forcing automobile manufacturers to slash production and layoff workers. As a result, automobile employment fell by more than 50,000 in the final quarter. These declines, in turn, meant a drop in orders for a number of other manufacturing industries, ranging from primary and fabricated metals to textiles and rubber and plastics. With reduced orders and rising inventories, sharp cutbacks in industrial production were soon evident throughout durable goods manufacturing and among nondurable goods industries as well.

With the prolonged slump in housing activity, there were also sizable cutbacks in industries heavily dependent upon construction activity. Most notably, employment in lumber and wood products slipped significantly during the year, falling to a level 24,000 below its June 1980 recession low. Stone, clay and glass and major appliances—which are closely tied to construction activity—also witnessed significant declines over the year. (See table 5.)

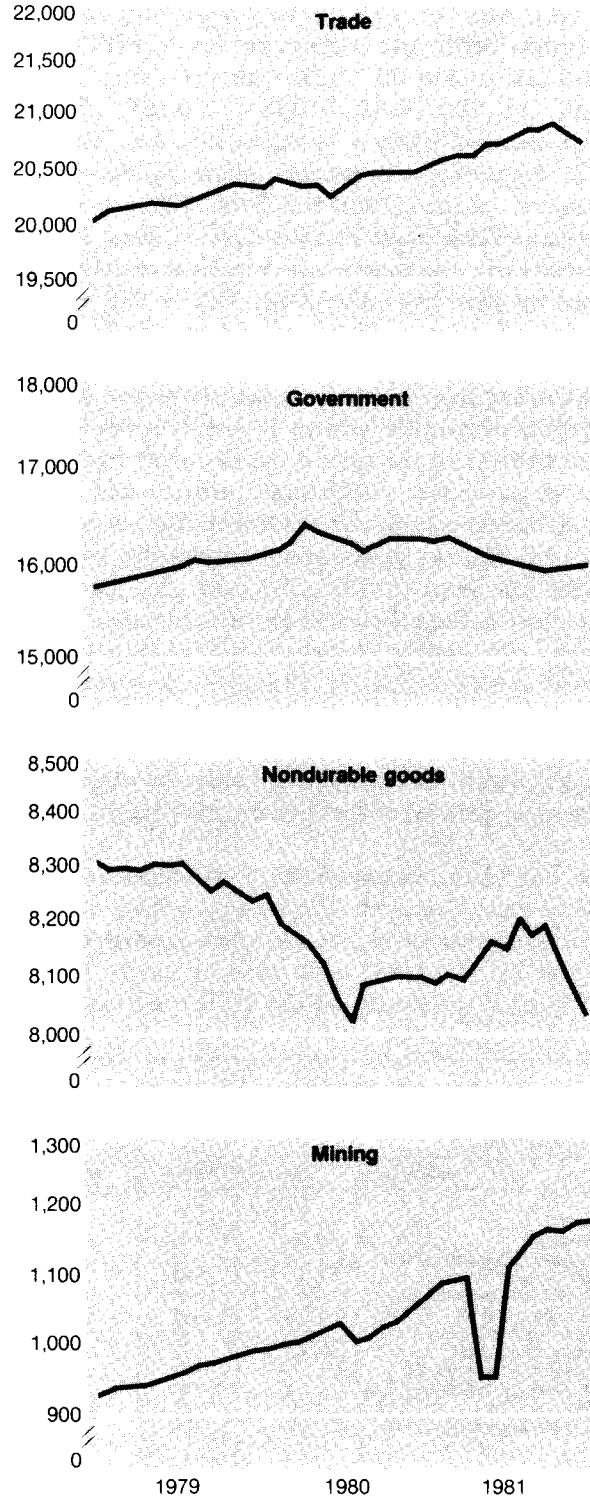
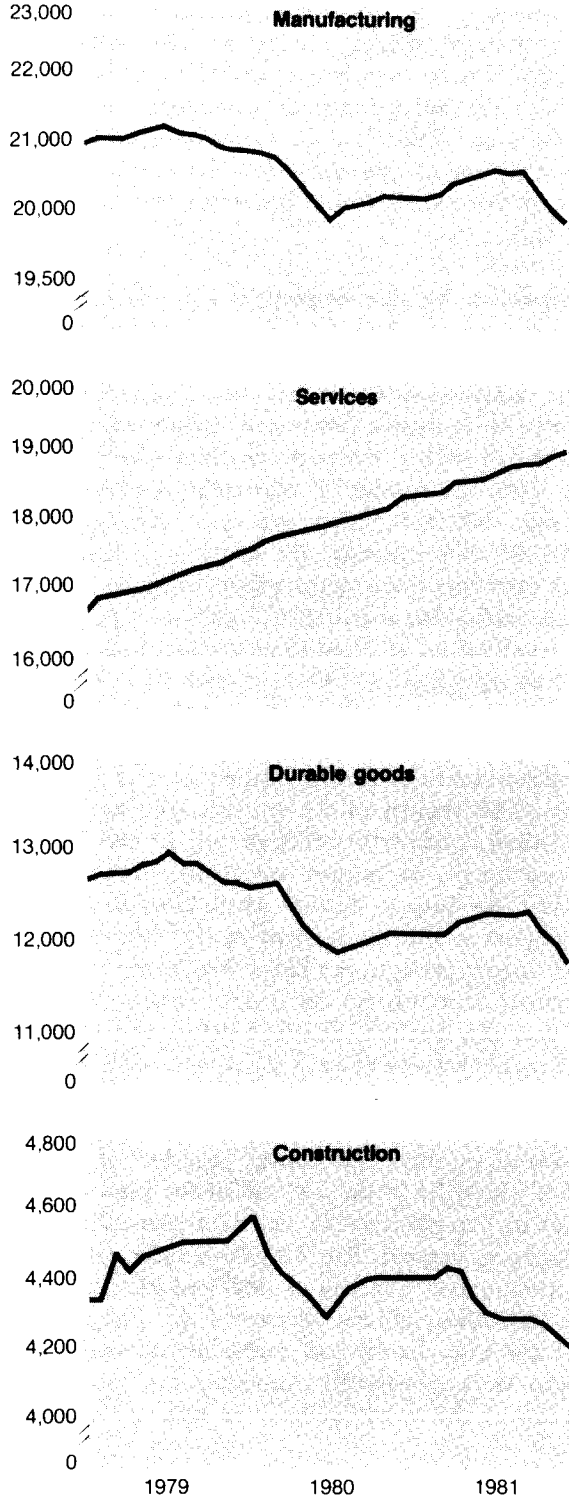
Employment in nondurable goods manufacturing rose in the first 3 quarters of 1981 but then dropped sharply in the final quarter. The largest cutback occurred in food processing, which has been following a long-term downtrend. Conversely, the only major nondurable industry to post a significant increase for the year was printing and publishing; this industry had also been largely unaffected by the 1980 downturn, possibly because of its strong ties with the less-cyclically vulnerable service-producing sector.

In marked contrast to the job declines registered in construction and manufacturing, mining grew rapidly in 1981, sustaining the pattern of growth that began in the aftermath of the 1973 oil embargo. While representing slightly more than half of the employment in the industry division, the oil and gas extraction industry accounted for more than 90 percent of the job gains during the year, a reflection of the rapid expansion in exploration and development activity. Despite a slight drop in employment in the second quarter, relating to temporary losses that stemmed from a coal strike, mining industry employment rose at a faster rate than any other nonfarm industry, climbing 11.3 percent in 1981. (See chart 2.)

Employment in the service-producing sector expanded throughout 1981, more than offsetting the employment decline in the goods sector. However, as evidence that the sector is not totally immune to recessions, the rate of increase was significantly below that witnessed during the few years just prior to the 1980 and 1981 recessions. The number of jobs rose by 860,000 from the fourth-quarter 1980 level to 66.1 million at the end of

Chart 2. Nonfarm payroll employment by selected industries, 1979-81

Thousands (seasonally adjusted)



Note: Data for November and December 1981 are preliminary.

1981. The advance was dominated by increases in the division comprising such diverse industries as legal, health, business, and educational services, hotels and other lodging, amusement and recreation, and auto repair. This amalgam of service industries posted a gain of 660,000 jobs. The increases were concentrated in the fast-growing health and business service industries. Jobs in wholesale and retail trade, after sustaining growth through the first three quarters, tapered off near yearend, as pre-Christmas hiring in 1981 was less than normal. Employment in transportation, public utilities, and finance, insurance, and real estate followed a similar pattern. These three divisions posted gains for the year, however. In contrast, government employment dropped by more than 300,000 in 1981, to 15.9 million, as a result of stringent budgets and severe staffing limitations, particularly in primary and secondary education. State and local government had the largest decline, falling 260,000 over the year to 13.2 million, while Federal government employment dropped almost 50,000.

The varied impact of the weak recovery and subsequent economic contraction are summarized in table 6. As can be seen, the goods-oriented industries were the principal job losers in 1981. For example, job losses amounted to at least 7 percent in the automobile manufacturing and lumber industries. Government—State and local as well as Federal—was the only service-producing area to register over-the-year job losses. Among job gainers, the fast-growing mining industry experienced the largest relative increase, while the other gainers were concentrated in the service-producing sector.

Hours. One of the earliest signs of the stifled recovery and subsequent downturn in economic activity was the manufacturing workweek, which began decreasing rapidly from its May 1981 peak of 40.3 hours. By the fourth quarter, the factory workweek had fallen to 39.3

hours, only 0.1 hour above its 1980 recession low. Factory overtime hours, which were largely responsible for the decline in the manufacturing workweek, had declined by 0.7 hour to 2.5 hours by the end of the year.

As a further indication of the weakening economic environment, the index of aggregate weekly hours for production or nonsupervisory workers, which reflects changes in both employment and the workweek, peaked in July and declined steadily throughout the remainder of the year.¹¹ Likewise, the manufacturing hours index began falling at midyear and continued to decline so that by yearend, it was at its lowest level in more than 5 years.

Occupations. Because employment in the goods industries is more vulnerable to cyclical contractions, it follows that the occupations which are concentrated in these industries—blue-collar—are also more adversely affected by economic downturns. Exhibiting a decline of nearly 1.9 million between the third quarters of 1979 and 1980, the number of blue-collar workers increased by only 800,000 during the short recovery through mid-1981. Subsequently, the economic situation worsened and blue-collar employment dropped 1.0 million by the end of the year. At 30.7 million in the last quarter, employment of blue-collar workers was 200,000 below the third-quarter 1980 level and 600,000 below the same quarter a year before. (See table 4.)

All of the major blue-collar occupational groups registered declines from their second quarter 1981 levels. Because 80 percent of the workers who are operatives (excluding transport) are employed in the goods-producing sector, it is not surprising that this group showed the largest decline when employment turned downward in the second half of the year. Among the other major groups, the larger the share of their employment that was in the goods sector—craftworkers (60 percent), nonfarm laborers (40 percent), and transport equipment operatives (30 percent)—the greater the extent of their decline.

Employment growth in white-collar occupations was sustained through the second quarter of 1981 but slowed markedly in the last half of the year, as the economic deterioration which set in for blue-collar workers at midyear spread. The 850,000-million job gain between the fourth quarters of 1980 and 1981 occurred almost exclusively among persons in the professional and technical and managerial fields, as salesworkers and clerical workers together accounted for only about 10 percent of the total increase in white-collar employment.

Among the other occupational categories, the number of service workers increased by 400,000 above the fourth quarter 1980 level, while the number of farmworkers, which had been on a slow downtrend

Table 6. Major payroll employment changes, by industry, fourth quarter 1980 to fourth quarter 1981

[Numbers in thousands]

Industry	Number	Percent
Job losers:		
Construction	-159	-3.6
Residential building construction	-32	-5.3
Lumber and wood products	-48	-7.0
Stone, clay, and glass products	-23	-3.5
Primary metal industries	-36	-3.2
Fabricated metal industries	-35	-2.2
Transportation equipment	-77	-4.2
Motor vehicles and equipment	-55	-7.4
Food and kindred products	-33	-1.9
Textile mill products	-21	-2.5
State and local government	-262	-1.9
Job gainers:		
Mining	119	11.3
Printing and publishing	36	2.8
Retail trade	305	2.0
Finance, insurance, and real estate	124	2.4
Services	663	3.7

throughout the postwar period until the late 1970's, showed little movement.

The labor force

The civilian labor force grew at a slower pace in 1981 than in the late 1970's. Between the fourth quarters of 1980 and 1981, the labor force was up by 1.6 million, slightly above the increase of the previous year but down from increases of about 3 million or more in the years following the 1973-75 recession. Diminished growth has not been altogether unexpected, however. The number of persons reaching labor force age has been smaller in recent years because the baby-boom generation, now aged 20 to 30, was followed by a "baby-bust" generation. The growth in the number of women in the labor force continued, although it did slow considerably in the latter half of the year. Such growth still accounted for two-thirds of the total labor force increase. At 6.9 million in the last quarter, women accounted for about 43 percent of the work force.

Overall, the percentage of the working-age population employed or unemployed—the labor force participation rate—was up slightly in 1981 to 63.9 percent. (See table 7.) The participation of women has increased from rates slightly above 30 percent in the late 1940's to more than 52 percent in 1981, while the rates for men declined. Early postwar increases were concentrated among older women, those who had largely completed the time-consuming portion of their child-rearing responsibilities. But in the past two decades, the greatest labor force increases have occurred among women under age 35. Many of these women delayed marriage, and childbearing, to pursue careers. Even when they had children, many retained their jobs rather than leave the labor force, as in earlier times. The trend may have gotten an added push in the 1970's by a desire to maintain family buying power in the face of inflationary pressures. The labor force participation rate for women near normal retirement ages has recently turned downward, joining a long-standing trend for men.

The participation rate for men, down slightly to 79.0

Table 7. Labor force participation rates for selected demographic groups, annual averages, 1951-81

	1951	1961	1971	1981
Total	59.3	59.3	60.2	63.9
Teenagers, 16-19 years	52.2	46.9	49.7	55.4
Men, 20 years and over	88.2	85.7	82.1	79.0
20-24 years	88.4	87.8	83.0	85.5
25-34 years	96.9	97.5	95.9	94.9
35-54 years	96.8	96.6	95.2	93.5
55-64 years	87.2	87.3	82.1	70.6
65 years and over	44.9	31.7	25.5	18.4
Women, 20 years and over	34.0	38.0	43.3	52.1
20-24 years	46.5	47.0	57.7	69.6
25-34 years	35.4	36.4	45.6	66.7
35-54 years	39.7	46.8	52.9	64.2
55-64 years	27.6	37.9	42.9	41.4
65 years and over	8.9	10.7	9.5	8.0

percent between 1980 and 1981, has declined fairly steadily over the postwar years, primarily a result of the continued early labor force withdrawal among older men. For example, there was an especially large decline among those 55 to 64 years in the past decade, indicative of an improved financial ability to retire. Participation rates have actually increased for young adults, and they remained quite high (and little changed) for men in the prime working ages. The rate for teenagers had increased steadily since 1965, reaching a high of 57.9 percent in 1979, before declining in the last 2 years.

AS 1981 ENDED, the country was mired in a recession, the eighth in the post-World War II era. All recessions are separate and distinct in terms of magnitude, duration and breadth. However, this episode is unique from the previous seven by the fact that there was a rather limited recovery from its 1980 predecessor, and that two key industries—notably construction and automobile—were essentially in a continued depressed state through the recovery period. While, as of this writing, it is too early to see the end of the tunnel, it was clear at yearend that most leading economic indicators were pointing toward further deterioration and that industrial production was still heading downward. □

FOOTNOTES

¹ Data on labor force, total employment, and unemployment are derived from the Current Population Survey (CPS), a sample survey of households conducted and tabulated by the Bureau of the Census for the Bureau of Labor Statistics. Statistics on nonagricultural payroll employment and hours from the Current Employment Statistics Program (CES) are collected by State agencies from employer reports of payroll records and are tabulated by the Bureau of Labor Statistics. A description of the two surveys appears in the Bureau of Labor Statistics monthly publication, *Employment and Earnings*.

² The proportion of blacks in the "black and other" group has been declining; it was 83 percent in 1980. This has resulted from a gradual influx of Asians, particularly Vietnamese, into the U.S. labor force in the 1970's. For this reason, and because of the availability and increased reliability of data for blacks, it is not as necessary as in the past to use data for "black and other" when discussing black work-

ers. Thus, unless otherwise stated, the term black in this article refers exclusively to the "black only" population and not to the "black and other" category, which, in addition to blacks, includes American Indians, Alaskan Natives, and Asian and Pacific Islanders.

³ Because of movement between industries and into and out of the labor force, unemployment rates by detailed industry are difficult to interpret. For example, a decline in joblessness among workers in a particular industry does not necessarily indicate the reemployment of laid-off workers. It could mean that these workers have found work elsewhere or simply left the labor force.

⁴ Data do not include the small number of workers on shortened workweeks because of material shortages and those who began or ended a job during the survey week.

⁵ See Robert W. Bednarzik, "Worksharing in the U.S.: its preva-

lence and duration," *Monthly Labor Review*, July 1980, pp. 3-12.

⁶ For further detail on this subject, see Paul O. Flaim, "Discouraged workers and changes in unemployment," *Monthly Labor Review*, March 1973, pp. 8-16, and Carol M. Ondeck, "Discouraged workers' link to jobless rate reaffirmed," *Monthly Labor Review*, October 1978, pp. 40-42.

⁷ For a discussion of the employment-population ratio as a cyclical indicator, see Carol Boyd Leon, "The employment-population ratio: its value in labor force analysis," *Monthly Labor Review*, February 1981, pp. 36-45, and Julius Shiskin, "Employment and unemployment: the doughnut or the hole?" *Monthly Labor Review*, February 1976, pp. 3-10.

⁸ For a discussion of the relative impact of recessions on different

demographic groups, see Norman Bowers, "Have employment patterns in recessions changed?" *Monthly Labor Review*, February 1981, pp. 15-28.

⁹ The employment-population ratio for black and other youth was down about 13 points over the past quarter century.

¹⁰ For a detailed discussion of indexes of diffusion of changes in the number of employees on nonagricultural payrolls, see John F. Early, "Introduction of Diffusion Indexes," *Employment and Earnings*, December 1974, pp. 7-11.

¹¹ Aggregate hours is a joint measure of the change in both hours and employment. For basic industries, aggregate hours are the product of average weekly hours and production-worker or nonsupervisory-worker employment.

The role of apprenticeship

Apprenticeship is only one of the many ways in which a vocational aptitude may be gained. In most occupations, training is acquired on the job, in trade or vocational schools, in the Armed Forces, or in Federal or State training courses, or principally by 'picking up the trade'—that is, working with journeymen on a variety of jobs until proficiency is achieved. Only about one-fourth of all unions actually participate in apprenticeship regulation. Moreover, most employees who do work in apprenticeable trades have learned their trade without having served an apprenticeship. Thus, studies have estimated that as many as 80 percent of all carpenters and 30 percent of all electricians became journeymen without serving apprenticeships. These studies also show that it is more difficult to become a journeyman in the electrical, mechanical, and plumbing trades without formal training than in the carpentry, painting, and trowel trades (bricklaying, cement finishing, and so on).

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Economics of Labor Relations,
9th ed. (Homewood, Ill., Richard D. Irwin,
Inc., 1981), p. 228.
