Labor market completes sixth year of expansion in 1988

Both civilian and nonagricultural employment continued to rise; the 5.3-percent unemployment rate in the fourth quarter was the lowest since the second quarter of 1974

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Labor market performance by most measures remained healthy in 1988, as employment gains continued and the civilian unemployment rate fell to a 14-year low. The economy completed its sixth year of expansion, the second longest period of sustained growth since World War II and the longest peacetime expansion.

Following are highlights of employment and unemployment developments in 1988:

- Employment growth continued during the year, as measured by both the Current Employment Statistics survey (CES)— a survey of more than 300,000 business establishments—and the Current Population Survey (CPS) —a survey of nearly 56,000 households. The establishment survey showed an increase of 3.7 million persons, or 3.5 percent, while the household survey showed an increase of 2.4 million persons, or 2.1 percent. (See box on page 4.)
- The goods-producing sector showed significant job gains for the second straight year. Within that sector, both construction and manufacturing registered over-the-year increases. The service-producing sector continued to grow at a rapid pace, with services and wholesale trade increasing the fastest.
- After declining early in 1988, the civilian worker unemployment rate fluctuated around 5.5 percent for much of the year before edging to 5.3 percent in the fourth quarter. The rate was then six-tenths of a percentage point below that of a year earlier and at its lowest mark since the second quarter of 1974. All major age and sex groups benefited from the unemployment decline.
- All three major racial and ethnic groups shared in 1988's job market improvements. Each group recorded a drop in its unemployment rate, and employment growth, particularly strong for Hispanics, continued.
- The number of persons working part time for economic reasons declined in 1988, but their proportion of total employment still remained above what it was prior to the recessions early in the decade. The number of discouraged workers showed little change over the year.

Industry developments

Nonagricultural payroll employment, as measured by the Bureau of Labor Statistics' business establishment survey, continued to show a healthy employment gain throughout 1988. At 107.3 million in the fourth quarter of 1988, nonfarm employment increased by about 3.7 million over the year. (See table 1.) (All over-the-year comparisons are made using fourth-quarter averages, unless otherwise noted.) This marks the second straight year in which nonfarm job growth exceeded 3 million.

As has typically been the case, employment rose at a faster rate in the service-producing sector than it did in the goods-producing sector, accounting for 4 of 5 of the net job gains during 1988. Services and wholesale trade had the fastest rates of employment growth in this sector.

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(See chart 1.) In addition, following declines in 1985 and 1986, the goods-producing sector showed a significant job gain for the second straight year. Both construction and manufacturing continued to expand, while the number of mining jobs declined.

The *service-producing sector* continued to add jobs at about the same rapid pace that has prevailed throughout the 6-year expansion, with employment in the sector increasing by 2.9 million, or 3.7 percent. The *services* division recorded the largest over-the-year employment gain, adding 1.3 million jobs, or almost 4 of every 10 additional jobs. (See chart 1.) This division is a heterogeneous mix that includes such industries as business, health, educational, social, and legal services; hotels and motels; entertainment; and auto repair. While the services division as a whole continued to grow at the brisk pace experienced throughout the expansion, its two largest industries, business and health services, showed somewhat different over-the-year trends.

Business services exhibited a slightly lower rate of employment growth than in previous years, while the pace accelerated sharply in health services. A decline in the rate of employment growth in personnel supply services, particularly in temporary help, explains some of the drop-off in the pace of business services employment growth. However, the other dynamic business services industry—computer and data processing services—continued to grow at a fast pace. Much of the recent growth has been in the computer programming and software services component. This includes firms which provide analysis and

Examining the divergences in the CPS and CES

While it is common for the household and payroll surveys to have different patterns of growth or even occasionally move in different directions in the short run, longer periods of major divergence are unusual. Between the fourth quarters of 1987 and 1988, the establishment survey registered a job gain that exceeded the rise in civilian employment by nearly 1.3 million.

The two surveys do measure different things; for instance, the household survey includes among the employed agricultural workers, the self-employed, private household workers, workers on leave without pay, and persons working without pay in a family business for 15 hours or more. The establishment survey does not cover such employment. These definitional differences, however, do not explain the sudden divergence in the two surveys.

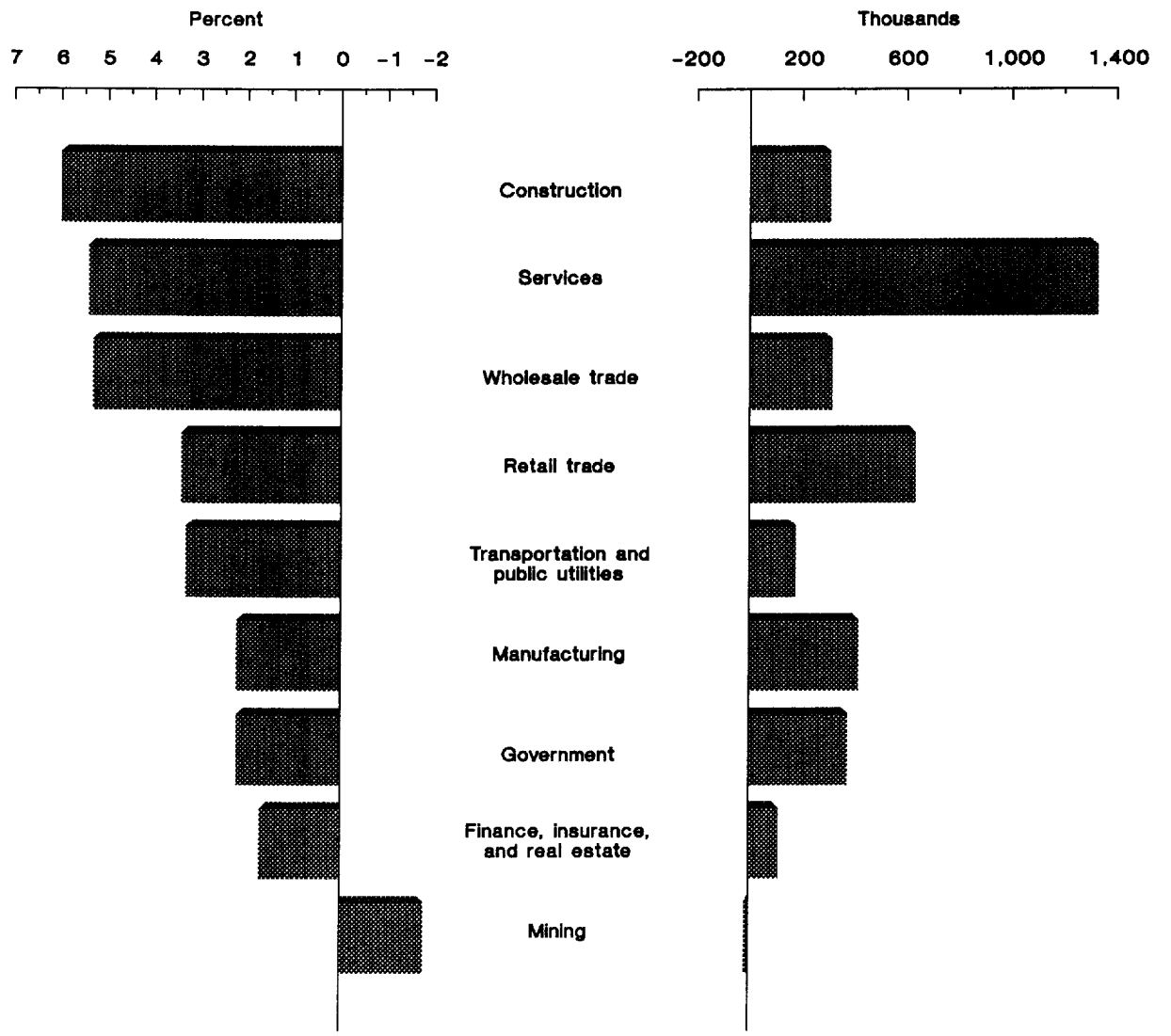
Although there is no direct evidence to explain the divergent survey results, several possibilities may account for some of the differences:

—The household survey estimates are based on current estimates of the population which are developed from the 1980 census, inflated to account for births, deaths, and migration into and out of the United States. If the population estimates for the inter-census period have been too low (as they were found to be between 1970 and 1980), then the employment estimates will have been similarly understated. The most problematical aspect of population estimation is accounting for illegal immigration. The Census Bureau currently adds 200,000 per year to their population estimate to account for illegal immigration, but if this estimate is too conservative, actual population growth (and the employment totals on which they are based) may have been underestimated. The establishment survey employment estimates, in contrast, are "rebenchmarked" each year based on counts of all employees from administrative records obtained through the unemployment insurance system.

—Because the establishment survey counts jobs, not people, persons holding more than one job are counted at each job. Thus, if an increasing number of workers were holding more than one job, business payrolls would register the resultant job gains while the household count of employed persons would not. In fact, between 1980 and 1985, the last 2 years in which the CPS measured the incidence of multiple-jobholding, the rate jumped considerably, particularly among women. If that trend has continued since 1985, it may account for some of the survey differences. (Additional data on multiple jobholding is scheduled to be collected in May of 1989, but results will not be available until around year's end.)

—The establishment survey sample does not have a systematic rotation of sample units, but replaces reporters as needed. This tends to underrepresent newly formed establishments. Because these firms might account for a substantial portion of job growth, some estimate of their contribution to employment growth must be included in the CES employment estimate. Otherwise, the CES estimates would consistently fall below those of the benchmark count, which would include new firms. Because this "bias adjustment" is based on past patterns of job creation, at any point in time it may under- or overestimate the contribution of new businesses to job growth. The process is particularly likely to result in an overstatement of growth as the economy approaches a business cycle peak, and to do the opposite at a trough. Unfortunately, a final estimation of the difference between recent CES employment growth and that registered by the benchmark will not be known until mid-1990.

Chart 1. Employment increases by major industry division, fourth-quarter 1987-88



design for computer systems, development of computer programs or systems, computer programming services, and computer-related systems engineering.

The rise in *health services* employment has been driven by an increasingly aging population requiring more health care, the expansion of outpatient care services, and the growing willingness of health insurance programs to cover home health care. Within health services, employment growth was widespread. The largest number of job gains occurred, as in the past, in hospitals, where almost half of all health services workers are employed. The largest rates of employment growth, both in 1988 and in the last 6 years, occurred in outpatient care facilities, where employment has risen by more than 80 percent over the expansion and, to a lesser extent, in medical and dental labs and offices of physicians.

Retail trade added 635,000 jobs in 1988, a growth rate of 3.4 percent. Retail sales were strong throughout much of the year. However, retailers' profits were weak, as overstocking and subsequent discounting depressed performance.

Employment growth among the various retail industries was mixed. Following a slack year in 1987, food stores

grew the fastest of any component. Consumers were apparently undaunted by rising food prices following the summer's drought, as food sales were up significantly in 1988. Auto dealers and service stations, which have both been strong throughout the recovery, also experienced substantial employment growth throughout the year. Employment in general merchandise stores expanded rapidly in the first quarter of 1988, was unchanged in the second quarter, and then declined in the last half of the year (on a seasonally adjusted basis). Elsewhere, employment in eating and drinking places continued to grow at a steady pace; employment in radio, television, and music stores, which had

Table 1. Employees on nonagricultural payrolls by industry, seasonally adjusted, quarterly averages, 1982–88
[In thousands]

Industry	1982	1984	1986	1987	1988			
	IV				I	II	III	IV[p]
Total	88,717	95,868	100,347	103,683	104,670	105,609	106,478	107,335
Total private	72,893	79,710	83,496	86,518	87,406	88,263	89,071	89,793
Goods-producing	22,980	24,935	24,443	25,116	25,260	25,498	25,650	25,827
Mining	1,029	956	715	737	731	739	738	729
Oil and gas extraction	651	609	396	419	416	424	422	407
Construction	3,837	4,499	4,843	5,089	5,142	5,261	5,345	5,396
General building contractors	959	1,187	1,302	1,347	1,375	1,402	1,402	1,404
Manufacturing	18,115	19,481	18,885	19,290	19,388	19,498	19,567	19,706
Durable goods	10,484	11,631	11,137	11,353	11,403	11,484	11,550	11,634
Lumber and wood products	596	703	723	749	755	757	754	767
Furniture and fixtures	425	492	501	531	535	536	539	541
Stone, clay, and glass products	558	593	581	585	584	586	587	591
Primary metal industries	824	843	729	768	770	777	787	795
Blast furnaces and basic steel products	344	317	255	279	280	281	281	282
Fabricated metal products	1,349	1,483	1,404	1,428	1,437	1,450	1,461	1,474
Machinery, except electrical	2,051	2,236	2,002	2,062	2,092	2,122	2,155	2,184
Electrical and electronic equipment	1,953	2,248	2,102	2,101	2,113	2,117	2,124	2,129
Transportation equipment	1,662	1,931	2,037	2,048	2,031	2,047	2,043	2,049
Motor vehicles and equipment	659	877	868	855	837	850	854	860
Instruments and related products	699	721	698	703	705	709	716	721
Miscellaneous manufacturing	367	381	360	378	381	382	385	383
Nondurable goods	7,631	7,850	7,748	7,937	7,985	8,014	8,017	8,072
Food and kindred products	1,628	1,608	1,616	1,635	1,648	1,645	1,631	1,658
Tobacco manufactures	68	64	57	53	54	53	52	52
Textile mill products	729	726	709	732	731	727	722	723
Apparel and other textile products	1,139	1,155	1,094	1,107	1,105	1,099	1,091	1,091
Paper and allied products	654	682	676	683	686	689	690	691
Printing and publishing	1,271	1,404	1,475	1,527	1,543	1,559	1,571	1,585
Chemical and allied products	1,055	1,055	1,017	1,041	1,049	1,060	1,069	1,073
Petroleum and coal products	200	188	165	167	165	166	167	168
Rubber and miscellaneous plastics products	679	792	797	845	857	869	878	886
Leather and leather products	209	176	143	145	147	146	146	145
Service-producing	65,737	70,933	75,904	78,567	79,410	80,111	80,828	81,509
Transportation and public utilities	5,023	5,200	5,285	5,465	5,514	5,560	5,607	5,643
Transportation	2,735	2,963	3,093	3,230	3,273	3,313	3,355	3,393
Communication and public utilities	2,288	2,237	2,192	2,235	2,241	2,248	2,253	2,250
Wholesale trade	5,213	5,644	5,761	5,959	6,035	6,117	6,195	6,275
Durable goods	3,034	3,336	3,381	3,516	3,573	3,635	3,697	3,761
Nondurable goods	2,179	2,308	2,380	2,443	2,462	2,482	2,498	2,514
Retail trade	15,189	16,919	18,157	18,750	19,007	19,143	19,277	19,384
General merchandise stores	2,141	2,315	2,379	2,493	2,543	2,545	2,538	2,534
Food stores	2,510	2,685	2,945	2,979	3,029	3,061	3,104	3,158
Automotive dealers and service stations	1,634	1,834	1,967	2,028	2,047	2,070	2,093	2,106
Eating and drinking places	4,872	5,526	6,007	6,213	6,290	6,338	6,377	6,435
Finance, insurance, and real estate	5,356	5,780	6,401	6,610	6,640	6,662	6,688	6,722
Finance	2,664	2,890	3,210	3,298	3,306	3,302	3,299	3,315
Insurance	1,715	1,785	1,978	2,045	2,055	2,069	2,080	2,092
Real estate	977	1,105	1,214	1,267	1,279	1,291	1,309	1,314
Services	19,131	21,232	23,448	24,618	24,949	25,284	25,653	25,943
Business services	3,289	4,196	4,926	5,292	5,370	5,448	5,517	5,573
Health services	5,892	6,177	6,632	6,962	7,054	7,161	7,277	7,417
Government	15,824	16,158	16,851	17,165	17,264	17,346	17,407	17,542
Federal	2,745	2,830	2,899	2,973	2,972	2,957	2,965	2,990
State	3,641	3,771	3,925	3,991	4,017	4,047	4,072	4,075
Local	9,438	9,557	10,026	10,200	10,275	10,342	10,370	10,477

p=preliminary.

shown the largest percentage job growth of any retail industry in the past few years, was little changed in 1988.

A substantial job gain in *wholesale trade*—315,000—was largely attributed to an increase in the sale of durable goods, particularly among wholesalers of export-driven goods such as machinery and equipment. Some of the strength in wholesale employment also resulted from the increased demand for lumber and materials used by the construction industry. In the last 6 years, these and other durable goods components of wholesale trade have accounted for about 70 percent of wholesale trade employment gains.

Transportation was responsible for nearly all of the 180,000 employment gain in the *transportation and public utilities* industry. Within transportation, trucking and airlines continued to post gains while railroad employment was little changed.

Employment in the *finance, insurance, and real estate* industry was up by a comparatively meager 110,000 in 1988, the smallest increase of the 6-year expansion. Insurance and real estate continued to show steady employment gains throughout the year. However, weakness in both the banking and securities industries—the latter largely related to the October 1987 stock market crash—held finance employment in check.

Government employment increased by 375,000 in 1988, which is consistent with the rate of growth evident since 1984. Virtually all of the 1988 increase was in State and local governments.

Employment in the *goods-producing sector* rose by 710,000 to 25.8 million by the fourth quarter of 1988. Rates of growth within the sector varied: construction advanced sharply, manufacturing rose moderately, and mining declined.

Construction employment rose by 305,000 during the year, the largest growth since 1984. Job gains within construction were unevenly distributed, as strong growth in special trades contrasted with modest gains in other industry components. The special trades industry, which includes a wide variety of construction trades (plumbing, painting, papering, electrical work, stone masonry, and roofing), has accounted for nearly three-fourths of all new construction jobs in the 6 years of the present expansion. As a result, 3 of every 5 construction workers are now employed in special trades. Elsewhere in the industry, general building contractors experienced moderate employment growth in the first half of 1988, but little change during the last 6 months.

Manufacturing added 415,000 jobs in 1988, the second straight year that factory jobs have grown by more than 2 percent. These back-to-back gains more than offset the 3-percent employment decline in the 1985–86 period, but still left the number of factory jobs below 1979 levels. The rise in foreign demand for products manufactured in the United States helped spur the recent growth; the decline in the value of the dollar in 1988, caused partly by concern over the large merchandise trade deficit, played a major role. As the dollar fell, U.S. goods became cheaper and more competitive in foreign markets, while the prices of U.S. imports rose, in turn narrowing the trade gap.

Table 2. Over-the-year employment change by major occupation, 1983–88
[In percent]

Occupation	1983	1984	1985	1986	1987	1988
Total	3.5	3.3	2.0	2.3	2.8	2.1
Executive, administrative, and managerial	3.1	7.4	4.7	4.4	5.5	5.5
Professional specialty	1.4	3.2	3.9	1.6	3.6	4.1
Technicians and related support	1.6	3.4	2.7	3.4	.5	4.8
Sales occupations	5.1	5.3	.7	5.5	.6	2.5
Administrative support, including clerical	.9	1.5	4.2	2.3	3.6	-1.5
Service occupations	4.9	.9	2.6	1.2	2.3	2.6
Precision production, craft, and repair	10.9	3.5	1.4	.6	.7	.4
Operators, fabricators, and laborers	3.5	3.1	-1.0	.8	3.8	1.7
Farming, forestry, and fishing	-6.7	.8	-7.9	2.8	1.6	1.0

NOTE: Data based on fourth-quarter comparisons.

In response to the increased demand for both durable and nondurable products, industrial production rose throughout the year, and factory employees worked long hours by historical standards. Average weekly hours fluctuated between 40.9 and 41.2 hours and overtime ranged from 3.7 to 4.0 hours; these were the highest sustained levels since 1973. The capacity utilization rate in manufacturing rose to over 84 percent, its highest level since mid-1979, and both new and unfilled orders were growing at yearend.

Durable goods manufacturing employment rose steadily in 1988, accounting for more than two-thirds of the overall increase in factory jobs. The capacity utilization rate among durable goods producers surged to record highs, while the rate for nondurable producers was elevated but stable all year. Benefiting from strong exports and investment spending on business computing equipment, the machinery industry recorded a particularly large job increase of 120,000 in 1988. However, employment in this industry was still well below prerecession levels. Strong, though more modest, over-the-year gains were also made in the primary and fabricated metals industries, two other industries in which recent employment gains failed to match earlier declines.

Nondurable goods industries added 135,000 jobs in 1988, as the printing and publishing, chemical and allied products, and plastics products industries showed the

most strength. Despite midyear job losses resulting from 1988's drought, over-the-year employment was up in the food products industry. The textiles and apparel industries each had a small decline in jobs in 1988, after experiencing increases in 1987.

For a number of years, employment changes in the *mining* industry have mirrored developments in oil and gas extraction, which, in turn, are closely tied to crude oil prices. Mining employment was down in 1988 due to the relatively low prices of crude oil and an international surplus. This left little incentive for increased exploration and, hence, employment. At year's end, oil producers were making efforts to reach an accord to reduce production with the hopes of bolstering prices. Mining was the only major industry division in which employment at the end of 1988 was below the 1982 recession trough level.

Cyclical comparisons. Since the end of World War II, three periods of economic growth have lasted more than 4 years. The present economic expansion, which completed its sixth year in November 1988, is the second longest period of sustained growth, surpassed only by the nearly 9-year expansion following the 1960–61 recession. The recovery following the 1973–75 recession lasted nearly 5 years.

The three expansions are quite similar in terms of their annualized rates of employment growth, at 3.8 percent in the 1961–69 period, 3.9 percent in 1975–79, and 3.5 percent thus far during the present expansion. The *composition* of employment growth by industry, however, was markedly different over the course of the three expansions, as may be seen in the first three columns of the following tabulation:

	Percent contribution			*Percent distribution*	
	1961 –69	*1975 –80*	*1982 –88*	*February 1961*	*December 1988*
Nonagricultural total	100.0	100.0	100.0	100.0	100.0
Goods-producing	27.0	27.7	15.5	36.6	24.1
Mining	–.3	1.8	–1.6	1.3	.7
Construction	4.8	7.3	8.3	5.3	5.0
Manufacturing	22.5	18.6	8.8	30.1	18.3
Service-producing	73.0	72.3	84.5	63.4	75.9
Transportation and public utilities	3.3	4.4	3.3	7.3	5.2
Wholesale trade	4.8	6.2	5.7	5.9	5.9
Retail trade	15.9	18.0	22.5	15.3	18.1
Finance, insurance, and real estate	5.2	6.6	7.3	5.0	6.3
Services	21.9	26.7	36.5	14.1	24.2
Government	21.9	10.3	9.2	15.8	16.3

The proportion of job growth made up by the goods-producing sector has been much smaller over the current expansion than it was in the two prior growth periods. Within the goods sector, the manufacturing share of employment growth declined from 23 percent in 1961–69 to 19 percent in 1975–80, and then fell sharply to 9 percent in the current recovery. As the last two columns show, manufacturing has a much smaller share of total nonagricultural employment today than it had in 1961. The construction industry gradually increased its share in each successive expansion and, despite being very hard hit in recessions, has maintained a 5-percent share of total employment. The shift towards service-producing employment shows up principally in the sizable gains in the services and retail trade industries. Services has both increased its share of growth during expansions and been relatively insulated from job losses during recessions. As a result, its share of employment has risen dramatically since the early 1960's; the industry now accounts for almost 1 of every 4 jobs. The notably small government share of employment growth in the 1975–80 recovery has been maintained in the present expansion; these smaller growth rates partly reflect the fact that, by the late 1970's, the baby-boom generation had largely passed through the public education systems.

Occupational developments

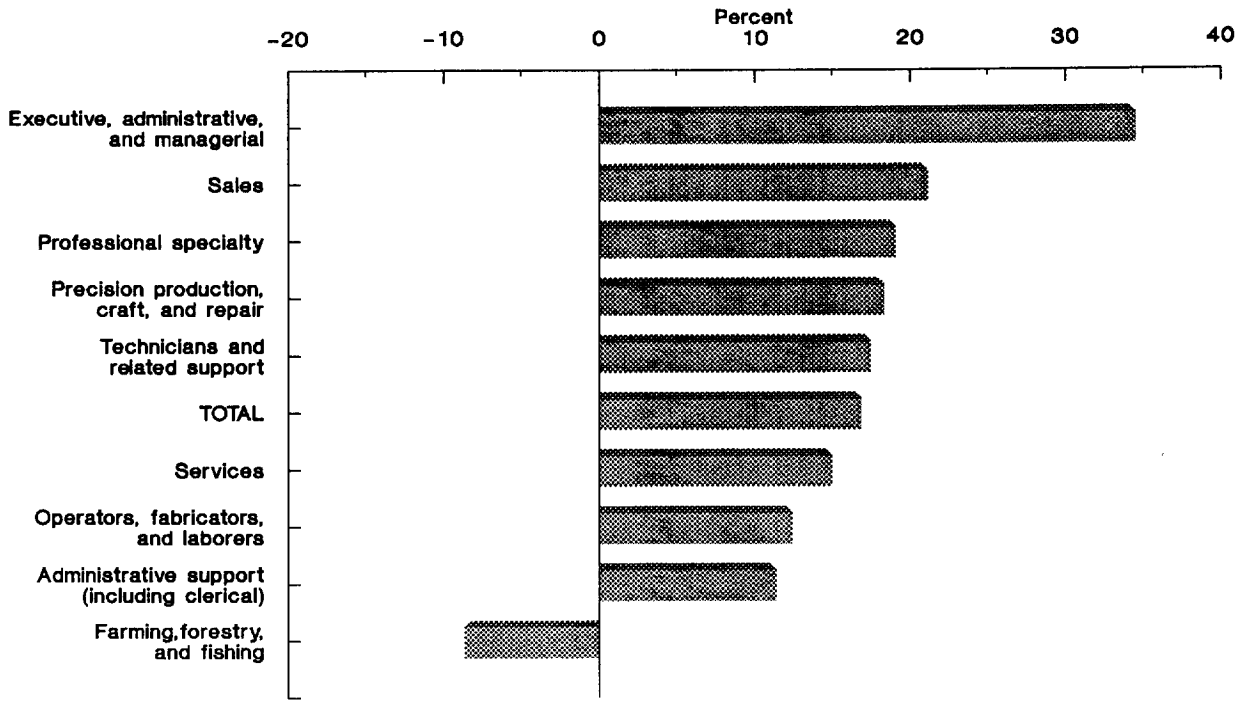
The greatest rate of job growth in 1988, as it was throughout most of the expansion, was among executives, administrators, and managers. (See table 2.) Gains were also strong in the professional specialty occupations and among technicians and related support. Services and sales occupations showed growth of a more moderate nature, but occupations concentrated in the manufacturing and agriculture industries (production, craft, and repair workers; operators, fabricators, and laborers; and employees in farming, forestry, and fishing occupations) registered very little change from the year before.

Overall employment growth during the entire expansion has been widespread, but some occupations and industries have expanded more than others. Charts 2 and 3 provide employment growth rates of major occupational categories and industry divisions since the trough of the recession.

Civilian employment

Total civilian employment, as measured by the CPS, rose by 2.4 million in 1988 to 115.8 million. With the exception of the 2.8-percent employment jump in 1987, the current economic expansion has followed a "normal" pattern for an economic recovery—robust job gains in the first few years (average growth was 3.4 percent in the 1983–84 rebound years), succeeded by much smaller gains in subsequent years (the 2.1-percent job increase in 1988 matches the average employment gain in the 1985–86 period).

Chart 2. Percentage change in employment by major occupation, fourth-quarter 1982–88



All three major age and sex groups (adult men, adult women, and teenagers) shared in 1988's employment expansion. (See table 3.) Adult women, who represent 45 percent of the work force, accounted for a little more than 60 percent of the over-the-year job gain, slightly more than their share of employment growth throughout the first 5 years of the expansion. Adult men were responsible for a slightly smaller than normal share of the employment growth than they had experienced in recent years, and, for the third straight year, teenagers experienced a job gain.

The employment-population ratio provides a useful indicator of the economy's ability to generate jobs for a growing population, as the ratio is affected by both the supply of jobs and the supply of workers. Thus, a 0.6-percentage-point over-the-year rise in the employment-population ratio reflects both the 2.4 million employment advance in 1988 as well as a slowdown in the rate of growth of the working-age population.

As the tabulation below shows, the overall employment-population ratio for all workers declined during the 1980–82 recessionary period, but has steadily increased ever since; record highs have been established every quarter since mid-1985, including the 62.5-percent level recorded in the fourth quarter of 1988:

	Total	*Men, 20 years and over*	*Women, 20 years and over*	*Teenagers*
Fourth-quarter:				
1979	60.0	76.1	48.1	48.5
1982	57.3	70.9	48.1	41.3
1985	60.3	73.4	51.4	43.9
1986	60.9	73.4	52.4	44.5
1987	61.9	74.0	53.5	45.9
1988	62.5	74.2	54.5	47.1

The employment-population ratios for the three age and sex groups have shown different patterns since 1979. The ratio for women, which has risen steadily since the mid-1950's, paused in the early 1980's and then increased by about a percentage point a year between 1983 and 1988. In contrast, the employment-population ratio for men dropped 5.2 percentage points between 1979 and 1982. It only partly recovered in 1983 and 1984, was unchanged in 1985 and 1986, and edged up in 1987 and 1988. By year's end, the ratio for men remained well below that posted in 1979, in large part attributable to a decline in work activity among those of potential retirement age (55 and older). The ratio for teenagers followed a pattern similar to that of men during the 1979–85 period. However, after edging up in 1986, it has increased even faster than the ratio for women, growing nearly 3

percentage points in the last 2 years. Nevertheless, at year's end the teenage employment-population ratio remained below prerecession levels.

Unemployment

After declining in 1988, the rate of unemployment for civilian workers fluctuated around 5.5 percent for much of the year before edging down to 5.3 percent in the fourth quarter, the lowest rate since the second quarter of 1974. Over the year, the number of unemployed persons fell by 530,000, to 6.6 million. Following a sharp decline in 1987 in the level and rate of unemployment, both measures resumed the pattern exhibited in 1985 and 1986 of little or no improvement.

The 1988 decline in the overall civilian jobless rate was shared by teenagers, men, and women. The number of unemployed teenagers fell by about 13 percent. This resulted in a 2.1-percentage-point drop in their unemployment rate, the third straight yearly decline. The improvement was largely attributable to a combination of rising demand in many services jobs that have traditionally been filled by teenagers and a dwindling supply of such young workers. At 14.6 percent in the fourth quarter of 1988, the teenage rate was the lowest since 1973.

The unemployment rate for adult men declined by 0.3 percentage point to 4.7 percent in the second quarter of 1988 and remained at that rate the rest of the year. However, that level was still slightly above the fourth-quarter 1979 level, as adult men were still affected by their heavy concentration in some slow-growing (or declining) industries and occupations. The rate for adult women slipped 0.5 percentage point to 4.7 percent at year's end—its lowest level since the first quarter of 1970 and well below the rates recorded just before the 1980–82 recessionary period.

In the 1960's and 1970's, unemployment rates were much higher for adult women than men. In the past few years, however, the male-female unemployment rate differential has become negligible. (See chart 4.) Improvement in women's educational attainment, their increasing attachment to year-round full-time jobs, and their greatly reduced tendency to leave the labor force for child-bearing and -rearing have acted to lower their unemployment rates. The continuing strong employment growth in the service-producing sector—particularly services, where 60 percent of jobs are held by women—has also played a role.

Labor force

Civilian labor force growth was steady throughout the year, increasing by 1.8 million to 122.4 million in the fourth quarter of 1988. The year's 1.5-percent labor force rise was somewhat below the growth rates in each of the previous 4 years, which ranged from 1.7 percent to 2.0

Chart 3. Percentage change in employment by major industry division, fourth-quarter 1982–88

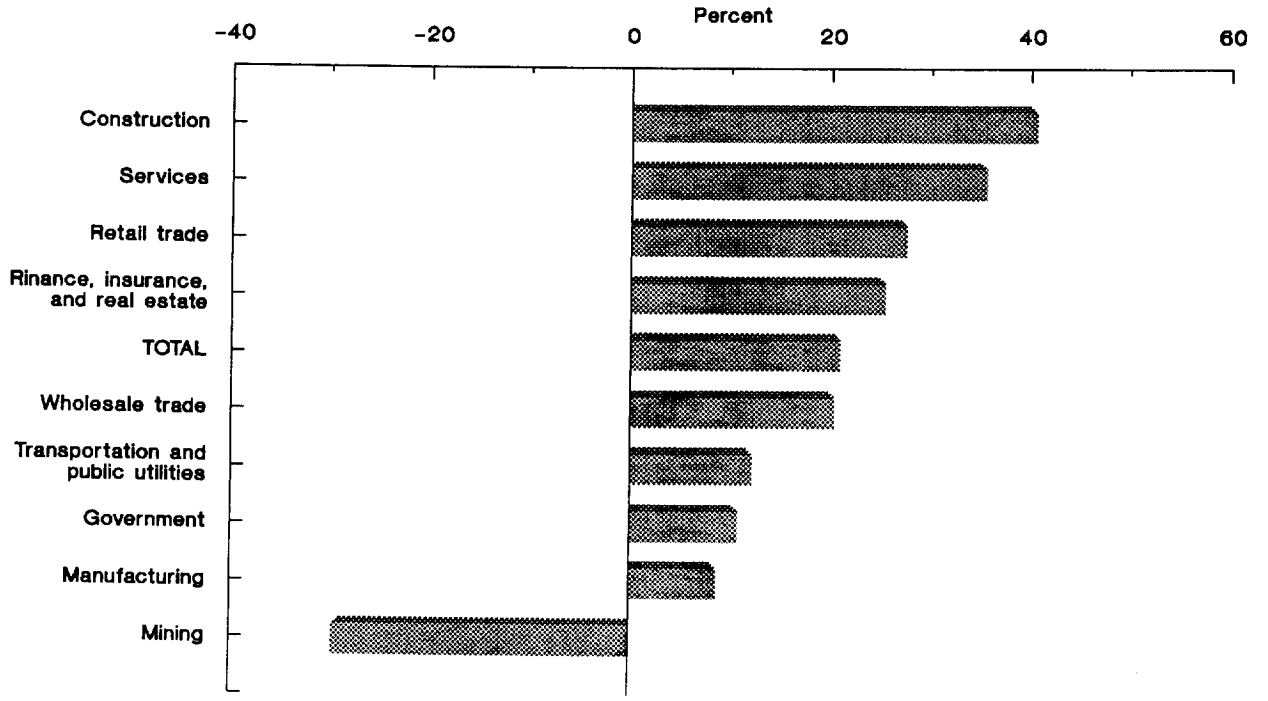


Table 3. Selected labor force indicators by sex, age, race, and Hispanic origin, seasonally adjusted quarterly averages, 1982–88

[Numbers in thousands]

Characteristic	1982	1985	1986	1987	1988			
	IV				I	II	III	IV
Total								
Civilian labor force	110,959	116,183	118,548	120,552	121,045	121,352	121,881	122,388
Percent of population	64.1	64.9	65.4	65.7	65.8	65.8	65.9	66.1
Employed	99,120	107,981	110,428	113,475	114,152	114,688	115,202	115,843
Agriculture	3,471	3,087	3,163	3,191	3,212	3,139	3,126	3,223
Nonagriculture	95,649	104,894	107,264	110,282	110,940	111,549	112,076	112,620
Employment-population ratio	57.3	60.3	60.9	61.9	62.1	62.2	62.3	62.5
Unemployed	11,839	8,202	8,120	7,077	6,893	6,664	6,678	6,545
Unemployment rate	10.7	7.1	6.8	5.9	5.7	5.5	5.5	5.3
Men, 20 years and over								
Civilian labor force	58,375	60,594	61,670	62,270	62,522	62,721	62,843	62,971
Percent of population	78.8	78.1	78.2	77.9	78.0	78.0	77.9	77.8
Employed	52,553	56,943	57,885	59,147	59,448	59,756	59,905	60,017
Employment-population ratio	70.9	73.4	73.4	74.0	74.1	74.3	74.3	74.2
Unemployed	5,822	3,651	3,785	3,123	3,074	2,965	2,938	2,953
Unemployment rate	10.0	6.0	6.1	5.0	4.9	4.7	4.7	4.7
Women, 20 years and over								
Civilian labor force	44,112	47,733	48,993	50,214	50,501	50,604	50,919	51,449
Percent of population	52.9	54.9	55.7	56.5	56.6	56.6	56.8	57.2
Employed	40,127	44,684	46,062	47,605	47,963	48,122	48,423	49,022
Employment-population ratio	48.1	51.4	52.4	53.5	53.8	53.8	54.0	54.5
Unemployed	3,985	3,049	2,931	2,609	2,538	2,483	2,496	2,427
Unemployment rate	9.0	6.4	6.0	5.2	5.0	4.9	4.9	4.7
Both sexes, 16 to 19 years								
Civilian labor force	8,472	7,856	7,885	8,069	8,022	8,026	8,119	7,969
Percent of population	54.3	54.3	54.2	55.1	55.0	55.1	56.0	55.2
Employed	6,440	6,353	6,481	6,723	6,742	6,810	6,874	6,804
Employment-population ratio	41.3	43.9	44.5	45.9	46.2	46.7	47.4	47.1
Unemployed	2,032	1,503	1,404	1,345	1,281	1,216	1,244	1,165
Unemployment rate	24.0	19.1	17.8	16.7	16.0	15.2	15.3	14.6
White								
Civilian labor force	96,623	100,530	102,413	103,758	104,255	104,555	104,900	105,286
Percent of population	64.4	65.2	65.7	65.9	66.1	66.2	66.2	66.4
Employed	87,452	94,486	96,345	98,527	99,204	99,691	99,909	100,436
Employment-population ratio	58.3	61.3	61.8	62.6	62.9	63.1	63.1	63.3
Unemployed	9,171	6,044	6,067	5,231	5,050	4,864	4,991	4,849
Unemployment rate	9.5	6.0	5.9	5.0	4.8	4.7	4.8	4.6
Black								
Civilian labor force	11,503	12,473	12,709	13,167	13,137	13,090	13,240	13,342
Percent of population	61.5	63.0	63.2	64.3	63.9	63.4	63.8	64.1
Employed	9,155	10,573	10,893	11,546	11,512	11,530	11,751	11,831
Employment-population ratio	48.9	53.4	54.1	56.4	56.0	55.8	56.7	56.8
Unemployed	2,348	1,900	1,816	1,621	1,626	1,559	1,489	1,510
Unemployment rate	20.4	15.2	14.3	12.3	12.4	11.9	11.2	11.3
Hispanic origin								
Civilian labor force	6,826	7,804	8,252	8,724	8,889	8,914	9,007	9,119
Percent of population	63.5	64.6	66.0	66.9	67.6	67.2	67.3	67.6
Employed	5,783	6,968	7,418	7,981	8,176	8,127	8,286	8,409
Employment-population ratio	53.8	57.7	59.3	61.2	62.2	61.3	61.9	62.3
Unemployed	1,043	837	834	743	713	787	721	709
Unemployment rate	15.3	10.7	10.1	8.5	8.0	8.8	8.0	7.8

NOTE: Detail for race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

percent. Similar to recent years, the labor force participation rate (the proportion of the population that is in the labor force) grew by 0.4 percent to 66.1 percent.

Contributing to the slower growth in the labor force in 1988 was a 1.2-percent drop in the size of the teenage labor force. This fall-off coincided with the first decline in the teenage population since 1985. As a result, the teenage labor force participation rate remained virtually unchanged at 55.2 percent. The labor force participation rates for adult men and women moved differently in 1988, as they have for many years. A 0.7-percentage-point rise in the labor force participation rate for adult women over the year carried on a long-term uptrend. In contrast, the labor force participation rate for adult men was flat at about 78 percent. This measure has slowly trended downward during the four decades of the monthly CPS, having dropped about 10 percentage points over that period. As with the employment-population ratio, this has largely

been the result of persons retiring at an earlier age. Between 1986 and 1987, however, there was some indication that this long-term retirement trend might have plateaued, as participation rates for men age 55 and older were little changed over the period. Data from 1988 show a return to the downward trend, with a 1.1-percentage-point fall in the participation rate for men ages 55 to 64.

Developments by race and ethnic origin

All three race and ethnic groups shared in 1988's labor market gains. Black and white workers registered similar proportional declines in their levels of unemployment, although the black unemployment rate at yearend was still somewhat higher than that of Hispanics and much higher than that for whites. While Hispanics did not register as strong an unemployment level decline as the others, 1988 was another exceptional year in terms of their employment growth.

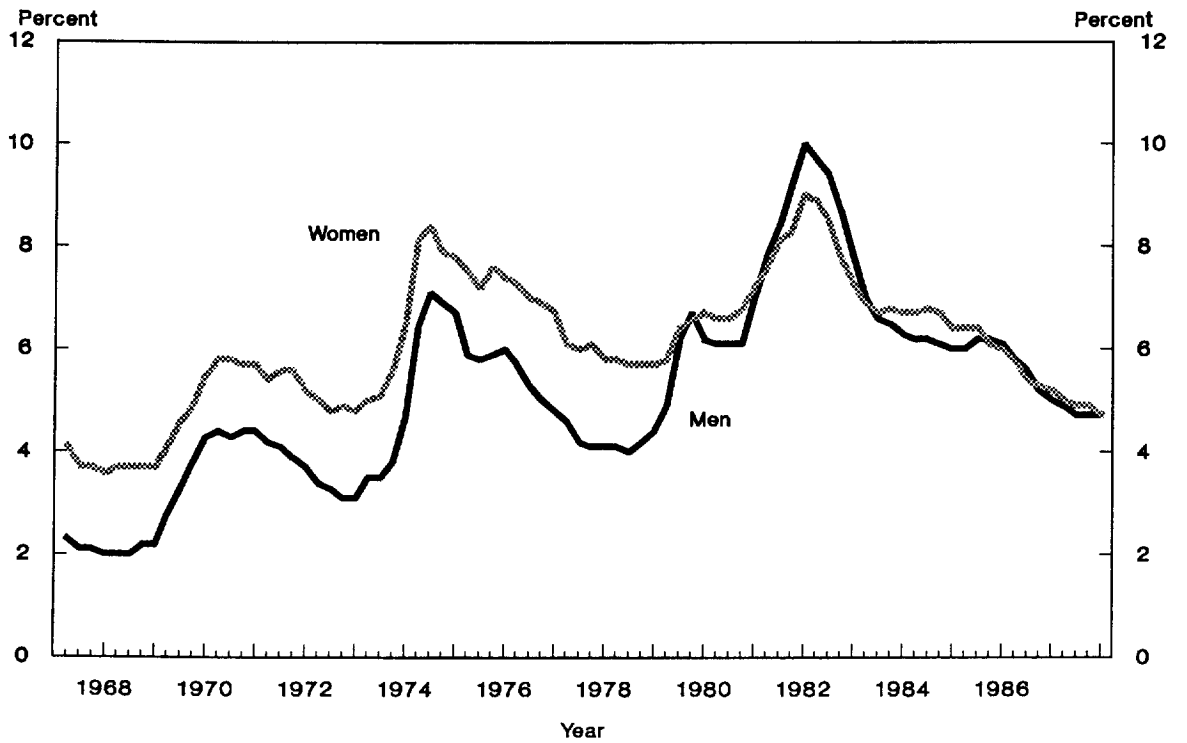
The Hispanic population has been showing very rapid growth throughout the 1980's, a time when overall population growth has been slowing. The Hispanic population surge has manifested itself in a rapidly expanding labor force, which grew by nearly 5 percent in 1988. The rate of labor force growth for Hispanics has consistently exceeded that of their population, and, during the current expansion, their labor force participation rate surpassed that of whites for the first time. In 1988, it continued to be the highest among the race and ethnic groups, at 67.6 percent.

Following the pace-setting rates of Hispanic population and labor force growth, Hispanic employment has also shown the fastest rise. In 1988, Hispanic employment grew at a very rapid rate of 5.4 percent. After being hit particularly hard in the last recession, Hispanics have since accounted for over 15 percent of total employment gains, about twice their share of total employment. Their proportion of total employment growth, large in the early years of the expansion, has become even greater in recent years.

Though dropping by a percentage point from the year before, the unemployment rate for black workers (11.3 percent) remained well above that for Hispanics (7.8 percent). In the second quarter, the black unemployment rate dipped below its prerecession levels for the first time, simultaneously attaining a 14-year low. The black teenage unemployment rate did not share in the over-the-year decline, holding at slightly above 30 percent at yearend.

As with Hispanics, blacks have shown greater rates of employment growth than whites in the expansion. Nonetheless, a large gap still remains between minority unemployment rates and that for whites; the Hispanic rate remains more than 1.5 times the white rate, and the black rate is still

Chart 4. Unemployment rates for men and women age 20 and over, quarterly averages, 1968–88



nearly 2.5 times higher.

After changing little in the first half of 1988, employment and labor force levels for blacks made some gains in the final two quarters, resulting in moderate over-the-year improvements for those measures. The second-half employment rise propelled the employment-population ratio for blacks to a record high 56.8 percent (since separate statistics for blacks became available in 1972). That ratio is 6.5 percentage points lower than the one for whites; the gap between the ratios was 9.4 points at the recession trough.

The 1988 rate of employment growth for whites returned to its 1985–86 pace of about 2 percent, after experiencing a sudden upturn in 1987 along with the rates for other groups. The ratio of employed whites to their population reached a new high—63.3 percent—as it has done in virtually every quarter since the recession. The unemployment situation for whites also improved in 1988, as the absolute number of unemployed persons dipped to its lowest level in the decade, despite continued labor force growth over the year. The already low unemployment rate for white workers edged down from the previous year and reached its lowest point since 1974—4.6 percent.

Other labor market developments

Two additional measures of the condition of the labor market are the counts of "discouraged workers" and "persons working part time for economic reasons." The number of *discouraged workers*—persons who want jobs but are not looking for them because they believe no work is available—was essentially unchanged over the year, at 950,000. This was a bit unusual in that the number of discouraged workers generally follows overall movements in the level of unemployment, which fell nearly 8 percent over the year. Women continued to make up slightly more than half of all discouraged workers, and black persons made up nearly a quarter.

The number of persons working *part time for economic reasons*—those working part time even though they would prefer a full-time job—was as high as 6.7 million during the 1981–82 recession, but had fallen by a million by early 1984. From then until the beginning of 1987, the measure was stubborn in its improvements, as it fluctuated in a very narrow range between 5.5 million and 5.7 million. In the last 2 years, that lower boundary was broken and, though erratic month-to-month changes have still been the norm, the level was down to 5.1 million by the end of 1988. Despite the recent improvement, this count of underutilized workers is still nearly 40 percent above its fourth-quarter 1979 level. Even given the present expansion's rapid employment growth, persons working part time for economic reasons accounted for a much higher percentage of total employment at the end of 1988 than in 1979—4.4 percent, compared with 3.7 percent.

Duration of unemployment. The median duration of unemployment ended the year at a postrecession low of 5.7 weeks. During the last half of 1987 and all of 1988, the number of persons becoming unemployed each month was remarkably consistent. That is, the number reporting they had been jobless for less than 5 weeks was between 3.0 million and 3.2 million for each month of the period. This means that the declines in the level and rate of unemployment over that period reflected a drop in the amount of time workers were remaining unemployed. In particular, the number of persons whose spell of unemployment was more than half a year declined rapidly, from around 1 million in mid-1987 to just under 750,000 in late 1988. Those workers made up 11 percent of all unemployed persons, as compared with 15 percent in the mid-1983 highpoint (long-duration joblessness usually lags by 6 months or longer). The current proportion of workers encountering such extreme job market difficulties is still quite high by historical standards for this far into an economic expansion.

Reasons for unemployment. Two related postrecession trends continued in 1988: a slight increase in the proportion of unemployed workers who *left* their last job and a slight decrease in the proportion who *lost* their last job. Such trends are usually considered signs of labor market health; in periods of economic uncertainty, the two trends reverse directions, as more workers are forced into unemployment attributable to cutbacks (and thereby become job losers) and fewer voluntarily give up their jobs (and become job leavers).

Regional unemployment. Just as decreases in joblessness were widely dispersed among the major age-sex and race-ethnic groups in 1988, unemployment declined in virtually all geographic regions of the country. However, as is always the case, there were wide differences in the incidence of unemployment among the regional labor markets. As the tabulation below shows, the unemployment rate (not seasonally adjusted) in the fourth quarter of 1988 was markedly lower than the national average in the Northeast, especially in New England. In contrast, jobless rates in the South Central States continued to be much higher than the national average, attributable principally to weaknesses in the energy-related industries.

Total United States	5.3		
Northeast	3.9	South	5.7
New England	2.9	South Atlantic	4.5
Mid-Atlantic	4.3	East South Central	6.9
		West South Central	7.0
North Central	5.3	West	5.0
East North Central	5.7	Mountain	5.4
West North Central	4.4	Pacific	4.8

IN SUMMARY, the economy maintained its expansion through a sixth full year in 1988, as growth in employment and declines in unemployment continued. As in past years, the service-producing sector paced the expansion, although the manufacturing industry demonstrated strength for the second straight year. The Nation's civilian jobless rate, at 5.3 percent in the final quarter, reached its lowest point since 1974, as most major worker groups shared in the improving job picture. □

Shiskin award nominations

The Washington Statistical Society invites nominations for the tenth annual Julius Shiskin Award in recognition of outstanding achievement in the field of economic statistics.

The award, in memory of the former Commissioner of Labor Statistics, is designed to honor an unusually original and important contribution in the development of economic statistics, or in the use of economic statistics in interpreting the economy. The contribution could be in statistical research, in the development of statistical tools, in the application of computers, in the use of economic statistics to analyze and interpret the economy, in the management of statistical programs, or in developing public understanding of measurement issues, to all of which Mr. Shiskin contributed. Either individuals or groups can be nominated.

The award will be presented, with an honorarium of $500, at the Washington Statistical Society's annual dinner in June 1989. A nomination form may be obtained by writing to the Julius Shiskin Award Committee, American Statistical Association, 1429 Duke Street, Alexandria, VA 22314-3402. Completed nomination forms must be received by April 1, 1989.