

# Strong job growth continues, unemployment declines in 1997

*The unemployment rate fell to a 28-year low last year, as job growth accelerated; real earnings reached their highest level yet in the 1990s*

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The labor market continued to improve in 1997 as job growth accelerated from the previous year and unemployment declined. Total nonfarm payroll employment increased by more than 3 million workers and the unemployment rate fell to 4.7 percent in the fourth quarter of 1997, the lowest level in nearly 28 years. During this sixth year of job market expansion, earnings growth accelerated and real average hourly earnings of private production or nonsupervisory workers posted their largest increases in 21 years.

This article summarizes labor market developments for 1997 and describes the economic context in which these developments occurred. Unless otherwise noted, the data presented are quarterly averages, and 1997 changes represent the difference between the fourth quarters of 1996 and 1997.

## Overview

The U.S. economy expanded at a solid pace in 1997. The gross domestic product, or GDP, adjusted for inflation grew by 3.8 percent over the year, much faster than in 1996. (See table 1.) Almost every sector of the economy showed improvement in 1997. For most of the year, consumers reacted to a strong job market and rising personal incomes by increasing their expenditures on goods and services. The consumer confidence index advanced by nearly 17 percent to record levels by yearend. Consumers also benefited from modest price increases; in 1997, the Consumer Price Index for All Urban Consumers

(CPI-U) rose by just 1.9 percent, a very small advance by historical standards. The housing market also continued to show strength in 1997, although the pace of new home sales slowed somewhat from 1996.

## Industry employment

The U.S. job market remained strong throughout 1997. (See chart 1 and table 2.) The annual rate of employment growth as measured by the Current Employment Statistics (CES) survey was 2.5 percent, four-tenths of a percentage point above that posted a year earlier.

By the end of 1997, the nonfarm job market had completed nearly 6 years of uninterrupted growth. Following the 1990–91 recession,<sup>1</sup> employment floundered for a year before turning upward in 1992. Job growth then accelerated until peaking in 1994, when 3.8 million jobs were added. Employment growth slowed in 1995, but strengthened slightly in 1996.

Employment growth accelerated again in 1997 and nonfarm payrolls increased by more than 3 million workers, although the pace of job growth varied considerably across industries.<sup>2</sup> Nine of seventy-three major industry groups added more than 100,000 workers. On the other hand, five industries each lost at least 10,000 workers, and employment in these industries fell by a combined 124,000. The Federal Government and the apparel and other textiles industry accounted for more than two-thirds of these losses. The industries with the greatest employment gains and losses for the year are shown in table 3.

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More than half of the major industry divisions experienced accelerated job growth when compared with 1996.<sup>3</sup> In contrast, employment expansion for retail trade and construction decelerated in 1997. The following discussion groups the major industry divisions according to their growth in 1997 compared with 1996. Within each division, specific industries with notable employment gains or losses are discussed.

*Accelerated growth.* Manufacturing exhibited the most dramatic change in trend in 1997. The industry division added 192,000 workers, following a loss of 44,000 during the previous year. In addition, the average workweek of production workers increased slightly to 42.1 hours, extremely long by historical standards. Factory overtime hours reached an all-time high of 4.9 hours.

The majority of manufacturing job gains occurred in the durable goods industries, in which employment growth continued nonstop from the fourth quarter of 1996 until the end of 1997. Two industries—*transportation equipment* and *industrial machinery and equipment*—added more than 65,000 workers each to payrolls. Growth in each industry was sharply higher than in 1996.

Motor vehicles and equipment and aircraft and parts account for all of the job growth in transportation equipment manufacturing. Employment in motor vehicles rebounded from a decline in 1996 and grew by 26,000, about the same as in 1995. Aircraft and parts accounts for less than 30 percent of employment in the transportation equipment industry, yet contributed over 60 percent of the job growth in 1997. It was the second year of employment expansion in aircraft and parts and followed job losses over the 6 years prior to 1996. Analysts have attributed recent strength to rising orders for aircraft from the private sector, despite shortages of parts and skilled labor.<sup>4</sup>

In contrast to the robust job performance of durable goods manufacturing, nondurables manufacturing continued to post job losses, although at a slower pace. *The apparel and other textiles* and *textile mill products* industries shed a combined total of 61,000 workers in 1997. The former lost the greatest number of jobs among all industries and the latter, the third largest number. However, employment declines in both industries decelerated in 1997, compared with the prior 2 years.

Five other major industry divisions had faster growth in 1997 than in 1996—services; government; wholesale trade; finance, insurance, and real estate; and transportation and public utilities.

Employment in the services industry division grew at a slightly faster pace than in 1996, adding more than 1.3 million workers in 1997. This increase represented both the fastest growth rate and the greatest number of jobs added in any industry division in 1997. Nevertheless, slower employment growth occurred in slightly more than half of the industries

**Table 1. Percent change in selected economic indicators, fourth-quarter averages, 1994–97<sup>1</sup>**

Indicator	1994–95	1995–96	1996–97
Nonfarm employment .....	2.0	2.1	2.5
Real gross domestic product <sup>2</sup> .....	2.0	2.8	3.8
Gross private domestic investment <sup>2</sup> .....	1.6	7.8	11.5
Real disposable personal income <sup>2</sup> .....	3.3	2.3	2.9
Personal consumption expenditures <sup>2</sup> .....	2.4	2.6	3.3
Home mortgage interest rate <sup>3</sup> .....	-17.7	3.9	-6.4
New home sales .....	3.4	11.2	5.7
Sales of existing homes .....	-3.9	7.2	8.7
Consumer confidence <sup>3</sup> .....	1.4	11.4	16.6
Industrial production .....	1.5	4.1	9.9
Inventories-to-sales ratio .....	.4	-1.3	-7
Consumer Price Index for All Urban Consumers (CPI-U) .....	2.6	3.2	1.9

<sup>1</sup> Seasonally adjusted annual rates, unless otherwise indicated.  
<sup>2</sup> Annual percent changes, adjusted for inflation.  
<sup>3</sup> Not seasonally adjusted.

within services, including its largest component, health services. Strength in amusement and recreation services, legal services, private educational services, social services, and engineering and management services offset slower growth in other industries within services.

Employment growth accelerated in *engineering and management services*, which was the third largest generator of jobs in 1997. Over 40 percent of the gain occurred in *management and public relations services*, which added 78,000 workers. Employment in these establishments has expanded, on average, by over 7 percent annually since 1988, the first year for which data are available. Job growth was more than 1 percentage point above that average in 1997. Employment in engineering and architectural services also grew more rapidly than it had in 1996, posting a net increase of 44,000 workers.

Amusement and recreation services generated twice as many jobs in 1997 as in the previous year. Nearly 80 percent of the jobs added were in the miscellaneous component, which includes a hodge-podge of recreation services such as amusement parks, golf clubs, and physical fitness centers.

Employment growth in *business services* advanced at the same rate as in 1996, 5.8 percent, and the industry continued to produce more jobs in 1997 than any other single industry. This industry contributed 14 percent of the total nonfarm employment increase, more than twice its “fair share” of job growth.

Two sectors of business services—*computer and data processing services* and *miscellaneous business services*—expanded more rapidly than in 1996. Computer and data pro-

cessing services added approximately 50,000 more workers in 1997 than it had over the prior year. Within this industry, growth occurred in 6 of the 9 components, including computer programming, prepackaged software, computer integrated systems design, and information retrieval services (such as Internet access).

Employment growth in *miscellaneous business service* establishments, which provide services such as guards, security systems, news syndicates, and photofinishing, accelerated slightly over the year, with the industry gaining 125,000 jobs.

Health services added more than 220,000 workers to payrolls in 1997. Although this increase placed it second in the list of job gainers numerically, the rate of growth was two-tenths of a percentage point below that for all industries combined. On the positive side, *hospitals*, along with *offices and clinics of medical doctors*, accounted for about two-thirds of the industry's job gains. Employment growth in hospitals and doctors' offices accelerated in 1997. However, the rate of increase fell off in more than half of the health services industries, with the most dramatic slowdowns occurring in *nursing and personal care facilities*, *dentists' offices*, and *home health care services*. Employment growth in each was about 1 percentage point less than in 1996. Pressure to cut health care costs and government investigations into allegations of health care fraud—along with a moratorium on the entry of new home health agencies into the medicare program prompted by the investigations—may have contributed to the slow growth in 1997.<sup>5</sup>

Government added approximately 266,000 workers in 1997. Continued declines in the Federal Government offset, in part, employment expansion in State and local governments. Most of the job growth occurred in *local government* (255,000), which boosted employment in its education component by about 160,000 for a second year. As the following tabulation shows, schools have added relatively more employees than students almost every year through both the 1980s and 1990s, and the student-to-employee ratio continued to tick down in 1997:

	<i>Enrollment<sup>6</sup></i> (thousands)	<i>Employment<sup>7</sup></i>	<i>Student-to- employment ratio</i>
1982 .....	39,565	5,075	7.80
1989 .....	40,543	5,906	6.86
1992 .....	42,823	6,232	6.87
1993 .....	43,465	6,372	6.82
1994 .....	44,109	6,516	6.77
1995 .....	44,912	6,629	6.78
1996 .....	45,700	6,796	6.72
1997 .....	46,353	6,957	6.66

In contrast to job growth at the local level of government, Federal employment decreased by 40,000. Employment in *Federal Government agencies, excluding the Postal Service*,

has been falling since the second quarter of 1992, and stands at its lowest level since 1966. (See chart 2.)

In 1997, more than two-thirds of the nonpostal employment loss in the Federal Government can be traced to the U.S. Department of Defense. The Department's civilian workers accounted for 55 percent of nonpostal Federal employment during the 1960s, but their proportion declined to less than 40 percent in 1997. In fact, Defense losses of civilian workers account for 65 percent of all nonpostal Federal employment declines since 1992, as indicated below:

	<i>Department of Defense</i>		
	<i>Federal Government, except Postal Service (in thousands)</i>	<i>Number (in thousands)</i>	<i>Percent of Federal, except Postal Service</i>
1992-97 .....	-336	-218	65
1992-93 .....	-50	-47	94
1993-94 .....	-75	-45	60
1994-95 .....	-75	-46	61
1995-96 .....	-77	-39	51
1996-97 .....	-59	-41	69

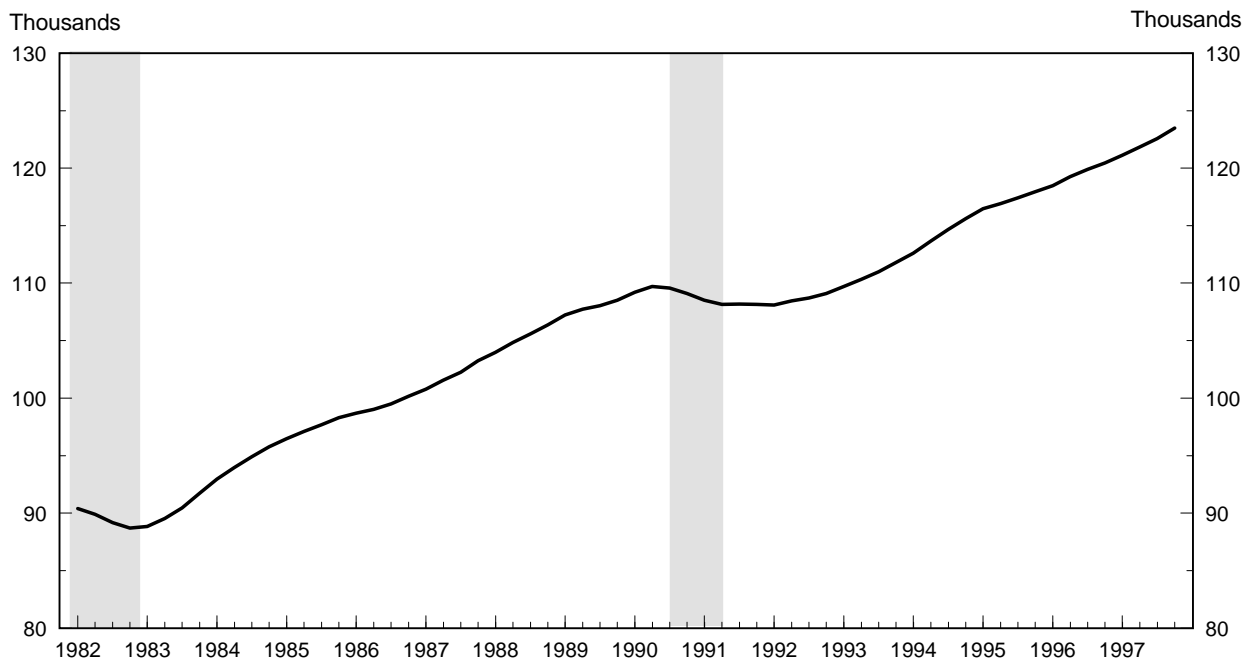
Establishments engaged in the wholesale trade of *durable goods* have enjoyed 5 consecutive years of employment growth. In 1997, the number of workers in this industry group rose by 147,000, or 3.8 percent. Three wholesale trade industries—*professional and commercial equipment*; *electrical goods*; and *machinery, equipment, and supplies*—expanded by more than 30,000 workers each. Employment growth for the latter two industries accelerated compared to 1996.

Finance, insurance, and real estate added 50,000 more workers to payrolls in 1997 than during the year before. Employment growth in most of *finance* and *insurance* gained momentum in 1997, while *real estate* added about the same number of workers as in 1996.

After reaching a trough in 1995, employment in finance experienced substantial growth in 1996, and was even more robust in 1997. *Security and commodity brokers* account for less than 20 percent of finance employment, but added nearly 40 percent of job gains over the year. In contrast, *depository institutions*, with nearly 60 percent of the employment in finance, accounted for less than 25 percent of the growth in 1997. Despite slower-than-average growth, employment in depository institutions more than doubled the increases posted the year before. Job growth in *mortgage bankers and brokers* was well above the national average, but fell short, by half, of gains made in 1996. The pattern of employment increase in this industry over the past 2 years has paralleled that in construction, a related industry.

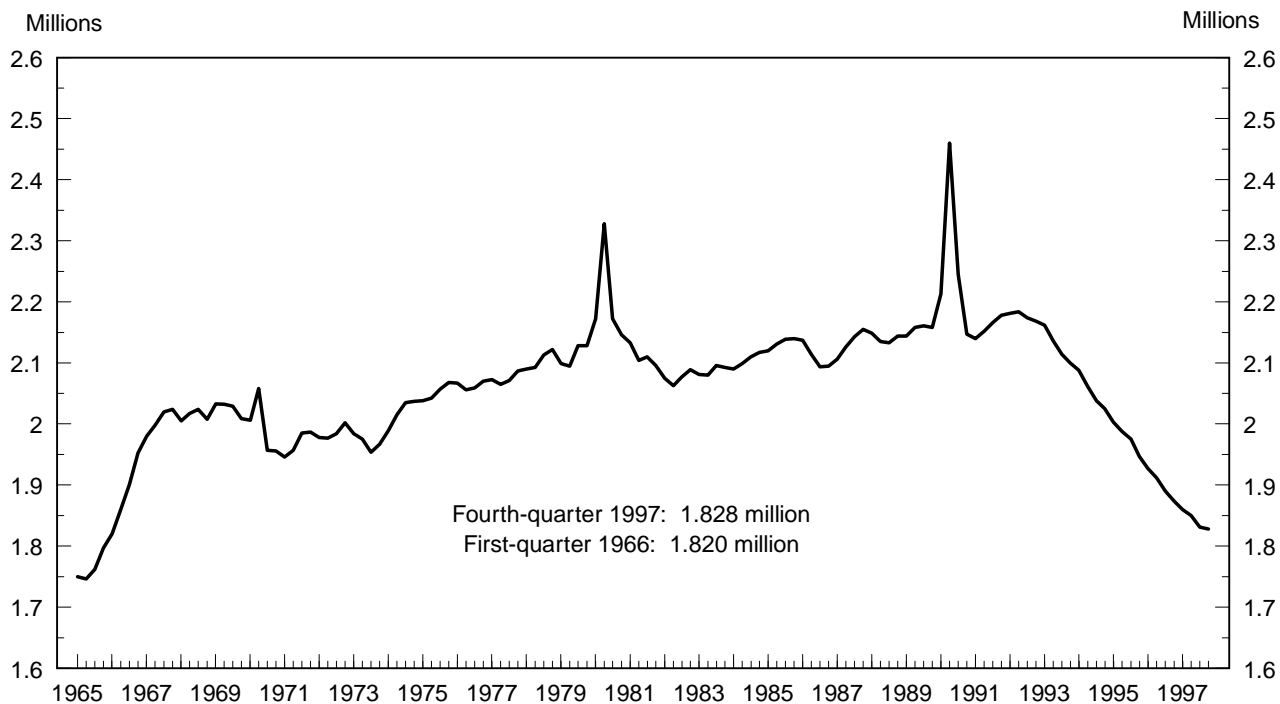
Transportation and public utilities was the third fastest growing industry division behind services and construction in

**Chart 1. Total nonfarm employment, seasonally adjusted quarterly averages, 1982–97**



NOTE: Shaded areas denote recessionary periods, as designated by the National Bureau of Economic Research.

**Chart 2. Federal (except Postal Service) employment, seasonally adjusted quarterly averages, 1965–97**



**Table 2. Employees on nonfarm payrolls by industry, seasonally adjusted quarterly averages, 1994–97**

[Numbers in thousands]

Industry	Fourth-quarter 1994	Fourth-quarter 1995	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997	
				First quarter	Second quarter	Third quarter	Fourth quarter	Number	Percent
Total nonfarm .....	115,609	117,949	120,452	121,138	121,854	122,575	123,481	3,029	2.5
Total private .....	96,380	98,610	100,953	101,598	102,259	102,829	103,716	2,763	2.7
Goods-producing .....	24,157	24,293	24,509	24,635	24,694	24,750	24,895	386	1.6
Mining .....	595	574	571	573	574	574	573	2	.4
Metal mining .....	49	52	54	54	54	54	53	-1	-1.9
Coal mining .....	110	101	94	93	93	91	90	-4	-4.3
Oil and gas extraction .....	331	316	316	318	320	322	322	6	1.9
Nonmetallic minerals, except fuels .....	105	105	107	108	108	108	107	0	.0
Construction .....	5,086	5,231	5,494	5,585	5,616	5,635	5,687	193	3.5
General building contractors .....	1,209	1,219	1,273	1,294	1,300	1,306	1,326	53	4.2
Heavy construction, except building .....	745	758	772	781	770	762	762	-10	-1.3
Special trade contractors .....	3,132	3,254	3,450	3,510	3,547	3,566	3,599	149	4.3
Manufacturing .....	18,476	18,488	18,444	18,476	18,504	18,541	18,636	192	1.0
Durable goods .....	10,581	10,707	10,791	10,835	10,870	10,940	11,018	227	2.1
Lumber and wood products .....	767	772	787	793	799	797	802	15	1.9
Furniture and fixtures .....	512	507	504	507	507	508	511	7	1.4
Stone, clay, and glass products .....	537	538	542	543	540	541	542	0	.0
Primary metal industries .....	708	712	707	708	709	711	717	10	1.4
Fabricated metal products .....	1,415	1,438	1,457	1,462	1,469	1,473	1,485	28	1.9
Industrial machinery and equipment .....	2,015	2,097	2,116	2,131	2,147	2,163	2,182	66	3.1
Computer and office equipment .....	350	359	365	370	377	383	385	20	5.5
Electronic and other electrical equipment .....	1,595	1,641	1,649	1,645	1,646	1,661	1,674	25	1.5
Electronic components and accessories .....	556	599	609	612	623	636	649	40	6.6
Transportation equipment .....	1,790	1,765	1,789	1,805	1,812	1,840	1,861	72	4.0
Motor vehicles and equipment .....	947	972	960	966	961	974	986	26	2.7
Aircraft and parts .....	469	431	475	487	499	513	521	46	9.7
Instruments and related products .....	849	845	855	854	855	858	861	6	.7
Miscellaneous manufacturing industries .....	392	390	386	387	387	387	383	-3	-8
Nondurable goods .....	7,894	7,781	7,653	7,641	7,633	7,601	7,618	-35	-5
Food and kindred products .....	1,678	1,701	1,687	1,696	1,695	1,684	1,699	12	.7
Tobacco products .....	42	42	42	42	41	40	41	-1	-2.4
Textile mill products .....	681	645	617	613	608	606	603	-14	-2.3
Apparel and other textile products .....	976	903	844	831	819	808	797	-47	-5.6
Paper and allied products .....	695	689	679	678	676	675	677	-2	-3
Printing and publishing .....	1,543	1,544	1,536	1,534	1,546	1,548	1,551	15	1.0
Chemicals and allied products .....	1,046	1,036	1,028	1,028	1,029	1,024	1,029	1	.1
Petroleum and coal products .....	150	142	141	139	139	138	137	-4	-2.8
Rubber and miscellaneous plastics products .....	972	978	985	987	988	989	994	9	.9
Leather and leather products .....	111	102	94	94	93	90	89	-5	-5.3
Service-producing .....	91,452	93,656	95,943	96,504	97,159	97,825	98,586	2,643	2.8

**Table 2. Continued—Employees on nonfarm payrolls by industry, seasonally adjusted quarterly averages, 1994–97**

[Numbers in thousands]

Industry	Fourth-quarter 1994	Fourth-quarter 1995	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997	
				First quarter	Second quarter	Third quarter	Fourth quarter	Number	Percent
Transportation and public utilities .....	6,060	6,185	6,295	6,377	6,429	6,402	6,494	199	3.2
Transportation .....	3,830	3,956	4,072	4,142	4,186	4,161	4,239	167	4.1
Railroad transportation .....	241	236	229	227	227	227	228	-1	-4
Local and interurban passenger transit .....	408	425	447	453	458	461	460	13	2.9
Trucking and warehousing .....	1,555	1,605	1,646	1,664	1,683	1,701	1,705	59	3.6
Water transportation .....	174	174	173	175	177	177	177	4	2.3
Transportation by air .....	1,047	1,094	1,138	1,179	1,192	1,143	1,214	76	6.7
Pipelines, except natural gas .....	17	15	14	14	14	14	14	0	.0
Transportation services .....	388	407	424	430	435	438	441	17	4.0
Communications and public utilities .....	2,230	2,229	2,223	2,235	2,242	2,241	2,255	32	1.4
Communications .....	1,306	1,325	1,346	1,359	1,371	1,375	1,392	46	3.4
Electric, gas, and sanitary services .....	924	904	877	876	871	866	864	-13	-1.5
Wholesale trade .....	6,262	6,407	6,549	6,591	6,629	6,675	6,728	179	2.7
Durable goods .....	3,625	3,746	3,846	3,877	3,909	3,952	3,993	147	3.8
Nondurable goods .....	2,637	2,662	2,702	2,714	2,720	2,723	2,735	33	1.2
Retail trade .....	20,832	21,312	21,850	21,928	22,045	22,188	22,352	502	2.3
Building materials and garden supplies .....	855	870	909	918	930	928	931	22	2.4
General merchandise stores .....	2,655	2,686	2,762	2,764	2,795	2,814	2,843	81	2.9
Department stores .....	2,319	2,354	2,420	2,429	2,449	2,466	2,493	73	3.0
Food stores .....	3,309	3,393	3,464	3,476	3,483	3,505	3,520	56	1.6
Automotive dealers and service stations .....	2,151	2,211	2,300	2,311	2,317	2,325	2,341	41	1.8
New and used car dealers .....	980	1,006	1,045	1,053	1,055	1,057	1,061	16	1.5
Apparel and accessory stores .....	1,151	1,105	1,107	1,105	1,100	1,100	1,109	2	.2
Furniture and home furnishings stores .....	921	953	1,011	1,022	1,031	1,045	1,061	50	4.9
Eating and drinking places .....	7,171	7,422	7,532	7,544	7,579	7,628	7,655	123	1.6
Miscellaneous retail establishments .....	2,620	2,673	2,764	2,787	2,810	2,843	2,891	127	4.6
Finance, insurance, and real estate .....	6,853	6,820	6,951	6,981	7,027	7,069	7,132	181	2.6
Finance .....	3,265	3,240	3,336	3,357	3,388	3,415	3,458	122	3.7
Depository institutions .....	2,050	2,018	2,029	2,034	2,043	2,048	2,059	30	1.5
Commercial banks .....	1,479	1,461	1,473	1,480	1,487	1,491	1,499	26	1.8
Savings institutions .....	292	271	257	255	253	252	251	-6	-2.3
Nondepository institutions .....	468	479	530	532	541	549	559	29	5.5
Mortgage bankers and brokers .....	221	213	238	241	243	246	252	14	5.9
Security and commodity brokers .....	522	532	565	576	585	596	610	45	8.0
Holding and other investment offices .....	225	211	212	215	219	222	231	19	9.0
Insurance .....	2,230	2,219	2,220	2,218	2,223	2,231	2,248	28	1.3
Insurance carriers .....	1,543	1,519	1,507	1,503	1,504	1,510	1,522	15	1.0
Insurance agents, brokers, and services .....	687	700	713	715	719	721	725	12	1.7
Real estate .....	1,357	1,360	1,395	1,406	1,416	1,423	1,426	31	2.2
Services .....	32,217	33,593	34,800	35,086	35,436	35,745	36,115	1,315	3.8
Agricultural services .....	579	592	637	648	667	676	686	49	7.7
Hotels and other lodging places .....	1,639	1,676	1,732	1,745	1,751	1,750	1,760	28	1.6
Personal services .....	1,145	1,164	1,194	1,196	1,188	1,185	1,190	-4	-3

**Table 2. Continued—Employees on nonfarm payrolls by industry, seasonally adjusted quarterly averages, 1994–97**

[Numbers in thousands]

Industry	Fourth-quarter 1994	Fourth-quarter 1995	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997	
				First quarter	Second quarter	Third quarter	Fourth quarter	Number	Percent
Business services .....	6,526	6,997	7,405	7,525	7,619	7,690	7,836	431	5.8
Services to buildings .....	872	891	897	895	903	899	905	8	.9
Personnel supply services .....	2,394	2,530	2,713	2,763	2,748	2,754	2,818	105	3.9
Help supply services .....	2,125	2,235	2,398	2,439	2,412	2,414	2,475	77	3.2
Computer and data processing services .....	1,000	1,146	1,246	1,279	1,322	1,361	1,402	156	12.5
Auto repair, services, and parking .....	990	1,041	1,108	1,122	1,133	1,140	1,152	44	4.0
Miscellaneous repair services .....	345	365	379	380	384	388	389	10	2.6
Motion pictures .....	456	503	529	530	532	546	553	24	4.5
Amusement and recreation services .....	1,354	1,430	1,481	1,493	1,535	1,569	1,584	103	7.0
Health services .....	9,079	9,328	9,550	9,599	9,663	9,713	9,772	222	2.3
Offices and clinics of medical doctors .....	1,568	1,637	1,699	1,718	1,736	1,748	1,770	71	4.2
Nursing and personal care facilities .....	1,663	1,708	1,745	1,751	1,761	1,764	1,767	22	1.3
Hospitals .....	3,760	3,785	3,834	3,846	3,863	3,884	3,910	76	2.0
Home health care services .....	589	652	672	677	683	685	683	11	1.6
Legal services .....	923	921	938	944	952	959	968	30	3.2
Educational services .....	1,907	1,988	2,039	2,045	2,066	2,096	2,119	80	3.9
Social services .....	2,265	2,364	2,424	2,438	2,466	2,498	2,517	93	3.8
Child day care services .....	539	564	576	579	586	597	596	20	3.5
Residential care .....	621	653	681	687	696	704	712	31	4.6
Museums and botanical and zoological gardens .....	79	82	86	87	88	88	89	3	3.5
Membership organizations .....	2,112	2,162	2,190	2,192	2,201	2,206	2,205	15	.7
Engineering and management services .....	2,633	2,774	2,894	2,926	2,975	3,025	3,077	183	6.3
Engineering and architectural services .....	794	824	851	862	872	882	895	44	5.2
Management and public relations .....	743	833	902	918	942	965	980	78	8.6
Government .....	19,229	19,339	19,499	19,540	19,594	19,746	19,765	266	1.4
Federal .....	2,854	2,797	2,731	2,716	2,702	2,686	2,691	-40	-1.5
Federal, except Postal Service .....	2,025	1,947	1,874	1,860	1,850	1,831	1,828	-46	-2.5
State government .....	4,625	4,624	4,620	4,622	4,637	4,666	4,671	51	1.1
State government education .....	1,907	1,915	1,925	1,929	1,944	1,965	1,968	43	2.2
Other State government .....	2,718	2,709	2,695	2,693	2,693	2,701	2,703	8	.3
Local government .....	11,750	11,918	12,149	12,202	12,256	12,394	12,404	255	2.1
Local government education .....	6,530	6,645	6,806	6,844	6,870	6,980	6,965	159	2.3
Other local government .....	5,219	5,272	5,342	5,358	5,386	5,413	5,439	97	1.8

1997, adding about 200,000 jobs to payrolls. Three industries within this division—*trucking and warehousing*, *transportation by air*, and *communications*—accounted for approximately 90 percent of over-the-year job growth.

Transportation by air, a rapidly expanding industry, experienced a major work stoppage that affected the August 1997 employment data. Approximately 185,000 workers in the air courier industry were on strike for 16 days in August and remained off payrolls for the entire survey week. Most of the strikers had returned to work by the following September survey period. In response to the strike, about 11,000 workers

were added in other transportation companies and in the U.S. Postal Service during this period.

In contrast to strength in the transportation and communications industries, employment in *electric, gas, and sanitary services* continued to decline for a sixth straight year, but losses in 1997 were about half those recorded in 1996. Restructuring resulting from deregulation, along with mergers and acquisitions, helped to pull down employment levels over the year.

*Slowing growth.* Retail trade accounted for more than 15 percent of total nonfarm employment gains over the year

(502,000 jobs), but growth slowed modestly compared with 1996. In fact, half of the retail industries posted slower employment growth rates in 1997 than in the prior year.

Job growth in *automotive dealers and service stations* slowed by more than 50 percent in 1997. This industry added only 41,000 workers, compared to nearly 90,000 over the preceding year.

Furniture and home furnishings stores and building materials and garden supply retailers, two industries related to new home sales and construction, experienced significantly slower employment growth in 1997 compared with the previous year. Building materials added only about half as many jobs as in 1996. Although employment expansion in furniture stores fell by 1.2 percentage points from the prior year's rate, the industry's job growth remained stronger than the national average.

Three industries—*eating and drinking places, miscellaneous retail establishments, and general merchandise stores*—contributed about half of total retail job gains; they each fared somewhat better in 1997 than in the prior year. Eating and drinking places added 123,000 workers, but the pace of employment growth was much slower than in the economy in general. Miscellaneous retail establishments, which account for just 13 percent of jobs in retail trade, added a quarter of the net retail employment growth in 1997. This industry is composed of a wide variety of retail businesses such as pharmacies, liquor stores, and mail-order houses.

Construction was the second-fastest growing industry division in 1997. Nevertheless, this industry division added about 70,000 fewer jobs than it did in 1996. While still quite strong, employment expansion was slower within 7 of the 9 segments of *special trade contractors*, in which construction jobs are concentrated. Special trade contractors, the third-largest producer of jobs in 1996, ranked only fifth a year later, as employment growth slowed. This performance is consistent with economic indicators related to the construction industry. New home sales, housing completions, and construction expenditures, while still increasing, slowed during 1997 compared with 1996.

*Heavy construction* lost 10,000 jobs in 1997, compared with a 14,000 gain the year before. Losses were concentrated in the construction of bridges, tunnels, and sewer and utility lines.

The industry comparisons in this section were based on data from the Current Employment Statistics survey. The following analysis is based on data from the Current Population Survey (CPS).

### The workers: demographic differences

Employment data from the household survey also reflect the solid job growth that prevailed in 1997. One way to assess the strength of the labor market is to compare its recent performance with that during a previous business cycle expan-

**Table 3. Employment gains and losses in the total nonfarm sector and in selected industries,<sup>1</sup> year ending fourth-quarter 1997**

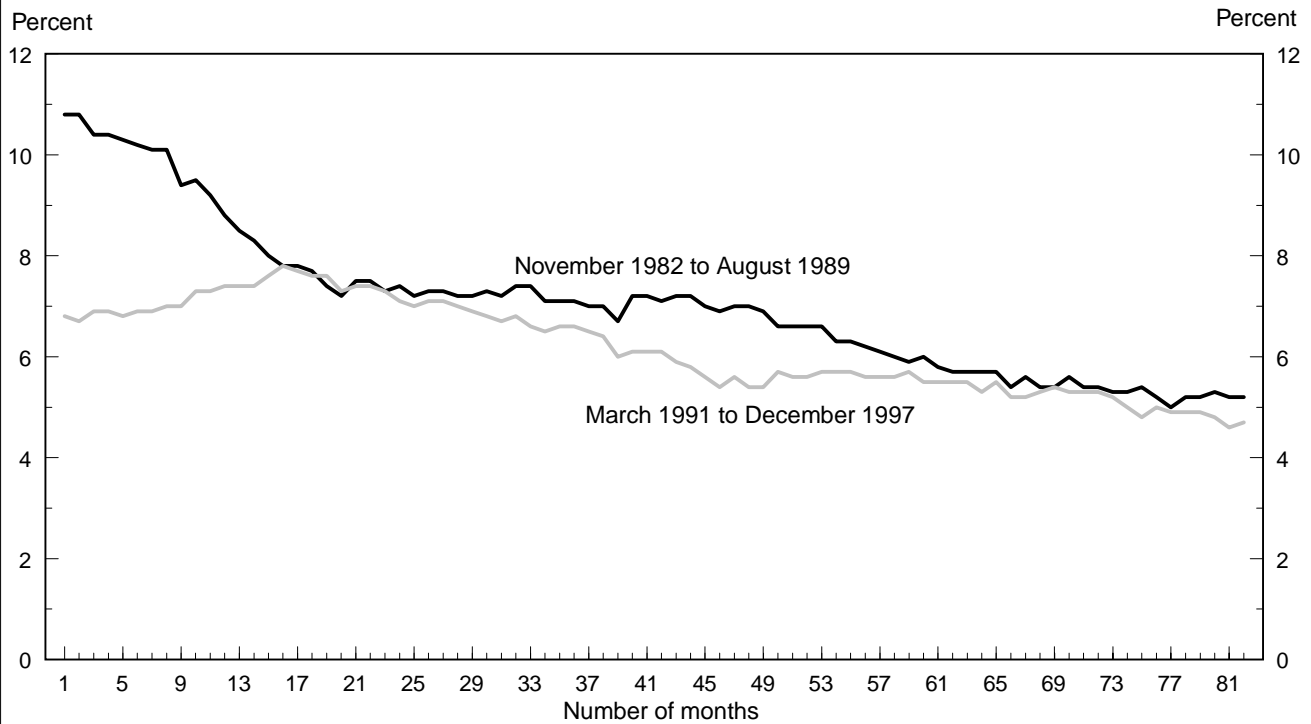
Industry	Fourth-quarter 1997 employment (thousands)	Percent of total nonfarm	Change, year ending fourth-quarter 1997		
			Number (thousands)	Percent	Percent of total
Total nonfarm .....	123,481	100.0	3,029	2.5	100.0
<b>Greatest gains</b>					
Business services .....	7,836	6.3	431	5.8	14.2
Health services .....	9,772	7.9	222	2.3	7.3
Engineering and management services ..	3,077	2.5	183	6.3	6.0
Local government education .....	6,965	5.6	159	2.3	5.2
Special trade contractors .....	3,599	2.9	149	4.3	4.9
Wholesale trade, durable goods .....	3,993	3.2	147	3.8	4.9
Miscellaneous retail establishments .....	2,891	2.3	127	4.6	4.2
Eating and drinking places .....	7,655	6.2	123	1.6	4.1
Amusement and recreation services .....	1,584	2.8	103	7.0	3.4
<b>Greatest losses</b>					
Heavy construction, except building .....	762	.6	-10	-1.3	-.3
Electric, gas, and sanitary services .....	864	.7	-13	-1.6	-.4
Textile mill products .....	603	.5	-14	-2.3	-.5
Federal Government .....	2,691	2.2	-40	-1.5	-1.3
Apparel and other textiles .....	797	.6	-47	-5.6	-1.6

<sup>1</sup>Industries with employment gains of 100,000 or more or losses of 10,000 or more are shown in the table. This comparison covers industries at the 2-digit SIC

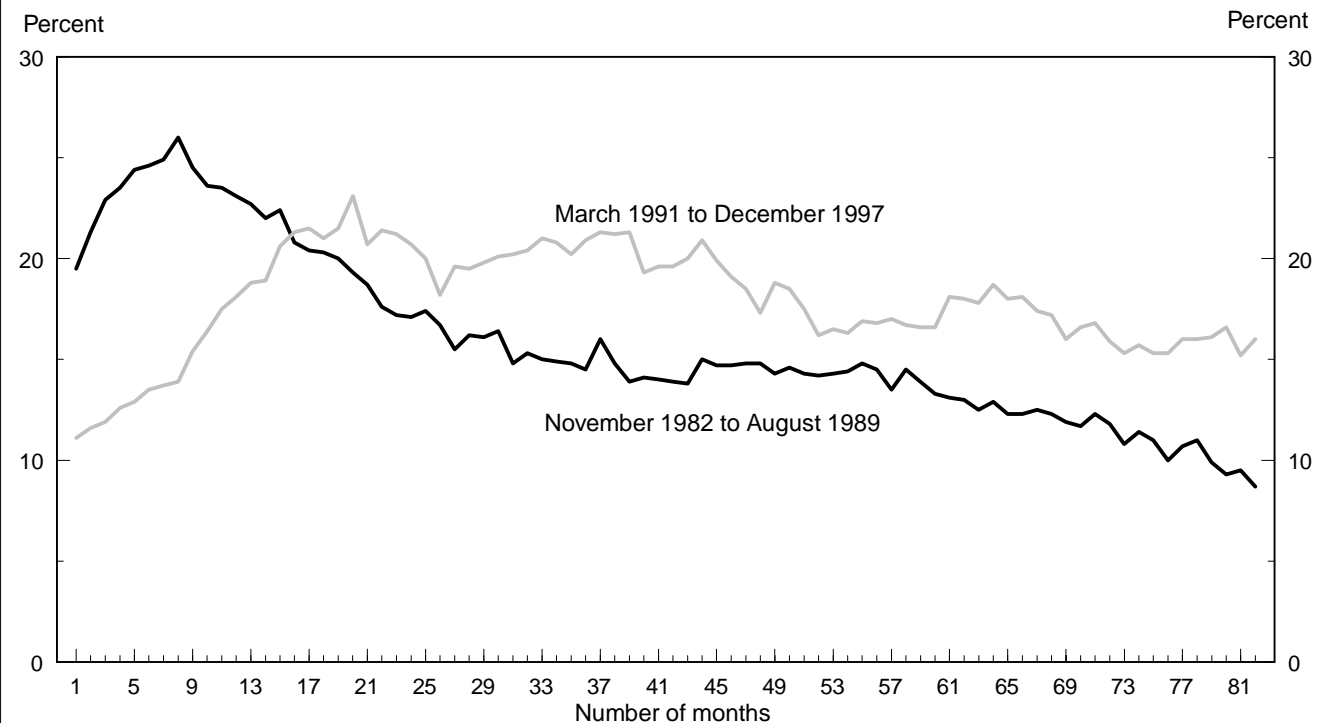
level for the private economy, and government activities at the total Federal, State education and noneducation, and local education and noneducation levels.



**Chart 3. Unemployment rates, seasonally adjusted, 82 months after business cycle trough**



**Chart 4. Long-term unemployment as a proportion of total unemployment, seasonally adjusted, 82 months after business cycle trough**



**Table 4. Employment status of the civilian noninstitutional population 16 years and older by sex, age, race, and Hispanic origin, quarterly averages, seasonally adjusted, 1996–97**

[Numbers in thousands]

Characteristic	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997 <sup>1</sup>
		First quarter	Second quarter	Third quarter	Fourth quarter	
<b>TOTAL</b>						
Civilian labor force .....	134,944	135,844	136,103	136,379	136,813	1,552
Participation rate .....	67.0	67.1	67.1	67.1	67.1	.1
Employed .....	127,787	128,697	129,387	129,723	130,421	2,342
Employment–population ratio ...	63.4	63.6	63.8	63.8	64.0	.6
Unemployed .....	7,157	7,147	6,716	6,656	6,392	-791
Unemployment rate .....	5.3	5.3	4.9	4.9	4.7	-.6
<b>Men, 20 years and older</b>						
Civilian labor force .....	68,402	68,954	69,085	69,168	69,418	751
Participation rate .....	76.9	77.0	77.0	76.9	76.9	.0
Employed .....	65,391	65,916	66,255	66,348	66,612	972
Employment–population ratio ...	73.5	73.6	73.8	73.7	73.8	.3
Unemployed .....	3,011	3,038	2,830	2,820	2,806	-222
Unemployment rate .....	4.4	4.4	4.1	4.1	4.0	-.4
<b>Women, 20 years and older</b>						
Civilian labor force .....	58,633	58,898	59,100	59,342	59,437	802
Participation rate .....	60.2	60.4	60.5	60.6	60.5	.3
Employed .....	55,817	56,140	56,473	56,788	57,042	1,224
Employment–population ratio ...	57.3	57.5	57.8	57.9	58.1	.8
Unemployed .....	2,816	2,757	2,626	2,554	2,394	-423
Unemployment rate .....	4.8	4.7	4.4	4.3	4.0	-.8
<b>Both sexes, 16 to 19 years</b>						
Civilian labor force .....	7,909	7,993	7,919	7,869	7,958	-1
Participation rate .....	52.3	52.3	51.7	51.1	51.4	-.8
Employed .....	6,579	6,641	6,659	6,586	6,766	145
Employment–population ratio ...	43.5	43.5	43.5	42.8	43.7	.3
Unemployed .....	1,330	1,352	1,260	1,282	1,192	-146
Unemployment rate .....	16.8	16.9	15.9	16.3	15.0	-1.8
<b>White</b>						
Civilian labor force .....	113,869	114,411	114,596	114,683	115,040	976
Participation rate .....	67.4	67.5	67.5	67.4	67.5	.0
Employed .....	108,648	109,298	109,802	109,862	110,465	1,641
Employment–population ratio ...	64.3	64.5	64.7	64.6	64.8	.5
Unemployed .....	5,222	5,114	4,794	4,821	4,575	-666
Unemployment rate .....	4.6	4.5	4.2	4.2	4.0	-.6
<b>Black</b>						
Civilian labor force .....	15,309	15,413	15,413	15,648	15,634	320
Participation rate .....	64.4	64.6	64.4	65.1	64.7	.4
Employed .....	13,675	13,758	13,846	14,152	14,115	436
Employment–population ratio ...	57.6	57.6	57.8	58.9	58.4	.9
Unemployed .....	1,634	1,655	1,567	1,495	1,519	-116
Unemployment rate .....	10.7	10.7	10.2	9.6	9.7	-1.0
<b>Hispanic origin</b>						
Civilian labor force .....	13,118	13,656	13,725	13,869	13,916	446
Participation rate .....	67.4	68.1	67.8	68.0	67.6	.0
Employed .....	12,065	12,539	12,659	12,815	12,883	492
Employment–population ratio ...	62.0	62.5	62.6	62.8	62.6	.4
Unemployed .....	1,053	1,118	1,066	1,054	1,034	-45
Unemployment rate .....	8.0	8.2	7.8	7.6	7.4	-.6

<sup>1</sup>Data for 1997 are not strictly comparable with those shown for 1996 because of the introduction of revised population controls in January 1997. (See text footnote 8.) Estimates of over-the-year change have been adjusted to correct for this break in series.

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.

## Reconciling differences in employment estimates from the Current Population Survey (Household Survey) and the Current Employment Statistics Survey (Establishment Survey)

The Bureau of Labor Statistics (BLS) maintains two monthly data series of employment that are independently obtained: The estimate of total nonfarm jobs, derived from the Current Employment Statistics (CES) survey, and the estimate of total employment, derived from the Current Population Survey (CPS). (The CPS also provides information on unemployment whereas, the CES survey does not.) The CES survey is an employer-based survey that provides data on the number of jobs within industries, while the CPS is a survey of households that provides data by demographic characteristics, occupation, and industry. The surveys are largely complementary.

Employment estimates from the CPS pertain to persons in any type of work arrangement—including the self-employed and unpaid workers in family businesses—whereas those from the CES survey refer only to persons on nonfarm payrolls. As a result, the count of employment from the CPS is larger than that from the CES survey. Partially offsetting the higher estimate from the CPS is the fact that it is a count of persons and, as such, includes individuals only once, regardless of the number of jobs they hold. In contrast, the CES survey is a count of jobs and includes each job for persons who work in more than one establishment. It is possible, though, to make some adjustments to the CPS employment estimate so that it more closely matches the CES survey data.

A partial reconciliation of the two series is shown in the table below. It should be noted that the data shown are not necessarily representative of the difference between the two surveys at all points in the business cycle. Also, there are some differences in concepts and definitions that are not possible to quantify. For instance, the CPS provides information on persons aged 16 and over. By contrast, in the CES survey, any person who appears on a payroll record, regardless of age, is counted as employed.

Other differences in the surveys' methodology and coverage also preclude a perfect reconciliation of the two employment series. For example, the reference period for the CPS is the *week* that includes the 12th day of the month,

while, for the CES survey, it is the *pay period* that includes the 12th of the month. Obviously, pay periods vary in length and can be longer than 1 week. It is therefore possible for the CES survey estimate of employment to reflect a longer reference period than that used for the CPS.

Finally, coverage in the CPS includes household members who are part of the civilian noninstitutional population. Persons who are inmates of institutions, such as those confined in penal or mental facilities, residents of homes for the aged, and those who are on active duty in the Armed Forces, are excluded from the CPS. Also, only households that are in the United States are eligible to be sampled in the CPS. In this regard, the coverage of the CES survey is broader: uniformed military personnel who hold civilian jobs are counted in the CES survey because of their civilian employment, and persons who commute into the United States from Mexico or Canada and are employed by companies within the United States are counted as employed in the CES survey estimate.

### Reconciliation of employment estimates from the cps and the ces surveys, not seasonally adjusted

[In thousands]

Category	Fourth-quarter		Over-the-year change
	1996	1997	
CPS employment estimate .....	128,166	130,818	2,652
Less: Agricultural employment .....	3,300	3,245	-55
Nonagricultural:			
Self-employed workers .....	9,063	8,939	-124
Unpaid family workers .....	137	93	-44
Private household workers .....	974	929	-45
Unpaid absences from work ..	1,431	1,457	26
Plus: Multiple jobholders .....	5,419	5,063	-356
Agricultural services .....	789	777	-12
Adjusted CPS employment .....	119,469	121,995	2,526
CES survey employment estimate .....	121,375	124,447	3,072

NOTE: Changes in the household data do not incorporate the effects of the population controls introduced in January 1997.

sion. Employment grew by 2.0 percent in 1997 (as measured by the CPS),<sup>8</sup> or at about the same rate as that posted during a similar phase of the 1983–90 expansion.<sup>9</sup>

The trend in unemployment in 1997 mirrored that observed during a comparable period of the 1983–90 expansion. The most striking similarity was evident in the unemployment rate itself. In the sixth and seventh years following the official

ends of the respective recessions, the unemployment rates (seasonally adjusted) were of about the same magnitude and exhibited a very similar, slightly downward, trend. (See chart 3.) The ways in which these points were reached were quite different, in that labor market conditions were much slower to improve following the most recent downturn than during the recession of 1981–82.<sup>10</sup>

The feature of unemployment in which the current and previous expansions have differed most significantly is long-term unemployment. In more recent years, the proportion of the unemployed who had been looking for work for 27 weeks or longer has continued to be substantially higher than in similar phases of the 1983–90 expansion. In fact, during 1996 and 1997, long-term unemployment as a percentage of total unemployment ranged from 3 to 7 percentage points higher than it had at similar points in the business cycle expansion of the late 1980s. (See chart 4.)

## Total employed

*Employment.* Total employment increased by about 2.3 million in 1997, to a seasonally adjusted level of 130.4 million in the fourth quarter. The increase in employment in 1997 was nearly the same as that posted in 1996, with adult women accounting for about 1.2 million of the net change, and men, about 1 million. Employment of teenagers was up by 145,000 over the year. Among the race-ethnic groups, both Hispanics and blacks contributed disproportionate shares of the net increase in employment growth in 1997—21 and 19 percent, respectively. (See table 4.)

The proportion of the civilian noninstitutional population aged 16 and older who were employed—the employment-population ratio—also continued upward in 1997, increasing by 0.6 percentage point to 64.0 percent, a historical high. The ratio for adult women rose by 0.8 percentage point over the year, while that for adult men edged up by 0.3 percentage point. The measure was essentially unchanged among teenagers. Among the major race-ethnic groups, the employment-population ratio for whites increased by 0.5 percentage points in 1997 to 64.8 percent. The ratio for blacks also rose, from 57.6 to 58.4 percent, and the ratio for Hispanics was little changed at 62.6 percent.

Employment among full-time workers (those who usually work 35 hours or more per week at all jobs combined) continued to rise over the year. Consistent with the pattern since 1994, the proportion of total employment attributable to full-time workers rose over the year, while the share of part-time employment continued to decline.<sup>11</sup> Self-employment as a share of the total has declined slightly in recent years.

*Multiple jobholding.* On average, 8 million workers were multiple jobholders—that is, they held more than one job at a time—in 1997. The proportion of the total employed who were multiple jobholders was 6.1 percent. The multiple jobholding rate has changed little since 1994. As shown in the tabulation below, more than half of all “moonlighters” in 1997 combined a full-time job with a part-time one, while about 1 in 5 combined two part-time jobs.<sup>12</sup>

	<i>Percent distribution</i>		
	<i>Total</i>	<i>Men</i>	<i>Women</i>
Full-time job and part-time job .....	56.4	62.8	49.1
Two full-time jobs .....	3.0	4.0	1.8
All part-time jobs .....	21.2	12.3	31.4
Hours vary on one or more jobs .....	19.0	20.5	17.2

Similar proportions of employed men and women held more than one job, but women who did so were 2–1/2 times as likely as men to work two or more part-time jobs.

*Occupational employment.* Recently, there has been some shift in the distribution of net job growth among the major occupations. For example, in 1997, managerial and professional specialty occupations, which, over the course of the 1990s, had accounted for a disproportionately large share of the net increase in employment, grew by only 886,000, and accounted for about a third of the total increase (seasonally adjusted, quarterly data). In 1996, employment among managers and professionals rose by 1.4 million and made up over half of the total increase.

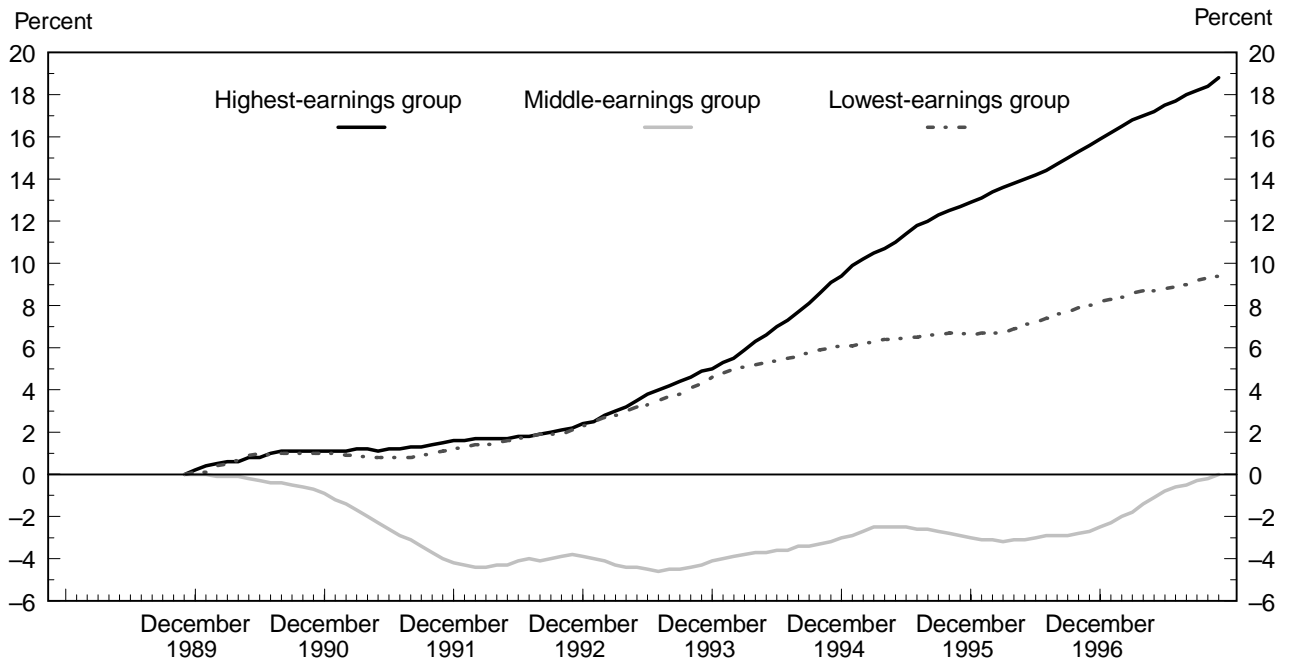
Conversely, employment levels among precision production, craft, and repair workers increased by more than half a million over the year. The share of the net increase attributable to these workers, 20 percent, was more than 3 times their contribution in 1996.

It has been widely perceived that so-called “blue-collar” employment is on the wane, given the lackluster growth in manufacturing. It also has been suggested that the nature of what is considered “blue-collar” work has been changing—that is, that such work has become somewhat less concentrated in manufacturing.<sup>13</sup> Although employment among precision production, craft, and repair workers and operators, fabricators, and laborers in manufacturing declined significantly during the labor market contraction of the early 1990s, some of that loss has been recouped in recent years. It is noteworthy, however, that employment in these occupations has shifted somewhat to other industries, such as construction and transportation and public utilities, and, to a lesser extent, services.

*Job quality.* Although considerable job growth has occurred in the U.S. economy over the past few years, questions have been raised as to the “quality” of the employment gains. Recent research into this issue, using earnings as a measure of job quality for a group of 90 major occupations and industries, reveals that most of the job growth since 1989 occurred in both higher-paying and lower-paying occupations.<sup>14</sup>

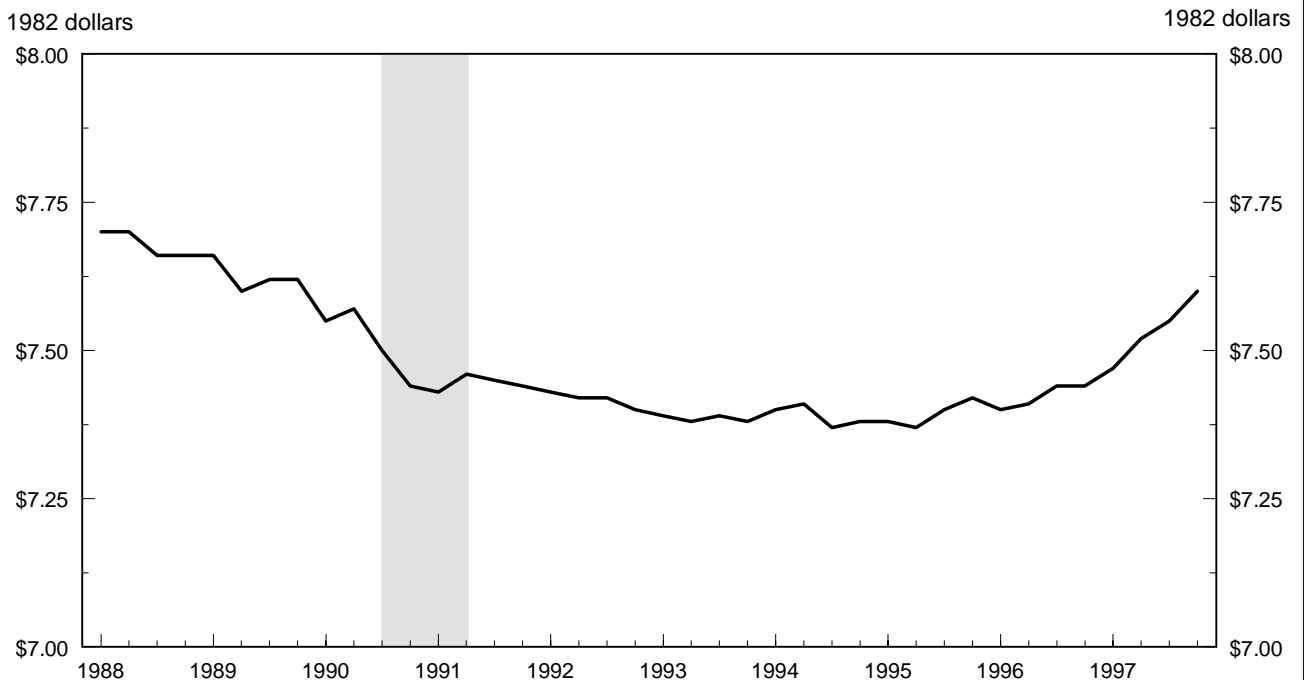
From 1989 to 1997, total employment increased by 11.3 million to 129.6 million, not seasonally adjusted. A time series of the employment growth among three earnings groups is pre-

**Chart 5. Employment growth or decline by earnings group, 1989–97**



NOTE: The percent change shown represents the percent growth (decline) in average employment between the 12 months ending in the month indicated and the average employment level in 1989.

**Chart 6. Real average hourly earnings, 1988–97**



NOTE: Shaded area denotes recessionary period, as designated by the National Bureau of Economic Research.

sented in chart 5. The data show the percent change in employment (on a 12-month moving average basis) for each of the three earnings groups, using the annual average for 1989 as the base.<sup>15</sup> Over the entire period, job growth surged by 18.8 percent in the highest-earnings group, twice the increase recorded in the lowest-earnings group. Employment in the middle-earnings category was unchanged over the period; this group had experienced notable declines during the early 1990s.

A more complete understanding of employment developments that transpired between 1989–97 can be obtained by looking more closely at specific occupation-industry groups within the three earnings categories, as presented in table 5.<sup>16</sup> Changes in employment between two distinct periods are com-

pared and contrasted. Most of the 1989–93 period was characterized by widespread economic weakness, sluggish employment growth, and increasing unemployment. Conversely, the years 1993–97 have been characterized by rapid economic expansion, strong job growth, and a declining unemployment rate.

Job growth in the highest-earnings group, which consists primarily of managers and professionals in nearly all industries, swelled between 1993 and 1997, and the compound annual rate of increase (3.2 percent) was the highest among the three earnings groups. This followed more modest employment gains among managerial and professional specialty occupations during the 1989–93 period. While recent job growth

**Table 5. Change in employment, 1989–93 and 1993–97, and 1993 median usual weekly earnings for selected occupations, and industries**

[Numbers in thousands]

Occupation	Industry	Change in employment, 1989–93 <sup>1</sup>		Change in employment, 1993–97 <sup>1</sup>		1993
		Number	Compound annual rate	Number	Compound annual rate	Median weekly earnings <sup>2</sup>
<b>Highest-earnings group</b>						
Total	...	1,968	1.2	5,638	3.2	( <sup>3</sup> )
Professional specialty	Manufacturing	-117	-1.7	250	3.5	\$818
Executive, administrative, and managerial	Manufacturing	-128	-1.3	450	4.3	803
Executive, administrative, and managerial	Transportation and public utilities	46	1.2	255	6.0	760
Executive, administrative, and managerial	Construction	-88	-2.2	346	8.2	699
Executive, administrative, and managerial	Finance, insurance, and real estate	-19	-.2	339	3.8	618
Sales occupations	Finance, insurance, and real estate	67	.9	174	2.2	602
Executive, administrative, and managerial	Services	508	2.6	1,408	6.1	597
Professional specialty	Services	1,322	2.7	1,813	3.4	577
<b>Middle-earnings group</b>						
Total	...	-1,635	-1.1	1,627	1.1	( <sup>3</sup> )
Precision production, craft, and repair	Manufacturing	-391	-2.5	143	.9	500
Precision production, craft, and repair	Construction	-151	-.9	439	2.5	461
Operators, fabricators, and laborers	Transportation and public utilities	237	2.4	285	2.6	459
Technicians and related support	Services	281	3.3	190	2.0	436
Executive, administrative, and managerial	Retail trade	109	1.7	241	3.5	422
Precision production, craft, and repair	Services	199	2.6	68	.8	412
Precision production, craft, and repair	Retail trade	-142	-3.0	78	1.7	407
Administrative support, including clerical	Manufacturing	-243	-2.6	-132	-1.6	392
Operators, fabricators, and laborers	Construction	-164	-2.8	191	3.4	375
Operators, fabricators, and laborers	Manufacturing	-1,134	-3.3	415	1.3	342
<b>Lowest-earnings group</b>						
Total	...	1,703	1.1	2,036	1.2	( <sup>3</sup> )
Administrative support, including clerical	Services	555	2.1	272	1.0	304
Sales occupations	Services	61	1.7	247	5.9	246
Farming, forestry, and fishing	Agriculture	-150	-1.4	200	1.9	228
Sales occupations	Retail trade	209	.6	760	2.2	223
Service occupations	Services	626	1.7	343	.9	216
Service occupations	Retail trade	297	1.6	175	.9	166

<sup>1</sup> Change (number and percent) was calculated from unrounded estimates.

<sup>2</sup> Data refer to all wage and salary workers aged 16 years and older.

<sup>3</sup> Not available.

Note: Detail will not sum to totals because only those specific occupation-industry groups that supplied a large proportion of the employment growth or

decline are presented. Employment change was calculated using annual averages for 1989, 1993, and 1997. To increase comparability with data for 1990 forward, data for 1989 were adjusted to incorporate 1990 census-based population controls. (See text footnote 16.) Beginning in January 1997, data reflect revised population controls used in the household survey.

among managers and professionals continued to be largest in the services industry, notable increases also occurred among managers in construction, transportation and public utilities, and finance, insurance, and real estate. There also was a notable rebound in employment among managers and professionals in manufacturing. (See table 5 and chart 5.)

Within the middle-earnings group, employment gains from 1993 to 1997 were equal to the losses sustained over the 1989–93 period. (See table 5.) During the labor market contraction of the early 1990s, there were widespread job losses in occupations within manufacturing and construction. As labor market conditions improved in 1994, employment in some of these cyclically sensitive jobs began to rebound. Since then, there has been a notable pickup in job growth among precision production, craft, and repair workers in construction. These developments—combined with the continued growth in employment of technicians in the services industry, of managers in retail trade, and of operators, fabricators, and laborers in transportation and public utilities—have enabled the middle-earnings group to recoup all of the job losses incurred during the early 1990s.

The annual rate of job growth in the lowest-earnings group was about the same for the 1989–93 and 1993–97 periods. Job growth remained concentrated among sales and service occupations in retail trade and clerical and service occupations in services.

**Labor force.** Labor force growth in 1997 was somewhat slower than that recorded over 1996. The number of persons either working or looking for work expanded by 1.6 million over the year, to 136.8 million. The labor force participation rate—the share of the civilian noninstitutional population that was in the labor force—was up slightly for adult women, and was unchanged for adult men. (See table 4.) The rate

**Table 6. Unemployed persons by reason for and duration of unemployment, quarterly averages, seasonally adjusted, 1996–97**

[Numbers in thousands]

Reason and duration	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997 <sup>1</sup>
		First quarter	Second quarter	Third quarter	Fourth quarter	
Total, 16 years and older .....	7,157	7,147	6,716	6,656	6,392	-791
<b>Reason for unemployment</b>						
Job losers and persons who completed temporary jobs .....	3,231	3,162	3,031	2,990	2,937	-294
On temporary layoff .....	965	965	932	893	913	-52
Not on temporary layoff .....	2,266	2,197	2,099	2,098	2,024	-242
Job leavers .....	827	821	804	853	693	-134
Reentrants .....	2,525	2,535	2,364	2,233	2,215	-310
New entrants .....	598	612	551	559	556	-42
<b>Duration of unemployment</b>						
Less than 5 weeks .....	2,658	2,625	2,518	2,498	2,504	-154
5 to 14 weeks .....	2,299	2,306	2,144	2,111	1,961	-338
15 weeks and over .....	2,225	2,129	2,078	2,088	1,940	-285
15 to 26 weeks .....	1,033	999	1,039	1,014	918	-115
27 weeks and over .....	1,192	1,130	1,038	1,074	1,022	-170
Median duration, in weeks .....	8.0	8.0	7.9	8.1	7.7	-3
Average (mean) duration, in weeks .....	16.1	15.7	15.3	16.1	16.1	.0

<sup>1</sup> The over-the-year estimate of change for total unemployment has been adjusted to account for the introduction of revised population controls in January 1997. (See text footnote 8.)

**Table 7. Persons unemployed 27 weeks or longer as a percent of the total unemployed by selected characteristics, annual averages, 1994–97**

Characteristic	1994	1995	1996	1997
Total, 16 years and older .....	20.3	17.3	17.4	15.8
Men .....	22.1	18.7	18.5	16.6
Women .....	18.1	15.6	16.2	14.9
16 to 19 years .....	9.4	8.7	8.7	8.0
20 to 24 years .....	14.0	12.7	12.9	12.3
25 to 34 years .....	20.6	17.4	16.8	15.0
35 to 44 years .....	24.9	20.8	21.3	19.4
45 to 54 years .....	29.6	25.1	25.1	23.2
55 to 64 years .....	30.0	25.3	28.5	23.9
65 years and older .....	27.4	25.9	25.7	24.6
White .....	19.3	15.8	16.0	14.1
Black .....	23.7	21.6	21.8	20.2
Hispanic origin .....	20.7	16.6	19.1	16.3
Managerial and professional specialty .....	23.6	20.6	20.3	18.8
Technical, sales, and administrative support .....	19.8	16.6	16.7	14.1
Service occupations .....	18.2	16.6	16.5	16.6
Precision production, craft, and repair .....	20.2	18.2	18.2	15.1
Operators, fabricators, and laborers .....	21.2	17.0	17.8	15.7
Permanent job losers .....	28.7	23.2	24.0	21.2

for teenagers slipped by 0.8 percentage point over the year to 51.4 percent. Since the first quarter of 1995, the labor force participation rate for teenagers has fallen by 2.4 percentage points.

## Unemployment and underutilization

Unemployment fell by 791,000 to 6.4 million in 1997, following a decline of less than a quarter million during the previous year. By the end of the year, the unemployment rate had dropped to 4.7 percent, its lowest point in nearly 28 years. The rates for all major worker groups declined over the year, except that for Hispanics, for which the change was not statistically significant. (See table 4.)

*Reasons for unemployment.* The number of persons who were unemployed because they had lost their jobs fell by 294,000 over the year, to 2.9 million. Of the two major subcategories of this group—those on temporary layoff (expecting recall) and those whose job loss was thought to be permanent—the latter made up the vast majority (82 percent) of the over-the-year decline. (See table 6.) The number of unemployed who were reentrants to the labor force also fell over the year, to 2.2 million. Between the fourth quarters of 1996 and 1997, the number of unemployed persons who had voluntarily left their last job—job leavers—declined slightly (by 134,000).

There had been virtually no change in this measure between the fourth quarter of 1995 and the fourth quarter of 1996.

The proportion of new job leavers—those who have been unemployed for less than 5 weeks—remained fairly constant over the year, at 297,000 (quarterly data, not seasonally adjusted). It has been suggested that an increase in this measure might indicate that workers would be more willing to quit their jobs because they feel confident about employment opportunities.<sup>17</sup> While this may be true, unemployed job leavers who had been out of work for less than 5 weeks accounted for only 0.2 percent of the total civilian labor force in the fourth quarter of 1997, and this figure has varied by no more than 0.1 percentage point for several years. In addition, this measure does not account for persons who quit their job and immediately become employed at another, or who quit their job and leave the labor force altogether. Hence, the number of new job leavers as a percent of the labor force may not be a particularly revealing measure of the amount of slack in the job market.

*Duration of unemployment.* In 1997, the number of persons unemployed for long periods (27 weeks and over) declined. (See table 6.) As mentioned earlier, however, the *proportion* of persons unemployed for half a year or more has remained unusually high relative to levels observed prior to the 1990–91 recession. In the fourth quarter of 1997, about 1 in 6 un-

**Table 8.** Range of alternative measures of labor underutilization, quarterly averages, not seasonally adjusted, 1996–97

[In percent]						
Measure	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997
		First quarter	Second quarter	Third quarter	Fourth quarter	
U-1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force	1.5	1.7	1.6	1.4	1.3	-0.2
U-2 Job losers and persons who completed temporary jobs, as a percent of the civilian labor force	2.3	2.8	2.1	2.0	2.0	-3
U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate)	5.0	5.7	4.9	4.8	4.4	-6
U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers	5.2	5.9	5.2	5.1	4.6	-6
U-5 Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers	6.0	6.8	5.9	5.7	5.3	-7
U-6 Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers	9.0	10.0	8.9	8.6	8.0	-1.0



**Table 9. Persons not in the labor force by desire and availability for work, age, and sex, annual averages, 1996–97**

[Numbers in thousands]

Category	Total		Age						Sex			
			16 to 24 years		25 to 54 years		55 years and over		Men		Women	
	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
Total not in labor force .....	66,647	66,837	11,160	11,343	18,720	18,552	36,768	36,942	24,119	24,454	42,528	42,382
Want a job now <sup>1</sup> .....	5,451	4,941	2,050	1,909	2,514	2,241	886	791	2,190	2,034	3,261	2,907
Searched for work in previous year <sup>2</sup> .....	2,290	2,084	950	875	1,108	997	232	212	1,005	917	1,285	1,168
Not available to work .....	732	669	365	346	328	289	40	34	277	257	455	412
Available to work .....	1,558	1,416	585	529	780	708	192	178	728	659	830	756
Reason not currently looking:												
Discouragement over job prospects <sup>3</sup> .....	397	343	115	107	225	184	58	52	233	200	164	143
Reasons other than discouragement .....	1,160	1,073	471	423	555	524	135	126	495	460	666	613
Did not search for work in previous year .....	3,161	2,857	1,100	1,034	1,407	1,245	654	579	1,185	1,118	1,976	1,739
Do not want a job now <sup>1</sup> .....	61,197	61,895	9,110	9,434	16,205	16,311	35,882	36,151	21,929	22,420	39,267	39,475

<sup>1</sup> Includes some persons who are not asked if they want a job.<sup>2</sup> Persons who had a job in the prior 12 months must have searched since being separated from that job.<sup>3</sup> Includes persons who believed that no work was available, those who could not find work, those who lacked necessary schooling or training, and

persons who believed that potential employers think they are too young or too old, or who believed that they were being discriminated against for other reasons.

NOTE: Beginning in January 1997, data reflect revised population controls used in the household survey.

employed persons had been looking for work for more than a half year. This ratio is down only slightly from 1 in 5 in mid-1992, when the overall unemployment rate began to decline.

It is not clear why the proportion of long-term unemployment has remained so high in the face of strong employment growth and low unemployment.<sup>18</sup> Research has shown that some groups, such as prime-age workers (those 25 to 54 years of age), managers, professionals, and permanent job losers, tend to experience more long-term unemployment than do others, as shown in table 7, and that these groups account for a larger share of unemployment than they did prior to the 1990–91 recession. However, this shift in the composition of the unemployed does not completely explain the persistently high degree of long-term unemployment in the current expansion.

*Other labor market measures.* The official unemployment rate is not the only measure of the extent to which labor resources are being utilized. The Bureau of Labor Statistics has developed a range of indicators, called *alternative measures of labor underutilization*, that can be used to supplement the jobless rate. Table 8 shows alternative measures U-3 through U-6 over the past year.<sup>19</sup> As with the official jobless rate (U-3, not seasonally adjusted), all of these measures trended down over the year.

Alternative measure U-4 adds persons classified as “discouraged” to the number of unemployed persons. Discouraged workers are those persons who say that they want a job,

were available for work, and had searched sometime in the previous 12 months, but had stopped looking for work because they believed there were no jobs available for them. The total number of discouraged workers declined slightly between 1996 and 1997, and U-4 trended down over the year. (See table 9.)

Alternative indicator U-5 includes all “marginally attached” workers. Compared with U-4, this broader group includes the discouraged as well as those who are not currently looking for work for reasons other than discouragement, such as transportation or child-care problems. In 1997, there were about 1.4 million of these “marginally attached” workers, down slightly from the previous year. (See table 9.) Reflecting this decline, U-5, while 0.9 percentage point higher than the official unemployment rate in the fourth quarter of 1997, also was down over the year.

The broadest of the alternative indicators, U-6, adds a group of the “underemployed” to the calculation. It represents the number of unemployed persons, plus all “marginally attached” workers (including discouraged workers), plus all persons employed part time for economic reasons, as a percent of the labor force plus all marginally attached workers. People are employed part time—that is, 1 to 34 hours per week—for various reasons. Some would prefer to work full time but, because of slack work, business conditions, or seasonal declines in demand, are unable to do so. This group, often labeled “persons employed part time for economic rea-

**Table 10. Unemployment rates, by census region and division, quarterly averages, seasonally adjusted, 1996–97**

[In percent]

Region and division	Fourth-quarter 1996	1997				Change, fourth-quarter 1996 to fourth-quarter 1997
		First quarter	Second quarter	Third quarter	Fourth quarter	
<b>Northeast</b> .....	5.5	5.6	5.5	5.4	5.1	-0.4
New England .....	4.7	4.5	4.9	4.1	4.1	-6
Middle Atlantic .....	5.8	6.0	5.8	5.8	5.4	-4
<b>South</b> .....	5.3	5.3	4.9	5.0	4.5	-8
South Atlantic .....	4.9	5.0	4.7	4.3	4.2	-7
East South Central .....	6.1	5.6	5.0	5.8	4.9	-1.2
West South Central .....	5.4	5.6	5.3	5.5	5.0	-4
<b>Midwest</b> .....	4.5	4.2	3.9	3.9	4.1	-4
East North Central .....	4.7	4.5	4.0	4.1	4.4	-3
West North Central .....	4.1	3.6	3.5	3.4	3.4	-7
<b>West</b> .....	6.3	5.9	5.5	5.5	5.3	-1.0
Mountain .....	5.0	4.7	4.4	3.9	4.2	-8
Pacific .....	6.9	6.4	6.0	6.1	5.7	-1.2

**Table 11. Average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls by industry, 1995–97**

Industry	Average hourly earnings (current dollars)			Percent change		
	1995	1996	1997	1994–95	1995–96	1996–97
Total private .....	\$11.56	\$11.97	\$12.45	3.0	3.5	4.0
Mining .....	15.46	15.77	16.35	3.0	2.0	3.7
Construction .....	15.20	15.62	16.23	2.1	2.8	3.9
Manufacturing .....	12.50	12.93	13.36	2.7	3.5	3.3
Transportation and public utilities .....	14.30	14.51	15.05	2.7	1.5	3.8
Wholesale trade .....	12.57	13.06	13.65	3.0	3.9	4.5
Retail trade .....	7.77	8.13	8.49	2.7	4.6	4.4
Finance, insurance, and real estate .....	12.52	12.95	13.60	4.4	3.4	5.0
Services .....	11.53	11.98	12.46	3.3	3.9	4.0

sions,” totaled about 3.7 million (not seasonally adjusted) in the fourth quarter of 1997, having declined slightly over the past year. By including these workers, U-6 treats some part-time workers on an equal basis with the unemployed. In the fourth quarter of 1997, U-6 was 8.0 percent; in tandem with the official rate of unemployment, U-6 declined over the year.

Another possible indication of the tightening labor market can be gleaned from data on a broad group of persons who are not in the labor force, but who have said they would like a job. These persons who “want a job now” include not only discouraged and other marginally attached workers—persons who have shown some evidence of labor market attachment by their prior job search—but *anybody* who simply indicates the desire for employment. The total number of such persons in 1997 was about 4.9 million. The over-the-year decline was slightly more than 500,000, compared with a decrease of less than half that magnitude in 1996. (See table 9.)

## Regional differences in growth

*Employment.* Nonfarm payroll employment grew in all four census regions in 1997.<sup>20</sup> The rate of expansion doubled in the Northeast relative to last year’s performance, increased slightly in the South, and slowed somewhat in the West and Midwest. Despite the moderation, the West was once again the fastest growing region. Services accounted for the greatest increase in the number of jobs in each of the four regions, but construction employment posted the fastest rate of growth, at least 3.6 percent in each. Employment expanded in all major industries throughout all regions, except for a small decline in mining in the Midwest. The following tabulation shows the growth in nonfarm jobs<sup>21</sup> from 1996 to 1997:

	Number	Percent
West .....	684,000	2.7
South .....	898,000	2.1
Northeast .....	419,000	1.8
Midwest .....	410,000	1.4

For the second year in a row, job growth was faster in the Mountain and Pacific divisions (both in the West region) than any of the other seven divisions.

The East South Central and East North Central divisions recorded the slowest rates of employment growth, just over 1 percent. Services and trade accounted for between one-half and four-fifths of the nonfarm payroll growth in each division. The only major industries to suffer employment losses at the division level were mining (in four divisions) and manufacturing (in three divisions).

*Unemployment.* Unemployment rates decreased over the year in all four census regions, reflecting the sustained improvement at the national level. The regions with the largest declines were the West, where the rate fell by 1.0 percentage point, and the South, whose rate dropped by 0.8 point. Despite the large decrease in its rate, the West continued to have the highest fourth-quarter jobless rate for the fifth year in a row. At 4.1 percent, the Midwest had the lowest unemployment rate for the seventh consecutive year.

**Table 12. Quartiles and selected deciles of usual weekly earnings of full-time wage and salary workers by selected characteristics, annual averages, 1996-97**

Characteristic	Upper limit of:									
	First decile		First quartile		Second quartile (median)		Third quartile		Ninth decile	
	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
<b>Sex, race, and Hispanic origin</b>										
Total, 16 years and older .....	\$233	\$242	\$319	\$329	\$490	\$503	\$738	\$760	\$1,059	\$1,109
Men .....	253	265	359	372	557	579	827	858	1,177	1,228
Women .....	215	225	291	299	418	431	619	636	871	907
White .....	239	249	330	342	506	519	759	783	1,099	1,139
Men .....	262	273	376	386	580	595	854	884	1,222	1,256
Women .....	219	229	297	305	428	444	632	652	891	926
Black .....	203	214	274	284	387	400	578	595	786	824
Men .....	211	228	287	300	412	432	612	635	851	892
Women .....	197	204	261	269	362	375	526	537	733	761
Hispanic .....	191	201	247	258	339	351	514	528	771	798
Men .....	197	209	256	270	356	371	548	571	816	851
Women .....	183	190	231	238	316	318	468	483	682	698
<b>Educational attainment</b>										
Total, 25 years and older .....	250	260	348	360	520	540	771	801	1,113	1,149
Less than a high school diploma .....	187	195	238	246	317	321	453	463	639	640
High school graduates, no college .....	236	245	312	322	443	461	625	646	840	876
Some college or associate degree .....	272	280	367	378	518	535	727	754	970	1,008
College graduates, total .....	374	388	530	556	758	779	1,096	1,136	1,528	1,565
Bachelor's degree only .....	345	364	491	508	697	725	984	1,026	1,371	1,430
Advanced degree .....	458	470	640	655	914	927	1,273	1,321	1,795	1,880
Men, 25 years and older .....	279	288	398	408	599	615	874	904	1,236	1,273
Less than a high school diploma .....	200	210	263	272	357	365	510	511	712	705
High school graduates, no college .....	275	284	373	383	516	535	716	739	934	974
Some college or associate degree .....	301	309	423	435	604	621	826	861	1,091	1,140
College graduates, total .....	401	427	599	618	874	896	1,239	1,274	1,749	1,800
Bachelor's degree only .....	379	403	555	586	795	827	1,135	1,167	1,553	1,589
Advanced degree .....	485	502	710	733	1,025	1,047	1,459	1,464	1,944	2,029
Women, 25 years and older .....	227	235	307	315	444	462	646	666	902	938
Less than a high school diploma .....	172	180	208	215	268	275	347	352	456	466
High school graduates, no college .....	209	218	276	284	365	378	498	512	663	681
Some college or associate degree .....	245	255	321	333	442	459	606	622	784	820
College graduates, total .....	344	355	480	493	657	672	903	934	1,186	1,246
Bachelor's degree only .....	318	330	441	459	608	620	818	857	1,085	1,153
Advanced degree .....	437	438	591	600	784	800	1,060	1,073	1,427	1,469

NOTE: See text footnote 24 for explanation of deciles and quartiles. Beginning in January 1997, data reflect revised population controls used in the household survey.

SOURCE: Current Population Survey.

All nine census divisions reported at least small declines in joblessness, with the Pacific and East South Central divisions reporting the largest decreases, 1.2 percentage points each, in their unemployment rates. The West North Central had the lowest rate for the eighth consecutive year, while the Pacific had the highest for the sixth year in a row. The range at the division level, 2.3 percentage points, was the smallest fourth-quarter spread in 5 years. Twenty-four States enjoyed their lowest rates in the nearly 20-year history of the series.<sup>22</sup> (See table 10.)

## Earnings

*Payroll survey.* Average hourly earnings for production or nonsupervisory workers in private, nonfarm industry increased 4.0 percent or \$0.48, to \$12.45 over the year.<sup>23</sup> The pace of growth accelerated over 1996; 6 of the 8 private-sector industry divisions enjoyed stronger growth in 1997. (See table 11.)

Average hourly earnings, adjusted for inflation by the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), were up 2.3 percent over the year. Real average hourly earnings have not increased this rapidly over the year since 1976. While strong growth in current dollar earnings is certainly responsible for some of the increase in real earnings, lower inflation as measured by the CPI-W helped boost constant dollar earnings also. Increases in the price index averaged about 0.4 percent per quarter in 1997, half the rate recorded in 1996. In 1997, constant dollar average hourly

earnings rose to \$7.61 (1982=100), a level that has not been attained since 1989. (See chart 6 on p. 60.)

Average weekly earnings rose 4.3 percent in 1997, slightly more than a year earlier. Real average weekly earnings were up 2.5 percent in 1997, the most in 14 years, and surpassed \$260 (1982=100) for the first time since the onset of recession in the early 1990s.

*Household survey.* Median weekly earnings of full-time wage and salary workers rose 2.7 percent over the year, slightly more than the increase in 1996.<sup>24</sup> (See table 12.) In 1997, women's earnings as a percentage of men's, at 74.4 percent, was down slightly from the 1996 figure.

Following a recent trend, median earnings for high school graduates aged 25 and older who work full time increased by 4.1 percent over the year, while those for college graduates grew by only 2.8 percent. Median earnings for high school graduates are well below those of college graduates, but earnings of high school graduates have risen by 9.5 percent since 1994, while those of college graduates have increased by 6.3 percent.

AS THE ECONOMY CONTINUED to expand in 1997, job growth accelerated to 2.5 percent, slightly above that posted in the prior 2 years. Despite employment losses in a few industries, there was a net addition of 3 million payroll jobs. Both the number of unemployed persons and the jobless rate continued to trend down in 1997; the jobless rate fell to its lowest quarterly level in nearly 28 years, 4.7 percent. In addition, real earnings reached their highest level yet in the 1990s.

## Footnotes

ACKNOWLEDGMENT: The authors thank Lisa Williamson, an economist in the Office of Employment and Unemployment Statistics, for her analysis of regional employment.

<sup>1</sup> The official ending dates for the last two major recessions, as determined by the National Bureau of Economic Research, were November 1982 and March 1991. Data used for this analysis are seasonally adjusted monthly data. Although employment, which usually is a coincident economic indicator, did not hit its low point until February 1992, aggregate hours (the total number of hours worked by production or nonsupervisory workers on private, nonfarm payrolls) turned around in April 1991, 1 month after the official economic trough.

<sup>2</sup> Comparisons are made at the two-digit SIC level for the private sector; government is disaggregated into five components—Federal, State education and noneducation, and local education and noneducation.

<sup>3</sup> The nonfarm industry divisions include mining; construction; manufacturing; transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; services; and government.

<sup>4</sup> See, for example, Frederic M. Biddle, "Boeing's effort to cushion itself from cycles backfires," *The Wall Street Journal*, Oct. 24, 1997.

<sup>5</sup> See, for example, Eva M. Rodriguez and Lucette Lagnado, "U.S. claims deep fraud at Columbia," *The Wall Street Journal*, Oct. 7, 1997; and "Clinton calls for moratorium on entry of home health agencies into Medicare," *Health Care Policy Report* (Washington, Bureau of National Affairs, Sept. 22, 1987), pp. 1442-3.

<sup>6</sup> Enrollment levels are for the fall term and are projections from 1995

forward. See U.S. Department of Education, National Center for Education Statistics, *Projections of Education Statistics to 2007*, NCES 97-382.

<sup>7</sup> Employment levels are from the Current Employment Statistics survey and are seasonally adjusted data for September. They include noninstructional as well as instructional staff.

<sup>8</sup> Beginning in 1997, the population controls used in the second-stage ratio adjustment method were revised to reflect updated information on the demographic characteristics of immigrants to, and emigrants from, the United States. As a result, the count of the civilian noninstitutional population 16 years and older was raised by about 470,000. The labor force and employment levels were increased by about 320,000 and 290,000, respectively. Nearly all of the employment adjustment was assigned to men. The overall unemployment level was marginally affected by about 25,000. The Hispanic-origin population and labor force estimates were raised by about 450,000 and 250,000, respectively, and Hispanic employment by 325,000. Overall and subgroup unemployment rates and other percentages of labor market participation were not significantly affected. For additional information and an explanation of the changes and their effects on national labor force estimates, see Gloria Peterson Green, "Revisions in the Current Population Survey Effective January 1997," *Employment and Earnings*, February 1997.

<sup>9</sup> The Current Population Survey (CPS) a nationwide sample survey conducted for the Bureau of Labor Statistics by the Bureau of the Census, provides information about the demographic characteristics and employment status of the noninstitutional population aged 16 and older. The estimates of employment and over-the-year employment growth from the CPS differ from

those obtained from the Current Employment Statistics (CES) survey because of conceptual and methodological differences between the two surveys. (For an overview of these differences, see box on page 58.) The official ending dates for the last two major recessions, as determined by the National Bureau of Economic Research, were November 1982 and March 1991. Data used for this analysis are seasonally adjusted monthly data.

<sup>10</sup> See Jennifer M. Gardner, "The 1990–91 recession: how bad was the labor market?" *Monthly Labor Review*, June 1994, pp. 3–11.

<sup>11</sup> Direct comparisons with data from periods prior to January 1994 are not recommended because subsequent changes to the questionnaire resulted in an increase in estimated number of people working part time.

<sup>12</sup> Multiple jobholders are defined as persons who, during the survey reference week, held two or more jobs as wage and salary workers, were self-employed and also held a wage and salary job, or worked as an unpaid family worker and also held a wage and salary job. *Full-time* jobs are those in which persons usually work 35 hours or more per week. *Part-time* jobs are those in which persons usually work 1 to 34 hours per week. For more information on multiple jobholding, see John F. Stinson, Jr., "New data on multiple jobholding available from the CPS," *Monthly Labor Review*, March 1997, pp. 3–8; and Thomas Amirault, "Characteristics of multiple jobholders, 1995," *Monthly Labor Review*, March 1997, pp. 9–15. Data presented in the text tabulation are annual averages.

<sup>13</sup> See Robert D. Hershey, Jr., "The rise of the working class," *The New York Times*, Sept. 3, 1997, Business Day section, p. D1.

<sup>14</sup> Individual cells of a major occupation by major industry matrix were ranked in descending order by median weekly earnings of all wage and salary workers in 1993. These cells were then grouped into three categories—highest-, middle-, and lowest-earnings—that each accounted for approximately one-third of total employment in 1988. An employment time series for each occupation-industry cell from January 1989 to December 1997 was developed, and data for each cell were sorted into the appropriate earnings group. For a more detailed explanation of the nature of job growth and a complete discussion of the methodology used in the analysis, see Randy E. Ilg, "The nature of employment growth, 1989–95," *Monthly Labor Review*, June 1996, pp. 29–36.

<sup>15</sup> Because the data used were not seasonally adjusted, they were averaged over a 12-month moving period to smooth seasonal variations. The annual (12-month) average employment for 1989 is the base employment level, shown as the zero value for December 1989. All other values are the average employment level for the 12 months ending with a specific month divided by the 12-month average for 1989, converted to a percent change. Beginning in 1997, data reflect revised population controls used in the household survey.

<sup>16</sup> Only data for those specific occupation-industry groups that supplied a large proportion of the employment growth or decline are presented. For a complete list of the occupation-industry cells in each earnings group, see Ilg, "The nature of employment growth, 1989–95." The source of employment and earnings data used in this analysis is the Current Population Survey (CPS). The employment estimates for the period under study have been affected by a number of factors. Official data for 1990 and later years incorporate 1990 census-based population controls, adjusted for the estimated undercount, whereas 1989 data are based on 1980 census population con-

trols, for which no such adjustment has been made. In an effort to make the 1989 estimates more comparable with data for the other years analyzed, they were adjusted on the basis of the relationship, or ratios, between the 1990–93 monthly estimates prior to and after the incorporation of 1990 census-population controls. The pre- to post-1990 census adjustment ratio for each occupation-industry cell for each month over the 4 years from 1990 to 1993 was averaged and applied to the 1989 unadjusted estimate.

<sup>17</sup> See G. Pascal Zachary and Michael M. Phillips, "Fewer workers worry about losing jobs," *The Wall Street Journal*, Feb. 26, 1997, p. A2.

<sup>18</sup> Several studies have noted the persistently high degree of long-term joblessness in the current expansion. For example, see "Long-term unemployment remains high during recovery," *Issues in Labor Statistics*, Summary 95–11 (Bureau of Labor Statistics, September 1995). See also Randy E. Ilg, "Long-term unemployment in recent recessions" *Monthly Labor Review*, June 1994, pp. 12–15; and Gardner, "The 1990–91 recession."

<sup>19</sup> For additional information, see John E. Bregger and Steven E. Haugen, "BLS introduces new range of alternative unemployment measures," *Monthly Labor Review*, October 1995, pp. 19–26. Two of the alternative measures, U-1 and U-2, are excluded from this analysis because they focus on duration of unemployment and are reasons for unemployment that have just been discussed.

<sup>20</sup> Regions, divisions, and the States they comprise (including the District of Columbia) are as follows: NORTHEAST: *New England division*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont; *Middle Atlantic division*—New Jersey, New York, Pennsylvania; SOUTH: *South Atlantic division*—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia; *East South Central division*—Alabama, Kentucky, Mississippi, Tennessee; *West South Central division*—Arkansas, Louisiana, Oklahoma, Texas; MIDWEST: *East North Central division*—Illinois, Indiana, Michigan, Ohio, Wisconsin; *West North Central division*—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota; WEST: *Mountain division*—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming; *Pacific division*—Alaska, California, Hawaii, Oregon, Washington.

<sup>21</sup> Changes in terms of number and percent, are based on fourth-quarter 1996 to the October and November average for 1997, seasonally adjusted. The total of regional employment may not equal U.S. employment, because the regional estimates represent the sum of State employment estimates, which are developed by each State employment security agency, and are not intended for national aggregation. The national employment estimate is produced separately by the Bureau of Labor Statistics.

<sup>22</sup> The series of monthly statewide employment and unemployment figures begins in 1978.

<sup>23</sup> Hours and earnings for government are not produced by the CES program.

<sup>24</sup> Ten percent of all full-time wage and salary workers earn less than the upper limit of the first decile; 25 percent earn less than the upper limit of the first quartile; 50 percent earn less than the upper limit of the second quartile, or median; 75 percent earn less than the upper limit of the third quartile; and 90 percent earn less than the upper limit of the ninth decile.