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Date	Time	Release
Thursday, May 06, 2010	8:30 AM	Productivity and Costs for First Quarter 2010
Friday, May 07, 2010	8:30 AM	Employment Situation for April 2010
Tuesday, May 11, 2010	10:00 AM	Job Openings and Labor Turnover Survey for March 2010
Wednesday, May 12, 2010	10:00 AM	Extended Mass Layoffs for First Quarter 2010
Thursday, May 13, 2010	8:30 AM	U.S. Import and Export Price Indexes for April 2010
Tuesday, May 18, 2010	8:30 AM	Producer Price Index for April 2010
Wednesday, May 19, 2010	8:30 AM	Consumer Price Index for April 2010
Wednesday, May 19, 2010	8:30 AM	Real Earnings for April 2010
Thursday, May 20, 2010	10:00 AM	Quarterly Data Series on Business Employment Dynamics for Third Quarter 2009
Friday, May 21, 2010	10:00 AM	Mass Layoffs for April 2010
Friday, May 21, 2010	10:00 AM	Regional and State Employment and Unemployment for April 2010

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# MONTHLY LABOR REVIEW

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### The April Review

The evolution of the U.S. economy from a primarily goods-producing system to a predominately service-providing one has been the topic of many papers, reports, and discussions for decades. How these changes have been reflected in different sections of the country also has been an occasional focus of research. In this issue's lead article, Bureau regional economists Gerald Perrins and Diane Nilsen take a look at how the Philadelphia metropolitan area job market has changed considerably during the last decade. Once a fairly traditional metropolitan area with the largest percentage of jobs concentrated in the trade, transportation, and utilities industries, Philadelphia has transformed itself by becoming a significant job creator in the education, health care, and professional and business services industries. Using employment and wage data from the Quarterly Census of Employment and Wages program, the authors examine shifts in both employment and wage growth for the these industries in the 11 counties composing the greater Philadelphia area. In addition, using available detailed county-level industry data, the article analyzes each jurisdiction's distinct growth pattern independently. Finally, where appropriate, the authors also compare Philadelphia—1 of the 12 largest U.S. metropolitan areas—with its counterparts.

The Bureau's International Price Program (IPP) produces and disseminates data on monthly price changes in the foreign trade sector of the U.S. economy. The IPP publishes these price changes through the Import Price Index and the Export Price Index. Edwin Bennion, an economist in the Office of

Prices and Living Conditions, presents an annual look at import and export price changes in "IPP 2008 year in review." For the year as a whole, a drop in both import and export prices, led primarily by energy goods, left each index down for the first time since 2001. However, this simplified summary hardly tells the story. In fact, as Bennion points out, the sharp price increases experienced during the first 7 months of 2008 contrasted sharply with the dramatic price decreases that occurred during the last 5 months of the year. In fact, the overall price increases for the first 7 months of 2008 and the price decreases for the whole year were each greater than any increase or decrease during a comparable period since the inception of the Import and Export Price Indices. Specifically, import prices increased 15.9 percent during the first part of 2008 and then fell 22.4 percent from August to December. Likewise, export prices rose 7.3 percent during the first part of 2008 and then fell 9.5 percent during the latter part of the year.

For more than 20 years the Bureau's Employer Cost for Employee Compensation (ECEC) publications have provided estimates of the average hourly costs for wages and benefits across industries, occupations, and labor force characteristics. What makes ECEC data (which are drawn from the National Compensation Survey) especially helpful is that they include detailed estimates for paid leave, health insurance, and contributions to retirement plans, among other benefits. Thomas Moehrl, an economist in the Office of Compensation and Working Conditions, uses ECEC estimates to analyze the changes in compensation of construction workers over the 2004-to-2009 period. "Compensation of residential and nonresidential construction work-

ers" finds that workers in nonresidential construction typically earn more than workers in residential construction and that the difference has grown over time. The author demonstrates this by presenting changes in compensation patterns for residential and nonresidential construction activities in the construction of buildings subsector and the specialty trade contractors subsector. The article also incorporates employment data from the Current Employment Statistics program as part of the analysis.

This issue of the *Review* concludes with a conference report by Geoffrey Paulin, a senior economist in the Office of Prices and Living Conditions. The report summarizes the Consumer Expenditure (CE) Survey Microdata Users' Workshop, which was sponsored by the Bureau of Labor Statistics on July 29–31, 2009. The 3-day workshop has been an annual event since 2006 and includes speakers who demonstrate features of CE topcoded microdata as well as present reports and articles that highlight their work. The 2009 workshop included presentations by CE economists, researchers, and academicians on topics such as sampling methods and the construction and proper use of sample weights. A training session was also conducted that, in part, provided examples of many of the concepts shown during the workshop. The next workshop is expected to be held in July 2010 and, as usual, will be free, although registration is required. For more information about the 2009 workshop and forthcoming workshops, visit the CE website, [www.bls.gov/cex](http://www.bls.gov/cex), and look for "Annual Workshop" under the left navigation bar entitled "Public Use Microdata." For direct access to this information, go to [www.bls.gov/cex/csxannualworkshop.htm](http://www.bls.gov/cex/csxannualworkshop.htm). □

## Industry shifts over the decade put Philadelphia on a new road to job growth

*Expansion of the education and health services and professional and business services supersectors from 1998 to 2008 allowed Philadelphia and its environs to reduce the area's dependence on perennial jobs leader trade, transportation, and utilities*

Gerald Perrins  
and  
Diane Nilsen

During the 10-year period from 1998 to 2008, the industrial composition of the Philadelphia metropolitan area<sup>1</sup> job market evolved considerably. Once a traditional metropolitan area with the largest percentage of jobs concentrated in the trade, transportation, and utilities supersector, Philadelphia has transformed itself into a leader in the education and health services industry. Moreover, professional and business services also increased its employment presence in the area over the decade, while fewer jobs became available in manufacturing.

This article looks at how the employment expansion in two supersectors in Philadelphia—education and health services, and professional and business services—helped reshape the metropolitan area's job market from the first quarter of 1998 to the first quarter of 2008. Using employment and wage data from the Quarterly Census of Employment and Wages (QCEW) program,<sup>2</sup> this study examines shifts in both employment and wage growth for the two industry supersectors in the 11 counties composing the greater Philadelphia area. The availability of detailed industry data at the county level allowed each jurisdiction's<sup>3</sup> growth to be analyzed independently, whereupon distinct patterns became readily apparent. No-

tably, employment in education and health services remained concentrated in Philadelphia County<sup>4</sup> despite the large number of jobs added across the metropolitan area, with the City accounting for 37 percent of those employed in this industry in 2008, the same as 10 years earlier. In contrast, the distribution of jobs in professional and business services was appreciably affected by the increased growth in that supersector over the decade, with the result that Montgomery County had overtaken the City as the industry's largest employer by 2008 with 25 percent of the workforce. Lastly, when appropriate, Philadelphia, 1 of the 12 largest metropolitan areas in the United States, was compared with its counterparts.

### Overview

In the first quarter of 1998, trade, transportation, and utilities accounted for the largest percentage of the employed in the metropolitan area, at 19.4 percent, followed by education and health services, with an employment share of 16.7 percent. By the first quarter of 2008, the percentage of jobs in trade, transportation, and utilities had shrunk to 18.8 percent of the Philadelphia workforce while the share employed in education and health services had grown to 18.8

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## Regional Trends

percent, enabling the industry to join trade, transportation, and utilities as the area's top employer, with both supersectors employing more than a half-million workers. (See chart 1 and table 1.)

Professional and business services, the highest paying supersector in the area, remained in third place over the course of the decade, though it did strengthen its share of the workforce, which rose from 13.9 percent to 15.2 percent. The industry also distanced itself from the fourth-ranked employer, government, whose employment share of 13.0 percent in 2008 was virtually unchanged from 10 years earlier.

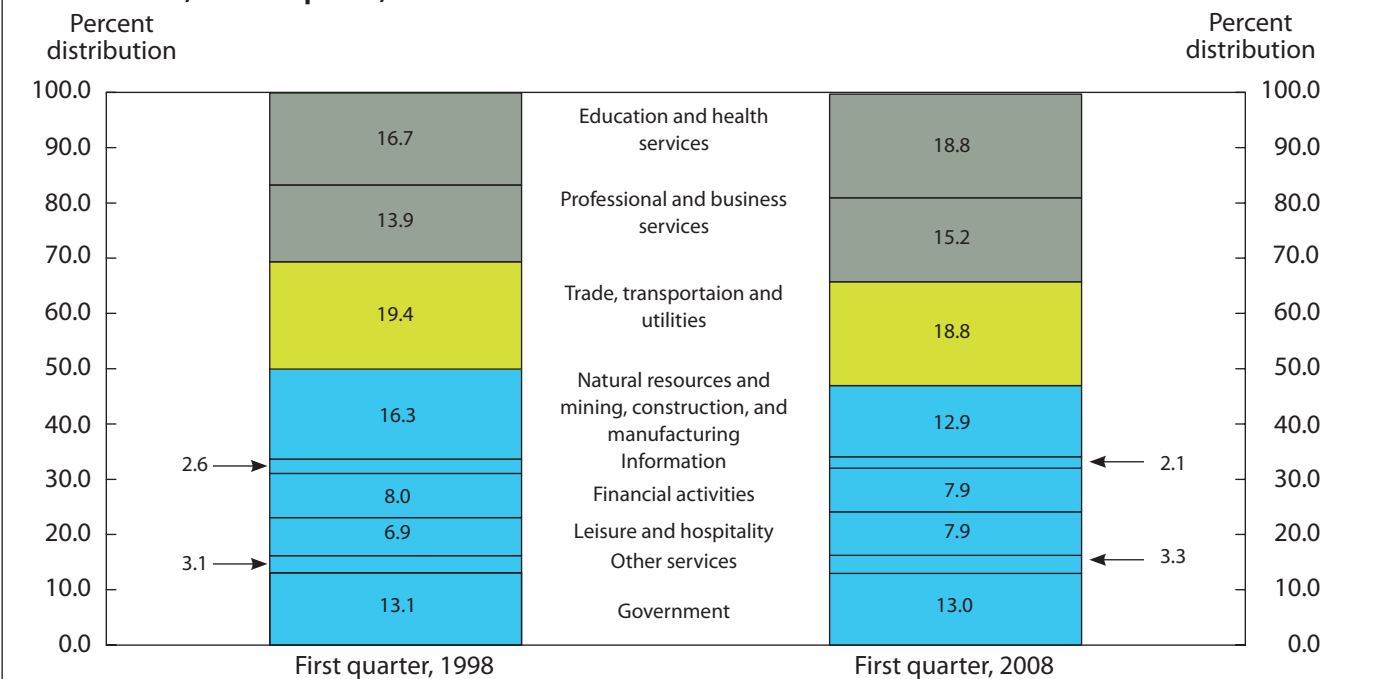
Although changes in the industrial composition of a metropolitan area are to be expected over time, it should be noted how remarkable Philadelphia's situation was in the first quarter of 2008, with education and health services rivaling trade, transportation, and utilities as the top employer in the area. Historically, trade, transportation, and utilities has dominated the job markets of most of the larger metropolitan areas in the United States, including Philadelphia, but its predominance has been challenged in recent years.

In 2008, trade, transportation, and utilities had the highest employment share among all supersectors in 9 of the

12 largest metropolitan areas nationwide. The notable exceptions were Washington and San Francisco, where professional and business services dominated the landscape, and Boston, where education and health services was the new frontrunner. Philadelphia had a foothold in both the old and new worlds in 2008, with the percentage of jobs in education and health services equaling that in trade, transportation, and utilities for the first time. Moreover, the two industries that Philadelphia gravitated to over the decade, but particularly professional and business services, are expected to provide a solid base for better paying jobs throughout the area, because a number of these positions require an advanced education or technical training.

Trade, transportation, and utilities grew slowly over the decade at a rate of 3.9 percent, well below the metropolitan area average of 6.9 percent. The 18,877 jobs added in this industry supersector were appreciably less than the additions of 84,385 jobs in education and health services and 59,735 in professional and business services from 1998 to 2008. Of note, jobs in trade, transportation, and utilities, unlike those in education and health services, were well distributed throughout the Delaware Valley in 2008, with 18.4 percent in Montgomery County, 16.7 percent in Philadelphia City, and 12.0 percent in Bucks

**Chart 1. Percent distribution of total nonfarm employment, by industry, Philadelphia metropolitan area, first quarter, 1998, and first quarter, 2008**



NOTE: The natural resources and mining, construction, and manufacturing industries were combined for this chart due to confidentiality requirements.

**Table 1. Philadelphia metropolitan area industry employment as a percentage of total covered employment, first quarter, 1998, and first quarter, 2008**

Industry	First quarter, 1998	Percent of total covered	First quarter, 2008	Percent of total covered	First quarter, 1998, to first quarter, 2008	
					Net change	Percent change
Total covered.....	2,494,614	100.0	2,667,177	100.0	172,563	6.9
Private industry.....	2,167,965	86.9	2,319,541	87.0	151,577	7.0
Natural resources and mining.....	9,065	.4	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Construction.....	96,661	3.9	( <sup>1</sup> )	( <sup>1</sup> )	(1)	( <sup>1</sup> )
Manufacturing.....	299,722	12.0	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Trade, transportation, and utilities.....	483,634	19.4	502,511	18.8	18,877	3.9
Information.....	64,250	2.6	56,329	2.1	-7,921	-12.3
Financial activities.....	198,539	8.0	212,006	7.9	13,467	6.8
Professional and business services.....	346,669	13.9	406,404	15.2	59,735	17.2
Education and health services.....	416,958	16.7	501,343	18.8	84,385	20.2
Leisure and hospitality.....	172,656	6.9	210,626	7.9	37,970	22.0
Other services.....	78,299	3.1	87,380	3.3	9,081	11.6
Government.....	326,649	13.1	347,636	13.0	20,987	6.4

<sup>1</sup> Data do not meet BLS or State agency disclosure standards.

County. Five other counties accounted for more than 8.0 percent, but less than 10.0 percent, of those employed in the industry.

Some supersectors exhibited employment declines from 1998 to 2008. There were fewer jobs in manufacturing and information, and this drop corresponded to a decline in those industries' employment shares over the decade. While confidentiality requirements precluded a detailed analysis of metropolitan area job losses in manufacturing, when the industry was grouped with natural resources and mining, and construction, the combined percentage of the workforce decreased 3.4 percentage points over the 10-year period to 12.9 percent in the first quarter of 2008.

In short, both education and health services and professional and business services grew rapidly over the decade, adding jobs at a rate more than double the metropolitan area average. By the first quarter of 2008, these industries accounted for 34 percent of the employed in the greater Philadelphia area; 10 years earlier, they had made up approximately 30 percent. That said, trade, transportation, and utilities still maintained a large presence in the area in the first quarter of 2008, but, having the slowest growth rate of any industry for which data were published over the decade, it no longer could be expected to be the strong source of jobs that it had been in the past.

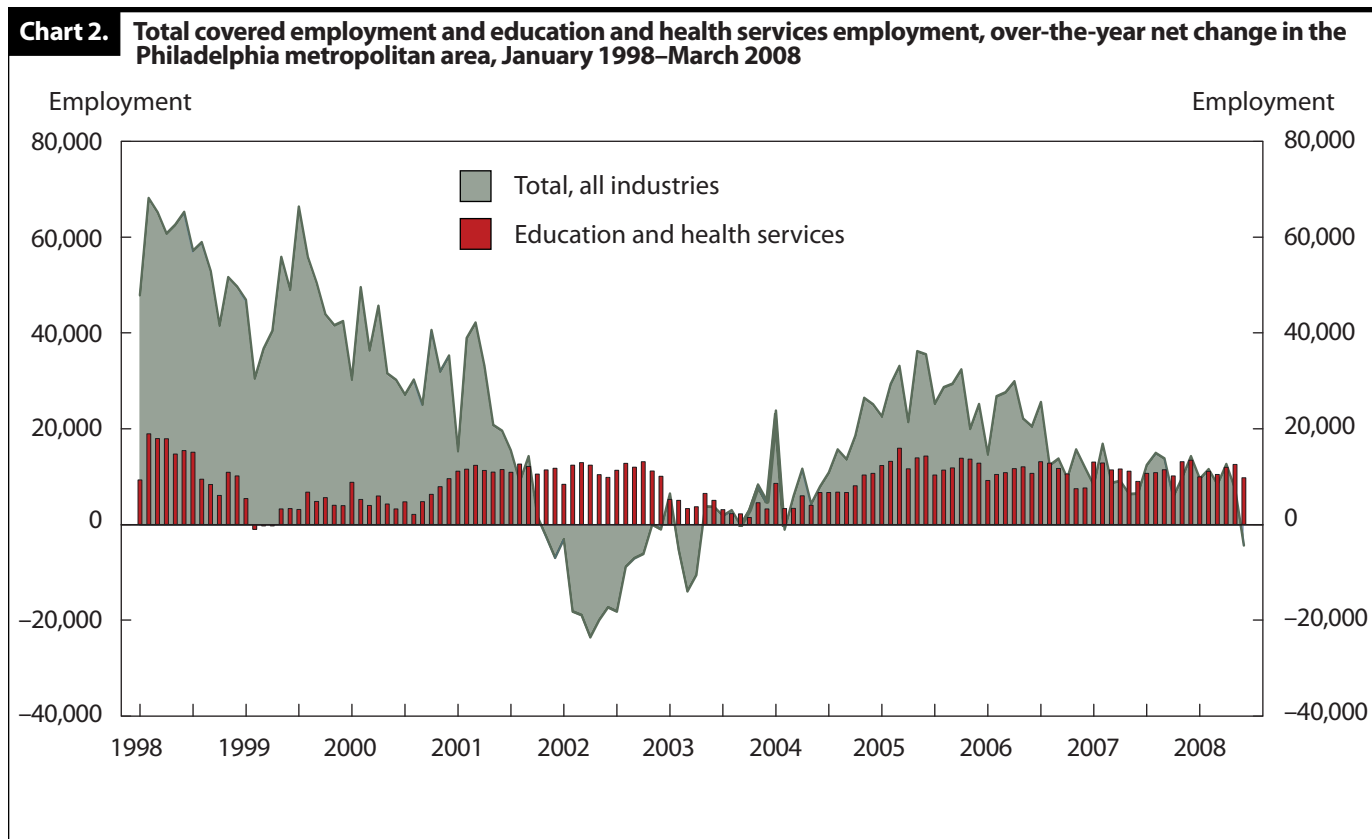
### Education and health services

The ascendancy of education and health services in the local job market was not totally unexpected, given that Philadelphia has long had a tradition in this field. Growth

in “eds and meds”<sup>5</sup> has brought the total number of institutions in the metropolitan area to nearly 100 hospitals<sup>6</sup> and close to 90 institutions of higher learning<sup>7</sup> in the latter part of the decade under study. Of the approximately 2.7 million workers in the greater Philadelphia area in the first quarter of 2008, education and health services accounted for over a half million, or almost one-fifth, of the workforce. More than 84,000 jobs had been added over the 10-year period, with job growth surpassing 20 percent.

The strong growth exhibited by education and health services throughout the 1998–2008 period helped stabilize the metropolitan area during times of economic duress. The 10-year span was characterized by cyclical swings that included two national recessions; one encompassed almost the entire year of 2001, and the other began in December 2007 and continued through 2008.<sup>8</sup> Although overall employment was depressed during the downturns and well after, the education and health services supersector remained strong and continued to add jobs throughout the two periods. (See chart 2.)

Of particular importance is the fact that, during Philadelphia's two expansionary periods, the most recent upturn added far fewer jobs overall, and a large portion of the jobs it did add was in education and health services. For example, during the first expansion, education and health services grew by about 17,000 over the 3-year span ending in March 2001, accounting for 14 percent of total job growth. However, in the expansionary period from March 2004 to March 2007, education and health services added about 35,000 jobs, but made up a much larger proportion, 58 percent, of the total growth.



To better understand just how highly concentrated education and health services jobs had become in Philadelphia by 2008, location quotient analysis<sup>9</sup> was used to compare industrial activity levels both within the 11-county Philadelphia area and for the 12 largest metropolitan areas across the country. The use of location quotients can determine the local employment concentration of an industry sector compared with the average for the Nation, which by definition has a location quotient of 1.00.

In the greater Philadelphia area, the education and health services supersector stood out as having the highest location quotient, 1.42, among the 12 largest metropolitan areas<sup>10</sup> in the country in the first quarter of 2008. (See table 2.) This means that Philadelphia's employment share for education and health service jobs was 42 percent greater than the national average. Even so, location quotients varied considerably across the 11 counties in the metropolitan area, with Philadelphia City having an area high of 2.25. Delaware County's location quotient of 1.76 also was well above average. Both Philadelphia City's and Delaware County's location quotients increased over the 10-year span, 2 of only 3 counties in the metropolitan area to do so. New Castle, the third county with an increase, enjoyed the largest gain—from 0.95 to 1.05. Among the

eight counties experiencing a decline in industrial concentration in education and health services were Montgomery (from 1.33 to 1.15) and Cecil (from 0.95 to 0.80). As important as the education and health services supersector was to the greater Philadelphia area, it was clear that the majority of counties did not increase their employment concentration in this industry over the decade. Instead, Philadelphia City, the county with the highest concentration of education and health services jobs in the first quarter of 1998, not only maintained the top position 10 years later, but further distanced itself from almost all of the surrounding counties.

When Philadelphia was compared with the other 11 largest areas in the country, only Boston, with a location quotient of 1.39, came close to matching Philadelphia's concentration of jobs in the education and health services industry. Three other areas—New York (1.28), Detroit (1.12), and Chicago (1.03)—also posted location quotients above the national average.

To further illustrate the Philadelphia metropolitan area's status as a job leader in education and health services, the employment share for this supersector was also compared with those of the other largest metropolitan areas in the country. The Philadelphia area had the highest percent-

**Table 2. Location quotients for education and health services employment, United States and 12 largest metropolitan areas, first quarter, 1998, and first quarter, 2008**

Area	First quarter, 1998	First quarter, 2008
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA.....	1.49	1.42
Philadelphia, PA, Metropolitan Division .....	1.67	1.59
Philadelphia, PA.....	2.21	2.25
Delaware, PA.....	1.74	1.76
Bucks, PA.....	1.26	1.20
Montgomery, PA.....	1.33	1.15
Chester, PA.....	1.03	1.00
Camden, NJ, Metropolitan Division.....	1.15	1.09
Camden, NJ.....	1.40	1.35
Burlington, NJ.....	.99	.94
Gloucester, NJ.....	.88	.85
Wilmington, DE-MD-NJ, Metropolitan Division .....	.96	1.02
New Castle, DE.....	.95	1.05
Salem, NJ.....	1.07	1.04
Cecil, MD.....	.95	.80
Boston-Cambridge-Quincy, MA-NH.....	1.43	1.39
New York-Northern New Jersey-Long Island, NY-NJ-PA.....	1.29	1.28
Detroit-Warren-Livonia, MI.....	1.01	1.12
Chicago-Naperville-Joliet, IL-IN-WI.....	.99	1.03
Miami-Fort Lauderdale-Pompano Beach, FL.....	1.04	1.00
San Francisco-Oakland-Fremont, CA.....	.87	.84
Los Angeles-Long Beach-Santa Ana, CA.....	.82	.84
Washington-Arlington-Alexandria, DC-VA-MD-WV.....	( <sup>1</sup> )	.82
Houston-Sugar Land-Baytown, TX.....	.78	.77
Dallas-Fort Worth-Arlington, TX.....	.75	.77
Atlanta-Sandy Springs-Marietta, GA.....	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Data do not meet BLS or State agency disclosure standards.

NOTE: By definition, U.S. location quotient equals 1.00.

age of education and health service workers, 18.8 percent, followed by the Boston area, 18.4 percent. (See chart 3.)

Three other areas had employment shares greater than that for the Nation: New York (16.9 percent), Detroit (14.9 percent), and Chicago (13.6 percent). However, percent distributions notwithstanding, all of the metropolitan areas for which data were available increased their shares of education and health services jobs over the 10-year period as the national percentage went from 11.3 percent to 13.2 percent.

*County specifics.* Employment in education and health services grew by 84,385 in the Philadelphia metropolitan area during the 10-year span, with all 11 counties in the area adding jobs. (See chart 4.) Still, its overall rate of job growth at 20.2 percent, while high for industries in Philadelphia, was below the nationwide industry average of 30.2 percent. In particular, the rate of job growth in Philadelphia City, where the largest percentage of jobs

was located, had slowed to 16.6 percent. (See table 3.)

Approximately one-third of the employment gain in education and health services in the Philadelphia metropolitan area occurred in Philadelphia City, which added 26,736 jobs through the first quarter of 2008. New Castle County recorded the second-largest increase in jobs in this industry, 10,059, and was followed closely by Chester and Bucks Counties, up 9,159 and 9,022, respectively. These three counties accounted for another third of the area's increase in "eds and meds" employment during the 10-year period.

Although gains were widespread throughout the education and health services supersector, the majority of the expansion occurred in 3 of its 5 subsectors—educational services, ambulatory health services, and social assistance. (See table 4.) These 3 sectors added over 20,000 jobs each and accounted for 83 percent of the growth in education and health services in the Philadelphia metropolitan area.

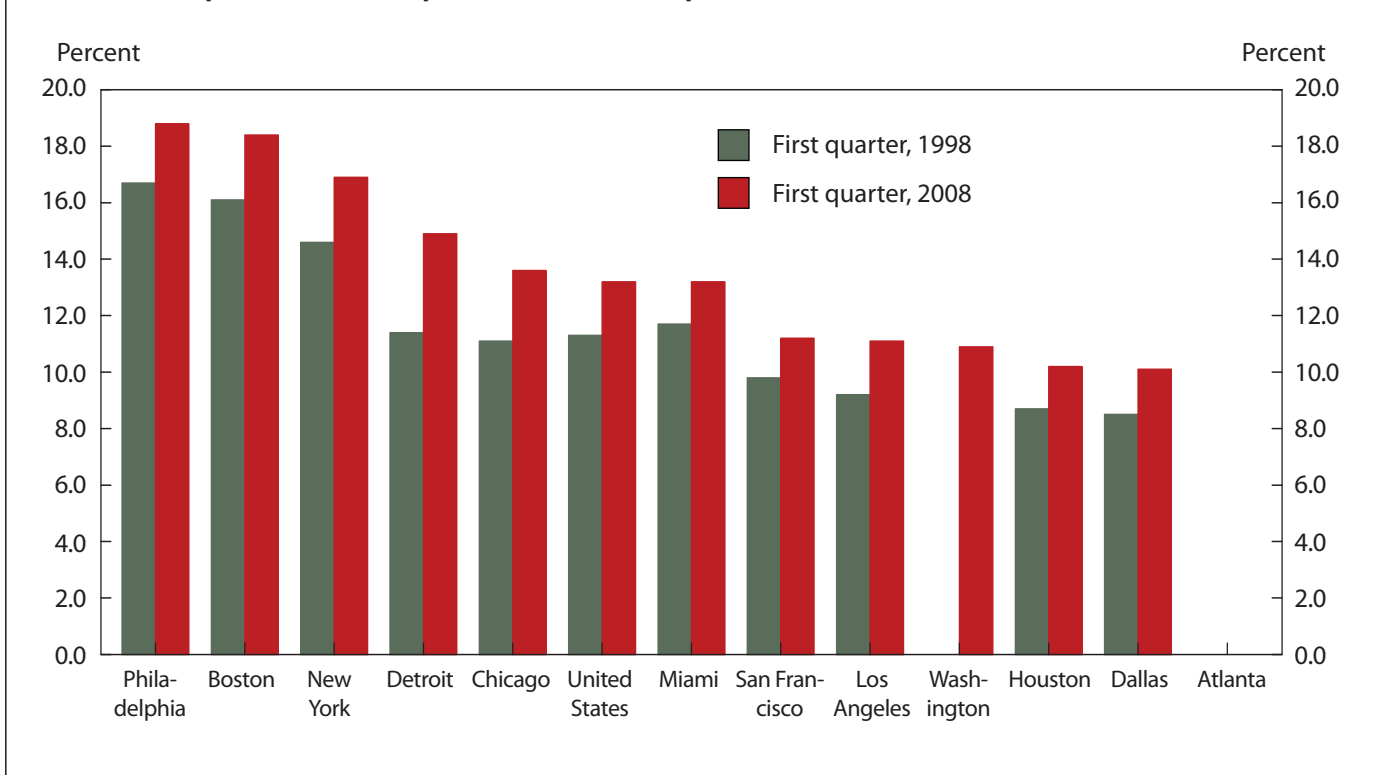
It is important to note that a large portion of the metropolitan area's job growth in the educational services subsector occurred in Philadelphia City, in particular, elementary and secondary schools and colleges and universities. Philadelphia City added 5,101 elementary and secondary school jobs—over 3 times the number added in Chester County (1,429), the jurisdiction with the second-largest contribution of such jobs in the area. Montgomery County was the only other jurisdiction in the metropolitan area to add more than 1,000 elementary and secondary school positions over the 10-year span. Likewise, Philadelphia City's addition of 3,418 college and university positions was over twice the expansion occurring in Delaware (1,498) and Montgomery (1,320), the counties with the next-highest employment growth over the decade.

Growth in the ambulatory health care services subsector was concentrated in the City as well. Over half of the expansion in Philadelphia City occurred in the offices of physicians (2,425). Other jurisdictions with notable gains in the offices of physicians included New Castle, Bucks, Montgomery, and Burlington, all with increases of 1,000 or more. Of note, the Philadelphia area had one of the highest ratios of primary care physicians in the country per 100,000 residents in 2006, 86.1. The national average was 71.9 primary care physicians per 100,000 residents that same year.<sup>11</sup>

Like the educational services and ambulatory health care services subsectors, the social assistance subsector was dominated by expanding payrolls in the City of Philadelphia. The vast majority of the City's employment growth in social assistance occurred in the individual and family



**Chart 3. Education and health services employment as a percentage of a total covered employment, 12 largest metropolitan areas, first quarter, 1998, and first quarter, 2008**



services industry, which added 5,600 jobs from the first quarter of 1998 to the first quarter of 2008. Four other counties had job gains ranging from 1,000 to 2,000 in the individual and family services industry: Bucks, Delaware, Montgomery, and Chester. Philadelphia City also added 2,231 jobs in child daycare services and 1,015 in emergency and other relief services, further boosting its presence in the social assistance subsector.

The metropolitan area wage in education and health services averaged \$841, \$74 above the nationwide industry average of \$767, in the first quarter of 2008. Among the 11 counties, wages in this industry were not as disparate as in some other industry supersectors, with 7 of the counties averaging less than \$830, but more than \$715, a week. In the remaining 4 counties, 2, Philadelphia and New Castle, had average wages exceeding \$900, and 2 others, Salem and Cecil, had wages under \$700.

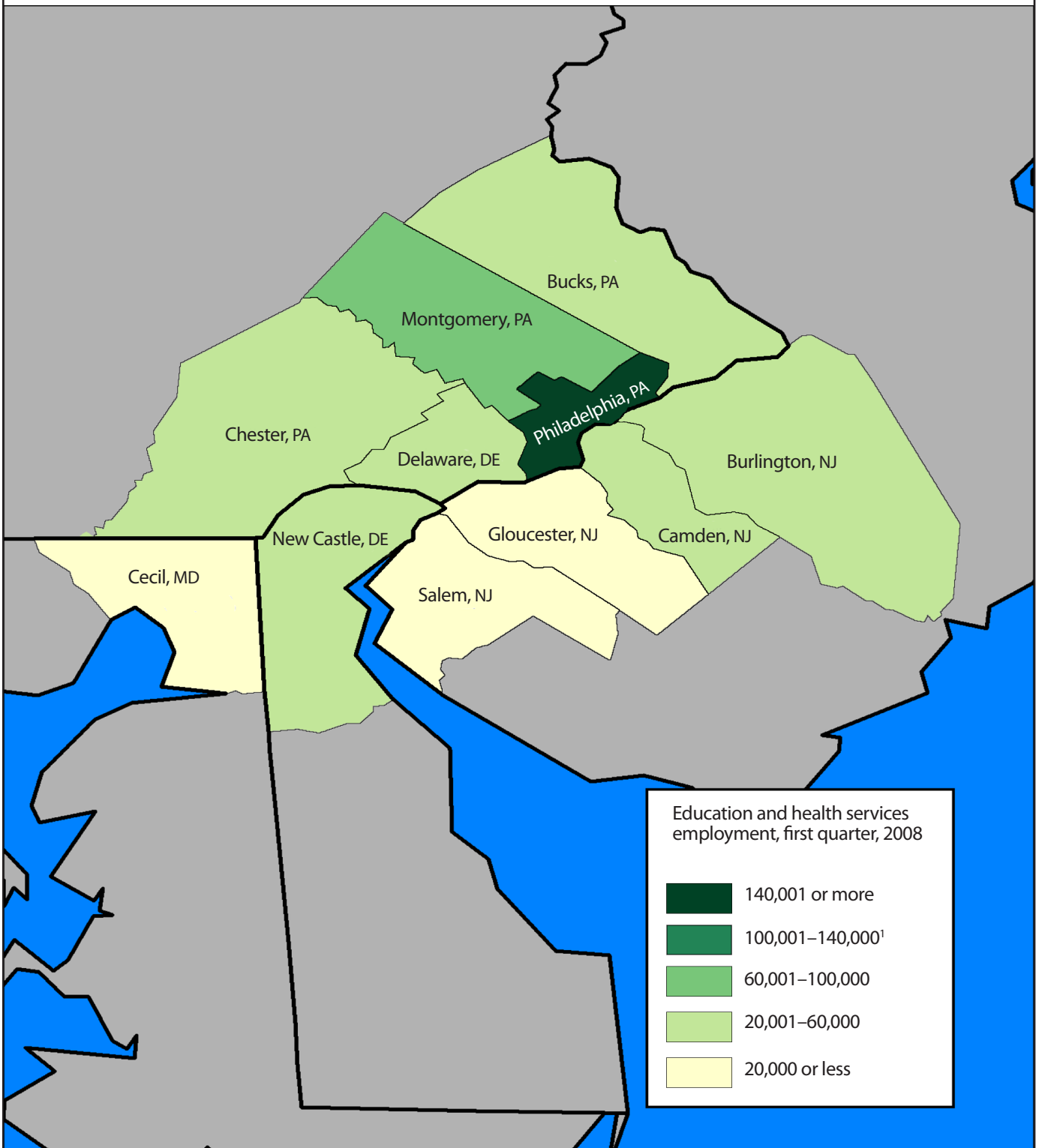
Weekly wages in the local “eds and meds” industry grew strongly over the decade, increasing by \$253, or 43.0 percent, little different from the national rate of increase of 45.0 percent. Of the 11 counties that make up the Philadelphia metropolitan area, 4 had wage growth exceeding the U.S. average in the first quarter of 2008, led by Bucks County with a 55.0-percent gain. (See table 5.)

### Professional and business services

Like education and health services, professional and business services grew strongly over the decade. With a growth rate of 17.2 percent, the industry has added 59,735 jobs since 1998, bringing the total employed to more than 400,000 in the metropolitan area. (See table 1.) The largest beneficiary of the job growth was Montgomery County, which employed more than 100,000 workers by the first quarter of 2008, up from about 70,000 10 years earlier. Altogether, 7 of the 11 jurisdictions experienced employment growth greater than 20 percent in professional and business services during the period. This did not include Philadelphia City, however, which added fewer than 2,500 professional and business services positions, growing at a 3.1-percent pace.

Job growth in several high-wage industries in the professional and business services supersector, particularly management of companies and enterprises, computer systems design and related services, and scientific research and development services, has made the Philadelphia area more appealing to jobseekers. As a result, the Delaware Valley has become a more attractive location for corporate headquarters and the jobs that it supports. A recent study

**Chart 4.** Employment in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, Metropolitan Statistical Area, education and health services, first quarter, 2008



<sup>1</sup> No education and health services employment in this category.

**Table 3. Employment in education and health services, by county, Philadelphia metropolitan area, first quarter, 1998, and first quarter, 2008**

Area	First quarter, 1998	First quarter, 2008	Net change, 1998–2008	Percent change, 1998–2008	Rank by net change	Rank by percent change
United States.....	13,636,345	17,751,400	4,115,054	30.2	...	...
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA.....	416,958	501,343	84,385	20.2	...	...
Philadelphia, PA, Metropolitan Division.....	325,032	382,891	57,859	17.8	...	...
Bucks, PA.....	32,252	41,274	9,022	28.0	4	6
Chester, PA.....	22,883	32,042	9,159	40.0	3	3
Delaware, PA.....	41,698	48,596	6,898	16.5	5	10
Montgomery, PA.....	67,556	73,600	6,044	8.9	7	11
Philadelphia, PA.....	160,643	187,379	26,736	16.6	1	9
Camden, NJ, Metropolitan Division.....	58,638	73,563	14,925	25.5	...	...
Burlington, NJ.....	18,976	25,114	6,138	32.3	6	5
Camden, NJ.....	31,563	36,976	5,413	17.1	8	8
Gloucester, NJ.....	8,099	11,473	3,374	41.7	9	2
Wilmington, DE-MD-NJ, Metropolitan Division.....	33,287	44,888	11,601	34.9	...	...
Cecil, MD.....	2,213	3,227	1,014	45.8	10	1
New Castle, DE.....	28,591	38,650	10,059	35.2	2	4
Salem, NJ.....	2,484	3,012	528	21.3	11	7

found that the number of employees working at headquarters in the Philadelphia metropolitan area increased by 50 percent from the end of the 2001 recession through mid-2006.<sup>12</sup> Overall, the influx of professional and business services jobs has had a considerable impact on the composition of the area's industry mix.

Although the Philadelphia area had an above-average concentration of professional and business services jobs, it ranked in the middle of the pack when its location quotient of 1.16 was compared with those of the other largest metropolitan areas nationwide. In fact, in two of the largest counties, Philadelphia and Bucks, the concentrations of professional and business services jobs, at 1.00 and 1.02, respectively, were on a par with the national average. (See table 6.)

Several counties in the Philadelphia area, however, did set themselves apart from the others. Montgomery County, with a location quotient of 1.58 in professional and business services, had the highest in the area; Chester and New Castle followed with quotients above 1.30. Not coincidentally, these three were among the best paid counties in the Philadelphia area in professional and business services with average weekly wages surpassing \$1,400 in the first quarter of 2008.

When Philadelphia was compared with the other 11 largest metropolitan areas, all had location quotients exceeding that for the Nation, but none came close to matching Washington's concentration (1.72) of jobs in professional and business services. The next highest in rank were San Francisco (1.39), Detroit (1.36), Boston

(1.29), Atlanta (1.27), and Chicago (1.22). The remaining 6 areas, including Philadelphia, recorded location quotients that fell into a very narrow band ranging from 1.17 in Dallas to 1.10 in Miami.

Professional and business services was the third-largest industry in the greater Philadelphia area in the first quarter of 1998, behind trade, transportation, and utilities and education and health services. Ten years later, its ranking had not changed but its presence in the area had increased nonetheless. In the first quarter of 1998, professional and business services accounted for 13.9 percent of the metropolitan area's jobs; by the end of the decade, the percentage had grown to 15.2 percent.

To more clearly understand the role of professional and business services in the Philadelphia metropolitan area's economy, the employment share for that supersector was compared with those of the other largest metropolitan areas in the country. Within this grouping, the Philadelphia area had one of the lower employment shares for professional and business service workers in 2008; still, its percentage was well above the 13.1 percent for the Nation. This relationship was common among the country's 12 largest metropolitan areas, with the employment distributions for professional and business services jobs all exceeding the U.S. average. (See chart 5.)

Four other areas had employment shares in professional and business services close to that for Philadelphia—Dallas, Los Angeles, New York, and Houston. The Miami area had the lowest percentage of professional and busi-

**Table 4. Net change in education and health services, by selected four-digit industries, for the 11 counties in the Philadelphia metropolitan area, first quarter, 1998, to first quarter, 2008**

NAICS code	Industry	Philadelphia, PA, Metropolitan Division					
		Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	
<b>Educational services</b>							
6111	Elementary and secondary schools.....	364	1,429	444	1,228	5,101	
6112	Junior colleges.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	
6113	Colleges and universities.....	( <sup>1</sup> )	( <sup>1</sup> )	1,498	1,320	3,418	
6114	Business, computer, and management training.....	58	( <sup>1</sup> )	-87	-20	-257	
6115	Technical and trade schools.....	30	( <sup>1</sup> )	-214	-33	135	
6116	Other schools and instruction.....	-17	309	423	527	849	
6117	Educational support services.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	
<b>Ambulatory health care services</b>							
6211	Offices of physicians.....	1,355	790	332	1,328	2,425	
6212	Offices of dentists.....	698	397	106	332	-206	
6213	Offices of other health practitioners.....	597	243	591	-2,344	518	
6214	Outpatient care centers.....	273	363	330	75	831	
6215	Medical and diagnostic laboratories.....	-266	29	-6	-485	383	
6216	Home health care services.....	517	-240	955	-77	426	
6219	Other ambulatory health care services.....	234	374	111	618	393	
<b>Hospitals</b>							
6221	General medical and surgical hospitals.....	1,482	449	( <sup>1</sup> )	383	-895	
6222	Psychiatric and substance abuse hospitals.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	-456	
6223	Specialty hospitals.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2,085	
<b>Nursing and residential care facilities</b>							
6231	Nursing care facilities.....	-2,014	-531	-277	20	-1,863	
6232	Residential mental health facilities.....	44	-255	636	-248	2,534	
6233	Community care facilities for the elderly.....	( <sup>1</sup> )	2,251	566	960	1,031	
6239	Other residential care facilities.....	( <sup>1</sup> )	-51	109	-58	-207	
<b>Social assistance</b>							
6241	Individual and family services.....	1,666	1,410	1,637	1,531	5,600	
6242	Emergency and other relief services.....	161	46	( <sup>1</sup> )	134	1,015	
6243	Vocational rehabilitation services.....	-6	-26	( <sup>1</sup> )	-87	169	
6244	Child daycare services.....	548	819	529	865	2,231	
NAICS code	Industry	Camden, NJ, Metropolitan Division			Wilmington, DE-MD-NJ, Metropolitan Division		
		Burlington County	Camden County	Gloucester County	Cecil County	New Castle County	Salem County
<b>Educational services</b>							
6111	Elementary and secondary schools.....	215	851	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6112	Junior colleges.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6113	Colleges and universities.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6114	Business, computer, and management training.....	-51	62	( <sup>1</sup> )	( <sup>1</sup> )	-9	( <sup>1</sup> )
6115	Technical and trade schools.....	( <sup>1</sup> )	76	( <sup>1</sup> )	( <sup>1</sup> )	245	( <sup>1</sup> )
6116	Other schools and instruction.....	-99	186	196	128	111	( <sup>1</sup> )
6117	Educational support services.....	16	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	344	( <sup>1</sup> )
<b>Ambulatory health care services</b>							
6211	Offices of physicians.....	1,218	450	540	19	1,528	27
6212	Offices of dentists.....	288	302	177	36	384	13
6213	Offices of other health practitioners.....	645	296	113	145	655	21
6214	Outpatient care centers.....	182	852	251	109	270	( <sup>1</sup> )
6215	Medical and diagnostic laboratories.....	188	156	( <sup>1</sup> )	( <sup>1</sup> )	-148	( <sup>1</sup> )
6216	Home health care services.....	452	-162	( <sup>1</sup> )	( <sup>1</sup> )	-147	( <sup>1</sup> )
6219	Other ambulatory health care services.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	215	( <sup>1</sup> )

See footnote at end of table.

**Table 4. Continued—Net change in education and health services, by selected four-digit industries, for the 11 counties in the Philadelphia metropolitan area, first quarter, 1998, to first quarter, 2008**

NAICS code	Industry	Camden, NJ, Metropolitan Division			Wilmington, DE-MD-NJ, Metropolitan Division		
		Burlington County	Camden County	Gloucester County	Cecil County	New Castle County	Salem County
<b>Hospitals</b>							
6221	General medical and surgical hospitals.....	( <sup>1</sup> )	-186	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6222	Psychiatric and substance abuse hospitals.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6223	Specialty hospitals.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Nursing and residential care facilities</b>							
6231	Nursing care facilities.....	332	-247	-202	( <sup>1</sup> )	867	( <sup>1</sup> )
6232	Residential mental health facilities.....	( <sup>1</sup> )	-25	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6233	Community care facilities for the elderly.....	579	791	7	( <sup>1</sup> )	425	( <sup>1</sup> )
6239	Other residential care facilities.....	( <sup>1</sup> )	97	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
<b>Social assistance</b>							
6241	Individual and family services.....	584	816	389	( <sup>1</sup> )	137	-12
6242	Emergency and other relief services.....	11	146	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6243	Vocational rehabilitation services.....	134	138	-13	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
6244	Child daycare services.....	535	502	549	44	774	15

<sup>1</sup> Data do not meet BLS or State agency disclosure standards.

**Table 5. Average weekly wages in education and health services, by county, Philadelphia metropolitan area, first quarter, 1998, and first quarter, 2008**

Area	First quarter, 1998	First quarter, 2008	Net change, 1998-2008	Percent change, 1998-2008	Rank by net change	Rank by percent change
United States.....	\$529	\$767	\$238	45.0	...	...
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA.....	588	841	253	43.0	...	...
Philadelphia, PA, Metropolitan Division.....	592	843	251	42.4	...	...
Bucks, PA.....	482	747	265	55.0	4	1
Chester, PA.....	534	740	206	38.6	10	10
Delaware, PA.....	542	770	228	42.1	7	7
Montgomery, PA.....	562	795	233	41.5	6	9
Philadelphia, PA.....	649	920	271	41.8	3	8
Camden, NJ, Metropolitan Division.....	560	810	250	44.6	...	...
Burlington, NJ.....	550	823	273	49.6	2	2
Camden, NJ.....	580	829	249	42.9	5	6
Gloucester, NJ.....	502	719	217	43.2	9	5
Wilmington, DE-MD-NJ, Metropolitan Division.....	598	878	280	46.8	...	...
Cecil, MD.....	456	678	222	48.7	8	3
New Castle, DE.....	617	909	292	47.3	1	4
Salem, NJ.....	513	695	182	35.5	11	11

ness services jobs, 14.5 percent, while the Washington metropolitan area had the highest share, 22.5 percent, in the first quarter of 2008.

*County specifics.* Employment in professional and business services, the highest paying industry in Philadelphia, grew by nearly 60,000 from the first quarter of 1998 to the first quarter of 2008. Nine of the 11 counties that compose the metropolitan area added jobs in this industry over the 10-year span, the exceptions being New Castle (-8,248) and

Delaware (-4,311). Although the City added about 2,500 professional and business services jobs, its rate of growth, 3.1 percent, was one of the slowest in the Delaware Valley; in comparison, the neighboring county of Montgomery added approximately 31,000 jobs, growing at a 44.3-percent pace. (See table 7.)

Professional and business services jobs were more widely dispersed than those in education and health services, which were concentrated in the City. (See chart 6.) Of the nine counties that added professional and business serv-

**Table 6. Location quotients for professional and business services, United States and 12 largest metropolitan areas, first quarter, 1998, and first quarter, 2008**

Area	First quarter, 1998	First quarter, 2008
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA .....	1.16	1.16
Philadelphia, PA, Metropolitan Division .....	1.12	1.19
Montgomery, PA.....	1.29	1.58
Chester, PA.....	1.23	1.38
Bucks, PA.....	.91	1.02
Philadelphia, PA.....	1.05	1.00
Delaware, PA.....	1.10	.86
Camden, NJ, Metropolitan Division .....	1.03	1.02
Camden, NJ.....	1.11	1.10
Burlington, NJ.....	1.05	1.07
Gloucester, NJ.....	.81	.74
Wilmington, DE-MD-NJ, Metropolitan Division .....	1.60	1.20
New Castle, DE.....	1.79	1.33
Salem, NJ.....	.45	.63
Cecil, MD.....	.39	.41
Washington-Arlington-Alexandria, DC-VA-MD-WV.....	1.67	1.72
San Francisco-Oakland-Fremont, CA.....	1.51	1.39
Detroit-Warren-Livonia, MI.....	1.40	1.36
Boston-Cambridge-Quincy, MA-NH.....	1.29	1.29
Atlanta-Sandy Springs-Marietta, GA.....	1.40	1.27
Chicago-Naperville-Joliet, IL-IN-WI.....	1.25	1.22
Dallas-Fort Worth-Arlington, TX.....	( <sup>1</sup> )	1.17
Los Angeles-Long Beach-Santa Ana, CA.....	1.25	1.16
New York-Northern New Jersey-Long Island, NY-NJ-PA.....	1.22	1.15
Houston-Sugar Land-Baytown, TX	1.18	1.14
Miami-Fort Lauderdale-Pompano Beach, FL	1.14	1.10

<sup>1</sup> Data do not meet BLS or State agency disclosure standards.  
NOTE: By definition, U.S. location quotient = 1.00.

ices jobs over the decade, three gained more than 10,000, with Montgomery in the lead. Chester County recorded the second-highest increase, 14,823, followed by Bucks County, which added 10,391. Growth in the remaining six counties ranged from 7,035 professional and business services jobs in Burlington County to 661 in Cecil County.

Although gains were widespread throughout the professional and business services supersector, the majority of the expansion occurred in just one of its four sectors: management of companies and enterprises. (See table 8.) This industry group is among the highest paid locally, drawing on highly educated and experienced workers to fill its ranks.

Interestingly, a large portion of the employment gains in management of companies and enterprises from the first quarter of 1998 to the first quarter of 2008 occurred in Philadelphia City, which added 8,507 jobs. However, the City added few professional and business services po-

sitions in other subsectors and, in some cases, lost jobs, largely offsetting the gain in management of companies and enterprises. Philadelphia City experienced its biggest loss in administrative and support services, which includes employment services, business support services, and travel arrangement and reservation services, among others.

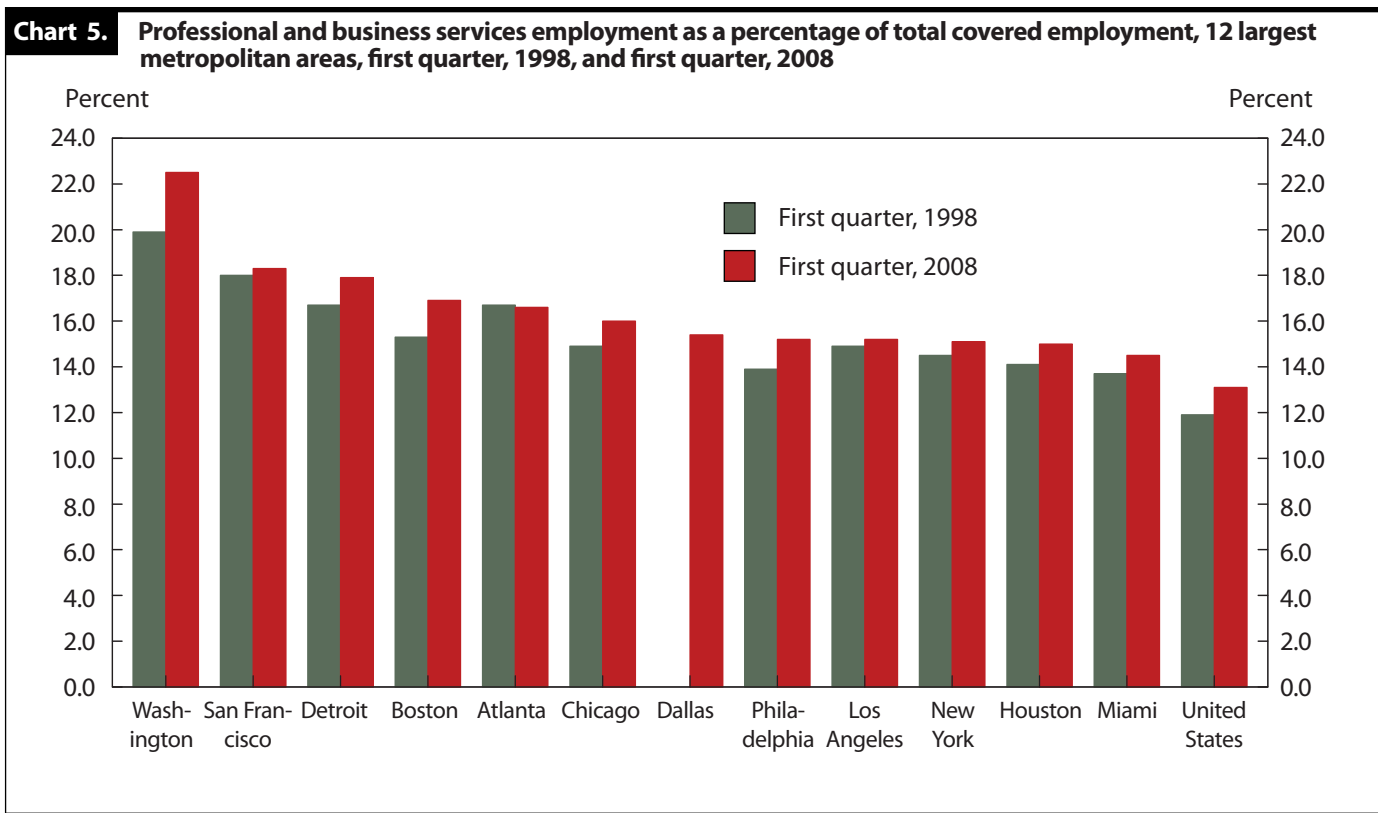
Montgomery County recorded the second-highest increase in jobs in management of companies and enterprises over the decade, 5,102, followed by Chester County, up 4,235. Four other counties—Burlington, Bucks, Camden, and Delaware—all had employment increases of greater than 1,000, but less than 2,500. Of the area's 11 jurisdictions, only 1, New Castle County, lost jobs in the management of companies and enterprises during the 10-year time span, down 5,824.

Montgomery County also added over 2,500 jobs in five other industry groups from 1998 to 2008: scientific research and development services (9,780), computer systems design and related services (5,818), management and technical consulting services (3,111), services to buildings and dwellings (2,850), and investigation and security services (2,729). Not unexpectedly, employment gains in Montgomery County were again among the largest in these industries in the Philadelphia area.

Other jurisdictions with notable gains were Chester County (5,346 in computer systems design and related services and 2,469 in scientific research and development services), Bucks County (3,208 in services to buildings and dwellings), and Camden County (2,845 in employment services).

Wages in professional and business services were among the highest in the Philadelphia metropolitan area, averaging \$1,383 a week in the first quarter of 2008, an increase of \$550 over the 10-year period beginning in the first quarter of 1998. In fact, this was the only supersector in the metropolitan area in which more than half of the counties (6) had an average wage exceeding \$1,000 a week, and five of these—Chester, Philadelphia, Montgomery, New Castle, and Delaware—had wages above the \$1,131 national average. Moreover, with the exception of Cecil County, wages in every jurisdiction surpassed \$900 in professional and business services during the first quarter of 2008, so these high-paying jobs were not relegated to a handful of counties. (See table 9.)

Wage growth in professional and business services was strong over the decade, increasing 66.0 percent in the Philadelphia area. Among the 11 counties, the average wage more than doubled in Chester County, reaching a metropolitan area high of \$1,703 in the first quarter of 2008. Growth of 75.0 percent or higher was achieved



**Table 7. Employment in professional and business services, by county, Philadelphia metropolitan area, first quarter, 1998, and first quarter, 2008**

Area	First quarter, 1998	First quarter, 2008	Net change, 1998–2008	Percent change, 1998–2008	Rank by net change	Rank by percent change
United States.....	14,471,848	17,620,163	3,148,315	21.8	...	...
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA.....	346,669	406,404	59,735	17.2	...	...
Philadelphia, PA, Metropolitan Division.....	231,648	285,924	54,276	23.4	...	...
Bucks, PA.....	24,670	35,061	10,391	42.1	3	5
Chester, PA.....	28,873	43,696	14,823	51.3	2	3
Delaware, PA.....	27,889	23,578	-4,311	-15.5	10	11
Montgomery, PA.....	69,742	100,626	30,884	44.3	1	4
Philadelphia, PA.....	80,474	82,963	2,489	3.1	6	9
Camden, NJ, Metropolitan Division.....	55,944	68,284	12,340	22.1	...	...
Burlington, NJ.....	21,363	28,397	7,035	32.9	4	6
Camden, NJ.....	26,639	29,934	3,295	12.4	5	8
Gloucester, NJ.....	7,942	9,952	2,010	25.3	7	7
Wilmington, DE-MD-NJ, Metropolitan Division.....	59,078	52,196	-6,882	-11.6	...	...
Cecil, MD.....	970	1,631	661	68.2	9	1
New Castle, DE.....	56,993	48,745	-8,248	-14.5	11	10
Salem, NJ.....	1,115	1,821	705	63.2	8	2

in three other counties—Gloucester, Montgomery, and Philadelphia City. One other county in the area, Delaware, had wage growth surpassing the nationwide industry average of 60.4 percent.

THE MIXTURE OF EXPANDING AND CONTRACTING employment levels within the various industry supersectors in the Philadelphia metropolitan area from 1998 to 2008 has resulted in a noticeable shift in the industrial

configuration of the local economy. Foremost, education and health services increased its presence in the area to rival trade, transportation, and utilities as the region’s job leader. To put this growth into perspective, the more than 84,000 education and health services jobs added in the Philadelphia area over the 10-year time span accounted for about one-half of the metropolitan area’s total employment gain. These increases, however, were largely City based—urban-oriented growth that figured

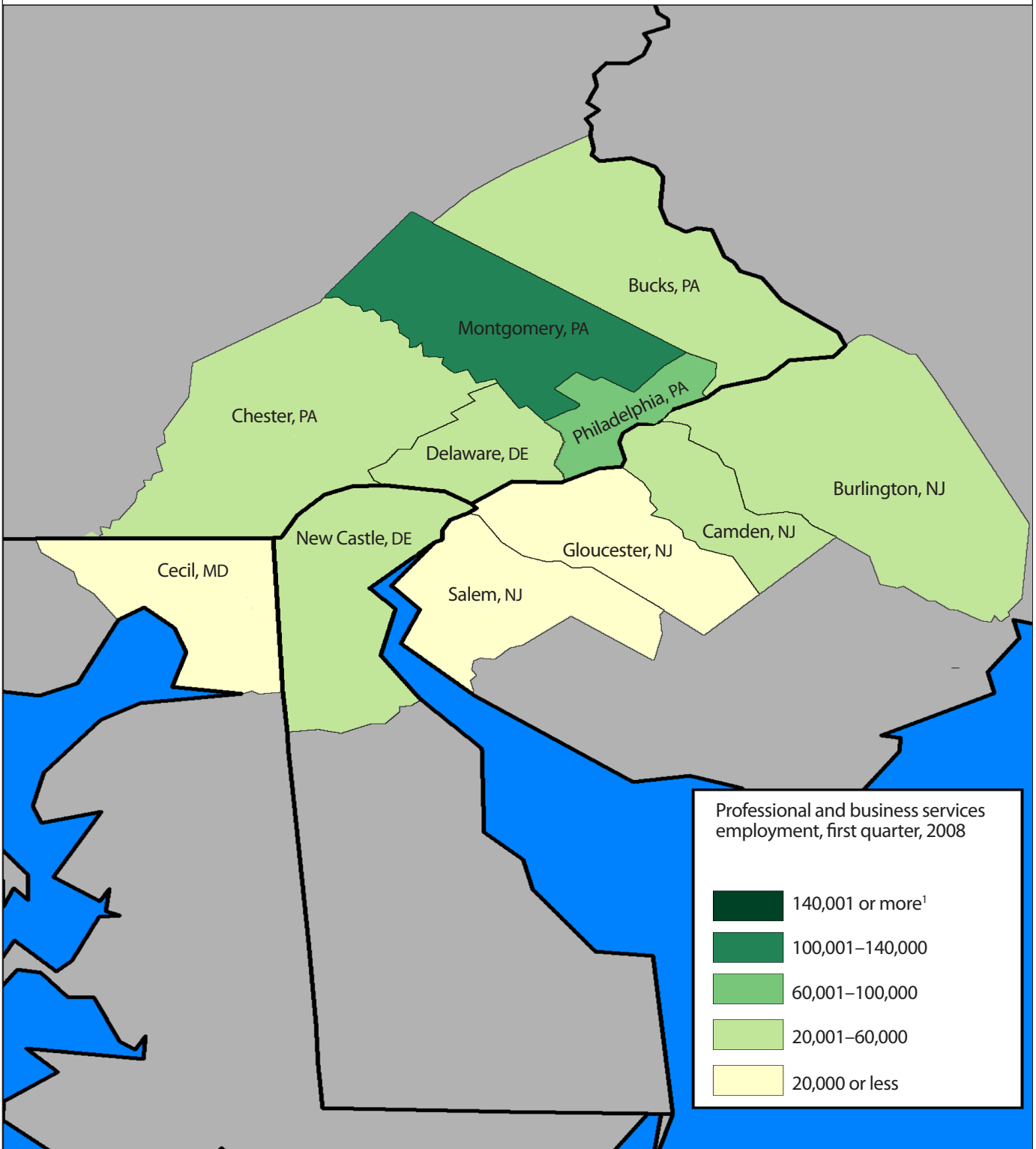
**Table 8. Net change in professional and business services, by selected four-digit industries for the 11 counties in the Philadelphia metropolitan area, first quarter, 1998, to first quarter, 2008**

NAICS code	Industry	Philadelphia, PA, Metropolitan Division					
		Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	
<b>Professional, scientific, and technical services</b>							
5411	Legal services.....	268	514	127	1,060	1,307	
5412	Accounting and bookkeeping services.....	303	627	198	1,054	718	
5413	Architectural and engineering services.....	610	423	-224	758	-739	
5414	Specialized design services.....	281	-325	43	-14	-122	
5415	Computer systems design and related services.....	1,091	5,346	-296	5,818	-582	
5416	Management and technical consulting services.....	726	906	617	3,111	749	
5417	Scientific research and development services.....	696	2,469	-2,335	9,780	-418	
5418	Advertising, public relations, and related services.....	316	-317	-87	-938	-504	
5419	Other professional and technical services.....	833	899	-444	-38	371	
<b>Management of companies and enterprises</b>							
5511	Management of companies and enterprises.....	1,994	4,235	1,144	5,102	8,507	
<b>Administrative and support services</b>							
5611	Office administrative services.....	-45	( <sup>1</sup> )	192	249	19	
5612	Facilities support services.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	
5613	Employment services.....	-2	-469	-2,549	-7	-2,072	
5614	Business support services.....	-143	-335	-1,304	-1,190	-1,115	
5615	Travel arrangement and reservation services.....	( <sup>1</sup> )	-193	-463	( <sup>1</sup> )	-1,092	
5616	Investigation and security services.....	101	391	665	2,729	-768	
5617	Services to buildings and dwellings.....	3,208	921	178	2,850	1,465	
5619	Other support services.....	162	( <sup>1</sup> )	( <sup>1</sup> )	307	-3,387	
<b>Waste management and remediation services</b>							
5621	Waste collection.....	( <sup>1</sup> )	( <sup>1</sup> )	356	301	( <sup>1</sup> )	
5622	Waste treatment and disposal.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	-187	-117	
5629	Remediation and other waste services.....	58	( <sup>1</sup> )	( <sup>1</sup> )	-66	( <sup>1</sup> )	
NAICS code	Industry	Camden, NJ, Metropolitan Division			Wilmington, DE-MD-NJ Metropolitan Division		
		Burlington County	Camden County	Gloucester County	Cecil County	New Castle County	Salem County
<b>Professional, scientific, and technical services</b>							
5411	Legal services.....	668	162	-20	6	1,515	-24
5412	Accounting and bookkeeping services.....	729	396	-29	110	768	-6
5413	Architectural and engineering services.....	257	362	609	18	449	48
5414	Specialized design services.....	98	243	( <sup>1</sup> )	( <sup>1</sup> )	-103	( <sup>1</sup> )
5415	Computer systems design and related services.....	-1,012	-1,305	-202	-57	-31	( <sup>1</sup> )
5416	Management and technical consulting services.....	862	-419	307	40	1,501	( <sup>1</sup> )
5417	Scientific research and development services.....	-74	125	( <sup>1</sup> )	( <sup>1</sup> )	-3,541	( <sup>1</sup> )
5418	Advertising, public relation, and related services.....	-256	-81	( <sup>1</sup> )	(1)	90	( <sup>1</sup> )
5419	Other professional and technical services.....	732	273	35	53	341	21
<b>Management of companies and enterprises</b>							
5511	Management of companies and enterprises.....	2,064	1,381	( <sup>1</sup> )	( <sup>1</sup> )	-5,824	( <sup>1</sup> )
<b>Administrative and support services</b>							
5611	Office administrative services.....	328	368	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
5612	Facilities support services.....	60	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
5613	Employment services.....	895	2,845	( <sup>1</sup> )	( <sup>1</sup> )	-3,552	( <sup>1</sup> )
5614	Business support services.....	470	-1,774	-154	( <sup>1</sup> )	-711	( <sup>1</sup> )
5615	Travel arrangement and reservation services.....	-319	-231	-43	( <sup>1</sup> )	364	( <sup>1</sup> )
5616	Investigation and security services.....	403	408	156	( <sup>1</sup> )	-83	( <sup>1</sup> )
5617	Services to buildings and dwellings.....	342	428	186	100	149	-26
5619	Other support services.....	740	( <sup>1</sup> )	134	( <sup>1</sup> )	-161	( <sup>1</sup> )
<b>Waste management and remediation services</b>							
5621	Waste collection.....	( <sup>1</sup> )	121	9	( <sup>1</sup> )	-85	( <sup>1</sup> )
5622	Waste treatment and disposal.....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
5629	Remediation and other waste services.....	56	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )

<sup>1</sup> Data do not meet BLS or State agency disclosure standards.



**Chart 6.** Employment in the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, Metropolitan Statistical Area, professional and business services, first quarter, 2008



<sup>1</sup> No professional and business services employment in this category.

**Table 9. Average weekly wages in professional and business services, by county, Philadelphia metropolitan area, first quarter, 1998, and first quarter, 2008**

Area	First quarter, 1998	First quarter, 2008	Net change, 1998–2008	Percent change, 1998–2008	Rank by net change	Rank by percent change
United States.....	\$705	\$1,131	\$426	60.4	...	...
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA.....	833	1,383	550	66.0	...	...
Philadelphia, PA, Metropolitan Division.....	819	1,472	653	79.7	...	...
Bucks, PA.....	618	965	347	56.1	7	6
Chester, PA.....	837	1,703	866	103.5	1	1
Delaware, PA.....	677	1,143	466	68.8	4	5
Montgomery, PA.....	852	1,534	682	80.0	3	3
Philadelphia, PA.....	896	1,583	687	76.7	2	4
Camden, NJ, Metropolitan Division.....	656	962	306	46.6	...	...
Burlington, NJ.....	724	983	259	35.8	10	9
Camden, NJ.....	650	962	312	48.0	8	7
Gloucester, NJ.....	494	905	411	83.2	6	2
Wilmington, DE-MD-NJ, Metropolitan Division.....	1,054	1,443	389	36.9	...	...
Cecil, MD.....	602	782	180	29.9	11	11
New Castle, DE.....	1,067	1,481	414	38.8	5	8
Salem, NJ.....	756	1,018	262	34.7	9	10

less prominently in the suburban counties—whereas the slowed growth in trade, transportation, and utilities was felt throughout the Delaware Valley. Perhaps, most importantly, employment growth in “eds and meds” showed no signs of slowing down, and its ongoing expansion will continue to be a magnet for the often high-skilled, well-paid jobs that universities, hospitals, and the like attract.<sup>13</sup>

Although the job growth in education and health services, particularly in the City, was not altogether unexpected given the industry’s long-term presence in the Philadelphia area, the increase of almost 60,000 professional and business services jobs from 1998 to 2008, a large portion of which was centered in suburban Montgomery County, was especially strong and of considerable importance in view of the fact that the industry had the highest average wage in the Philadelphia area. Most importantly, the first quarter of 2008 saw Montgomery County overtake Philadelphia City as the largest employer of professional and business services workers in the area. Overall, the combined job growth in education and health services and professional and business services helped offset the heavy losses in the hard-hit manufacturing industry and made up for the diminished growth in trade, transportation, and utilities.

On the surface, Philadelphia appears no different from a lot of other metropolitan areas that saw their local economy shift away from the goods-producing sector to take on a more service-provider orientation. However, what set Philadelphia apart from its counterparts over the decade was the strong growth exhibited by education and health services, which allowed the industry to catch up to the perennial jobs leader, trade, transportation, and utilities, in 2008.

*Postscript.* This article has covered employment and wage changes over the decade ending in the first quarter of 2008, an appropriate place to end given that in December 2007 the Nation entered its severest recession since the Great Depression. Data for the first quarter of 2009 have since become available and the trend confirmed: the employment share for education and health services in the Philadelphia metropolitan area rose to 19.9 percent over the year, surpassing the share for trade, transportation, and utilities, which slipped to 18.5 percent. Education and health services now stands alone in first place as the largest industry employer in greater Philadelphia, solidifying the area’s special status as one of the few major metropolitan areas not to be dominated by trade, transportation, and utilities. □

## Notes

ACKNOWLEDGMENTS: The authors thank Cassidy Canzani for her contributions in the preparation of this article and Michael Dickie, Thomas McGettigan, and Erin Delaney for gathering data and fact-checking the article.

<sup>1</sup>The substate area data presented in this article reflect the standards and definitions established by the U.S. Office of Management and Budget as of March 2004. A detailed list of the geographic definitions is available on the Internet at

## Regional Trends

[www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf](http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf) (visited October 19, 2008). The Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, Metropolitan Statistical Area (MSA) is composed of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties in Pennsylvania; Burlington, Camden, Gloucester, and Salem Counties in New Jersey; New Castle County in Delaware; and Cecil County in Maryland.

The Camden, NJ, Metropolitan Division is composed of Burlington, Camden, and Gloucester Counties in New Jersey. The Philadelphia, PA, Metropolitan Division is composed of Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties in Pennsylvania. The Wilmington, DE-MD-NJ, Metropolitan Division is composed of New Castle County in Delaware, Cecil County in Maryland, and Salem County in New Jersey.

The Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, MSA is commonly referred to as the Delaware Valley; this designation is used as a substitute for the Philadelphia metropolitan area throughout the article.

<sup>2</sup> The Quarterly Census of Employment and Wages (QCEW), a cooperative program involving the Bureau of Labor Statistics (BLS) and the various State Workforce Agencies (SWAs), provides employment and wage data for workers covered by State Unemployment Insurance (UI) laws that are compiled from quarterly contribution reports submitted to the SWAs by employers. For Federal civilian workers covered by the Unemployment Compensation for Federal Employees (UCFE) program, employment and wage data are compiled from quarterly reports that are sent to the appropriate SWA by the specific Federal Agency. The employment and wage data used in this article are derived from microdata summaries of more than 8 million employer reports of employment and wages submitted by States to the BLS. These reports are based on place of employment rather than place of residence.

Employment data under the QCEW program represent the number of covered workers who worked during, or received pay for, the pay period including the 12th of the month. Excluded are members of the Armed Forces, the self-employed, proprietors, domestic workers, unpaid family workers, and railroad workers covered by the railroad unemployment insurance system. Wages represent total compensation paid during the calendar quarter, regardless of when services were performed. Included in wages are pay for vacation and other paid leave, bonuses, stock options, tips, the cash value of meals and lodging, and in some States, contributions to deferred compensation plans (such as 401(k) plans). The QCEW program does provide partial information on agricultural industries and employees in private households.

<sup>3</sup> “Jurisdiction” will be used as a substitute for “county” throughout the article.

<sup>4</sup> “Philadelphia City” will be often used as a substitute for “Philadelphia County” throughout the article, given that both terms refer to the same geographical area.

<sup>5</sup> “Eds and meds” is a catchphrase for the education and health services supersector. The term will be used interchangeably with “the education and health services supersector” in this article.

<sup>6</sup> See “Philadelphia: The Official Convention and Visitors Site for Philadelphia,” on the Internet at [www.philadelphiausa.travel/philadelphia-page.php?itemid=8&pageid=233](http://www.philadelphiausa.travel/philadelphia-page.php?itemid=8&pageid=233) (visited September 10, 2008).

<sup>7</sup> See *Impact of Higher Education in Greater Philadelphia* (Philadelphia, Select Greater Philadelphia, October 2007), p. i, on the Internet at [www.selectgreaterphiladelphia.com/pdfs/Higher\\_Education\\_Study.pdf](http://www.selectgreaterphiladelphia.com/pdfs/Higher_Education_Study.pdf) (visited September 7, 2008).

<sup>8</sup> Recessionary periods are identified by the National Bureau of Economic Research (NBER). The NBER defines a recession as a significant decline in economic activity spread across the economy, lasting more than a few months, and normally visible in a drop in real GDP, real income, employment, industrial production, and both wholesale and retail sales.

<sup>9</sup> Location quotients are the ratio of industry employment in the area being analyzed to industry employment in the base area, divided by the ratio of industry employment in the analysis area to industry employment in the base area. For additional details, see “Help and Tutorials: Location Quotient Calculator” (Bureau of Labor Statistics, March 22, 2005), on the Internet at [www.bls.gov/help/def/lq.htm](http://www.bls.gov/help/def/lq.htm) (visited October 19, 2008).

<sup>10</sup> A detailed list of the geographic definitions of these 12 MSAs is available at [www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf](http://www.whitehouse.gov/omb/bulletins/fy2008/b08-01.pdf) (visited November 10, 2008).

<sup>11</sup> *Selected Hospital Capacity and Physician Workforce Measures* (Hanover, NH, Dartmouth Medical School, Center for the Evaluative Clinical Sciences, revised Sept. 8, 2009), pp. 39–52; on the Internet at [www.dartmouthatlas.org/data/download/2006\\_hosp\\_phys\\_hrr.xls](http://www.dartmouthatlas.org/data/download/2006_hosp_phys_hrr.xls) (visited November 10, 2008).

<sup>12</sup> See Bob Fernandez, “Hot Spots for HQ Jobs,” *Philadelphia Inquirer*, front page, Sept. 9, 2007.

<sup>13</sup> Timothy J. Bartik and George Erickcek, “The Local Economic Impact of ‘Eds & Meds’: How Policies to Expand Universities and Hospitals Affect Metropolitan Economies,” Metropolitan Economy Initiative, no. 6 (Washington, DC, The Brookings Institution, Dec. 10, 2008).

# IPP 2008 year in review

*On the whole, import and export prices rose sharply during the first 7 months of 2008 and then plunged during the last 5 months of the year; energy goods, most notably petroleum, led the price increases and decreases*

Edwin Bennion

**I**mport and export price movements through the first 7 months of 2008 contrasted sharply with those seen in the last 5 months of the year. During the first 7 months of the year, import prices and export prices reached their highest levels since first being published in 1982 and 1983, respectively. Import prices climbed 15.9 percent over the period, while export prices rose 7.3 percent.<sup>1</sup> The respective increases in import and export prices over the first 7 months of 2008 were larger than any annual price increase dating back to the inception of both the import and export price indexes. The largest annual increase for imports, a 10.6-percent rise, occurred in 2007, and the largest increase for exports, a 6.0-percent rise, also took place in 2007. Large price gains for fuel and precious metals, as well as a decline in value of the U.S. dollar, contributed towards the increases in both import and export prices. Large increases in the prices for agricultural commodities also contributed to the overall advance in export prices.

Prices for both imports and exports peaked in July 2008 and then, in August, began a precipitous drop that continued through the end of the year. During the final 5 months of the year, the drop in both import and export prices left each index down overall for 2008. Between August and December, import prices de-

clined 22.4 percent and export prices fell 9.5 percent. For 2008 as a whole, import and export prices were down for the first time since 2001, with the import index and the export index each exhibiting its largest decline since it was first published. Price decreases for fuel and precious metals, a turnaround in the value of the U.S. dollar, and drops in agricultural export prices were the major contributors to the overall price declines in the final 5 months of the year.

## Other price measures

In addition to the Import Price Index and the Export Price Index, the Bureau of Labor Statistics publishes other indexes that track monthly price changes. Two of these are the Consumer Price Index for all Urban Consumers (CPI-U), which measures the prices of goods and services purchased by urban households; and the Producer Price Index (PPI), which measures the prices that domestic producers receive for their output.

Although the magnitudes of the changes differed, both the CPI-U and the PPI experienced changes similar to those of the Import and Export Indexes. Increases throughout the first 7 months of the year, due to surges in prices for fuel and precious metals, were followed by decreases in the prices of the same commodities; the result was overall declines in the indexes for the year. Many of the market forces that were affecting import and export

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prices in 2008, especially volatile energy prices, also affected the CPI-U and PPI. The similarity in movement among the four indexes is evident in chart 1.

During the first 7 months of the year, the CPI-U increased 4.7 percent. Contributing towards the overall increase in the CPI-U were rapidly increasing prices for energy. During the first 7 months of the year, the energy price component of the index rose 29.1 percent, led by gasoline prices, which climbed 35.3 percent. This was a continuation of trends that took place in 2007, when the CPI-U increased 4.1 percent, driven by a 17.4 percent increase in energy prices.

With the onset of August the CPI-U began to decline. Over the course of the final 5 months of the year, the CPI-U fell 4.4 percent, ending the year up 0.09 percent. After leading the index on its way up over the first 7 months of the year, the energy component was responsible for the fall of the index over the remaining 5 months of the year, decreasing 39.1 percent over that period and 21.3 percent for the year.

The movement of the Producer Price Index was similar to the movements of the other three indexes throughout 2008. From January 2008 through July 2008, the PPI increased 15.1 percent, largely because of higher fuel prices. Prices for fuels and related prod-

ucts rose 39.5 percent. The summer brought about a change in the movement of the index. From August to the end of the year, the PPI declined 16.8 percent overall while prices for fuel and related products fell 45.8 percent. For the year, the PPI decreased 4.3 percent, the first annual decline since 2001.

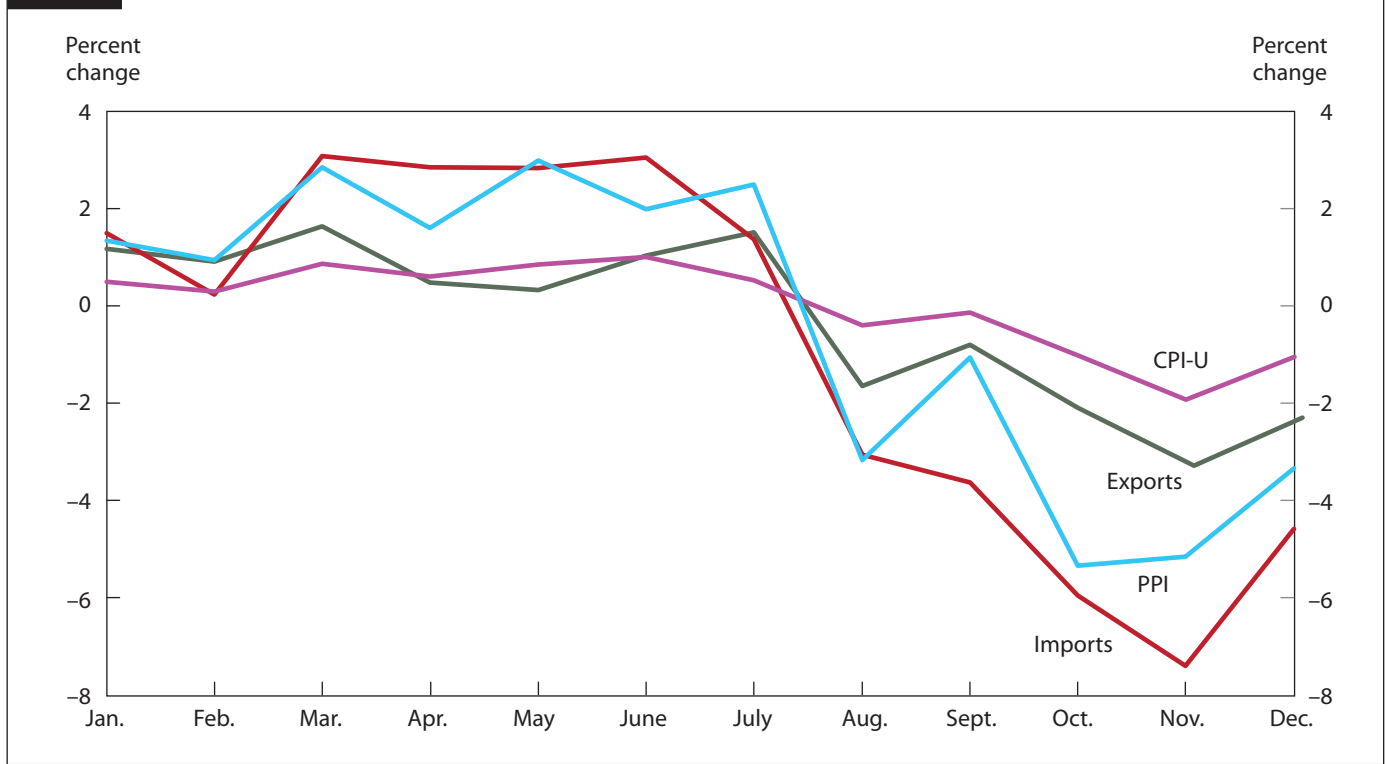
### Import price trends through July

During the first 7 months of 2008, import prices increased 15.9 percent, a larger increase than had occurred throughout 2007. The rapid rise in energy prices from March through July of 2008 was a major contributor to the overall increase in import prices, and price gains for precious metals also contributed to the rise in import prices.

*Energy.* Energy prices were the primary contributor in driving import price measures to record-high levels through the first 7 months of 2008. Prices for petroleum, petroleum products, and natural gas climbed steadily through the first 7 months of the year. Petroleum prices climbed 51.6 percent, continuing the upward trend of 2007 when the index rose 48.1 percent. The price of light, sweet crude oil surged to a record high on July 3, peaking at \$145.31 per barrel.<sup>2</sup>

Trade in the futures markets appears to have played a major role in the increase of oil and other commodity prices

**Chart 1. Monthly changes in the CPI-U, PPI, and import and export indexes, 2008**



through the first 7 months of 2008. In December of 2007 the Federal Reserve of the United States cut the Federal funds rate to a target range of zero to one-quarter of a percent, a level not seen since World War II. A number of other factors also helped spur global investment in the commodities markets; three of these factors were a weak U.S. dollar, concerns of impending inflation, and depressed real estate values. In the first quarter of 2008, global investments in commodities rose to more than \$400 billion.<sup>3</sup> An estimated \$70 billion in additional investment funds flowed into the global commodities market, much of it on a speculative basis from such sources as pension funds, commercial banks, and other large investors. The large volume of futures contracts being traded in 2008 bore witness to the increase in the amount of money being invested in a wide range of commodities, but especially in oil. Noncommercial traders, as defined by the U.S. Commodity Futures Trading Commission, accounted for approximately 20 percent of all long open-interest futures positions for crude oil on the New York Mercantile Exchange in February of 2007. Over a year later, in May of 2008, the number had risen to almost 37 percent of long open-interest futures positions. The New York Mercantile Exchange reported a 71.5-percent increase in the year-to-date volume of energy futures contracts during the same period. The number of energy futures contracts in 2008 was almost 339 million, up from a total of 190 million in 2007.<sup>4</sup> Such an influx in trading activity was also evident on the electronic exchanges. Intercontinental Exchange, a major electronic exchange for global commodity trading, also experienced large increases in trading volumes for petroleum futures. From May 2007 to May 2008, the volume of futures contracts for Brent Crude, a type of crude oil used as a benchmark in global oil pricing, swelled to 6.7 million futures contracts, a 23.5-percent increase from about 5.4 million.<sup>5</sup>

There were a number of factors that contributed to the increase in oil prices during the first several months of 2008. Falling crude inventories in the United States was one such factor. In March, the Energy Information Administration announced that crude inventories in the United States fell by 3.1 million barrels in the month of February to 305.4 million barrels, a level substantially lower than what many investors had expected.<sup>6</sup> This drop exacerbated fears that an already tight balance between supply and demand would grow more precarious.

Continued robust demand on the part of China, the world's second-largest oil-consuming market, also gave strength to prices throughout the first 7 months of 2008. Chinese demand for crude oil in March 2008 had in-

creased by 25 percent from a year earlier, as reported by the Customs General Administration of China.<sup>7</sup> Some of this increase in demand was attributed to agricultural needs as the planting season began. The approach of the Olympic Games, held in Beijing, also contributed to increased demand on the part of China. China stockpiled large reserves of fuel to ensure a steady and uninterrupted supply of petroleum to provide for transportation and energy needs during the games.

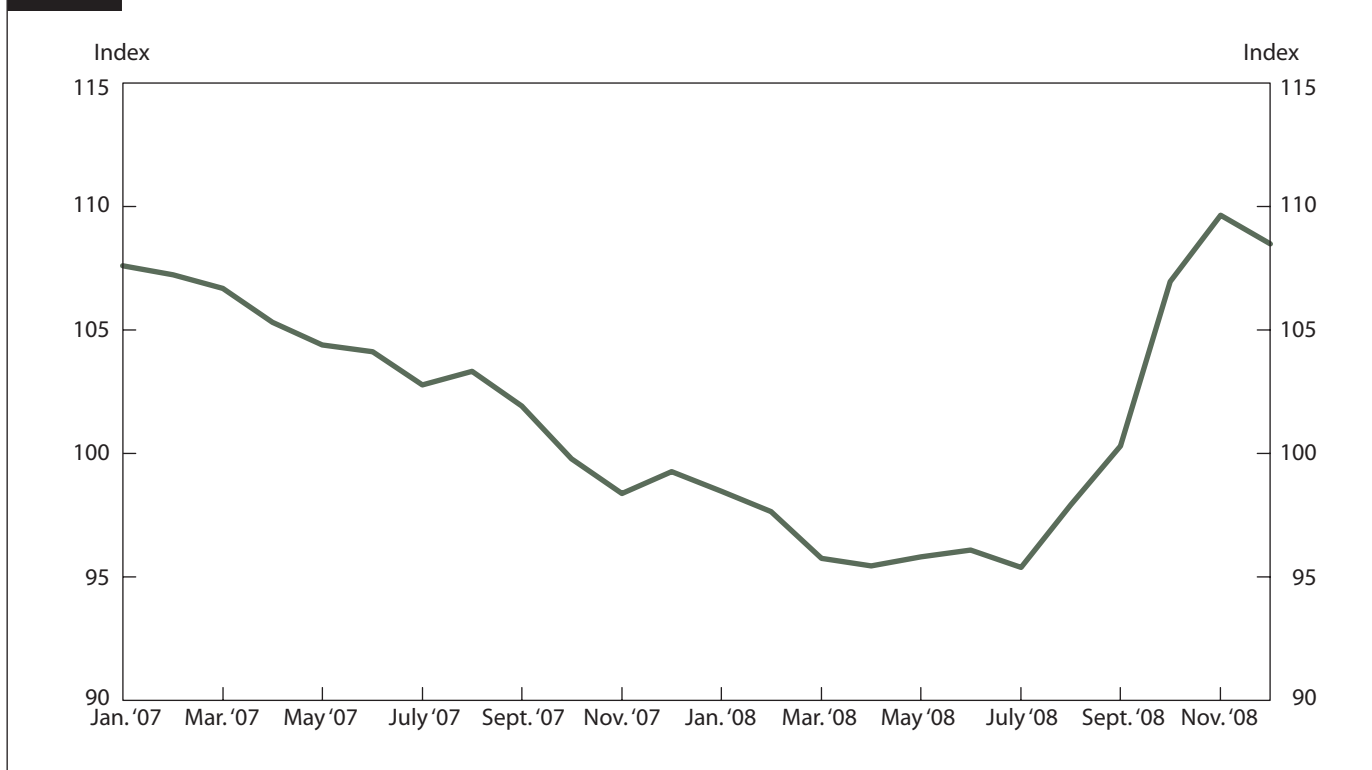
A number of geopolitical incidents affected the price of oil in the first half of 2008. In March, the United Nations Security Council issued sanctions against Iran in response to its nuclear program. Increased tensions between Iran and the United Nations raised fears that Iran might retaliate by disrupting the flow of oil coming from the Persian Gulf nations, especially those which ship petroleum through the Strait of Hormuz. The 16.5 million to 17 million barrels of petroleum that pass through the Strait of Hormuz on a daily basis make the Strait the world's most important transit route for oil, and any disruption of this route would have had a significant impact on the flow of oil to the global market.<sup>8</sup>

Supply disruptions caused by militant attacks in the Niger River delta and on offshore production facilities in Nigeria helped drive prices of oil higher throughout the spring of 2008. Though not a major threat to world supply, the attacks in Nigeria, the world's 14th-largest producer of oil in 2008, rattled the market.<sup>9</sup> Geopolitical incidents such as the Nigerian attacks and the increased tension between Iran and the United Nations drove prices for petroleum higher as the markets reacted in a fearful manner to the news rather than reacting in a way more consistent with the actual impact that the aforementioned events were having on the supply of petroleum to the international market at the time.

Another factor that contributed to higher fuel prices in the spring and early summer of 2008 was the weak U.S. dollar, which had declined 3.9 percent during the period as measured by the Federal Reserve's Nominal Broad Dollar Index.<sup>10</sup> (See chart 2.) The dollar reached its lowest value in July of 2008, the same month that petroleum set its record-high price. Because oil is priced in U.S. dollars, the declining value of the U.S. dollar mitigated the rise in oil prices in many other currencies.<sup>11</sup>

Prices for natural gas followed the same trend as those for petroleum. During the first 7 months of 2008, prices for natural gas climbed 59.3 percent, reaching a level not seen since the closing months of 2005. The large price increase of 2008 does not appear to have been caused by the same market forces that typically shift the price

**Chart 2. Nominal Broad Index of the U.S. dollar, January 2007–December 2008**



of natural gas, because the rise in price was at odds with usual price trends for imported natural gas. Under normal seasonal patterns prices climb in the winter months, fall in the summer, and rebound as winter approaches towards the end of the year. According to the Energy Information Administration, consumption in the United States was little changed from 2007, increasing only 0.1 percent, and temperatures through the first 7 months of the year were fairly mild.<sup>12</sup> A substantial force behind the large increase in natural gas prices was the large amount of investment in energy commodities that took place in 2008. As appeared to be the case with petroleum, the volume of natural gas futures contracts rose significantly from 2007 to 2008. On the New York Mercantile Exchange, the volume of futures contracts for natural gas increased by 20.0 percent, from 29,786,318 in 2007 to 38,730,519 in 2008.<sup>13</sup>

*Raw materials.* The index for imports of raw materials and industrial supplies excluding petroleum, natural gas, coal, and other energy commodities increased steadily over the first 7 months of 2008. From January through the end of July, prices for raw materials and industrial supplies increased 16.9 percent. This increase continued the trend from the previous year, during which prices had increased 7.4 percent. The major contributors to the overall increase

were metals, both precious and nonprecious, and chemicals.

Nonmonetary gold prices increased 10.2 percent through the first 7 months of the year, continuing a steady rise in price dating back to 2001. Gold became a very attractive investment when the U.S. Federal Reserve cut interest rates to record-low levels. Gold has traditionally been viewed as a reliable store of wealth and a hedge against inflation. As concerns regarding the state of the U.S. economy and the relative strength of the U.S. dollar mounted, investors turned to gold as a perceived safe investment.<sup>14</sup>

Other precious metals excluding gold also experienced large price increases during the first 7 months of the year. Prices for these metals, which include silver, platinum, palladium, and rhodium, rose 29.1 percent during the first 7 months of the year, with platinum prices increasing to record levels. Supply shortages in South Africa, the world's largest producer of the platinum group of metals, were a major contributor to the increase in platinum prices. Unlike gold, platinum is much more of a commercial commodity than an investment. Of the 239,000 kg of platinum sold in 2006, 130,000 kg were used in the production of automobile emissions control devices and a large percentage of the remaining platinum sold went to-

wards other industrial applications.<sup>15</sup> Prices for platinum are therefore driven largely by supply and industrial demand. Production in South African mines fell by over 10 percent as Eskom, South Africa's national power generator, was unable to meet the demand for electricity. Many mines were forced to operate with only 80 to 90 percent of their power supply, and as a result production suffered.<sup>16</sup> Owing to South Africa's position as the world's largest producer of platinum, the decrease in production on the part of South Africa's mines drove platinum prices higher.

Steel, iron, and other nonferrous metals such as copper experienced significant price increases through the first 7 months of 2008 as well. Prices for iron and steel climbed 41.1 percent during the period after having risen 8.1 percent in 2007. The world's leading iron ore producer, Brazil's Vale, set the prices for iron ore significantly higher at the beginning of February.<sup>17</sup> One of the causes of the price increases of 65 percent to 71 percent was continued high demand on the part of China's robust steel industry. While North American and European demand for steel was tepid at best, demand was still robust in many developing nations such as India and China where construction continued at a strong pace. Copper prices, which plummeted at the start of the year, climbed 22.2 percent from February through the month of May and, despite a decline in July, were still up 17.6 percent at that time compared with prices in January. In April labor unrest in three mines in Chile helped drive copper prices up on the London Metal Exchange.<sup>18</sup> As with other metals, and commodities in general, copper rose in price during the first 7 months of the year, driven up in part by the depreciation of the U.S. dollar against major world currencies along with fears of impending inflation.

Prices for chemicals excluding medicinals climbed 19.3 percent through the month of July, after an increase of 10.6 percent in 2007. Fertilizers, pesticides, and insecticides, which increased in price by 59.2 percent, were a major contributor to the overall increase of chemicals prices. As agricultural commodities climbed in price, farmers turned to fertilizers as a means of increasing crop yields.<sup>19</sup> Both the U.S. and world fertilizer industries were unable to quickly adjust to the surging demand for fertilizers. Rising energy prices also contributed to the rise in prices for fertilizer, because higher energy prices drove up production costs for fertilizers.

*Finished goods.* Prices for imports of finished goods, including capital goods; automotive vehicles, parts, and engines; and consumer goods also were on the rise during the first 7 months of 2008. Prices for passenger vehicles

continued to increase through July of 2008, continuing a trend that started in the mid 1990s. Prices rose 0.3 percent from January 2008 to July 2008 after a 2.4-percent annual increase in 2007. Auto parts, engines, bodies, and chassis increased in price by 1.6 percent during the first 7 months of 2008. Several factors helped drive up import prices for these goods. One of the factors was the depreciation of the U.S. dollar against the Canadian dollar, the yen, and the euro. As was previously mentioned, the Federal Reserve's Nominal Broad Dollar Index declined 3.9 percent for the period.

Rising prices for inputs such as steel also pushed up prices for auto parts and passenger vehicles.<sup>20</sup> Steel manufacturers, dealing with higher costs for iron ore and energy, raised prices for items such as sheet steel, which is used in the manufacturing of autobodies, to reflect the higher costs of manufacturing. In response, several auto manufacturers raised vehicle prices to offset erosion in earnings brought about by the higher price of steel.<sup>21</sup>

After rising steadily throughout 2007, prices for capital and consumer goods continued to rise throughout the first 7 months of 2008. A major contributor to the increases was increasing petroleum and metals prices. The weakening of the U.S. dollar against such currencies as the yen and the euro also drove prices higher as many businesses renegotiated contracts at the beginning of the year in order that they reflect the weaker dollar.

Prices for computers and home entertainment equipment were exceptions to the upward trend: prices for computers declined by 2.9 percent from January 2008 to July 2008, while home entertainment equipment prices declined by 1.3 percent. Increasing worldwide sales and economies of scale are two of the reasons for falling HD and flat-screen television prices.<sup>22</sup> It was mainly a combination of weakening demand and increased competition that drove down computer prices.

## Export price trends through July

Prices for exports increased significantly during the first 7 months of 2008, rising 7.3 percent. This 7-month increase was larger than any annual increase the index had experienced in the last two decades. Agricultural commodities such as soybeans and corn were major contributors to the overall increase in export prices. Rising prices for precious metals also contributed to the overall increase in export prices from January through July.

*Agricultural products.* As with petroleum, prices for exports of agricultural commodities were quite volatile



throughout 2008. During the first 7 months of the year, prices climbed 23.6 percent, which almost mirrored the 23.4-percent annual increase from 2007. During 2008 export price trends were dominated by rising prices for corn and soybeans.

Corn prices climbed steadily within the first 7 months of the year, increasing 63.7 percent. The influx of investment in futures markets that took place during the early part of 2008 and contributed to rising oil and gold prices also affected prices for agricultural commodities.<sup>23</sup> In May of 2008 noncommercial investors held nearly 463,000 long futures contracts in the Chicago Board of Trade corn futures. By comparison, at the end of May of 2007 there were slightly under 340,000 noncommercial long contracts.<sup>24</sup>

Weather also played a role in driving up corn prices during the first 7 months of 2008. Heavy rainfall during the spring delayed planting in the Corn Belt, stoking fears that there would not be sufficient acreage planted to meet growing demand. Flood waters inundated large areas of the Midwest in June, which further exacerbated fears of a diminished harvest. Iowa was especially hard hit, with approximately 1.2 million acres used for corn, or 1.5 percent of the country's anticipated harvest, waterlogged. These flooded acres were land either on which farmers needed to replant or on which they had not yet planted because of the water.<sup>25</sup> As a result of the heavy rainfall throughout the Midwest, the United States Department of Agriculture (USDA) lowered its forecast for the U.S. corn harvest by 3.2 percent. The original forecast of 12.1 billion bushels was reduced to 11.7 billion bushels.<sup>26</sup>

Increased export demand also drove up both corn and soybean prices in 2008. Because of the weakening of the U.S. dollar in relation to other currencies, foreign demand for U.S. agricultural products increased as they became much cheaper for foreigners to purchase in relation to agricultural products from many other countries. As global demand for meat rose, feed usage also increased, with much of the world turning to the United States as a source of animal feed. USDA increased its corn export forecast to 2.45 billion bushels, which was an all-time high.

Soybean prices rose 47 percent through the month of July despite an estimated 74.5 million acres planted, which was the third-largest area on record and a 17-percent increase from the previous year. The same factors that drove up corn prices also contributed to the rise in soybean prices. Increased investment in agricultural commodities, poor weather, the weakening U.S. dollar, and high export demand all played their part. In the month of July, soybean prices reached a record high of \$16 per

bushel. Flooding in the Midwest brought about a reduction in the percent of acres that would be planted, from 98.1 percent to 96.8 percent.<sup>27</sup> The flooding cut planted acreage by 3.7 million acres, and harvested acreage was expected to drop by 1.3 million acres. In June of 2008, soybean inventories were estimated to be 676 million bushels, down 38 percent from 2007 and the lowest level in 4 years. Prices for soybeans rose significantly in reaction to the news of low inventory.

*Raw materials.* Price trends for raw material exports were very similar to those of raw material imports, though of differing magnitudes. During 2007 prices for raw materials were steadily on the rise, increasing 10.5 percent, and the trend continued through the first 7 months of 2008. Through July of 2008 prices rose 15.4 percent, with especially large increases taking place in May, June, and July.

Prices for exported chemicals were on the rise, increasing 13.5 percent from January to July of 2008. As with their import counterparts, prices for exports of chemicals, specifically fertilizers and petrochemicals, were driven up by higher levels of demand, due to high agricultural commodity prices, and the rising price of oil. Fertilizer prices increased sharply in the early months of 2008 because of strong demand generated by exceptionally high global prices for agricultural commodities. In response to the high prices, farmers across the globe turned to fertilizers in an attempt to boost yields. Rising crude oil prices also drove up prices for petrochemicals such as benzene and ethylene, which in turn drove up prices for organic chemicals that are manufactured from them. Several gasoline additives also were increasing in price, mainly because these fuel additives routinely move in conjunction with petroleum prices.

Export metals prices also were on the rise through the month of July. The depreciation of the U.S. dollar against numerous world currencies coupled with rising global steel prices made U.S. exports of steel quite attractive for foreign buyers.<sup>28</sup> During the first 2 quarters of 2008, the United States exported 4.9 million tons of steel, a 19-percent increase from the same period in 2007, making the United States the 8th-largest steel exporter.<sup>29</sup> Most of the steel exported was destined for Asia and the Asian Near East (more commonly known as the Middle East), where demand remained strong throughout the early part of the year. Prices for exports of precious metals also were on the rise. The same factors that drove up prices for imported precious metals drove up prices for exported precious metals.

*Finished goods.* Prices for exports of finished goods all rose through the month of July. Prices for automotive vehicle parts, engines, and bodies increased 1.2 percent during the aforementioned period. As with imports, the main reason for the increase in prices of exports was materials costs. As steel and other metals rose in price, the production of automotive parts became more costly. The same was true for household and kitchen appliances, which increased 3.6 percent in price. Prices for industrial and service machinery also increased over the same period. The rising costs of materials such as steel were a driving force behind the increases. Consumer goods prices were on the rise as well, most notably in the form of rising jewelry prices. Increasing gold and other precious metals prices helped drive the price of jewelry higher.

### **Import price trends for August–December**

From August through the end of the year, the Import Price Index declined 22.4 percent and finished the year down 10.1 percent. Before 2008, the last decline in import prices took place in 2001, when import prices declined 9.1 percent for the year. It appears that the same commodities and products that drove the index up through the first 7 months of the year were responsible for the index's decrease over the final 5 months.

*Energy.* Prices of imported petroleum and petroleum products began their precipitous drop in August and, over the final 5 months of the year, fell 67.6 percent to end the year down 50.8 percent. Turmoil in the global financial sector brought about an overall slowing of economic activity across the globe, especially in developed countries, and thus decreased demand for energy.<sup>30</sup> In the United States unemployment figures rose to their highest levels in 25 years while GDP shrank, both of which indicated a worsening of the U.S. economy. Lower economic activity and concomitant softening demand for petroleum were significant factors in the decline of prices for petroleum.

Drivers in the United States reduced the number of miles driven as gas prices increased. Fifteen billion fewer vehicle miles were driven in August of 2008 in comparison with August of 2007, a 5.6-percent decline. By the end of the year, Americans had driven 108 billion fewer vehicle miles for the year 2008, a 3.6-percent decrease from the previous year.<sup>31</sup> The large decrease in miles driven, intensified by the growing global recession, bolstered fears of slackening demand for oil.

As economies around the world faltered and concerns of inflation subsided, the U.S. dollar underwent a very

large appreciation, which also contributed to falling petroleum prices. The popularity of the U.S. dollar as a safe haven in times of economic troubles helped it appreciate against the other major world currencies.<sup>32</sup> Because crude oil is priced in U.S. dollars, the appreciating value of the dollar made oil more expensive for buyers in foreign countries, resulting in reduced demand.

Geopolitical events, which had affected petroleum and energy prices during the first 7 months of 2008, appear to have had a relatively little impact on petroleum and energy prices over the final 5 months of the year. Supply disruptions in Nigeria, due to continued militant attacks; OPEC production cutbacks; an explosion on a portion of the Baku-Tblisi-Ceyhan pipeline in Turkey; and Tropical Storm Edouard, which made landfall south of Port Arthur, Texas, all did little to hinder the fall of oil prices. Starting in June many investors exited the energy markets. By October of 2008, the number of open-interest futures contracts held by noncommercial traders, as defined by the Commodity Futures Trading Commission, had fallen by 19.7 percent from May and accounted for only 29 percent of all positions for crude oil on the New York Mercantile Exchange.

*Raw materials.* Prices for imports of raw materials spent the final 5 months of 2008 steadily declining. During these 5 months, prices for raw materials declined 14.7 percent, ending the year just 0.2 percent below where they began the year. After a slight increase in the price of gold in August, prices declined for the rest of the year, with notably large decreases in September and December. Investors flocked to gold during the first few months of 2008, but, as signs mounted that the economies of the United States and other developed nations were headed for or already in a recession, concerns of inflation quickly evaporated. Investors removed hedges against high global inflation and abandoned many positions on commodities such as oil and gold.<sup>33</sup> As the fear of inflation dissipated, the U.S. dollar staged a large recovery in value against the other major world currencies, making gold an even less attractive investment.

Other precious metals such as silver, platinum, and palladium experienced even more precipitous price declines over the final 5 months of the year. Platinum, which is used primarily as an industrial metal, especially in the construction of automobile emissions control devices, fell in price by more than 50 percent in the final 5 months of the year, from a record high of over \$2,000 an ounce. As the global economy fell into recession, demand for the metal declined as production of automobiles, especially

large SUVs, fell.<sup>34</sup> The attractiveness of silver as an investment in the same guise as gold also lessened as the specter of inflation from earlier in the year dissipated.

Prices for steel and iron continued to climb through the month of September and then quickly plummeted during the final 3 months of the year, falling 26 percent from the highs reached in September. Dwindling demand, due to the onset of the global recession, helped drive down steel prices as construction and manufacturing activity declined. Copper prices also plummeted, falling 43.3 percent. The struggling housing market in the United States had severely reduced copper prices, due to copper's important role in residential construction. Large surpluses of copper on the international market helped bring about lower prices and, as construction in Asia started to decline, copper prices fell even more. By August there was a surplus of 125,000 metric tons in the market.<sup>35</sup> From the start of August through the end of the year, copper prices declined 43.3 percent and finished the year down 41.8 percent compared with a year earlier.

*Finished goods.* Prices for finished goods imports over the final 5 months of 2008 were in line with those of other imports, save a few exceptions. As with the other categories of imports, price declines in finished goods were gradual through the summer and fall but by the end of the year had become quite pronounced.

After climbing by 1.6 percent through the first 7 months of the year, prices for capital goods peaked in July, remained unchanged in August, and then began a steady decline through the rest of the year, falling 0.7 percent. A resurgent U.S. dollar played a significant role in the decline of import prices. The Federal Reserve's Nominal Broad Dollar Index increased 13.7 percent over the final 5 months of 2008. The strengthening of the U.S. dollar, especially against the euro, Canadian dollar, British pound, and several currencies from Asian countries (although not the yen), helped drive down import prices.

Worsening economic conditions, in both the United States and the rest of the world, also contributed to the decline of import prices for finished goods. Both domestically and internationally, economies started to falter, which brought about a decline in consumer expenditures, contractions within the manufacturing sector, and falling prices. The GDP of the United States, as measured by the Bureau of Economic Analysis at the U.S. Department of Commerce, began its decline in the third quarter of 2008 and dropped steeply in the final quarter of the year, evident in chart 3. By the end of the year, GDP had receded to a level not far from that of the first 2 quarters of 2007. A

wide range of factors such as job loss, a severe reduction in credit, falling home prices, and a declining stock market put consumers under severe stress in the latter 2 quarters of 2008. Declining personal consumption expenditures in the final quarter of the year went hand in hand with marked decline in GDP. Consumers spent an estimated \$210 billion less in the fourth quarter of 2008 than they had a year earlier.

### Export price trends for August–December

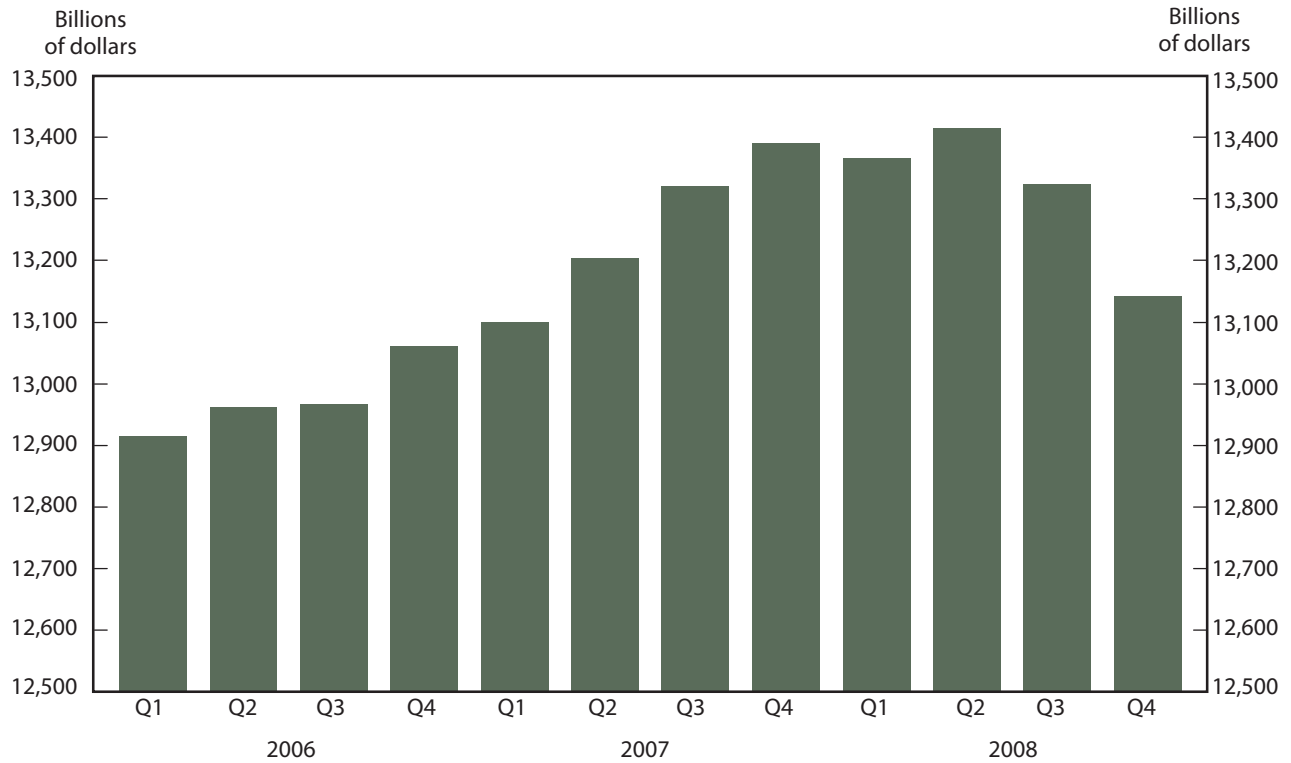
The final 5 months of 2008 bore witness to declining import and export prices, as well as a decline in the U.S. trade deficit. Overall levels of both imports and exports of goods and services also fell during the closing months of the year, as is illustrated in chart 4. After growing steadily during 2007 and the first 7 months of 2008, both imports and exports declined sharply with the onset of autumn. From August through the end of the year, imports fell 23.8 percent and exports declined 19.2 percent. Waning demand for both imports and exports, due to poor economic conditions both domestically and abroad, was responsible for the declines. Falling crude oil prices were a major contributor to the reduced trade deficit in the closing months of 2008, though a resurgent dollar did lessen the impact to some extent. Even with the strengthening of the U.S. dollar, the U.S. trade deficit was the smallest it had been in 6 years as of December of 2008.

As has already been noted, the index for export prices peaked in July of 2008. During the final 5 months of the year, the index fell steadily and, by the end of the year, reached a level that had not been seen since the opening months of 2007. As was the case with imports, the major contributors to the index's rise during the first 7 months of the year were also those primarily responsible for the index's decline during the last 5 months of the year.

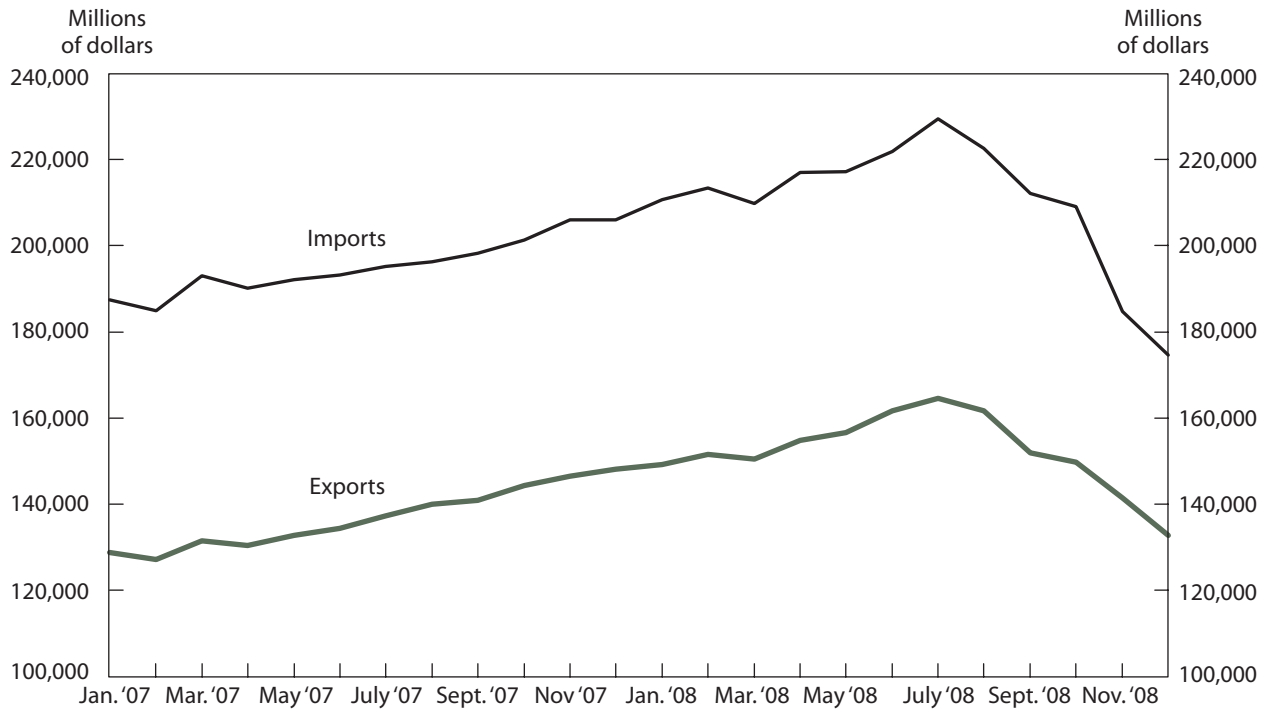
*Agricultural products.* Declining corn prices were a major contributor to the overall decline in export prices. After reaching record highs during the first 7 months of 2008, a period in which prices experienced some of the largest gains of the last decade, prices dropped precipitously over the final 5 months of the year. From the start of August through the end of the year, prices fell by 51 percent, to a level not seen since autumn of 2006. A number of factors contributed to the decline in corn prices.

In August 2008, USDA's National Agricultural Statistics Service released new estimates for spring-planted row crops. Corn production was forecast to total 12.3 billion bushels, with expected yields to average 155 bushels per

**Chart 3. Gross Domestic Product of the United States, 2006–08**



**Chart 4. Levels of imports into and exports out of the United States, January 2007–December 2008**



acre, the second-highest yield on record.<sup>36</sup> Earlier in the year the USDA had reduced its crop forecasts for corn because of deluges that had severely affected the Corn Belt through much of the planting season. The forecasts of August greatly allayed fears that the 2008 crop would be significantly lower than the previous year and did much to relieve pressure on prices. During the month of August prices fell by 28.6 percent.

As summer gave way to fall and fall to winter, prices for corn continued to decline. Prices declined by 17 percent in October and 16.7 percent in December. Uncertainty regarding the overall global economic outlook helped dampen demand for grain.<sup>37</sup> As signs of a global economic downturn grew stronger, the attractiveness of commodities as an investment was greatly reduced. Along with the decline in export demand, the strengthening of the U.S. dollar over the last 5 months of the year helped drive down the price of corn.

Prices for soybeans and other oil seeds followed much the same trend as corn prices. After reaching never-before-seen highs in July of 2008, in the final 5 months of the year prices for soybeans and other oil seeds receded to levels in line with those of late 2007, completely erasing the record gains of 2008. Many of the same factors that contributed to the decline in corn prices also drove soybean prices down. In August, the National Agricultural Statistics Service forecast soybean production at 2.97 billion bushels for 2008, up 15 percent from the previous year.<sup>38</sup> Fears had persisted that the worst flooding to hit the Midwest since 1993 would severely hamper planting and would result in a lower-than-anticipated crop yield. The strengthening of the U.S. dollar coupled with the overall decline in the attractiveness of commodities also helped drive down soybean prices.

*Raw materials.* Over the final 5 months of 2008, export prices for raw materials steadily declined, falling 21.5 percent to a level on par with that of December of 2006. Prices for raw materials finished the year down 9.4 percent from a year earlier; 2008 was the first year that prices had declined since 2001.

Exported metals dropped in price significantly over the last 5 months of 2008. Prices for steel and iron products declined 9.9 percent. Demand for American steel declined in the latter half of 2008 as economies around the globe started to slow and the likelihood of a global recession loomed. China, in particular, scaled back demand for steel in the fall of 2008 because of the slowdown of construction in China and the rest of the world. Demand on the part of automobile manufacturers also declined as

the number of vehicle sales slowed.

Prices for nonmonetary gold and other precious metals also declined during the final 5 months of the year. Gold declined in price by 14.8 percent, and prices for other precious metals fell 45.6 percent. Many investors turned away from gold as concerns of inflation subsided, economies around the world started to slow, and the U.S. dollar regained some of the value it had lost in the early months of 2008. Prices for the platinum metals group also fell sharply through the latter part of 2008, though not for the same reason as gold prices. The demand for platinum fell sharply as automobile sales, especially of larger vehicles, declined.

As with metals prices, prices for chemicals were on the decline from August through the end of the year, falling 12.7 percent. Export chemicals prices finished 2008 down 0.9 percent for the year, which was the first annual decline since 2001. Prices for chemicals fell in tandem with prices of upstream products, namely petroleum and natural gas. The prices of benzene and ethylene, both petrochemicals, declined as crude oil prices dropped in price. This decline in turn drove down prices for a wide range of organic chemicals such as styrene, vinyl chloride, and methyl tertiary-butyl ether. Plastics prices also underwent a significant decline during the final 5 months of 2008, falling by 13.9 percent. As they were for the prices of organic chemicals, declining crude oil prices were the largest factor in the decline in prices for plastics.

*Finished goods.* Prices for finished goods exports declined much more slowly during the final 5 months of 2008 than prices for agricultural and raw material exports. Prices for capital goods declined 0.4 percent, with prices for computers and semiconductors falling 3.9 percent. Falling demand, which was brought about by the global economic slowdown, was exacerbated by oversupply, especially of components such as DRAM and NAND flash memory. In addition, technological innovations and competition kept manufacturing costs low and allowed for prices to continually decline.

It was not until the final 2 months of the year that prices for automotive vehicles and parts declined, and they did by only 0.2 percent. Prices for passenger cars and trucks rose in the late summer months and through October, when new (2009) vehicle models were introduced. After the introduction of the new models, prices remained stable through the close of the year. Prices for parts, engines, bodies, etc. began decreasing in November, falling 0.3 percent during the final 2 months of 2008. It took several months for the falling prices of inputs, especially steel, to

have an impact on the prices of parts. Auto manufacturers cut back production as the economy slowed and credit tightened, which dampened demand for vehicular parts.

Prices for consumer goods as a whole did not start to decline until November, when they began their 0.8-percent slide for the final 2 months of 2008. A wide range of factors contributed to falling prices for consumer goods. A number of categories of nondurable consumer goods such as pharmaceutical and medicinal materials along with books and magazines began declining in July and August as the U.S. dollar gained strength against the euro, British pound, South African rand, and Canadian dollar. Other consumer goods did not begin declining until November. Lower prices for materials finally began to drive down prices for goods such as recreational equipment, whose price declined 1.6 percent during the November–December period.

## Services and location of origin

*Services.* Price trends for the services indexes were in line with those of imports and exports for the first 7 months of 2008. During the spring of 2008 and into the summer months, prices steadily increased for both passenger fares and freight rates. The price index for export air passenger fares, a measure of passenger fares paid by residents of foreign countries to United States carriers, increased 16.9 percent through the first 7 months of the year. The index for export air freight, a measure of changes in the rates charged for the transportation of freight from the United States to foreign locations on U.S. carriers, increased 12.7 percent over the same period. Price increases were especially large in June and July. On the import side similar increases took place. The index for import air passenger fares, a measurement of passenger fares paid by U.S. residents to foreign carriers, increased 32 percent through the first 7 months of the year. The import air freight index, which measures the changes in rates charged for the transportation of freight from foreign countries to the United States on foreign carriers, increased by 14.7 percent. Rising fuel prices brought about by the sharp increase in the price for petroleum were responsible for a large part of the fare and rate increases. Many airlines and carriers responded to the higher price for jet fuel by increasing fares and add-

ing surcharges. The depreciation of the U.S. dollar also contributed to rising prices.

As with the other export and import price measurements, import and export air passenger fares and freight rates declined during the last few months of the year. Import air passenger fares and freight rates began declining in August. The former fell 11.9 percent from August to December, while the latter fell 14.8 percent. Export prices for the same services did not begin to decline until September of 2008. During the final 4 months of the year export air passenger fares declined 9.6 percent and import air freight rates declined 5.7 percent. Declining fuel prices brought about a reduction in passenger fares and freight rates along with surcharges. A resurgence of the dollar over the final 5 months of the year also contributed to declining prices.

*Location of origin.* The International Price Program publishes a set of import indexes known as location of origin indexes, each of which is based on a country or region of origin for goods and services. For a number of the locations the indexes are disaggregated by manufactured and nonmanufactured goods. The rise and subsequent decline of petroleum prices had a significant impact on the location of origin indexes of a number of countries and regions. Canada, Mexico, and the Asian Near East, more commonly known as the Middle East, are the three major sources for United States petroleum imports. The index for each of the three locations underwent large increases during the first 7 months of 2008 and then precipitous declines over the final 5 months. The most notable increase and decrease occurred in the index for the Asian Near East. From the beginning of the year through the month of July, prices for imports from that region climbed 38.5 percent. Over the last 5 months of the year, those prices declined by 55.2 percent. The Canadian index increased 22.1 percent during the first 7 months of the year and then declined 25.2 percent during the final 5 months. The location of origin index for Mexico increased 15.1 percent before declining 18.1 percent. Even the location of origin index for the United Kingdom, which exports a modest amount of petroleum to the United States from its North Sea fields, was affected by petroleum prices. During the first 7 months of the year index rose 14.2 percent, only to fall 17.9 percent over the final 5 months of the year. □

## Notes

<sup>1</sup> For every calculation in this article involving change over time, the base month is the month before the first month of the period that is referenced. In this example—in which change is measured over the first 7

months of 2008—the first month used in the calculation is December 2007 and the last is July 2008. For changes over the entire year of 2008, the change is calculated from December 2007 to December 2008.

<sup>2</sup> See the Cushing, OK WTI spot price for July 3, 2008, at the U.S. Energy Information Administration Web site: <http://tonto.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=D> (visited Apr. 5, 2010).

<sup>3</sup> Stewart Bailey, "'Tidal Wave' in Commodities Rises to \$400 Billion," *Bloomberg.com*, Apr. 7, 2008, on the Internet at [www.bloomberg.com/apps/news?pid=20601081&refer=australia&sid=aq9xxwsBzf6k](http://www.bloomberg.com/apps/news?pid=20601081&refer=australia&sid=aq9xxwsBzf6k) (visited Apr. 5, 2010).

<sup>4</sup> Data on open-interest futures were obtained from the NYMEX Web site before the company was acquired by the CME group.

<sup>5</sup> See <https://www.theice.com/marketdata/reportcenter/reports.htm> (visited Apr. 5, 2010) and choose "Historical Monthly Volumes" for the category, "ICE Futures Europe" for the market, and "Historical Volumes – ICE Futures Europe" for the report.

<sup>6</sup> Sam Fletcher, "Fundamentals don't support \$105 oil," *Oil & Gas Journal*, vol. 106, issue 11, March 2008.

<sup>7</sup> Christian Schmollinger, "Oil Rises to Record on Mexico Terminal Closures, China Demand," *Bloomberg.com*, Apr. 15, 2008, on the Internet at [www.bloomberg.com/apps/news?pid=20601087&sid=aTSIUOgUhCFs&refer=home](http://www.bloomberg.com/apps/news?pid=20601087&sid=aTSIUOgUhCFs&refer=home) (visited Apr. 7, 2010).

<sup>8</sup> *World Oil Transit Chokepoints* (Energy Information Administration, January 2008), on the Internet at [www.eia.doe.gov/cabs/World\\_Oil\\_Transit\\_Chokepoints/Full.html](http://www.eia.doe.gov/cabs/World_Oil_Transit_Chokepoints/Full.html) (visited Apr. 7, 2010).

<sup>9</sup> *The World Factbook* (Central Intelligence Agency, 2008). The current version of the *Factbook* is at <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2173rank.html> (visited Apr. 7, 2010).

<sup>10</sup> *Foreign Exchange Rates: Summary Measures of the Foreign Exchange Value of the Dollar* (Federal Reserve), on the Internet at [www.federalreserve.gov/releases/h10/Summary/](http://www.federalreserve.gov/releases/h10/Summary/) (visited Apr. 7, 2010).

<sup>11</sup> Pablo Gorondi, "Supply concern, weak dollar put oil above \$130 for first time," *USA Today*, May 21, 2008, on the Internet at [www.usatoday.com/money/industries/energy/2008-05-21-oil-prices\\_N.htm?csp=34&utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+UsatodaycomMoney-TopStories+\(Money++Top+Stories\)](http://www.usatoday.com/money/industries/energy/2008-05-21-oil-prices_N.htm?csp=34&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+UsatodaycomMoney-TopStories+(Money++Top+Stories)) (visited Apr. 7, 2010).

<sup>12</sup> *Natural Gas Year-In-Review 2008* (Energy Information Administration, April 2009), on the Internet at [www.eia.doe.gov/pub/oil\\_gas/natural\\_gas/feature\\_articles/2009/ngvir2008/ngvir2008.html](http://www.eia.doe.gov/pub/oil_gas/natural_gas/feature_articles/2009/ngvir2008/ngvir2008.html) (visited Apr. 7, 2010).

<sup>13</sup> Data on open-interest futures were obtained from the NYMEX Web site before the company was acquired by the CME group.

<sup>14</sup> Danielle Rossingh, "Gold Gains in London as Fed Rate Cut Speculation Spurs Buying," *Bloomberg.com*, Mar. 10, 2008, on the Internet at [www.bloomberg.com/apps/news?pid=20601082&sid=aIm5clqvOQGU&refer=canada](http://www.bloomberg.com/apps/news?pid=20601082&sid=aIm5clqvOQGU&refer=canada) (visited Apr. 7, 2010).

<sup>15</sup> Micheal W. George, *2006 Minerals Yearbook: Platinum-Group Metals* (U.S. Geological Survey, September 2007), on the Internet at <http://minerals.usgs.gov/minerals/pubs/commodity/platinum/myb1-2006-plati.pdf> (visited Apr. 7, 2010).

<sup>16</sup> *Platts Metals Week*, Mar. 17, 2008, pp. 5–6.

<sup>17</sup> "China accepts Vale's iron ore price hike," *The Boston Globe*, Feb. 22, 2008, on the Internet at [www.boston.com/business/articles/2008/02/22/china\\_agrees\\_to\\_vales\\_iron\\_ore\\_price/](http://www.boston.com/business/articles/2008/02/22/china_agrees_to_vales_iron_ore_price/) (visited Apr. 7, 2010).

<sup>18</sup> *Platts Metals Week*, Apr. 28, 2008, p. 5.

<sup>19</sup> "Fertilizer prices soaring in U.S.," *The Columbus Dispatch*, Apr. 23, 2008.

<sup>20</sup> Dan Caterinicchia, "Gasoline isn't only rising cost for drivers," Associated Press, May 25, 2008.

<sup>21</sup> Seonjin Cha, "Hyundai Raises Car Prices in U.S. on Material Costs," *Bloomberg.com*, July 7, 2008, on the Internet at [www.bloomberg.com/apps/news?pid=20601080&sid=adm5MneOGOWU&refer=asia](http://www.bloomberg.com/apps/news?pid=20601080&sid=adm5MneOGOWU&refer=asia) (visited Apr. 7, 2010).

<sup>22</sup> Erica A. Taub, "Flat-Panel TV Prices Plummet," *The New York Times*, Dec. 2, 2008.

<sup>23</sup> Drake Lundell, "Speculation Caused High Corn Prices: Report," *Ethanol & Biodiesel News*, Oct. 28, 2008.

<sup>24</sup> "Corn: Futures Only Open Interest and Its Components," (U.S. Commodity Futures Trading Commission), on the Internet at [www.cftc.gov/OCE/WEB/Report%20Data/futures\\_Corn.html](http://www.cftc.gov/OCE/WEB/Report%20Data/futures_Corn.html) (visited Apr. 7, 2010).

<sup>25</sup> "Midwest Floods Devastate Corn Crops, Could Raise Prices," Associated Press, June 14, 2008.

<sup>26</sup> Scott Kilman, "U.S. Lowers Its Corn Harvest Forecast 3.2%, Prices Rise," *The Wall Street Journal*, June 12, 2008.

<sup>27</sup> Jeff Wilson, "Soybeans Rise to Record as Floods Cut U.S. Acreage, Hurt Yields," *Bloomberg.com*, July 1, 2008.

<sup>28</sup> David Bogoslaw, "U.S. Steelmakers' Surprising Strength," *Business Week*, Mar. 24, 2008, on the Internet at [www.businessweek.com/investor/content/mar2008/pi20080323\\_620307.htm](http://www.businessweek.com/investor/content/mar2008/pi20080323_620307.htm) (visited Apr. 9, 2010).

<sup>29</sup> "US steel exports surged in first half," *Metal Bulletin*, July 25, 2008.

<sup>30</sup> Sam Fletcher, "Market fears drive down prices," *Oil & Gas Journal*, vol. 106, issue 45, December 2008.

<sup>31</sup> "August 2008 Traffic Volume Trends" (U.S. Department of Transportation, Federal Highway Administration), on the Internet at [www.fhwa.dot.gov/ohim/tvtw/08augvtv/index.cfm](http://www.fhwa.dot.gov/ohim/tvtw/08augvtv/index.cfm) (visited Apr. 9, 2010).

<sup>32</sup> Tim Bowler, "Dollar and yen benefit in crisis," *BBC News*, Oct. 27, 2008, on the Internet at <http://news.bbc.co.uk/2/hi/7693020.stm> (visited Apr. 9, 2010).

<sup>33</sup> "US dollar at 6-mth high as oil, gold decline," Reuters, Aug. 12, 2008, on the Internet at <http://uk.reuters.com/article/idUK-SP34161820080812> (visited Apr. 9, 2010).

<sup>34</sup> Millie Munshi, "Platinum Prices Fall to Lowest Since 2005; Palladium Drops 12%," *Bloomberg.com*, Oct. 16, 2008.

<sup>35</sup> *Platts Metals Week*, "Surplus 125,000 mt in August – ICSG," Nov. 24, 2008, p. 6.

<sup>36</sup> *USDA Forecasts Robust Corn and Soybean Crops, Despite Flooding* (United States Department of Agriculture), Aug. 12, 2008, on the Internet at [www.nass.usda.gov/Newsroom/2008/08\\_12\\_2008.asp](http://www.nass.usda.gov/Newsroom/2008/08_12_2008.asp) (visited Apr. 9, 2010).

<sup>37</sup> "U.S. corn tumbles nearly 4 pct to 10-month low," Reuters, Oct. 6 2008.

<sup>38</sup> *USDA Forecasts Robust Corn and Soybean Crops, Despite Flooding* (United States Department of Agriculture), Aug. 12, 2008, on the Internet at [www.nass.usda.gov/Newsroom/2008/08\\_12\\_2008.asp](http://www.nass.usda.gov/Newsroom/2008/08_12_2008.asp) (visited Apr. 9, 2010).

## Compensation of residential and nonresidential construction workers

*Beginning around 2001, employment in residential construction rose much faster than that in nonresidential construction, but the former then began a precipitous drop earlier than the latter; in addition, employee compensation has grown faster in recent years in nonresidential building construction than in residential building construction*

Thomas Moehrle

For more than two decades, the Employer Cost for Employee Compensation (ECEC) publications available from the U.S. Bureau of Labor Statistics have reported estimates of the mean hourly costs for wages and benefits tabulated across industries, occupations, and labor force characteristics. The data for these estimates are drawn from the National Compensation Survey (NCS).<sup>1</sup> What makes ECEC statistics particularly useful for data users is the comprehensive detail of cost-level estimates for compensation components such as paid leave, health insurance, and contributions to retirement plans. Although the ECEC tabulations (published quarterly) currently serve a broad set of data users, the expansion over the last several years in the size of the NCS samples, along with enhancements in the industry classification system, have provided opportunities to examine—through the use of industry averages—industries that were once veiled from standard statistical analysis. This article presents compensation estimates for subsets of the construction sector, estimates that allow for an examination of recent trends in wages and benefits of workers employed in residential and nonresidential construction activities.

Standard ECEC publications provide data on compensation in the overall construction sector, but a more detailed analysis of subsectors, industry groups, and industries shows that compensation patterns for the construction sector as a whole mask important differences within the sector. The industry analysis in this article shows that workers in nonresidential construction typically earn more than workers in residential construction in the same subsector and that, for the construction of buildings subsector, the differential grew from 2004 to 2009.

### Classification in the construction sector

As all other BLS establishment surveys do, the NCS classifies surveyed establishments according to the North American Industry Classification System (NAICS)—the industry classification standard adopted by the United States, Canada, and Mexico—which classifies establishments into sectors. Every sector has a two-digit code. Within each sector, establishments are further grouped into subsectors (three digits), industry groups (four digits), and industries (five digits). Through the first five digits, NAICS codes are comparable across the United States, Canada, and Mexico. A sixth digit is used for further detail within any of the three countries.<sup>2</sup> Three subsectors are

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defined for construction: construction of buildings (NAICS 236), heavy and civil engineering construction (NAICS 237), and specialty trade contractors (NAICS 238). Heavy and civil engineering construction entails projects such as highway and dam construction, which at best indirectly relate to residential and nonresidential construction projects. Because this study focuses on residential and nonresidential construction workers, establishments classified under heavy and civil engineering construction are excluded. To further refine the analysis, only establishments within the private sector are studied. Table 1 displays some of the NAICS codes in the construction sector.

The establishments classified under construction of buildings are involved principally in the construction of residential and commercial buildings, or the remodeling and maintenance of existing buildings. Many of these establishments are general contractors, operative builders, or remodelers who may contract part or all of the production work of a given construction project. Construction of buildings is divided into two industry groups: residential building construction (NAICS 2361) and nonresidential building construction (NAICS 2362). This grouping conveniently facilitates comparisons within the subsector. Although NAICS has been officially used in the United States only since 1997, its predecessor—the Standard Industry Classification (SIC) system—organized the categories within construction of buildings in much the same way; the close similarities provide the continuity necessary to construct, at least in part, a historical economic per-

spective of residential and nonresidential trends.<sup>3</sup> The perspective is incomplete, however, because the construction of buildings subsector covers less than 25 percent of total construction employment.

Approximately 63 percent of all construction jobs are located in the specialty trade contractors subsector. Unlike the industry groups and industries within construction of buildings, those within the subsector of specialty trade contractors are defined by the types of production tasks carried out—such as carpentry, framing, electrical work, and plumbing—and not by whether activities are residential or nonresidential. Although the standard NAICS design does not distinguish residential construction from nonresidential construction in the specialty trade contractors subsector, BLS has used the last digit of the NAICS code to distinguish between these two activities.<sup>4</sup> The NAICS codes that BLS has added appear under the specialty trade contractor subsector in table 1.<sup>5</sup>

To gather a sense of the relative importance of residential and nonresidential activities, the article discusses employment trends for residential and nonresidential construction in the subsectors of specialty trade contractors and construction of buildings before turning to compensation patterns. The employment data in the article come from the Current Employment Statistics (CES) program at BLS. These data are not seasonally adjusted.

### Employment trends

Chart 1 shows employment trends in construction of buildings, and chart 2 shows employment trends for specialty trade contractors.<sup>6</sup> Because of the continuity of building construction data from SIC to NAICS, the charted data for that subsector stretch back to 1990, whereas the specialty trade contractors series is mapped back only to 2001. The data in the charts reveal that, although the two subsectors have very different employment levels, the patterns from 2001 and later are directionally similar. Residential construction employment in both subsectors increased with the residential housing boom in the early years of the decade until it began to contract in 2006, whereas nonresidential employment in both subsectors fell as the effects of the 2001 recession rippled through the economy and then climbed until 2008 when employment levels throughout the economy again began to contract.

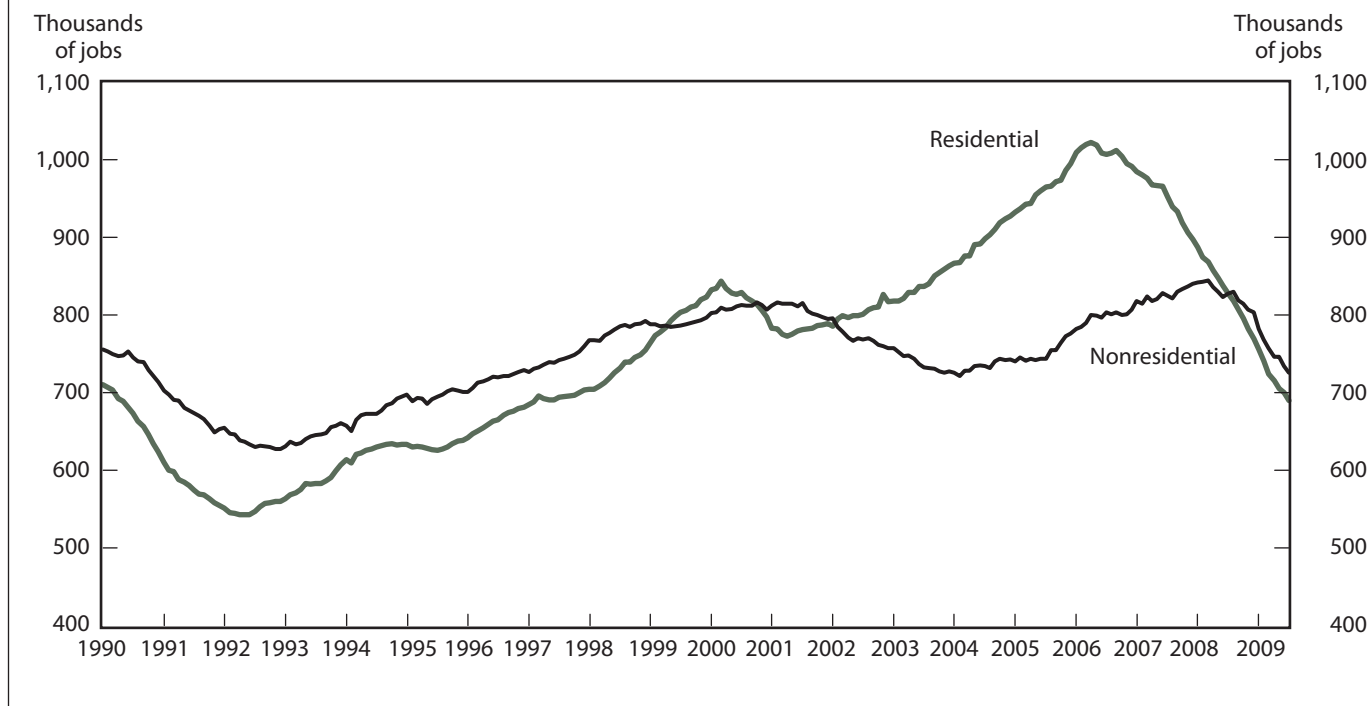
*Employment trends in construction of buildings.* In a 2006 Monthly Labor Review article,<sup>7</sup> John Mullins studied trends in residential and nonresidential construction employment. Using the building construction data series, Mullins reported that until the end of the 1990s employment trends of residential establishments and nonresidential establishments

**Table 1. BLS NAICS code summary for the construction sector, March 2009**

Title	Classification	NAICS code	Percent of employment <sup>1</sup>
Construction	Sector .....	23	100.0
Construction of buildings	Subsector ...	236	22.9
Residential building construction	Industry group .....	2361	10.7
Nonresidential building construction	Industry group .....	2362	12.2
Heavy and civil engineering	Subsector ...	237	13.6
Specialty trade contractors	Subsector ...	238	63.5
Residential specialty trade contractors	Industry (BLS) .....	238001	26.7
Nonresidential specialty trade contractors	Industry (BLS) .....	238002	36.8

<sup>1</sup> The data used to calculate the estimates in this column are not seasonally adjusted.

**Chart 1. Employment in residential and nonresidential construction of buildings, private industry, seasonally adjusted, January 1990–July 2009**



followed similar paths, although the latter had a larger share of employment. Establishments in both industries shed large numbers of people from payrolls in the first few years of the 1990s and then experienced relatively steady employment growth through the remaining years of that decade. (See chart 1.)

Although the patterns of residential and nonresidential construction were similar through the 1990s, there are notable differences, most notably that employment in residential construction dropped more sharply in the early years and grew more rapidly in the later years. The quicker paced job growth pushed the level of residential employment past that of nonresidential employment during 1999.

The similarities that had appeared in the 1990s dissipated by the new century. With the exception of a moderate decline from March 2000 to April 2001, establishments in residential building construction continued to add workers to payrolls—at an unprecedented rate—until the early part of 2006. Notably, the short and shallow recession of 2001 that stretched from March to November of that year appears not to have had any long-term ill effects on employment in residential building construction. The same cannot be said of nonresidential construction, however.

After adding jobs from 1993 through 1999, establishments in nonresidential building construction curtailed job creation as employment flattened in 2000 before precipitously falling through most of the period from 2001 through 2003. The divergent trends of the two industry groups resulted in an unparalleled widening of employment levels: residential construction employment grew by more than 10 percent between 2001 and 2004, and nonresidential construction employment decreased by more than 10 percent during that same period. When residential employment peaked in early 2006, it exceeded nonresidential employment by 223,000, a marked difference from what had occurred in the 1990s.

Mullins links this sudden divergence in employment paths to a confluence of events. He points out that the nonresidential construction industry was clearly affected by the recession of 2001—which was characterized by businesses cutting back on investment spending, while the residential side of the market shrugged off any recessionary drag. In fact, the residential housing market actually accelerated during the same period, as several socioeconomic factors—including historically low interest rates—came together. Among the factors Mullins cites are the growth in baby boomers' demand for second homes and their children's desire to purchase their first homes.

Since Mullins' 2006 article, employment in residential building construction has plummeted by nearly a third, falling from its April 2006 peak of 1.0 million to under 690,000 in July 2009. Employment in nonresidential establishments also has fallen, but not as steeply. Non-residential employment peaked at 844,000 in March 2008 before falling and eventually hitting 726,000 in July 2009, a 14-percent decline. To date, it appears that both industry groups continue the downward trend.

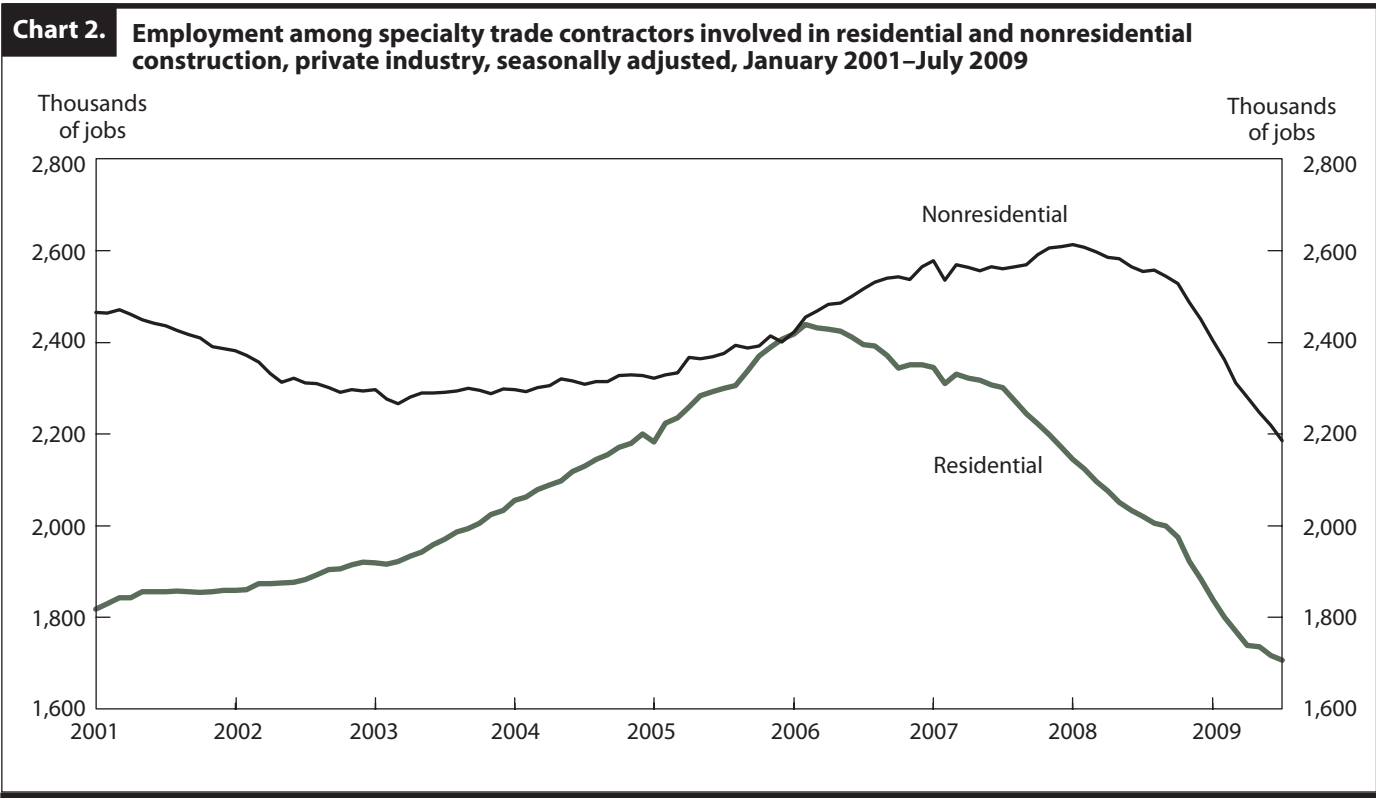
*Employment trends in the specialty trade contractors subsector.* The specialty trade contractors subsector has exhibited patterns remarkably similar to those of the construction of buildings subsector. Together, charts 1 and 2 show that employment in residential construction experienced nearly the same periods of growth and contraction in the two subsectors, as did employment in nonresidential construction. What is clearly different between the two subsectors is the level of employment: as of July 2009, employment in specialty trade contractors was 2.8 times larger than employment in building construction, making the former the predominant subsector of construction.

In specialty trade, nonresidential employment exceeded residential employment by nearly 650,000 in January 2001 (2.5 million compared with 1.8 million), but the extraordinary growth in residential employment brought

the two employment levels together by early 2006, the period in which residential employment in the subsector peaked. Residential employment in the subsector grew by about 34 percent during the 5-year period to peak at over 2.4 million.

Similar to what happened in building construction, employment in nonresidential establishments of specialty trade contractors fell with the 2001 recession to a low of 2.3 million before expanding from March 2003 to January 2008, when it peaked at 2.6 million. Both industries have shed jobs since their peaks. According to CES estimates, residential employment fell by 30 percent from its peak to 1.7 million as of July 2009, and nonresidential employment fell 16 percent from its peak to 2.2 million as of July 2009. In percentage terms, the comparable industries in both subsectors experienced very similar employment declines from their respective peaks.

Certainly, trends in employment can have effects on compensation levels. To capture these effects within particular industries, ECEC cost-level estimates are calculated through the use of sample weights calibrated to the level of industry employment at the time of the survey. For this study, sample weights are calibrated to account for changes in employment among the construction subsectors—inclusive of shifts among the residential and nonresidential industries—by use of employment data from the CES



program. When sample weights are adjusted to mirror employment trends at the time of the survey, aggregated compensation data—such as estimates for all residential workers or all nonresidential workers—will move more in accordance with employment. The next section of the article discusses these compensation estimates.

## Compensation patterns

In March 2004, the NCS program made a major transition regarding how ECEC compensation data are tabulated and published by industry and occupation. A switch was made from publishing industry estimates under the SIC system to publishing them under NAICS. The classification of occupations also was changed, from the occupational classification system of the 1990 Census of the Population to the 2000 Standard Occupational Classification (SOC) system.<sup>8</sup> As an extension of the ECEC tabulations by industry, table 2 presents estimates of employer costs for employee compensation by residential and nonresidential construction activities for the construction of buildings subsector, and table 3 does the same for the specialty trade contractors subsector.<sup>9</sup>

Although ECEC publications provide estimates for March, June, September, and December of each year, the tables presented in this article contain only March estimates but span the years from 2004 through 2009, the only years for which ECEC estimates are available under NAICS.<sup>10</sup> Tables A-1 and A-2 of the appendix provide the relevant relative standard errors, which measure the statistical reliability of these estimates.

The estimates reveal interesting differences in compensation structure between residential and nonresidential construction. For most of the years reported in tables 2 and 3, residential workers earned less in total compensation than nonresidential workers. Tables A-3 and A-4 of the appendix present differences in hourly compensation—by component of compensation—along with the *t*-statistics of each of these differences. The *t*-statistics presented in the tables gauge the statistical significance of the estimated differences in compensation. When one is interpreting the statistical significance of a difference presented in this article, a *t*-statistic greater than 1.65 is associated with statistical significance at the 90-percent level of confidence. Most differences for total compensation, wages and salaries, and total benefits are statistically significant, particularly for the years from 2006 forward. All compensation figures in this article are nominal.

*Compensation patterns in construction of buildings.* The

differentials in compensation between residential and nonresidential workers within building construction are somewhat varied. In March 2004, residential workers earned a mean of \$26.61 per hour in total compensation while nonresidential workers earned a mean of \$30.84 per hour in total compensation (table 2), 16 percent more than residential workers. By March 2009, nonresidential construction work paid, on average, 51 percent more in total compensation than residential construction work: total compensation of residential workers was virtually unchanged through the 6-year period while total compensation of nonresidential workers increased to \$41.12, a remarkable occurrence given the employment trends of the two industries. Arguably, nominal compensation could be expected to remain relatively flat for residential workers in light of the contraction in employment by a third from April 2006 to July 2009, but the weakening demand for nonresidential workers—evidenced by the 14-percent contraction in that industry group's employment—has not prevented the compensation levels of those workers from rising. This suggests that the two labor markets—that of residential construction and that of nonresidential construction—are different and should be analyzed separately as well as together.

As did the gap in total compensation, the wage and salary gap widened between 2004 and 2009. In March 2004, the mean of the wages and salaries paid to nonresidential workers was \$22.09 per hour, which was not significantly different from residential workers' mean wage, \$19.59. But by March 2009, nonresidential workers' average wages had grown to \$28.06 and residential wages averaged \$20.23—virtually unchanged from 2004. In addition, the estimated difference in wage and salary between residential and nonresidential building construction workers is statistically significant for each of the years from 2006 forward, suggesting fundamental differences in compensation structures emerging over the last few years.<sup>11</sup> Not only are the differences for the later years statistically significant, they are also economically significant. Because the wages paid to residential workers remained virtually flat, real wages—that is, wages adjusted for changes in the Consumer Price Index—fell in residential building construction as the Consumer Price Index increased 13.5 percent between March 2004 and March 2009. Nonresidential workers' wages stayed well ahead of price increases, rising a nominal 27 percent.

Not surprisingly, the wage differences are mirrored in the benefits component of compensation. Employers' costs for the benefits of residential building construction workers were virtually unchanged between 2004 (\$7.02

**Table 2. Mean employer costs for employee compensation per hour worked and costs as a percent of total compensation in the construction of buildings subsector (NAICS 236), private industry, March data, 2004–09**

Item	March 2004		March 2005		March 2006		
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands) <sup>1</sup> .....	844.4	703.3	911.3	716.3	987.1	763.4	
<b>Costs per hour worked</b>							
Total compensation .....	\$26.61	\$30.84	\$28.06	\$32.22	\$26.80	\$34.83	
Wages and salaries .....	19.59	22.09	19.72	22.90	19.28	23.91	
Total benefits .....	7.02	8.74	8.34	9.33	7.52	10.92	
Paid leave .....	.98	1.37	1.00	1.45	.97	1.60	
Supplemental pay .....	.95	.85	1.61	1.00	1.41	1.28	
Insurance .....	1.19	1.81	1.57	1.97	1.46	2.54	
Health .....	1.15	1.70	1.52	1.86	1.41	2.39	
Retirement and savings .....	.73	1.32	.78	1.48	0.60	1.77	
Legally required <sup>2</sup> .....	3.18	3.39	3.38	3.41	3.07	3.73	
<b>Percent of total compensation</b>							
Total compensation .....	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries .....	73.6	71.6	70.3	71.1	71.9	68.6	
Total benefits .....	26.4	28.4	29.7	28.9	28.1	31.4	
Paid leave .....	3.7	4.4	3.6	4.5	3.6	4.6	
Supplemental pay .....	3.6	2.8	5.7	3.1	5.3	3.7	
Insurance .....	4.5	5.9	5.6	6.1	5.4	7.3	
Health .....	4.3	5.5	5.4	5.8	5.3	6.9	
Retirement and savings .....	2.7	4.3	2.8	4.6	2.2	5.1	
Legally required <sup>2</sup> .....	11.9	11.0	12.1	10.6	11.5	10.7	
		March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands) .....	942.1	797.4	832.9	817.8	638.0	725.9	
<b>Costs per hour worked</b>							
Total compensation .....	\$26.69	\$35.65	\$26.25	\$38.32	\$27.18	\$41.12	
Wages and salaries .....	19.64	24.15	19.81	26.15	20.23	28.06	
Total benefits .....	7.06	11.50	6.44	12.17	6.94	13.06	
Paid leave .....	.98	1.50	.91	1.59	1.06	1.87	
Supplemental pay .....	1.47	1.32	1.09	1.23	1.13	1.19	
Insurance .....	1.25	2.79	1.10	2.90	1.28	3.15	
Health .....	1.21	2.62	1.06	2.71	1.23	2.96	
Retirement and savings .....	.39	2.06	.38	2.34	.41	2.43	
Legally required <sup>2</sup> .....	2.97	3.83	2.97	4.11	3.07	4.42	
<b>Percent of total compensation</b>							
Total compensation .....	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries .....	73.6	67.7	75.5	68.2	74.5	68.2	
Total benefits .....	26.4	32.3	24.5	31.8	25.5	31.8	
Paid leave .....	3.7	4.2	3.5	4.2	3.9	4.5	
Supplemental pay .....	5.5	3.7	4.1	3.2	4.2	2.9	
Insurance .....	4.7	7.8	4.2	7.6	4.7	7.7	
Health .....	4.5	7.3	4.0	7.1	4.5	7.2	
Retirement and savings .....	1.5	5.8	1.4	6.1	1.5	5.9	
Legally required <sup>2</sup> .....	11.1	10.8	11.3	10.7	11.3	10.8	

<sup>1</sup> The data in this row are not seasonally adjusted.

<sup>2</sup> Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

**Table 3. Mean employer costs for employee compensation per hour worked and costs as a percent of total compensation in the specialty trade contractors subsector (NAICS 238), private industry, March data, 2004–09**

Item	March 2004		March 2005		March 2006		
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands) <sup>1</sup> .....	1,987.8	2,197.7	2,136.7	2,231.9	2,322.6	2,365.4	
<b>Costs per hour worked</b>							
Total compensation .....	\$21.01	\$29.96	\$21.72	\$30.20	\$22.68	\$30.97	
Wages and salaries .....	15.58	20.34	15.90	20.46	16.58	20.77	
Total benefits .....	5.43	9.62	5.83	9.74	6.10	10.20	
Paid leave .....	.55	1.06	.59	1.01	.66	1.20	
Supplemental pay .....	.64	.87	.65	.80	.61	.95	
Insurance .....	.99	2.31	1.09	2.41	1.34	2.58	
Health .....	.94	2.25	1.04	2.33	1.28	2.46	
Retirement and savings .....	.47	1.99	0.56	2.07	.66	1.98	
Legally required <sup>2</sup> .....	2.78	3.37	2.94	3.44	2.83	3.49	
<b>Percent of total compensation</b>							
Total compensation .....	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries .....	74.2	67.9	73.2	67.7	73.1	67.1	
Total benefits .....	25.8	32.1	26.8	32.3	26.9	32.9	
Paid leave .....	2.6	3.5	2.7	3.3	2.9	3.9	
Supplemental pay .....	3.1	2.9	3.0	2.6	2.7	3.1	
Insurance .....	4.7	7.7	5.0	8.0	5.9	8.3	
Health .....	4.5	7.5	4.8	7.7	5.6	7.9	
Retirement and savings .....	2.2	6.7	2.6	6.9	2.9	6.4	
Legally required <sup>2</sup> .....	13.2	11.3	13.5	11.4	12.5	11.3	
		March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands) .....	2,222.1	2,465.3	1,995.3	2,491.6	1,588.3	2,190.1	
<b>Costs per hour worked</b>							
Total compensation .....	\$23.16	\$30.76	\$23.84	\$32.37	\$25.21	\$33.99	
Wages and salaries .....	17.01	20.92	17.67	21.86	18.67	22.83	
Total benefits .....	6.15	9.84	6.17	10.51	6.54	11.15	
Paid leave .....	.65	1.21	.66	1.26	.77	1.25	
Supplemental pay .....	.64	.95	.67	1.01	.63	1.04	
Insurance .....	1.27	2.54	1.32	2.72	1.36	3.00	
Health .....	1.21	2.40	1.25	2.56	1.29	2.84	
Retirement and savings .....	.60	1.78	.58	2.07	.69	2.29	
Legally required <sup>2</sup> .....	2.99	3.36	2.93	3.44	3.09	3.57	
<b>Percent of total compensation</b>							
Total compensation .....	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries .....	73.4	68.0	74.1	67.5	74.1	67.2	
Total benefits .....	26.6	32.0	25.9	32.5	25.9	32.8	
Paid leave .....	2.8	3.9	2.8	3.9	3.0	3.7	
Supplemental pay .....	2.8	3.1	2.8	3.1	2.5	3.1	
Insurance .....	5.5	8.2	5.6	8.4	5.4	8.8	
Health .....	5.2	7.8	5.3	7.9	5.1	8.4	
Retirement and savings .....	2.6	5.8	2.4	6.4	2.7	6.7	
Legally required <sup>2</sup> .....	12.9	10.9	12.3	10.6	12.3	10.5	

<sup>1</sup> The data in this row are not seasonally adjusted.

<sup>2</sup> Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

per hour) and 2009 (\$6.94 per hour). During that same period, the nonresidential side of the subsector reported benefit costs of \$8.74 in 2004 and \$13.06 in 2009. Using 2004 as a base and comparing that year with 2009 reveals that the benefit gap expanded from 24.5 percent in 2004 to 88.2 percent in 2009. Part of the divergence in benefit costs resulted from the difference in wage growth. For many workers, the majority of benefit costs are formulaically related to wage levels. For instance, as wages increase, so do the costs of Medicare and Social Security contributions, paid leave, and some supplemental components of compensation such as premium pay for overtime. With wage growth so different between residential and nonresidential building construction workers, a wedge between benefit costs can be expected to emerge naturally. But this is only part of the story. Much of the expansion of the gap in benefit costs can be traced directly to the cost of health insurance and that of retirement and savings, two benefits that are only weakly related to wage levels.

As frequently reported in the news media, health insurance costs have increased substantially over the years. Measured across all private industry workers, Employment Cost Index estimates indicate that employers' costs for health insurance have increased about 30 percent since 2004.<sup>12</sup> However, according to the ECEC estimates of this study, employers' costs for health insurance have remained virtually unchanged for residential workers in building construction, but have increased 74 percent for nonresidential workers in the same subsector. In 2009, employers' health insurance costs were \$1.23 per hour for residential workers and \$2.96 per hour for nonresidential workers. The mean for all private industry workers was \$2.00 in March 2009.

The cause of the large differences in health insurance costs as measured by ECEC can only be speculated upon. Naturally, more generous health insurance plans drive up costs, as does an increase in the rate of participation in health benefits. However, offsetting these factors are new requirements for some employees who participate in employer provided health plans, requirements such as dollar contributions to accompany employers' contributions. Whether the quality of health-care coverage is better and whether worker participation is higher among nonresidential workers are questions that cannot be answered definitively with ECEC data alone.<sup>13</sup> Nevertheless, with such a large difference in health insurance costs paid by employers, it seems clear that, overall, nonresidential building construction workers have fared better than their counterparts over the last few years in regard to health benefits.

The gap between residential and nonresidential building construction widened even further for retirement and saving benefits. Between 2004 and 2009, retirement contribution costs decreased by 43 percent for employers in residential building construction whereas they increased 85 percent for employers in nonresidential building construction. Retirement and savings costs include both the costs of defined benefit plans and those of defined contribution plans. In March 2009, retirement costs were \$0.41 for residential building construction and \$2.43 for nonresidential building construction.<sup>14</sup> The average for all of private industry was \$0.96.

*Compensation patterns for specialty trade contractors.* The gap in total compensation is large and significant in the specialty trade contractors subsector as well, but that differential has been comparatively more stable over the years than that of building construction. In March 2004 in the specialty trade contractors subsector, the mean total compensation of nonresidential construction workers was \$8.94 greater than that of residential construction workers; in March 2009 the difference was \$8.78.<sup>15</sup> The differences are statistically significant for March of every year from 2004 to 2009. The relatively stable difference in compensation from 2004 to 2009 reflects, in part, similar growth in compensation for the two sets of workers (residential and nonresidential), which stands in contrast to what occurred in building construction. Although the overall gap in compensation between residential workers and nonresidential workers in the two relevant subsectors of construction confirms differences between the markets for residential and nonresidential construction labor, the difference in growth in compensation between residential workers in construction of buildings and those working for specialty trade contractors suggests differences between these two groups of workers as well. The difference in growth in compensation between residential and nonresidential workers in specialty trade appears not to have been affected by the subsector's changing gap in employment, whereas the difference in compensation between residential and nonresidential building construction workers does appear to have been affected by that subsector's changing employment gap.

In the specialty trade contractors subsector, the gap in cost between residential and nonresidential workers is divided nearly equally (in dollar terms) between wages and salaries and total benefits. In March 2009, nonresidential workers were paid mean hourly wages of \$22.83 (table 3), \$4.17 more than residential workers, and received benefits costing an average of \$11.15, \$4.61 more than their counterparts.

## Factors influencing differences in compensation

Differences in compensation between comparable industries can come about from any number of factors. For instance, within a given occupation, it could be the case that nonresidential establishments employ a larger proportion of higher skilled workers than residential establishments. Moreover, the occupational distributions of residential and nonresidential construction work may be very different; for example, it could be that nonresidential establishments employ a greater proportion of people in higher wage occupations—such as managers or engineers—thereby pulling up the average compensation of the industry. And, of course, industry and occupational mix may vary by area of the country, and compensation levels can fluctuate significantly by area of the country.

*Regression analysis.* Because of the small size of the ECEC subsample of the NCS, for this article's calculations of average compensation by industry, no attempt is made to control for occupational staffing differences among establishments and industries.

However, regression analysis provides a means by which occupational, geographic, and other differences among industries can be statistically controlled while one measures differences in compensation among industries. To model the difference in compensation between the two industries in question, the ECEC microdata were used in a log-linear regression model of compensation levels. The compensation differential of the two industries within each of the two subsectors was isolated by controlling for the occupational mix, the geographical area, and selected occupational characteristics, which were unionization, establishment size, and the number of hours scheduled for work.<sup>16</sup> The regression results show a difference in total compensation between residential and nonresidential construction in the range of 5 percent to 11 percent, a range that is much smaller than the ranges between the industry averages presented in tables 2 and 3; this smaller range suggests that differences in compensation structure between the two sets of workers are not as large as the simple sample-weighted industry averages suggest, but the results of the model do confirm a significant difference in compensation.<sup>17</sup>

*OES data.* When one controls for occupational distribution and other factors associated with compensation, the ECEC sample cannot support simple sample-weighted industry averages that are statistically reliable (because

of the small sample size); however, the Occupational Employment Statistics (OES) program's sample can do so in part. The OES program conducts a large area-based national wage survey for which it canvasses all areas of the country. The national sample consists of 1.2 million establishments from which information is collected over 3 consecutive years. Because of the sample size of the OES survey, wage estimates often can be constructed for the most detailed level of occupations within given industries, and thus users of OES survey data can sometimes compare the average wage of an occupation within a given subsector, industry group, or industry with the same occupation's average wage in a different subsector, industry group, or industry.<sup>18</sup>

The OES program reports residential and nonresidential construction data for only the construction of buildings subsector, but that set of estimates is sufficient to demonstrate that gaps in compensation between residential and nonresidential construction remain across individual occupations. For May 2008, OES reported on 19 major occupational groups within construction of buildings. Not surprisingly, the largest major occupational group in terms of employment was construction and extraction, which accounted for nearly 64 percent of employment in the construction of buildings subsector. For construction and extraction, wages were notably different between residential and nonresidential construction. Workers within residential construction earned an average wage of \$19.36 per hour while nonresidential workers earned \$22.24 on average, a 15-percent difference. In fact, for the May 2008 results, all but two of the major occupational groups that were compared showed nonresidential workers earning more on an hourly basis than their counterparts.<sup>19</sup>

Still, because major occupational groups are composites of many individual occupations, an analysis of residential and nonresidential construction activity within the groups will of course tell a different story than an analysis of the two industries within individual occupations. Since the major group construction and extraction accounts for the largest percent of employment in the construction sector, it is illustrative to compare detailed occupations within this group. OES data show that carpenters make up the largest percentage of employment within this major group, with 47.8 percent of their employment within the residential industry and 30.6 percent of it within the nonresidential industry. Even within this narrowly defined occupation, wages are notably higher for nonresidential workers. Carpenters in residential construction earned, on average, \$19.71 per hour in wages in May 2008, while those in nonresidential construction earned \$22.95, a



16-percent difference.<sup>20</sup>

### Establishment and occupational characteristics

Differences in characteristics of workers, of establishments, and so forth are of interest to many ECEC data users because there are typically correlations between some of the characteristics and compensation levels.<sup>21</sup> Because of the small size of the ECEC sample, employer cost data that are tabulated by any of the characteristics, such as union membership or establishment size, cannot be precisely estimated for the two industries of residential and nonresidential construction, so they are not provided in this study.<sup>22</sup> However, the percentage distributions of these characteristics provide insight into differences among the four sets of workers (residential and nonresidential workers in construction of buildings and at specialty trade contractors) that may result in disparities in compensation. Table 4 shows, for March 2004 and March 2009, the percentage of workers in unions and the percentage with a full-time work schedule, as well as the distribution of workers among four establishment size classes.<sup>23</sup>

Typically, unionization is correlated with higher levels of compensation, and the compensation estimates in this study are consistent with that correlation.<sup>24</sup> The table shows that in March 2009 nonresidential workers—in both subsectors—had higher incidences of unionization than residential workers. Within building construction, less than 3 percent of residential workers were union members, while nearly 23 percent of nonresidential workers were members. For specialty trade, nearly 10 percent of residential workers were members of unions, whereas 35 percent of nonresidential workers were members. According to data from the Current Population Survey, union membership for the United States was 12.4 percent in 2008.<sup>25</sup>

The distribution of workers according to size of es-

tablishment also is revealing. Most construction jobs are found within establishments employing fewer than 100 workers. In March 2009, around 90 percent of workers in residential construction—in both subsectors—worked in establishments with fewer than 100 workers, and approximately 90 percent of these workers (in both subsectors) were employed in establishments with fewer than 50 workers. Less than 2 percent of residential workers were employed in establishments employing 500 or more workers. The distribution of nonresidential workers according to size of establishment is less skewed. In March 2009, about two-thirds of nonresidential construction workers employed in construction of buildings worked at establishments having fewer than 100 workers, and nearly 11 percent of nonresidential building construction workers worked at establishments having 500 or more workers. About 75 percent of specialty-trade nonresidential workers were employed within establishments having fewer than 100 workers; 3 percent were employed at establishments having 500 or more workers. Without regard to the full set of factors influencing levels of compensation, workers in large establishments tend to earn higher wages and salaries and typically have more generous benefit packages.

COMPENSATION OF CONSTRUCTION WORKERS varies greatly. Estimates derived from the March 2009 NCS survey data show that, in the construction of buildings subsector, the average total compensation of nonresidential workers was 51 percent higher than that of residential workers, and the differences in employer costs were large for both wages and benefits. A smaller gap is present in the specialty trade contractors subsector, in which nonresidential workers earn nearly 35 percent more in total compensation than residential workers. These differences stem from numerous factors, including occupational mix, geographical area, and many occupational characteristics.

**Table 4. Percentages for selected characteristics, construction of buildings (NAICS 236) and specialty trade contractors (NAICS 238), private industry, March 2004 and March 2009**

Subsector, industry group, or industry	Union		Full time		Establishment size classes (number of workers)							
					1-49		50-99		100-499		500 or more	
	2004	2009	2004	2009	2004	2009	2004	2009	2004	2009	2004	2009
Construction of buildings												
Residential .....	7.1	2.6	93.6	88.3	88.3	81.6	5.3	8.2	6.4	9.2	.0	1.0
Nonresidential .....	17.4	22.5	99.5	95.7	56.9	43.1	10.1	23.0	25.3	23.2	7.7	10.7
Specialty trade contractors												
Residential .....	9.2	9.4	97.4	93.2	76.7	83.0	11.6	8.7	9.8	6.8	1.9	1.5
Nonresidential .....	33.9	35.0	97.7	97.6	53.5	53.2	14.6	22.1	27.6	21.5	4.2	3.2

For building construction workers, the gap in total compensation between residential and nonresidential workers has widened greatly since 2004, when nonresidential workers received 16 percent more in total compensation. The widening of the gap occurred as nonresidential workers saw hefty increases in compensation while residential workers had virtually unchanged compensation across the 6-year period. Among nonresidential building construction workers, total benefits were up 49 percent from March 2004 to March 2009, increasing substantially faster than wages, which rose by 27 percent. Most

of the group's increases in benefits were driven by growth in the amounts employers paid for health insurance (74 percent) and retirement and savings (85 percent) benefits. For specialty trade contractors, the gap in total compensation has been more stable, undulating only slightly across the 6-year period. In March 2004, total compensation in nonresidential construction was about 43 percent more than that in residential construction. For March 2009, the gap is estimated at about 35 percent. The relative stability in the gap in compensation is attributable to increases in compensation that were only slightly different. □

## Notes

<sup>1</sup> For more on the National Compensation Survey and its products, visit [www.bls.gov/ncs](http://www.bls.gov/ncs) (visited Mar. 22, 2010).

<sup>2</sup> For a more thorough description of NAICS, see [www.census.gov/eos/www/naics/](http://www.census.gov/eos/www/naics/) (visited Mar. 22, 2010), and for a list of NAICS codes and their titles, see [www.census.gov/naics/2007/NAICOD07.HTM#N23](http://www.census.gov/naics/2007/NAICOD07.HTM#N23) (visited Mar. 22, 2010).

<sup>3</sup> To capture changes in the economy, NAICS codes are revised every 5 years. For construction, a major revision occurred in 2002, but no revisions to the sector were made for 2007. For the tabulations presented in this paper, NAICS codes for construction follow the 2002 and 2007 code structure.

<sup>4</sup> When an establishment is involved in both residential and nonresidential construction projects, BLS assigns the establishment to the type of construction (residential or nonresidential) that generates the most revenue.

<sup>5</sup> For more on the development of the residential and nonresidential construction industries in the specialty trade contractors subsector, see Christopher Manning and John P. Mullins, "Two new construction employment series for specialty trade contractors," *Monthly Labor Review*, October 2006, pp. 14–22, on the Internet at [www.bls.gov/opub/mlr/2006/10/art2full.pdf](http://www.bls.gov/opub/mlr/2006/10/art2full.pdf) (visited Mar. 22, 2010).

<sup>6</sup> The numerical data represented in these charts are available from the BLS Web site at [www.bls.gov/ces/tables.htm#ec](http://www.bls.gov/ces/tables.htm#ec) (visited Mar. 22, 2010). Many of these data are revised periodically, and the Web site will reflect the most recent revisions to the data.

<sup>7</sup> The October 2006 edition of the *Monthly Labor Review* featured three articles on employment in the construction industry: John P. Mullins, "Recent employment trends in residential and nonresidential construction," *Monthly Labor Review*, October 2006, pp. 3–13; Manning and Mullins, "Two new construction employment series for specialty trade contractors"; and Matthew Miller, "A visual essay: post-recessionary employment growth related to the housing market," *Monthly Labor Review*, October 2006, pp. 23–34.

<sup>8</sup> SOC is the occupational coding standard for all Federal statistical agencies. See [www.bls.gov/soc](http://www.bls.gov/soc) (visited Mar. 31, 2010).

<sup>9</sup> Although averages for all residential construction workers and for all nonresidential workers (cross-subsector) are not presented in the tables, they can be calculated by use of the employment counts provided in each column of tables 2 and 3.

<sup>10</sup> The Employment Cost Index and ECEC surveys have only recently been merged into the NCS. In order to reduce the cost of the surveys, both the older Employment Cost Index and ECEC surveys and the current NCS have operated under a rotating sampling design by which approximately 20 percent of private industry

establishments are replaced each year. Under this design, several years can pass before published survey results reflect changes that were made to the survey. The adoption of NAICS is one of those survey changes which have taken several years to implement. For more on NCS survey design, see chapter 8 of the *BLS Handbook of Methods* at [www.bls.gov/opub/hom/home.htm](http://www.bls.gov/opub/hom/home.htm) (visited Mar. 31, 2010).

<sup>11</sup> ECEC estimates show the average compensation employers pay workers; because the employment data that go into the calculation are the employment levels at the time of the survey, changes in factors such as distribution of employment among lower and higher paying jobs from one survey period to the next can affect average compensation figures even if the pay scales of the sampled occupations have not changed.

<sup>12</sup> See *Employment Cost Index—Supplemental Data: Health insurance, private industry, 12-month percent change in employer costs per hour worked* (Bureau of Labor Statistics, Jan. 29, 2010), on the Internet at [www.bls.gov/ncs/ect/sp/ehealth.pdf](http://www.bls.gov/ncs/ect/sp/ehealth.pdf) (visited Mar. 31, 2010).

<sup>13</sup> The NCS program publishes estimates on the percent of employees required to share in the costs of medical plan premiums and on employees' average contributions (in dollars). For more on these benefit statistics, see [www.bls.gov/ncs/ncspubs.htm](http://www.bls.gov/ncs/ncspubs.htm) (visited Mar. 31, 2010). The NCS program has not tabulated estimates for the detailed construction industries examined in this paper, however.

<sup>14</sup> Caution should be exercised when interpreting cost levels for individual benefits such as retirement and savings, because the relative standard errors are high. Relative standard error (RSE) is the sampling error of an estimate as a percent of that estimate. For most ECEC published series of benefit costs, RSEs range from 1 percent to 50 percent. The RSEs of the retirement and savings estimates for the industries in this study range from 17.8 percent to 35.5 percent. Typically, an RSE is inversely related to the size of the sample in question.

<sup>15</sup> These cost differences are calculated with unrounded industry averages. See tables A-3 and A-4 of the appendix for cost differences.

<sup>16</sup> Occupational mix was modeled by assigning an indicator variable to each of the six-digit SOC occupations present in the microdata. Geographical area and occupational characteristic variables were modeled in a similar way—by constructing indicator variables for each. Establishment size was modeled as the logarithm of reported establishment employment. The variable of interest, industry, also was modeled as an indicator variable.

<sup>17</sup> Each occupation that is selected during the NCS collection process is evaluated and slotted into 1 of 15 "work levels," which follow the Federal Government's General Schedule. For NCS purposes, multiple levels of the same occupation—accountants, for example—are considered as separate occupations. This occupational leveling process allows one to rank and compare all occupations that are randomly selected in

an establishment using the same criteria throughout. For information on the NCS occupational leveling process, see [www.bls.gov/ncs/ocs/sp/ncbr0004.pdf](http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf) (visited Apr. 5, 2010.) With the merger of the ECI/ECEC sample into the broader NCS wage sample, occupational leveling information is now collected for all sampled occupations. Leveling information show—among other characteristics—the knowledge and skill levels of workers within particular occupations. Leveling information may prove important for understanding differences between residential and nonresidential construction. Work continues in this area, and for this reason a complete analysis of the regression model is not presented in this article.

<sup>18</sup> Level of skill and other characteristics, however, are not controlled for when an occupation’s wage in one industry is compared with its wage in another industry, and, consequently, these characteristics can influence the difference in average wage that is calculated.

<sup>19</sup> The two major occupational groups reporting higher earnings for residential construction workers were life, physical, and social science occupations, and building and grounds cleaning and maintenance occupations. The former accounted for less one-tenth of one percent of employment in residential construction, and the latter accounted for about 1 percent of employment in residential construction.

<sup>20</sup> For other occupational wage and employment data on the construction of buildings subsector for May 2008, visit [www.bls.gov/oes/2008/may/naics3\\_236000.htm](http://www.bls.gov/oes/2008/may/naics3_236000.htm) (visited Mar. 31, 2010).

<sup>21</sup> See [ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ecec-](ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ecec-qrtn.pdf)

[qrtn.pdf](ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ecec-qrtn.pdf) (visited Mar. 31, 2010) for ECEC tables by worker characteristics from March 2004 to December 2009.

<sup>22</sup> For estimates of the median weekly earnings of union workers by occupation or industry, see data from BLS’s Current Population Survey, many of which are available at [www.bls.gov/cps/lfcharacteristics.htm#union](http://www.bls.gov/cps/lfcharacteristics.htm#union) (visited Mar. 31, 2010).

<sup>23</sup> Standard errors for the data on union membership and establishment size in this article are not available, and, consequently, comparisons across periods should be done with caution.

<sup>24</sup> The effect of unionization on pay levels is not universally causal: issues of endogeneity must be considered. The impact of unionization may be more an indirect correlation than a direct one, as in incidences in which unions effect better trained and safer groups of workers whose pay reflects the training. See David Card, “The effect of unions on the structure of wages: a longitudinal analysis,” *Econometrica*, July 1996, pp. 957–79.

<sup>25</sup> The assignment of union status can differ between the NCS and the Current Population Survey (CPS). In the CPS, unionization refers to members of a labor union or an employee association similar to a union. See [www.bls.gov/news.release/union2.nr0.htm](http://www.bls.gov/news.release/union2.nr0.htm) (visited Mar. 31, 2010). The NCS definition of union status is similar to that of the CPS, but it stipulates that the union be recognized as a bargaining agent for all workers in any occupation that is selected for the sample and that there also be a signed mutually binding collective bargaining agreement that includes at least earnings provisions.

**APPENDIX: Tables A-1 through A-4**

Item	March 2004		March 2005		March 2006	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation .....	7.6	4.4	9.2	4.8	8.3	5.6
Wages and salaries .....	7.3	4.0	7.3	4.1	6.0	4.9
Total benefits .....	8.7	9.0	15.3	10.1	16.3	9.1
Paid leave .....	13.8	12.5	13.5	15.4	12.9	15.0
Supplemental pay .....	37.7	16.3	66.9	24.4	57.7	16.8
Insurance .....	17.1	16.2	16.4	15.7	15.9	11.9
Health .....	17.3	16.7	16.6	15.9	15.8	12.0
Retirement and savings .....	35.5	24.6	31.3	23.2	31.2	20.9
Legally required <sup>1</sup> .....	10.0	6.0	7.4	6.3	7.6	6.0
	March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation .....	7.0	4.8	6.0	5.1	6.3	5.1
Wages and salaries .....	5.1	3.9	4.7	4.6	5.2	4.4
Total benefits .....	15.4	8.0	12.2	8.3	11.0	8.8
Paid leave .....	11.4	12.6	14.0	12.4	14.5	10.9
Supplemental pay .....	59.7	12.6	45.1	14.7	43.5	13.7
Insurance .....	16.8	9.7	20.4	10.0	17.4	10.6
Health .....	17.2	9.6	21.1	10.0	17.8	10.7
Retirement and savings .....	23.5	17.8	27.1	20.2	23.5	20.0
Legally required <sup>1</sup> .....	5.7	4.3	5.5	6.1	4.1	6.6

<sup>1</sup> Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

**Table A-2. Relative standard errors for selected characteristics, private industry, construction specialty trade (NAICS 238), March data, 2004–09**

Item	March 2004		March 2005		March 2006	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation .....	4.2	6.2	3.6	4.2	3.5	3.4
Wages and salaries.....	3.4	5.0	3.0	3.7	2.8	2.7
Total benefits.....	7.6	9.1	6.3	5.5	6.0	5.2
Paid leave .....	14.2	9.5	12.0	7.8	8.5	6.3
Supplemental pay.....	11.9	11.6	9.6	8.6	9.9	9.3
Insurance.....	14.7	14.4	11.2	7.7	10.5	6.5
Health .....	15.1	14.6	11.5	7.7	10.7	6.5
Retirement and savings .....	23.1	15.2	20.0	13.0	17.4	15.3
Legally required <sup>1</sup> .....	4.6	6.7	4.8	4.0	4.6	3.6
	March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation .....	2.3	3.3	2.6	3.5	2.5	3.6
Wages and salaries.....	1.9	2.6	2.1	2.6	2.2	2.8
Total benefits.....	4.5	4.9	4.9	5.8	4.8	5.4
Paid leave .....	8.2	9.5	8.7	8.8	7.2	9.3
Supplemental pay.....	7.6	8.1	8.1	6.9	7.2	9.1
Insurance.....	9.0	6.9	9.7	8.0	9.7	7.0
Health .....	8.9	6.9	9.6	7.8	9.6	7.0
Retirement and savings .....	14.4	11.2	16.4	14.3	17.6	10.4
Legally required <sup>1</sup> .....	4.3	3.5	4.3	3.9	3.3	3.7

<sup>1</sup> Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

**Table A-3. Differences between workers in nonresidential and residential construction of buildings (NAICS 236),<sup>1</sup> private industry, March data, 2004–09**

Item	March 2004	March 2005	March 2006	March 2007	March 2008	March 2009
	Differences in costs per hour worked ( <i>t</i> -statistics in parentheses) <sup>2</sup>					
Total compensation.....	\$4.22 (1.75)	\$4.17 (1.41)	\$8.03 (2.52)	\$8.96 (3.64)	\$12.07 (4.59)	\$13.94 (5.04)
Wages and salaries.....	2.50 (1.51)	3.18 (1.80)	4.62 (2.79)	4.51 (3.43)	6.34 (3.92)	7.82 (4.63)
Total benefits.....	1.72 (1.72)	.99 (.65)	3.40 (1.99)	4.44 (3.19)	5.73 (4.66)	6.12 (4.54)
Paid leave.....	.39 (1.81)	.45 (1.80)	.63 (2.17)	.52 (2.35)	.69 (2.87)	.82 (3.20)
Supplemental pay.....	-.09 (-.24)	-.60 (-.56)	-.13 (-.16)	-.15 (-.16)	.14 (.27)	.06 (.11)
Insurance.....	.61 (1.61)	.41 (1.11)	1.08 (2.76)	1.55 (4.87)	1.80 (5.07)	1.88 (4.78)
Health.....	.54 (1.47)	.34 (.96)	.99 (2.72)	1.41 (4.66)	1.65 (4.88)	1.73 (4.62)
Retirement and savings.....	.59 (1.44)	.70 (1.67)	1.17 (2.45)	1.66 (4.38)	1.96 (4.22)	2.02 (4.02)
Legally required <sup>3</sup> .....	.21 (.58)	.03 (.09)	.66 (1.90)	.86 (3.61)	1.14 (3.32)	1.35 (4.04)
Differences in percent of total compensation ( <i>t</i> -statistics in parentheses) <sup>2</sup>						
Total compensation.....	-	-	-	-	-	-
Wages and salaries.....	-2.0 (-1.06)	.8 (.27)	-3.3 (-1.09)	-5.8 (-2.10)	-7.2 (-3.62)	-6.2 (-3.08)
Total benefits.....	2.0 (1.06)	-.8 (-.27)	3.3 (1.09)	5.8 (2.10)	7.2 (3.62)	6.2 (3.08)
Paid leave.....	.8 (1.13)	.9 (1.44)	1.0 (1.42)	.5 (1.12)	.7 (1.42)	.7 (1.28)
Supplemental pay.....	-.8 (-.58)	-2.6 (-.75)	-1.6 (-0.57)	-1.8 (-.59)	-.9 (-.53)	-1.3 (-.76)
Insurance.....	1.4 (1.23)	.5 (.50)	1.8 (2.24)	3.2 (3.71)	3.4 (3.69)	3.0 (3.13)
Health.....	1.2 (1.07)	.4 (.33)	1.6 (2.12)	2.8 (3.34)	3.0 (3.39)	2.7 (2.89)
Retirement and savings.....	1.5 (1.22)	1.8 (1.51)	2.8 (2.24)	4.3 (4.62)	4.7 (4.47)	4.4 (4.10)
Legally required <sup>3</sup> .....	-.9 (-.74)	-1.5 (-1.18)	-.7 (-1.06)	-.4 (-.64)	-.6 (-.90)	-.5 (-.76)

<sup>1</sup> Each difference is calculated as all or a part of nonresidential workers' compensation minus all or the corresponding part of residential workers' compensation.

<sup>2</sup> Differences are calculated from unrounded averages.

<sup>3</sup> Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

**Table A-4. Differences between nonresidential and residential construction workers in the specialty trade contractors subsector (NAICS 238),<sup>1</sup> private industry, March data, 2004–09**

Item	March 2004	March 2005	March 2006	March 2007	March 2008	March 2009
	Differences in costs per hour worked (t-statistics in parentheses) <sup>2</sup>					
Total compensation .....	\$8.94 (4.80)	\$8.47 (5.88)	\$8.28 (5.92)	\$7.60 (6.42)	\$8.53 (6.35)	\$8.78 (6.42)
Wages and salaries .....	4.76 (4.83)	4.56 (5.21)	4.19 (5.36)	3.91 (5.78)	4.19 (5.59)	4.17 (5.32)
Total benefits .....	4.19 (4.37)	3.91 (6.30)	4.10 (6.25)	3.69 (6.78)	4.34 (6.55)	4.61 (7.11)
Paid leave .....	.51 (4.32)	.42 (3.95)	.54 (5.42)	.56 (4.54)	.60 (5.20)	.48 (3.94)
Supplemental pay .....	.22 (1.75)	.15 (1.73)	.34 (3.39)	.31 (3.55)	.33 (3.81)	.42 (3.95)
Insurance .....	1.32 (3.53)	1.32 (6.41)	1.24 (5.65)	1.27 (7.52)	1.40 (6.84)	1.64 (7.61)
Health .....	1.31 (3.57)	1.29 (6.45)	1.18 (5.58)	1.19 (7.39)	1.31 (6.92)	1.55 (7.56)
Retirement and savings .....	1.53 (4.82)	1.51 (5.16)	1.32 (4.08)	1.18 (5.91)	1.49 (5.07)	1.60 (6.80)
Legally required <sup>3</sup> .....	.60 (2.35)	.50 (2.43)	.65 (3.41)	.37 (1.96)	.51 (2.62)	.47 (2.68)
	Differences between percent of total compensation (t-statistics in parentheses) <sup>2</sup>					
Total compensation .....	–	–	–	–	–	–
Wages and salaries .....	–6.3 (–3.68)	–5.4 (–5.35)	–6.0 (–6.23)	–5.4 (–6.58)	–6.6 (–6.48)	–6.9 (–7.26)
Total benefits .....	6.3 (3.68)	5.4 (5.35)	6.0 (6.23)	5.4 (6.58)	6.6 (6.48)	6.9 (7.26)
Paid leave .....	.9 (2.32)	.6 (1.48)	1.0 (2.54)	1.1 (3.03)	1.1 (3.39)	.6 (1.97)
Supplemental pay .....	–.2 (–.34)	–.3 (–.99)	.4 (1.09)	.3 (1.10)	.3 (.98)	.6 (1.94)
Insurance .....	3.0 (3.06)	3.0 (5.61)	2.4 (4.57)	2.8 (7.08)	2.9 (6.05)	3.4 (7.01)
Health .....	3.0 (3.15)	2.9 (5.62)	2.3 (4.43)	2.6 (6.87)	2.7 (6.01)	3.2 (6.91)
Retirement and savings .....	4.4 (5.42)	4.3 (5.27)	3.5 (3.85)	3.2 (5.86)	4.0 (5.20)	4.0 (6.95)
Legally required <sup>3</sup> .....	–2.0 (–3.34)	–2.2 (–3.56)	–1.2 (–2.68)	–2.0 (–3.80)	–1.7 (–3.87)	–1.8 (–5.01)

<sup>1</sup> Each difference is calculated as all or a part of nonresidential workers' compensation minus all or the corresponding part of residential workers' compensation.

<sup>2</sup> Differences are calculated from unrounded averages.

<sup>3</sup> Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

### Consumer Expenditure Survey Microdata Users' Workshop, July 2009

Geoffrey D. Paulin

The Consumer Expenditure Survey (CE) is the most detailed source of expenditure, demographic, and income data collected by the Federal Government. The data are collected in two component surveys: the (quarterly) Interview Survey and the Diary Survey. Each year, the CE program releases topcoded microdata from these surveys, which are used by researchers in a variety of areas, including academia, government, market research, and other private industries.

In 2006, the Division of Consumer Expenditure Surveys began conducting a workshop each July for users of the CE microdata. Held in the conference facilities of the Bureau of Labor Statistics (BLS) headquarters in Washington, DC, the workshops have included speakers demonstrating features of the data, as well as reports from researchers who have used the data in their work. The BLS recognizes the workshop, which averages 50 participants, as a "BLS Best Practice." Each year, the format has changed to incorporate suggestions from participants, but the basic framework has remained intact.

For the most recent workshop (July 2009), the program was expanded from 2 days to 3 days. The first day was designed especially for new users, including novices and those who had never used the data. The second day

was designed to feature research from users outside the BLS. The third day was designed particularly for more experienced users. The program was arranged in this way to accommodate as many participants as possible. That is, any attendee could attend 1, 2, or all 3 days of the workshop and benefit from sessions geared toward his or her expertise.

The first day opened with a welcome by leader Bill Passero, followed by an overview of the CE, featuring topics such as how the data are collected and published (Veri Crain). This session was followed by an introduction to the microdata, including an explanation of its features (Passero and Jeff Crilley). In the afternoon, participants received practical "hands-on" training, with expert users from the Division of Consumer Expenditure Surveys staff (Laura Paszkiewicz and Crilley) demonstrating introductory computer programming techniques to participants in a classroom equipped with several computers.<sup>1</sup>

The second day featured a full day of presentations from researchers outside the BLS. In addition, complementing speakers who described results from the Interview Survey, Geoffrey Paulin gave a presentation on uses of data from the Diary Survey and Gerald Perrins, of the Philadelphia regional office of the BLS, described how regional offices use such data. In all, nine outside researchers presented their work, demonstrating the wide range and diversity of topics that can be studied with this rich source of data. (See the box on page 49 for the names, affiliations, and topics of the presenters.) The day concluded with a special presentation from Terry Schau and Leslie Brown Joyner, the current and immediate past managing editors of the *Monthly*

*Labor Review*. Their presentation described the publication process from submission to printing, for authors interested in having their works appear in that journal. Next came a brief talk by Steve Henderson about changes to the microdata files that would occur with the release of the 2008 microdata in October 2009, including a description of specially collected data on the 2008 Economic Stimulus payments, also known as "tax rebates." The second day of talks represented the first time that a full day of the workshop was devoted to research presentations; the talks were added in response to comments from past attendees indicating that research presentations were among their favorite parts of the workshops.

The third day featured advanced topics, including technical details about sampling methods and the construction of sample weights (Catherine Hackett, Division of Price Statistical Methods); imputation and the allocation of microdata (Troy Olson); and the proper use of sample weights in computing population estimates (Paulin). The latter session noted that the proper use of weights requires a special technique to account for sample design effects that, if not employed, results in estimates of variances and regression parameters that are incorrect.<sup>2</sup> Similar sessions in the afternoon addressed the proper use of the multiply imputed income variables (Paulin); using data from participants in all four published interviews, rather than treating observations from each quarter independently (Passero); and applying sales taxes to expenditure reports (Meaghan Duetsch). These presentations were followed by practical training sessions that, in part, provided programming examples of the con-

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cepts described in the earlier sessions of that day. The day concluded with CE program staff soliciting feedback from the participants.

Following are abstracts of the papers read at the conference, listed in the order in which the papers were presented:

Richard Bavier, “Reconciliation of Income and Consumption Data in Poverty Measurement,” *Journal of Policy Analysis and Management*, winter 2008, pp. 40–62. A recent series of papers has renewed interest in the question of whether consumption data are superior to income data for poverty measurement. Although the Census Bureau has provided researchers with an experimental series of variables that can produce a comprehensive income measure, this resource has not been fully exploited in previous analyses. When poverty is measured by a comprehensive income measure, income poverty rates and trends are similar to consumption poverty rates. Arguments that income is measured with more error than consumption at the bottom of the distribution are shown to be based upon inferior income data. (© 2008 by the Association for Public Policy Analysis and Management.)

Arpita Biswas, Ph.D. candidate, Clemson University, “Effect of Income Taxes on Charitable Giving,” dissertation (in progress). This paper analyzes how lowering tax rates on income affects charitable giving decisions of individuals across various socioeconomic groups. The paper focuses on a particular government intervention—the Economic Growth and Tax Reconciliation Relief Act of 2001—to answer three key questions: (1) What

is the elasticity of charitable giving with respect to income and price? (2) As lower taxes increase the marginal cost of giving, what is the effect on charitable giving of the exogenous increase in income due to lower taxes? (3) With regard to the latter question, does the income effect dominate the substitution effect? The CE data set from 1997 to 2006 is used both to derive empirical results and to investigate how the results vary across income and age groups.

Raymond Ring, Professor of Economics, School of Business, University of South Dakota, “Reconciling Census Households with Consumer Expenditure Survey Consumer Units.” The CE uses consumer units to categorize and analyze expenditure data, whereas the Census Bureau uses households. The definitional differences between these sample universes are slight, but significant. This paper emphasizes those differences in order to identify situations in which the results of data analysis vary with the definition used.

John McCollough, assistant professor of business, The Pennsylvania State University-Lehigh Valley, “Consumer Discount Rates and the Decision to Repair or Replace a Durable Product: A Sustainable Consumption Issue,” *Journal of Economic Issues*, March 2010, pp. 183–204. This paper attempts to answer the question, “Given two consumers with the same income level and the same socioeconomic background, why does one consumer choose to replace an older, malfunctioning product while the other chooses to have the product repaired for further reuse?” To help address this question, an enhanced replacement model is pre-

sented and then empirically tested. The replacement model has been around for some time, helping consumers and firms make capital budgeting decisions. The replacement model was chosen because it highlights the role of individual discount rates and consumers’ time preferences in the decision process. The analysis can be extrapolated to the macrolevel in which, for economies that are similar in that they have comparable levels of gross domestic product per capita and prices, the economy with a higher societal discount rate might be more strongly characterized as a “throwaway society” than the one with a lower societal discount rate.

Megumi Omori, assistant professor of sociology, Department of Sociology, Social Work, and Criminal Justice, Bloomsburg University, “Household Expenditure on Children: Differences in Resource Allocation by Household Type.” Children in single-parent families are disadvantaged in many ways, compared with their counterparts in two-parent families. Differences in children’s well-being between two-parent and single-parent families are often attributed to differences in resources, such as parental income and time spent with children. Also, the economic disadvantage of single families is clearly shown by statistics: in 2006, the median income for married families was \$69,716, whereas that for single-father families was \$47,078 and for single-mother families was \$31,818 dollars. Although it is well established that income is a strong indicator of children’s well-being, little focus has been paid to possible differences in the *allocation* of economic resources.



Accordingly, this paper uses the 2005 CE Interview Survey to explore household expenditures on children, with a special focus on household types. Specifically, the study asks, “Are there any differences in spending patterns for children in different types of households within the same income group, and if so, where is the difference?”

Lisa Kolovich, Ph.D. candidate, University of Maryland, “Home Bias in International Trade: Who Has a Taste for Discrimination?” dissertation (in progress). This paper investigates the role that consumer preferences play in “home bias,” the preference by consumers for products produced in their own country over otherwise identical imports. Data from the U.S. automobile market for the years 2000 to 2004 and from the CE are used to estimate whether there is a home bias for automobiles produced by Ford, General Motors, or Chrysler in the light of Becker’s 1971 theory of discrimination. The results show that, after accounting for a wide array of amenities and for performance, quality, and reliability characteristics of automobiles, there is indeed a home bias for American-badged (that is, Ford, General Motors, and Chrysler) automobiles. In addition, preliminary results show that certain demographic groups of consumers—for instance, older consumers, less educated consumers, and individuals residing in the Midwest—appear to be more likely to purchase American-badged automobiles.

Janet Wagner, associate professor of business management and marketing, University of Maryland,

“Seasonality in Household Service Expenditures: A Theoretical Framework and an Empirical Analysis” (coauthored with Manoucher Mokhtari). Using CE microdata, this paper presents a theoretical model of the effects of seasonality and household characteristics on service expenditures. Tobit regression is used to test the model, and the paper concludes that seasonality appears to moderate the effect of personal characteristics, characteristics of the consumer unit, and demographics on the consumer unit’s quarterly service expenditures for household operations, entertainment, and food away from home.

Helen Levy, research assistant professor, University of Michigan, “Consequences of SCHIP for Household Well-Being” (coauthored with Lindsey Leininger (University of Wisconsin) and Diane Whitmore Schanzenbach (University of Chicago)). This paper uses data from the CE and the Survey of Income and Program Participation to analyze how the expansions of the State Children’s Health Insurance Program (SCHIP) affected total household consumption as well as detailed categories of household spending (for example, food, housing, and education). By means of an instrumental variables approach that relies on variation across States in the generosity of SCHIP expansions, the effect of expanding coverage on total consumer spending, as well as the distribution of spending across consumption categories, is isolated. Then, by showing what households do with the money they “save” by switching their children from private

to public health insurance, the analysis provides solid data on how SCHIP has improved the material well-being of the low-income families it is intended to assist, including those who previously had been paying for their own coverage.

Paul Wilson, Minnesota Department of Revenue, “Using CES Data to Estimate Consumption Tax Burdens in Minnesota” (coauthored with Phillip Anthony). The Minnesota Department of Revenue is required to complete a biennial study of Minnesota tax burdens, estimating how State and local tax burdens vary across resident households by income and household type. For the latest edition of this study (the 10th), amounts for each kind of tax were estimated for each household that was included in a stratified random sample of 105,000 households. The CE was used to estimate many of the consumption taxes paid, including the general sales tax, motor vehicle sales tax, and State excise taxes on cigarettes, alcohol, and motor fuels. Consumer expenditure estimates also were used to examine the distribution of spending on categories of goods that were not subject to the sales tax, in order to address the impact of proposals to broaden the sales tax base to include currently nontaxable goods and services.

The next workshop will be held July 14–16, 2010. It will be free of charge to all participants, although advanced registration is required. For more information about the 2009 and forthcoming workshops, visit the CE Web site, [www.bls.gov/cex](http://www.bls.gov/cex), and look for “Annual Workshop” under the left navigation bar entitled

“PUBLIC USE MICRODATA.” For direct access to this information, the link is [www.bls.gov/cex/csxannual-workshop.htm](http://www.bls.gov/cex/csxannual-workshop.htm). □

## Notes

ACKNOWLEDGMENT: The author wishes to acknowledge William Hawk of the Of-

fice of Prices and Living Conditions, Bureau of Labor Statistics, for compiling the list of abstracts of papers presented at the workshop.

<sup>1</sup> Examples included how to merge data from the FMLY and MEMB files. The FMLY file contains information about the consumer unit as a whole, such as region of residence and summary variables for expenditure categories, including total expenditures, housing, and apparel. (For the definition of a consumer unit, see “About the CE data,” in the appendix.)

The MEMB files contain information about each member of the consumer unit, such as the member’s age, ethnicity, and educational attainment. Data on expenditures are collected for the consumer unit as a whole; therefore, expenditure data on specific members are not available, except in single-member consumer units.

<sup>2</sup> The CE sample design is pseudorandom. However, a proper use of weights requires the method of balanced repeated replication.

## Speakers at the workshop

### BLS Staff of Division of Consumer Expenditure Surveys:

- Crain, Veri, economist, Branch of Information and Analysis; day 1
- Crilley, Jeffrey, economist, Branch of Information and Analysis; day 1
- Duetsch, Meaghan, supervisory economist, Chief, Phase 1/Phase 2 Section, Branch of Production and Control; day 3
- Henderson, Steve, supervisory economist, Chief, Branch of Information and Analysis; all days
- Olson, Troy, supervisory economist, Chief, Phase 3 Section, Branch of Production and Control; day 3
- Passero, Bill, senior economist, Branch of Information and Analysis; all days
- Paszkiwicz, Laura, senior economist, Branch of Information and Analysis; day 1
- Paulin, Geoffrey, senior economist, Branch of Information and Analysis; days 2 and 3

### Other BLS speakers:

- Hackett, Catherine, mathematical statistician, Division of Price Statistical Methods; day 3
- Joyner, Leslie Brown, supervisory economist, Office of Publications and Special Studies, and Branch Chief, Editorial Services A; day 2
- Perrins, Gerald, supervisory economist, Office of Field Operations, Philadelphia regional office, Division of Economic Analysis and Information; day 2
- Schau, Terry, supervisory economist, Office of Publications and Special Studies, and Branch Chief, Editorial Services 1; day 2

### Speakers from outside BLS:

- Richard Bavier, “Reconciliation of Income and Consumption Data in Poverty Measurement,” *Journal of Policy Anal-*

*ysis and Management*, winter 2008, pp. 40–62.

Arpita Biswas, Ph.D. candidate, Clemson University, “Effect of Income Taxes on Charitable Giving,” Ph.D. dissertation (in progress).

Lisa Kolovich, Ph.D. candidate, University of Maryland, “Home Bias in International Trade: Who Has a Taste for Discrimination?” Ph. D. dissertation (in progress).

Helen Levy, research assistant professor, University of Michigan, “Consequences of SCHIP for Household Well-Being,” coauthored with Lindsey Leininger (University of Wisconsin) and Diane Whitmore Schanzenbach (University of Chicago).

John McCollough, assistant professor of business, The Pennsylvania State University, Lehigh Valley, “Consumer Discount Rates and the Decision to Repair or Replace a Durable Product: A Sustainable Consumption Issue,” *Journal of Economic Issues*, March 2010.

Megumi Omori, assistant professor of sociology, Department of Sociology, Social Work, and Criminal Justice, Bloomsburg University, “Household Expenditure on Children: Differences in Resource Allocation by Household Type.”

Raymond Ring, professor of economics, School of Business, University of South Dakota, “Reconciling Census Households with Consumer Expenditure Survey Consumer Units.”

Janet Wagner, associate professor of business management and marketing, University of Maryland, “Seasonality in Household Service Expenditures: A Theoretical Framework and an Empirical Analysis,” coauthored with Manoucher Mokhtari.

Paul Wilson, Minnesota Department of Revenue, “Using CES Data to Estimate Consumption Tax Burdens in Minnesota,” coauthored with Phillip Anthony.

## APPENDIX: About the CE data

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*Consumer unit.* The basic unit of analysis in the Consumer Expenditure Survey (CE) is the consumer unit. In general, a consumer unit consists of (1) all members of a particular household who are related by blood, marriage, adoption, or some other legal arrangement; (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who use their incomes to make joint expenditure decisions. Financial independence is determined by spending behavior with regard to the three major expense categories: housing, food, and other living expenses. To be considered financially independent, the respondent must provide at least two of these expenditure categories, either entirely or in part.

*Collection and methodology.* Since 1980, the Interview and Diary Surveys have been collected on an ongoing basis. The Inter-

view Survey is designed to collect expenditures for big-ticket (for example, major appliances, and cars and trucks) and recurring (for instance, payments for rent, mortgage, and insurance) items. Data on some expenditures, such as food at home, are collected globally.<sup>1</sup> In addition to data on expenditures, demographics, and income, information about assets and liabilities is collected. In this survey, participants are visited once every 3 months for five consecutive quarters. Data from the first interview are collected only for bounding purposes and are not published.<sup>2</sup> Since April 2006, about 7,000 consumer units have participated each quarter.

In the Diary Survey, participants record expenditures daily for two consecutive weeks. The survey is designed to collect expenditures for small-ticket and frequently purchased items, such as detailed types of food (white bread; ground beef; butter; lettuce). Since April 2006, about 7,000 consumer units have participated annually. Because they complete a separate diary each week, approximately 14,000 diaries are collected each year.

## Notes to the appendix

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<sup>1</sup> That is, the respondent is asked to provide an estimate of the consumer unit's total expenditure for these items, rather than collecting detailed information on the items composing food expenditures.

<sup>2</sup> A bounding interview collects information to alert the interviewer to probe in cases where the purchase of a big-ticket or an infrequently purchased item reported in one interview is reported, perhaps inadvertently, in

the next interview. For example, if, in both the first and second interviews, the respondent reports that he or she purchased a refrigerator, the interviewer can ask followup questions during the second interview to ascertain whether the refrigerator that was purchased was the one reported in the first interview. The same process is followed in the second through fifth interviews when similar cases occur. That is, the second interview provides bounding information for the third interview, and so forth.

## The international role of the dollar

The U.S. dollar is considered by many to be the world's preeminent currency: heavy use of the dollar extends far beyond the Nation's borders, making it crucial to international finance and trade. However, since the emergence of the euro in 1999, a large number of commentators have questioned the future of the dollar in such a role. One of these people is economist Linda Goldberg, who asks, "Is the International Role of the Dollar Changing?" (Federal Reserve Bank of New York, *Current Issues in Economics and Finance*, January 2010).

As a relatively stable currency, the dollar serves as a reliable store of value in many countries, especially those countries where the local currency is inflating rapidly. Approximately 65 percent of all U.S. banknotes are in circulation outside the Nation. The United States also benefits from the international role of the dollar, which decreases transaction costs in international finance and trade and aids in insulating the U.S. economy from foreign shocks.

Another sign of the dollar's prominence is that, as of 2007, there are 7 countries that are dollarized or have established currency boards that use the dollar and 89 countries that have a fixed exchange rate with the dollar. In addition, dollars play a role in 86 percent of foreign exchange transactions. Higher transaction volumes lead to lower bid-ask spreads, which reinforces the attractiveness of the dollar in the foreign exchange markets. The dollar is also the currency most commonly used for the invoices of exports in international trade, especially for oil and other commodities. Furthermore, 39 percent of all outstanding

debt securities throughout the world are denominated in dollars. The dollar's share of debt in 1999—42 percent—was only slightly higher.

Goldberg believes that, because of inertia and other factors, the dollar will continue to be the most dominant currency in the world for at least the near future. The recent financial crisis caused a global shortage of dollars, but the situation has since improved. The euro undoubtedly is one of the world's leading currencies, but it has not made many inroads beyond Europe. Nevertheless, the author emphasizes that it certainly appears possible for the dollar to lose its spot at number one sometime further in the future, especially when one considers that the dollar surpassed the pound sterling as the dominant reserve currency during the first half of the 20th century.

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## Gas prices' effects on the automobile market

The price of gasoline can have a significant effect on the total cost of owning and operating a vehicle. Economists Meghan R. Busse, Christopher R. Knittel, and Florian Zettelmeyer analyze how changes in gas prices affect the selling prices and market shares of new and used vehicles in their working paper titled "Pain at the Pump: The Differential Effect of Gasoline Prices on New and Used Automobile Markets" (NBER Working Paper 15590, December 2009). The results of the study offer insight into consumers' reactions to changes in fuel prices.

The research shows that, when the price of gasoline increased by \$1, the least fuel-efficient quartile of the market for used automobiles suffered a 5-percent decrease in market share.

The same \$1 price increase resulted in a 7-percent increase in market share for the most fuel-efficient quartile of used cars. The market for new vehicles showed a greater response to the price change. The research shows that the \$1 price increase elevated the market share of new vehicles in the upper quartile of fuel efficiency by 20 percent and decreased the market share of new vehicles in the least fuel-efficient quartile by 24 percent.

The study also includes data on the changes in market share for different classes of vehicles in response to a \$1 change in gas prices. The market shares for compact cars, midsize cars, and sporty cars increased by 24.1 percent, 7.9 percent, and 5.5 percent, respectively. The market shares of the larger and less fuel-efficient vehicles decreased as follows: SUVs, by 13.9 percent; pickups, by 11.2 percent; vans, by 10.3 percent; and luxury cars, by 4.0 percent.

New cars in the most fuel-efficient quartile received a relative price increase of \$363 per \$1 rise in gasoline prices. Used cars in the most fuel-efficient quartile had a relative price increase of \$2,839 per \$1 rise in gas prices. The researchers discuss potential explanations as to why there is a seemingly large gap between these figures.

The sample used in this study is made up of sales from car dealerships that sold both new and used vehicles, and it covers about 20 percent of all dealerships in the United States. The data were collected from September 1999 through June 2008. In the study, fuel efficiency was determined by the Environmental Protection Agency's Combined Fuel Economy rating for each vehicle. Gasoline prices were collected for over 15,000 ZIP codes throughout the United States. □

### The Executive Branch and Civil Rights

*To Advance Their Opportunities: Federal Policies Towards African American Workers From World War I to the Civil Rights Act of 1964.* By Judson MacLaury, Knoxville, TN, University of Tennessee (New-found Press), 2008, 300 pp., \$24.95/paperback

In his book *To Advance Their Opportunities*, Judson MacLaury, former historian at the U.S. Department of Labor, traces the evolution of federal policies toward African American workers. He focuses on the period dating from the inauguration of Woodrow Wilson (1913, also the founding year of the Department of Labor, or DOL) through the passage of the Civil Rights Act of 1964 by the Lyndon Johnson administration. To his great merit, MacLaury has mined the national archives, the labor library, and other published and unpublished material from the executive branch of government to bring to light its role in ending a critical era in American labor history. The result is a valuable permanent record, with rich documentation of the civil rights movement “on the ground.”

One challenge when addressing the Civil Rights movement is defining the precise beginning of the Jim Crow era. Unlike MacLaury, this daughter of New Orleans found it difficult to accept the onset of the Jim Crow era as either an inevitable consequence of the Civil War or peculiar to the South, but rather a result of the disastrous *Plessy v Ferguson* Supreme Court decision in 1896 a generation after the end of the War. In this decision a group of whites, French creoles, and free persons of color from New Orleans (including *Plessy*, who had one black great grandparent), challenged the Louisiana law that

separated railroad cars for blacks and whites. The defeat of this challenge meant that the de facto caste system became legal, with national repercussions when the demand for industrial labor resulted in black migration.

Dating the unconstitutional caste system to this turn of the century decision implicates the Wilson administration in the segregation of the United States capitol. This policy reversal saw the loss of black access to diplomatic and political appointments and the countenancing of attaching photographs to Civil Service applications that, under the Pendleton Act, had been “racially blind.” Wilson fostered a policy that spread segregation into government offices, even to the point of dividing rooms and walling off spaces to separate blacks from whites. Segregated restrooms were often the only spaces available to blacks for eating meals.

Angry reaction to Wilson’s policy by federal black employees and other conscientious Americans, in organizations such as the National Association for the Advancement of Colored People (NAACP) and the Urban League, produced, paradoxically, two vehicles for redress which would support the nascent civil rights movement and nurture its growth to its culmination in the Civil Rights Act: 1) the resort to orders by the Executive Branch and 2) the Division of Negro Economics. Of the two, the one that influenced MacLaury’s text most significantly was resort to executive orders, an effort to bypass a Congress whose Southern Democrats manipulated the Supreme Court decision to practically disenfranchise blacks. MacLaury describes in detail the use of executive orders in each succeeding administration, and the shift from “moral suasion” to legal sanctions as the scope of their coverage broadened to federal agencies as well as federal contracts.

The Division of Negro Economics (DNE), was a federal-state program headed by George Haynes, the first black man to receive a Ph. D. from Columbia University (1912). MacLaury asserts: “The work of the DNE, along with the state and local activities it spawned during and after World War I, seems to have generated hope and enthusiasm among blacks and racial progressives throughout the nation. It demonstrated to the pressure groups the importance of government action. Then Secretary of Labor William Wilson endorsed it as a first step toward applying the mandate to black workers as stated in the DOL’s Organic Act; to foster, promote, and develop the welfare of the wage earners of the United States, improve their working conditions, and advance their opportunities for profitable employment.” The DNE died, but it established the prototype of a commission for the next Democratic administration.

MacLaury notes the Republican Party’s tradition of non-intervention; Herbert Hoover, for example, refrained from introducing segregation into his department. It was not until the Franklin Roosevelt Administration that the executive branch was again called upon to show its mettle. Widespread relief programs during the Depression challenged the administration to come up with an even-handed distribution of Federal benefits at the same time that the administration depended on the legislative support of Southern Democrats. A number of progressive statesmen emerged. Harold Ickes, who administered the Public Works Administration (PWA) program, was an outstanding advocate for black employment. Frances Perkins, Secretary of Labor, was also an effective advocate. Both she and Harry Hopkins, who headed the Works Projects Administration

(WPA), were sympathetic to employment of blacks, but they did run into problems when Laurence Oxley, Director of Negro Labor, followed the DNE model of federal state administration: local offices often resisted desegregation.

New Dealers had not only Southern Democrats but also their pro-union constituency to plague their effectiveness in handling black labor problems. With the notable exception of A. Philip Randolph, unions were not only uncooperative they actually resented government intervention. The attempt to prevent discriminatory apprenticeship training programs to prepare black workers for construction jobs met with sustained hostility. Extensive relief programs nonetheless did benefit blacks as they found a champion in the President's wife,

Eleanor; as a result, Southern blacks shifted their vote to the Democratic Party. It remained, however, for Truman to desegregate the military. His close election in 1948 depended on black support.

Jim Crow was not legally overturned until the *Brown v Board of Education* decision in 1954 during the Eisenhower administration. Following traditional Republican policy, advances for blacks during that period were not publicized. The Kennedy Administration, in contrast, adopted the cause; by then, the concept of affirmative action had emerged. MacLaury's micro data documentation illuminates the step by step forging of concepts that necessarily prepared the ground for the executive branch of the Federal government to realize, finally, in the words of Kennedy, the "promise of our Constitution."

MacLaury amply demonstrates that justice does not just happen, it requires effort. Two quotes come to mind. Martin Luther King, Jr. wrote in a letter from Birmingham Jail that "freedom is never voluntarily given by the oppressor, it must be demanded by the oppressed." And, as President Lyndon Johnson told a group of labor and civil rights leaders who called on him to support the Civil Rights Act, "Go make me do it."

As an aside, an excellent insider's overview of the context of this work is supplied in a foreword by Professor Ray Marshall, Secretary of Labor in the Carter administration, and author of books on black labor. □

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# Notes on Current Labor Statistics

This section of the *Review* presents the principal statistical series collected and calculated by the Bureau of Labor Statistics: series on labor force; employment; unemployment; labor compensation; consumer, producer, and international prices; productivity; international comparisons; and injury and illness statistics. In the notes that follow, the data in each group of tables are briefly described; key definitions are given; notes on the data are set forth; and sources of additional information are cited.

## General notes

The following notes apply to several tables in this section:

**Seasonal adjustment.** Certain monthly and quarterly data are adjusted to eliminate the effect on the data of such factors as climatic conditions, industry production schedules, opening and closing of schools, holiday buying periods, and vacation practices, which might prevent short-term evaluation of the statistical series. Tables containing data that have been adjusted are identified as “seasonally adjusted.” (All other data are not seasonally adjusted.) Seasonal effects are estimated on the basis of current and past experiences. When new seasonal factors are computed each year, revisions may affect seasonally adjusted data for several preceding years.

Seasonally adjusted data appear in tables 1–14, 17–21, 48, and 52. Seasonally adjusted labor force data in tables 1 and 4–9 and seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 usually are revised in the March issue of the *Review*. A brief explanation of the seasonal adjustment methodology appears in “Notes on the data.”

Revisions in the productivity data in table 54 are usually introduced in the September issue. Seasonally adjusted indexes and percent changes from month-to-month and quarter-to-quarter are published for numerous Consumer and Producer Price Index series. However, seasonally adjusted indexes are not published for the U.S. average All-Items CPI. Only seasonally adjusted percent changes are available for this series.

**Adjustments for price changes.** Some data—such as the “real” earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of \$3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is \$2 ( $\$3/150 \times 100 = \$2$ ). The \$2 (or any other resulting

values) are described as “real,” “constant,” or “1982” dollars.

## Sources of information

Data that supplement the tables in this section are published by the Bureau in a variety of sources. Definitions of each series and notes on the data are contained in later sections of these Notes describing each set of data. For detailed descriptions of each data series, see *BLS Handbook of Methods*, Bulletin 2490. Users also may wish to consult *Major Programs of the Bureau of Labor Statistics*, Report 919. News releases provide the latest statistical information published by the Bureau; the major recurring releases are published according to the schedule appearing on the back cover of this issue.

More information about labor force, employment, and unemployment data and the household and establishment surveys underlying the data are available in the Bureau’s monthly publication, *Employment and Earnings*. Historical unadjusted and seasonally adjusted data from the household survey are available on the Internet:

[www.bls.gov/cps/](http://www.bls.gov/cps/)

Historically comparable unadjusted and seasonally adjusted data from the establishment survey also are available on the Internet:

[www.bls.gov/ces/](http://www.bls.gov/ces/)

Additional information on labor force data for areas below the national level are provided in the BLS annual report, *Geographic Profile of Employment and Unemployment*.

For a comprehensive discussion of the Employment Cost Index, see *Employment Cost Indexes and Levels, 1975–95*, BLS Bulletin 2466. The most recent data from the Employee Benefits Survey appear in the following Bureau of Labor Statistics bulletins: *Employee Benefits in Medium and Large Firms*; *Employee Benefits in Small Private Establishments*; and *Employee Benefits in State and Local Governments*.

More detailed data on consumer and producer prices are published in the monthly periodicals, *The CPI Detailed Report* and *Producer Price Indexes*. For an overview of the 1998 revision of the CPI, see the December 1996 issue of the *Monthly Labor Review*. Additional data on international prices appear in monthly news releases.

Listings of industries for which productivity indexes are available may be found on the Internet:

[www.bls.gov/lpc/](http://www.bls.gov/lpc/)

For additional information on international comparisons data, see *International Comparisons of Unemployment*, Bulletin

1979.

Detailed data on the occupational injury and illness series are published in *Occupational Injuries and Illnesses in the United States, by Industry*, a BLS annual bulletin.

Finally, the *Monthly Labor Review* carries analytical articles on annual and longer term developments in labor force, employment, and unemployment; employee compensation and collective bargaining; prices; productivity; international comparisons; and injury and illness data.

## Symbols

n.e.c. = not elsewhere classified.

n.e.s. = not elsewhere specified.

p = preliminary. To increase the timeliness of some series, preliminary figures are issued based on representative but incomplete returns.

r = revised. Generally, this revision reflects the availability of later data, but also may reflect other adjustments.

## Comparative Indicators

(Tables 1–3)

Comparative indicators tables provide an overview and comparison of major BLS statistical series. Consequently, although many of the included series are available monthly, all measures in these comparative tables are presented quarterly and annually.

**Labor market indicators** include employment measures from two major surveys and information on rates of change in compensation provided by the Employment Cost Index (ECI) program. The labor force participation rate, the employment-population ratio, and unemployment rates for major demographic groups based on the Current Population (“household”) Survey are presented, while measures of employment and average weekly hours by major industry sector are given using nonfarm payroll data. The Employment Cost Index (compensation), by major sector and by bargaining status, is chosen from a variety of BLS compensation and wage measures because it provides a comprehensive measure of employer costs for hiring labor, not just outlays for wages, and it is not affected by employment shifts among occupations and industries.

Data on **changes in compensation, prices, and productivity** are presented in table 2. Measures of rates of change of compensation and wages from the Employment Cost Index



program are provided for all civilian nonfarm workers (excluding Federal and household workers) and for all private nonfarm workers. Measures of changes in consumer prices for all urban consumers; producer prices by stage of processing; overall prices by stage of processing; and overall export and import price indexes are given. Measures of productivity (output per hour of all persons) are provided for major sectors.

**Alternative measures of wage and compensation rates of change**, which reflect the overall trend in labor costs, are summarized in table 3. Differences in concepts and scope, related to the specific purposes of the series, contribute to the variation in changes among the individual measures.

### Notes on the data

Definitions of each series and notes on the data are contained in later sections of these notes describing each set of data.

## Employment and Unemployment Data

(Tables 1; 4–29)

### Household survey data

#### Description of the series

Employment data in this section are obtained from the Current Population Survey, a program of personal interviews conducted monthly by the Bureau of the Census for the Bureau of Labor Statistics. The sample consists of about 60,000 households selected to represent the U.S. population 16 years of age and older. Households are interviewed on a rotating basis, so that three-fourths of the sample is the same for any 2 consecutive months.

#### Definitions

**Employed persons** include (1) all those who worked for pay any time during the week which includes the 12th day of the month or who worked unpaid for 15 hours or more in a family-operated enterprise and (2) those who were temporarily absent from their regular jobs because of illness, vacation, industrial dispute, or similar reasons. A person working at more than one job is counted only in the job at which he or she worked the greatest number of hours.

**Unemployed persons** are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work

because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

The **civilian labor force** consists of all employed or unemployed persons in the civilian noninstitutional population. Persons **not in the labor force** are those not classified as employed or unemployed. This group includes discouraged workers, defined as persons who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but are not currently looking, because they believe there are no jobs available or there are none for which they would qualify. The **civilian noninstitutional population** comprises all persons 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy. The **civilian labor force participation rate** is the proportion of the civilian noninstitutional population that is in the labor force. The **employment-population ratio** is employment as a percent of the civilian noninstitutional population.

#### Notes on the data

From time to time, and especially after a decennial census, adjustments are made in the Current Population Survey figures to correct for estimating errors during the intercensal years. These adjustments affect the comparability of historical data. A description of these adjustments and their effect on the various data series appears in the Explanatory Notes of *Employment and Earnings*. For a discussion of changes introduced in January 2003, see “Revisions to the Current Population Survey Effective in January 2003” in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at [www.bls.gov/cps/rvcps03.pdf](http://www.bls.gov/cps/rvcps03.pdf)).

Effective in January 2003, BLS began using the X-12 ARIMA seasonal adjustment program to seasonally adjust national labor force data. This program replaced the X-11 ARIMA program which had been used since January 1980. See “Revision of Seasonally Adjusted Labor Force Series in 2003,” in the February 2003 issue of *Employment and Earnings* (available on the BLS Web site at [www.bls.gov/cps/cpsrs.pdf](http://www.bls.gov/cps/cpsrs.pdf)) for a discussion of the introduction of the use of X-12 ARIMA for seasonal adjustment of the labor force data and the effects that it had on the data.

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical season-

ally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

FOR ADDITIONAL INFORMATION on national household survey data, contact the Division of Labor Force Statistics: (202) 691–6378.

## Establishment survey data

### Description of the series

Employment, hours, and earnings data in this section are compiled from payroll records reported monthly on a voluntary basis to the Bureau of Labor Statistics and its cooperating State agencies by about 160,000 businesses and government agencies, which represent approximately 400,000 individual worksites and represent all industries except agriculture. The active CES sample covers approximately one-third of all nonfarm payroll workers. Industries are classified in accordance with the 2007 North American Industry Classification System. In most industries, the sampling probabilities are based on the size of the establishment; most large establishments are therefore in the sample. (An establishment is not necessarily a firm; it may be a branch plant, for example, or warehouse.) Self-employed persons and others not on a regular civilian payroll are outside the scope of the survey because they are excluded from establishment records. This largely accounts for the difference in employment figures between the household and establishment surveys.

### Definitions

An **establishment** is an economic unit which produces goods or services (such as a factory or store) at a single location and is engaged in one type of economic activity.

**Employed persons** are all persons who received pay (including holiday and sick pay) for any part of the payroll period including the 12th day of the month. Persons holding more than one job (about 5 percent of all persons in the labor force) are counted in each establishment which reports them.

**Production workers** in the goods-producing industries cover employees, up through the level of working supervisors, who engage directly in the manufacture or construction of the establishment’s product. In private service-providing industries, data are collected for nonsupervisory workers, which include most employees except those in executive, managerial, and supervisory positions. Those

workers mentioned in tables 11–16 include production workers in manufacturing and natural resources and mining; construction workers in construction; and nonsupervisory workers in all private service-providing industries. Production and nonsupervisory workers account for about four-fifths of the total employment on private nonagricultural payrolls.

**Earnings** are the payments production or nonsupervisory workers receive during the survey period, including premium pay for overtime or late-shift work but excluding irregular bonuses and other special payments. **Real earnings** are earnings adjusted to reflect the effects of changes in consumer prices. The deflator for this series is derived from the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

**Hours** represent the average weekly hours of production or nonsupervisory workers for which pay was received, and are different from standard or scheduled hours. **Overtime hours** represent the portion of average weekly hours which was in excess of regular hours and for which overtime premiums were paid.

The **Diffusion Index** represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6-month spans are seasonally adjusted, while those for the 12-month span are unadjusted. Table 17 provides an index on private nonfarm employment based on 278 industries, and a manufacturing index based on 84 industries. These indexes are useful for measuring the dispersion of economic gains or losses and are also economic indicators.

## Notes on the data

With the release of data for January 2010, the CES program introduced its annual revision of national estimates of employment, hours, and earnings from the monthly survey of nonfarm establishments. Each year, the CES survey realigns its sample-based estimates to incorporate universe counts of employment—a process known as benchmarking. Comprehensive counts of employment, or benchmarks, are derived primarily from unemployment insurance (UI) tax reports that nearly all employers are required to file with State Workforce Agencies. With the release in June 2003, CES completed the transition from its original quota sample design to a

probability-based sample design. The industry-coding update included reconstruction of historical estimates in order to preserve time series for data users. Normally 5 years of seasonally adjusted data are revised with each benchmark revision. However, with this release, the entire new time series history for all CES data series were re-seasonally adjusted due to the NAICS conversion, which resulted in the revision of all CES time series.

Also in June 2003, the CES program introduced concurrent seasonal adjustment for the national establishment data. Under this methodology, the first preliminary estimates for the current reference month and the revised estimates for the 2 prior months will be updated with concurrent factors with each new release of data. Concurrent seasonal adjustment incorporates all available data, including first preliminary estimates for the most current month, in the adjustment process. For additional information on all of the changes introduced in June 2003, see the June 2003 issue of *Employment and Earnings* and “Recent changes in the national Current Employment Statistics survey,” *Monthly Labor Review*, June 2003, pp. 3–13.

Revisions in State data (table 11) occurred with the publication of January 2003 data. For information on the revisions for the State data, see the March and May 2003 issues of *Employment and Earnings*, and “Recent changes in the State and Metropolitan Area CES survey,” *Monthly Labor Review*, June 2003, pp. 14–19.

Beginning in June 1996, the BLS uses the X-12-ARIMA methodology to seasonally adjust establishment survey data. This procedure, developed by the Bureau of the Census, controls for the effect of varying survey intervals (also known as the 4- versus 5-week effect), thereby providing improved measurement of over-the-month changes and underlying economic trends. Revisions of data, usually for the most recent 5-year period, are made once a year coincident with the benchmark revisions.

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review*). When all returns have been received, the estimates are revised and published as “final” (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Fourth-quarter data are pub-

lished as preliminary in January and February and as final in March.

FOR ADDITIONAL INFORMATION on establishment survey data, contact the Division of Current Employment Statistics: (202) 691–6555.

## Unemployment data by State

### Description of the series

Data presented in this section are obtained from the Local Area Unemployment Statistics (LAUS) program, which is conducted in cooperation with State employment security agencies.

Monthly estimates of the labor force, employment, and unemployment for States and sub-State areas are a key indicator of local economic conditions, and form the basis for determining the eligibility of an area for benefits under Federal economic assistance programs such as the Job Training Partnership Act. Seasonally adjusted unemployment rates are presented in table 10. Insofar as possible, the concepts and definitions underlying these data are those used in the national estimates obtained from the CPS.

### Notes on the data

Data refer to State of residence. Monthly data for all States and the District of Columbia are derived using standardized procedures established by BLS. Once a year, estimates are revised to new population controls, usually with publication of January estimates, and benchmarked to annual average CPS levels.

FOR ADDITIONAL INFORMATION on data in this series, call (202) 691–6392 (table 10) or (202) 691–6559 (table 11).

## Quarterly Census of Employment and Wages

### Description of the series

Employment, wage, and establishment data in this section are derived from the quarterly tax reports submitted to State employment security agencies by private and State and local government employers subject to State unemployment insurance (UI) laws and from Federal, agencies subject to the Unemployment Compensation for Federal Employees (UCFE) program. Each quarter, State agencies edit and process the data and send the information to the Bureau of Labor Statistics.

The Quarterly Census of Employment and Wages (QCEW) data, also referred as ES-202 data, are the most complete enumeration of employment and wage information by

industry at the national, State, metropolitan area, and county levels. They have broad economic significance in evaluating labor market trends and major industry developments.

## Definitions

In general, the Quarterly Census of Employment and Wages monthly employment data represent the number of **covered workers** who worked during, or received pay for, the pay period that included the 12th day of the month. **Covered private industry employment** includes most corporate officials, executives, supervisory personnel, professionals, clerical workers, wage earners, piece workers, and part-time workers. It excludes proprietors, the unincorporated self-employed, unpaid family members, and certain farm and domestic workers. Certain types of nonprofit employers, such as religious organizations, are given a choice of coverage or exclusion in a number of States. Workers in these organizations are, therefore, reported to a limited degree.

Persons on paid sick leave, paid holiday, paid vacation, and the like, are included. Persons on the payroll of more than one firm during the period are counted by each ui-subject employer if they meet the employment definition noted earlier. The employment count excludes workers who earned no wages during the entire applicable pay period because of work stoppages, temporary layoffs, illness, or unpaid vacations.

**Federal employment data** are based on reports of monthly employment and quarterly wages submitted each quarter to State agencies for all Federal installations with employees covered by the Unemployment Compensation for Federal Employees (UCFE) program, except for certain national security agencies, which are omitted for security reasons. Employment for all Federal agencies for any given month is based on the number of persons who worked during or received pay for the pay period that included the 12th of the month.

An **establishment** is an economic unit, such as a farm, mine, factory, or store, that produces goods or provides services. It is typically at a single physical location and engaged in one, or predominantly one, type of economic activity for which a single industrial classification may be applied. Occasionally, a single physical location encompasses two or more distinct and significant activities. Each activity should be reported as a separate establishment if separate records are kept and the various activities are classified under different NAICS industries.

Most employers have only one establishment; thus, the establishment is the

predominant reporting unit or statistical entity for reporting employment and wages data. Most employers, including State and local governments who operate more than one establishment in a State, file a Multiple Worksite Report each quarter, in addition to their quarterly UI report. The Multiple Worksite Report is used to collect separate employment and wage data for each of the employer's establishments, which are not detailed on the UI report. Some very small multi-establishment employers do not file a Multiple Worksite Report. When the total employment in an employer's secondary establishments (all establishments other than the largest) is 10 or fewer, the employer generally will file a consolidated report for all establishments. Also, some employers either cannot or will not report at the establishment level and thus aggregate establishments into one consolidated unit, or possibly several units, though not at the establishment level.

For the Federal Government, the reporting unit is the **installation**: a single location at which a department, agency, or other government body has civilian employees. Federal agencies follow slightly different criteria than do private employers when breaking down their reports by installation. They are permitted to combine as a single statewide unit: 1) all installations with 10 or fewer workers, and 2) all installations that have a combined total in the State of fewer than 50 workers. Also, when there are fewer than 25 workers in all secondary installations in a State, the secondary installations may be combined and reported with the major installation. Last, if a Federal agency has fewer than five employees in a State, the agency headquarters office (regional office, district office) serving each State may consolidate the employment and wages data for that State with the data reported to the State in which the headquarters is located. As a result of these reporting rules, the number of reporting units is always larger than the number of employers (or government agencies) but smaller than the number of actual establishments (or installations).

Data reported for the first quarter are tabulated into **size** categories ranging from worksites of very small size to those with 1,000 employees or more. The size category is determined by the establishment's March employment level. It is important to note that each establishment of a multi-establishment firm is tabulated separately into the appropriate size category. The total employment level of the reporting multi-establishment firm is not used in the size tabulation.

Covered employers in most States report total **wages** paid during the calendar quarter, regardless of when the services were performed. A few State laws, however, specify

that wages be reported for, or based on the period during which services are performed rather than the period during which compensation is paid. Under most State laws or regulations, wages include bonuses, stock options, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans.

Covered employer contributions for old-age, survivors, and disability insurance (OASDI), health insurance, unemployment insurance, workers' compensation, and private pension and welfare funds are not reported as wages. Employee contributions for the same purposes, however, as well as money withheld for income taxes, union dues, and so forth, are reported even though they are deducted from the worker's gross pay.

**Wages of covered Federal workers** represent the gross amount of all payrolls for all pay periods ending within the quarter. This includes cash allowances, the cash equivalent of any type of remuneration, severance pay, withholding taxes, and retirement deductions. Federal employee remuneration generally covers the same types of services as for workers in private industry.

**Average annual wage** per employee for any given industry are computed by dividing total annual wages by annual average employment. A further division by 52 yields average weekly wages per employee. Annual pay data only approximate annual earnings because an individual may not be employed by the same employer all year or may work for more than one employer at a time.

Average weekly or annual wage is affected by the ratio of full-time to part-time workers as well as the number of individuals in high-paying and low-paying occupations. When average pay levels between States and industries are compared, these factors should be taken into consideration. For example, industries characterized by high proportions of part-time workers will show average wage levels appreciably less than the weekly pay levels of regular full-time employees in these industries. The opposite effect characterizes industries with low proportions of part-time workers, or industries that typically schedule heavy weekend and overtime work. Average wage data also may be influenced by work stoppages, labor turnover rates, retroactive payments, seasonal factors, bonus payments, and so on.

## Notes on the data

Beginning with the release of data for 2007, publications presenting data from the Covered Employment and Wages program have

switched to the 2007 version of the North American Industry Classification System (NAICS) as the basis for the assignment and tabulation of economic data by industry. NAICS is the product of a cooperative effort on the part of the statistical agencies of the United States, Canada, and Mexico. Due to difference in NAICS and Standard Industrial Classification (SIC) structures, industry data for 2001 is not comparable to the SIC-based data for earlier years.

Effective January 2001, the program began assigning Indian Tribal Councils and related establishments to local government ownership. This BLS action was in response to a change in Federal law dealing with the way Indian Tribes are treated under the Federal Unemployment Tax Act. This law requires federally recognized Indian Tribes to be treated similarly to State and local governments. In the past, the Covered Employment and Wage (CEW) program coded Indian Tribal Councils and related establishments in the private sector. As a result of the new law, CEW data reflects significant shifts in employment and wages between the private sector and local government from 2000 to 2001. Data also reflect industry changes. Those accounts previously assigned to civic and social organizations were assigned to tribal governments. There were no required industry changes for related establishments owned by these Tribal Councils. These tribal business establishments continued to be coded according to the economic activity of that entity.

To insure the highest possible quality of data, State employment security agencies verify with employers and update, if necessary, the industry, location, and ownership classification of all establishments on a 3-year cycle. Changes in establishment classification codes resulting from the verification process are introduced with the data reported for the first quarter of the year. Changes resulting from improved employer reporting also are introduced in the first quarter. For these reasons, some data, especially at more detailed geographic levels, may not be strictly comparable with earlier years.

County definitions are assigned according to Federal Information Processing Standards Publications as issued by the National Institute of Standards and Technology. Areas shown as counties include those designated as independent cities in some jurisdictions and, in Alaska, those areas designated by the Census Bureau where counties have not been created. County data also are presented for the New England States for comparative purposes, even though townships are the more common designation used in New England (and New Jersey).

The Office of Management and Budget (OMB) defines metropolitan areas for use in Federal statistical activities and updates these definitions as needed. Data in this table use metropolitan area criteria established by OMB in definitions issued June 30, 1999 (OMB Bulletin No. 99-04). These definitions reflect information obtained from the 1990 Decennial Census and the 1998 U.S. Census Bureau population estimate. A complete list of metropolitan area definitions is available from the National Technical Information Service (NTIS), Document Sales, 5205 Port Royal Road, Springfield, Va. 22161, telephone 1-800-553-6847.

OMB defines metropolitan areas in terms of entire counties, except in the six New England States where they are defined in terms of cities and towns. New England data in this table, however, are based on a county concept defined by OMB as New England County Metropolitan Areas (NECMA) because county-level data are the most detailed available from the Quarterly Census of Employment and Wages. The NECMA is a county-based alternative to the city- and town-based metropolitan areas in New England. The NECMA for a Metropolitan Statistical Area (MSA) include: (1) the county containing the first-named city in that MSA title (this county may include the first-named cities of other MSA, and (2) each additional county having at least half its population in the MSA in which first-named cities are in the county identified in step 1. The NECMA is officially defined areas that are meant to be used by statistical programs that cannot use the regular metropolitan area definitions in New England.

FOR ADDITIONAL INFORMATION on the covered employment and wage data, contact the Division of Administrative Statistics and Labor Turnover at (202) 691-6567.

## Job Openings and Labor Turnover Survey

### Description of the series

Data for the **Job Openings and Labor Turnover Survey** (JOLTS) are collected and compiled from a sample of 16,000 business establishments. Each month, data are collected for total employment, job openings, hires, quits, layoffs and discharges, and other separations. The JOLTS program covers all private nonfarm establishments such as factories, offices, and stores, as well as Federal, State, and local government entities in the 50 States and the District of Columbia. The JOLTS sample design is a random sample drawn from a universe of more than eight mil-

lion establishments compiled as part of the operations of the Quarterly Census of Employment and Wages, or QCEW, program. This program includes all employers subject to State unemployment insurance (UI) laws and Federal agencies subject to Unemployment Compensation for Federal Employees (UCFE).

The sampling frame is stratified by ownership, region, industry sector, and size class. Large firms fall into the sample with virtual certainty. JOLTS total employment estimates are controlled to the employment estimates of the Current Employment Statistics (CES) survey. A ratio of CES to JOLTS employment is used to adjust the levels for all other JOLTS data elements. Rates then are computed from the adjusted levels.

The monthly JOLTS data series begin with December 2000. Not seasonally adjusted data on job openings, hires, total separations, quits, layoffs and discharges, and other separations levels and rates are available for the total nonfarm sector, 16 private industry divisions and 2 government divisions based on the North American Industry Classification System (NAICS), and four geographic regions. Seasonally adjusted data on job openings, hires, total separations, and quits levels and rates are available for the total nonfarm sector, selected industry sectors, and four geographic regions.

### Definitions

Establishments submit **job openings** information for the last business day of the reference month. A job opening requires that (1) a specific position exists and there is work available for that position; and (2) work could start within 30 days regardless of whether a suitable candidate is found; and (3) the employer is actively recruiting from outside the establishment to fill the position. Included are full-time, part-time, permanent, short-term, and seasonal openings. Active recruiting means that the establishment is taking steps to fill a position by advertising in newspapers or on the Internet, posting help-wanted signs, accepting applications, or using other similar methods.

Jobs to be filled only by internal transfers, promotions, demotions, or recall from layoffs are excluded. Also excluded are jobs with start dates more than 30 days in the future, jobs for which employees have been hired but have not yet reported for work, and jobs to be filled by employees of temporary help agencies, employee leasing companies, outside contractors, or consultants. The job openings rate is computed by dividing the number of job openings by the sum of employment and job openings, and multiplying that quotient

by 100.

**Hires** are the total number of additions to the payroll occurring at any time during the reference month, including both new and rehired employees and full-time and part-time, permanent, short-term and seasonal employees, employees recalled to the location after a layoff lasting more than 7 days, on-call or intermittent employees who returned to work after having been formally separated, and transfers from other locations. The hires count does not include transfers or promotions within the reporting site, employees returning from strike, employees of temporary help agencies or employee leasing companies, outside contractors, or consultants. The hires rate is computed by dividing the number of hires by employment, and multiplying that quotient by 100.

**Separations** are the total number of terminations of employment occurring at any time during the reference month, and are reported by type of separation—quits, layoffs and discharges, and other separations. Quits are voluntary separations by employees (except for retirements, which are reported as other separations). Layoffs and discharges are involuntary separations initiated by the employer and include layoffs with no intent to rehire, formal layoffs lasting or expected to last more than 7 days, discharges resulting from mergers, downsizing, or closings, firings or other discharges for cause, terminations of permanent or short-term employees, and terminations of seasonal employees. Other separations include retirements, transfers to other locations, deaths, and separations due to disability. Separations do not include transfers within the same location or employees on strike.

The separations rate is computed by dividing the number of separations by employment, and multiplying that quotient by 100. The quits, layoffs and discharges, and other separations rates are computed similarly, dividing the number by employment and multiplying by 100.

## Notes on the data

The JOLTS data series on job openings, hires, and separations are relatively new. The full sample is divided into panels, with one panel enrolled each month. A full complement of panels for the original data series based on the 1987 Standard Industrial Classification (SIC) system was not completely enrolled in the survey until January 2002. The supplemental panels of establishments needed to create NAICS estimates were not completely enrolled until May 2003. The data collected up until those points are from less than a

full sample. Therefore, estimates from earlier months should be used with caution, as fewer sampled units were reporting data at that time.

In March 2002, BLS procedures for collecting hires and separations data were revised to address possible underreporting. As a result, JOLTS hires and separations estimates for months prior to March 2002 may not be comparable with estimates for March 2002 and later.

The Federal Government reorganization that involved transferring approximately 180,000 employees to the new Department of Homeland Security is not reflected in the JOLTS hires and separations estimates for the Federal Government. The Office of Personnel Management's record shows these transfers were completed in March 2003. The inclusion of transfers in the JOLTS definitions of hires and separations is intended to cover ongoing movements of workers between establishments. The Department of Homeland Security reorganization was a massive one-time event, and the inclusion of these intergovernmental transfers would distort the Federal Government time series.

Data users should note that seasonal adjustment of the JOLTS series is conducted with fewer data observations than is customary. The historical data, therefore, may be subject to larger than normal revisions. Because the seasonal patterns in economic data series typically emerge over time, the standard use of moving averages as seasonal filters to capture these effects requires longer series than are currently available. As a result, the stable seasonal filter option is used in the seasonal adjustment of the JOLTS data. When calculating seasonal factors, this filter takes an average for each calendar month after detrending the series. The stable seasonal filter assumes that the seasonal factors are fixed; a necessary assumption until sufficient data are available. When the stable seasonal filter is no longer needed, other program features also may be introduced, such as outlier adjustment and extended diagnostic testing. Additionally, it is expected that more series, such as layoffs and discharges and additional industries, may be seasonally adjusted when more data are available.

JOLTS hires and separations estimates cannot be used to exactly explain net changes in payroll employment. Some reasons why it is problematic to compare changes in payroll employment with JOLTS hires and separations, especially on a monthly basis, are: (1) the reference period for payroll employment is the pay period including the 12th of the month, while the reference period for hires and separations is the calendar month; and (2) payroll employment can vary from month

to month simply because part-time and on-call workers may not always work during the pay period that includes the 12th of the month. Additionally, research has found that some reporters systematically underreport separations relative to hires due to a number of factors, including the nature of their payroll systems and practices. The shortfall appears to be about 2 percent or less over a 12-month period.

FOR ADDITIONAL INFORMATION on the Job Openings and Labor Turnover Survey, contact the Division of Administrative Statistics and Labor Turnover at (202) 961-5870.

## Compensation and Wage Data

(Tables 1-3; 30-37)

The National Compensation Survey (NCS) produces a variety of compensation data. These include: The Employment Cost Index (ECI) and NCS benefit measures of the incidence and provisions of selected employee benefit plans. Selected samples of these measures appear in the following tables. NCS also compiles data on occupational wages and the Employer Costs for Employee Compensation (ECEC).

## Employment Cost Index

### Description of the series

The **Employment Cost Index** (ECI) is a quarterly measure of the rate of change in compensation per hour worked and includes wages, salaries, and employer costs of employee benefits. It is a Laspeyres Index that uses fixed employment weights to measure change in labor costs free from the influence of employment shifts among occupations and industries.

The ECI provides data for the civilian economy, which includes the total private nonfarm economy excluding private households, and the public sector excluding the Federal government. Data are collected each quarter for the pay period including the 12th day of March, June, September, and December.

Sample establishments are classified by industry categories based on the 2007 North American Classification System (NAICS). Within a sample establishment, specific job categories are selected and classified into about 800 occupations according to the 2000 Standard Occupational Classification (SOC) System. Individual occupations are combined to represent one of ten intermediate

aggregations, such as professional and related occupations, or one of five higher level aggregations, such as management, professional, and related occupations.

Fixed employment weights are used each quarter to calculate the most aggregate series—civilian, private, and State and local government. These fixed weights are also used to derive all of the industry and occupational series indexes. Beginning with the March 2006 estimates, 2002 fixed employment weights from the Bureau's Occupational Employment Statistics survey were introduced. From March 1995 to December 2005, 1990 employment counts were used. These fixed weights ensure that changes in these indexes reflect only changes in compensation, not employment shifts among industries or occupations with different levels of wages and compensation. For the series based on bargaining status, census region and division, and metropolitan area status, fixed employment data are not available. The employment weights are reallocated within these series each quarter based on the current ECI sample. The indexes for these series, consequently, are not strictly comparable with those for aggregate, occupational, and industry series.

## Definitions

**Total compensation** costs include wages, salaries, and the employer's costs for employee benefits.

**Wages and salaries** consist of earnings before payroll deductions, including production bonuses, incentive earnings, commissions, and cost-of-living adjustments.

**Benefits** include the cost to employers for paid leave, supplemental pay (including nonproduction bonuses), insurance, retirement and savings plans, and legally required benefits (such as Social Security, workers' compensation, and unemployment insurance).

Excluded from wages and salaries and employee benefits are such items as payment-in-kind, free room and board, and tips.

## Notes on the data

The ECI data in these tables reflect the conversion to the 2002 North American Industry Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. ECI series based on NAICS and SOC became the official BLS estimates starting in March 2006.

The ECI for changes in wages and salaries in the private nonfarm economy was pub-

lished beginning in 1975. Changes in total compensation cost—wages and salaries and benefits combined—were published beginning in 1980. The series of changes in wages and salaries and for total compensation in the State and local government sector and in the civilian nonfarm economy (excluding Federal employees) were published beginning in 1981. Historical indexes (December 2005=100) are available on the Internet: [www.bls.gov/ect/](http://www.bls.gov/ect/)

ADDITIONAL INFORMATION on the Employment Cost Index is available at [www.bls.gov/ncs/ect/home.htm](http://www.bls.gov/ncs/ect/home.htm) or by telephone at (202) 691-6199.

## National Compensation Survey Benefit Measures

### Description of the series

NCS benefit measures of employee benefits are published in two separate reports. The annual summary provides data on the incidence of (access to and participation in) selected benefits and provisions of paid holidays and vacations, life insurance plans, and other selected benefit programs. Data on percentages of establishments offering major employee benefits, and on the employer and employee shares of contributions to medical care premiums also are presented. Selected benefit data appear in the following tables. A second publication, published later, contains more detailed information about health and retirement plans.

### Definitions

**Employer-provided benefits** are benefits that are financed either wholly or partly by the employer. They may be sponsored by a union or other third party, as long as there is some employer financing. However, some benefits that are fully paid for by the employee also are included. For example, long-term care insurance paid entirely by the employee are included because the guarantee of insurability and availability at group premium rates are considered a benefit.

Employees are considered as having **access** to a benefit plan if it is available for their use. For example, if an employee is permitted to participate in a medical care plan offered by the employer, but the employee declines to do so, he or she is placed in the category with those having access to medical care.

Employees in contributory plans are considered as **participating** in an insurance or retirement plan if they have paid required contributions and fulfilled any applicable

service requirement. Employees in noncontributory plans are counted as participating regardless of whether they have fulfilled the service requirements.

**Defined benefit pension plans** use predetermined formulas to calculate a retirement benefit (if any), and obligate the employer to provide those benefits. Benefits are generally based on salary, years of service, or both.

**Defined contribution plans** generally specify the level of employer and employee contributions to a plan, but not the formula for determining eventual benefits. Instead, individual accounts are set up for participants, and benefits are based on amounts credited to these accounts.

**Tax-deferred savings plans** are a type of defined contribution plan that allow participants to contribute a portion of their salary to an employer-sponsored plan and defer income taxes until withdrawal.

**Flexible benefit plans** allow employees to choose among several benefits, such as life insurance, medical care, and vacation days, and among several levels of coverage within a given benefit.

### Notes on the data

ADDITIONAL INFORMATION ON THE NCS benefit measures is available at [www.bls.gov/ncs/ebs/home.htm](http://www.bls.gov/ncs/ebs/home.htm) or by telephone at (202) 691-6199.

## Work stoppages

### Description of the series

Data on work stoppages measure the number and duration of major strikes or lockouts (involving 1,000 workers or more) occurring during the month (or year), the number of workers involved, and the amount of work time lost because of stoppage. These data are presented in table 37.

Data are largely from a variety of published sources and cover only establishments directly involved in a stoppage. They do not measure the indirect or secondary effect of stoppages on other establishments whose employees are idle owing to material shortages or lack of service.

### Definitions

**Number of stoppages:** The number of strikes and lockouts involving 1,000 workers or more and lasting a full shift or longer.

**Workers involved:** The number of workers directly involved in the stoppage.

**Number of days idle:** The aggregate number of workdays lost by workers involved

in the stoppages.

**Days of idleness as a percent of estimated working time:** Aggregate workdays lost as a percent of the aggregate number of standard workdays in the period multiplied by total employment in the period.

## Notes on the data

This series is not comparable with the one terminated in 1981 that covered strikes involving six workers or more.

ADDITIONAL INFORMATION on work stoppages data is available at [www.bls.gov/cba/home.htm](http://www.bls.gov/cba/home.htm) or by telephone at (202) 691-6199.

## Price Data

(Tables 2; 38-46)

Price data are gathered by the Bureau of Labor Statistics from retail and primary markets in the United States. Price indexes are given in relation to a base period—December 2003 = 100 for many Producer Price Indexes (unless otherwise noted), 1982-84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

## Consumer Price Indexes

### Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993-95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers, the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

The CPI is based on prices of food, clothing, shelter, fuel, drugs, transportation fares, doctors' and dentists' fees, and other goods and services that people buy for day-to-day living. The quantity and quality of these items are kept essentially unchanged between major revisions so that only price changes will be measured. All taxes directly associated with the purchase and use of items are included in the index.

Data collected from more than 23,000 retail establishments and 5,800 housing units in 87 urban areas across the country are used to develop the "U.S. city average." Separate estimates for 14 major urban centers are presented in table 39. The areas listed are as indicated in footnote 1 to the table. The area indexes measure only the average change in prices for each area since the base period, and do not indicate differences in the level of prices among cities.

### Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are measured for the CPI-U. A rental equivalence method replaced the asset-price approach to homeownership costs for that series. In January 1985, the same change was made in the CPI-W. The central purpose of the change was to separate shelter costs from the investment component of homeownership so that the index would reflect only the cost of shelter services provided by owner-occupied homes. An updated CPI-U and CPI-W were introduced with release of the January 1987 and January 1998 data.

FOR ADDITIONAL INFORMATION, contact the Division of Prices and Price Indexes: (202) 691-7000.

## Producer Price Indexes

### Description of the series

**Producer Price Indexes** (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the North American Indus-

try Classification System and product codes developed by the U.S. Census Bureau.

To the extent possible, prices used in calculating Producer Price Indexes apply to the first significant commercial transaction in the United States from the production or central marketing point. Price data are generally collected monthly, primarily by mail questionnaire. Most prices are obtained directly from producing companies on a voluntary and confidential basis. Prices generally are reported for the Tuesday of the week containing the 13th day of the month.

Since January 1992, price changes for the various commodities have been averaged together with implicit quantity weights representing their importance in the total net selling value of all commodities as of 1987. The detailed data are aggregated to obtain indexes for stage-of-processing groupings, commodity groupings, durability-of-product groupings, and a number of special composite groups. All Producer Price Index data are subject to revision 4 months after original publication.

FOR ADDITIONAL INFORMATION, contact the Division of Industrial Prices and Price Indexes: (202) 691-7705.

## International Price Indexes

### Description of the series

The **International Price Program** produces monthly and quarterly export and import price indexes for nonmilitary goods and services traded between the United States and the rest of the world. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts; it includes corporations, businesses, and individuals, but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The product universe for both the import and export indexes includes raw materials, agricultural products, semifinished manufactures, and finished manufactures, including both capital and consumer goods. Price data for these items are collected primarily by mail questionnaire. In nearly all cases, the data are collected directly from the exporter or importer, although in a few cases, prices are obtained from other sources.

To the extent possible, the data gathered refer to prices at the U.S. border for exports and at either the foreign border or the U.S. border for imports. For nearly all products, the prices refer to transactions completed during

the first week of the month. Survey respondents are asked to indicate all discounts, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

In addition to general indexes of prices for U.S. exports and imports, indexes are also published for detailed product categories of exports and imports. These categories are defined according to the five-digit level of detail for the Bureau of Economic Analysis End-use Classification, the three-digit level for the Standard International Trade Classification (SITC), and the four-digit level of detail for the Harmonized System. Aggregate import indexes by country or region of origin are also available.

BLS publishes indexes for selected categories of internationally traded services, calculated on an international basis and on a balance-of-payments basis.

### Notes on the data

The export and import price indexes are weighted indexes of the Laspeyres type. The trade weights currently used to compute both indexes relate to 2000.

Because a price index depends on the same items being priced from period to period, it is necessary to recognize when a product's specifications or terms of transaction have been modified. For this reason, the Bureau's questionnaire requests detailed descriptions of the physical and functional characteristics of the products being priced, as well as information on the number of units bought or sold, discounts, credit terms, packaging, class of buyer or seller, and so forth. When there are changes in either the specifications or terms of transaction of a product, the dollar value of each change is deleted from the total price change to obtain the "pure" change. Once this value is determined, a linking procedure is employed which allows for the continued repricing of the item.

FOR ADDITIONAL INFORMATION, contact the Division of International Prices: (202) 691-7155.

## Productivity Data

(Tables 2; 47-50)

### Business and major sectors

#### Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour,

output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

Corresponding indexes of hourly compensation, unit labor costs, unit nonlabor payments, and prices are also provided.

### Definitions

**Output per hour of all persons** (labor productivity) is the quantity of goods and services produced per hour of labor input.

**Output per unit of capital services** (capital productivity) is the quantity of goods and services produced per unit of capital services input. **Multifactor productivity** is the quantity of goods and services produced per combined inputs. For private business and private nonfarm business, inputs include labor and capital units. For manufacturing, inputs include labor, capital, energy, nonenergy materials, and purchased business services.

**Compensation per hour** is total compensation divided by hours at work. Total compensation equals the wages and salaries of employees plus employers' contributions for social insurance and private benefit plans, plus an estimate of these payments for the self-employed (except for nonfinancial corporations in which there are no self-employed). **Real compensation per hour** is compensation per hour deflated by the change in the Consumer Price Index for All Urban Consumers.

**Unit labor costs** are the labor compensation costs expended in the production of a unit of output and are derived by dividing compensation by output. **Unit nonlabor payments** include profits, depreciation, interest, and indirect taxes per unit of output. They are computed by subtracting compensation of all persons from current-dollar value of output and dividing by output.

**Unit nonlabor costs** contain all the components of unit nonlabor payments except unit profits.

**Unit profits** include corporate profits with inventory valuation and capital consumption adjustments per unit of output.

**Hours of all persons** are the total hours at work of payroll workers, self-employed persons, and unpaid family workers.

**Labor inputs** are hours of all persons adjusted for the effects of changes in the education and experience of the labor force.

**Capital services** are the flow of services from the capital stock used in production. It

is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

**Combined units of labor and capital inputs** are derived by combining changes in labor and capital input with weights which represent each component's share of total cost. Combined units of labor, capital, energy, materials, and purchased business services are similarly derived by combining changes in each input with weights that represent each input's share of total costs. The indexes for each input and for combined units are based on changing weights which are averages of the shares in the current and preceding year (the Tornquist index-number formula).

### Notes on the data

Business sector output is an annually-weighted index constructed by excluding from real gross domestic product (GDP) the following outputs: general government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Nonfarm business also excludes farming. Private business and private nonfarm business further exclude government enterprises. The measures are supplied by the U.S. Department of Commerce's Bureau of Economic Analysis. Annual estimates of manufacturing sectoral output are produced by the Bureau of Labor Statistics. Quarterly manufacturing output indexes from the Federal Reserve Board are adjusted to these annual output measures by the BLS. Compensation data are developed from data of the Bureau of Economic Analysis and the Bureau of Labor Statistics. Hours data are developed from data of the Bureau of Labor Statistics.

The productivity and associated cost measures in tables 47-50 describe the relationship between output in real terms and the labor and capital inputs involved in its production. They show the changes from period to period in the amount of goods and services produced per unit of input.

Although these measures relate output to hours and capital services, they do not measure the contributions of labor, capital, or any other specific factor of production. Rather, they reflect the joint effect of many influences, including changes in technology; shifts in the composition of the labor force; capital investment; level of output; changes in the utilization of capacity; energy, material, and research and development; the organization of production; managerial skill; and characteristics and efforts of the work force.

FOR ADDITIONAL INFORMATION on this



productivity series, contact the Division of Productivity Research: (202) 691-5606.

## Industry productivity measures

### Description of the series

The BLS industry productivity indexes measure the relationship between output and inputs for selected industries and industry groups, and thus reflect trends in industry efficiency over time. Industry measures include labor productivity, multifactor productivity, compensation, and unit labor costs.

The industry measures differ in methodology and data sources from the productivity measures for the major sectors because the industry measures are developed independently of the National Income and Product Accounts framework used for the major sector measures.

### Definitions

**Output per hour** is derived by dividing an index of industry output by an index of labor input. For most industries, **output** indexes are derived from data on the value of industry output adjusted for price change. For the remaining industries, output indexes are derived from data on the physical quantity of production.

The **labor input** series is based on the hours of all workers or, in the case of some transportation industries, on the number of employees. For most industries, the series consists of the hours of all employees. For some trade and services industries, the series also includes the hours of partners, proprietors, and unpaid family workers.

**Unit labor costs** represent the labor compensation costs per unit of output produced, and are derived by dividing an index of labor compensation by an index of output. **Labor compensation** includes payroll as well as supplemental payments, including both legally required expenditures and payments for voluntary programs.

**Multifactor productivity** is derived by dividing an index of industry output by an index of combined inputs consumed in producing that output. **Combined inputs** include capital, labor, and intermediate purchases. The measure of **capital input** represents the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories. The measure of **intermediate purchases** is a combination of purchased materials, services, fuels, and electricity.

### Notes on the data

The industry measures are compiled from data produced by the Bureau of Labor Statistics and the Census Bureau, with additional data supplied by other government agencies, trade associations, and other sources.

FOR ADDITIONAL INFORMATION on this series, contact the Division of Industry Productivity Studies: (202) 691-5618, or visit the Web site at: [www.bls.gov/lpc/home.htm](http://www.bls.gov/lpc/home.htm)

## International Comparisons

(Tables 51-53)

### Labor force and unemployment

#### Description of the series

Tables 51 and 52 present comparative measures of the labor force, employment, and unemployment approximating U.S. concepts for the United States, Canada, Australia, Japan, and six European countries. The Bureau adjusts the figures for these selected countries, for all known major definitional differences, to the extent that data to prepare adjustments are available. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country. For further information on adjustments and comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" *Monthly Labor Review*, June 2000, pp. 3-20, available on the Internet at [www.bls.gov/opub/mlr/2000/06/art1full.pdf](http://www.bls.gov/opub/mlr/2000/06/art1full.pdf).

### Definitions

For the principal U.S. definitions of the labor force, employment, and unemployment, see the Notes section on Employment and Unemployment Data: Household survey data.

### Notes on the data

Foreign country data are adjusted as closely as possible to the U.S. definitions. Primary areas of adjustment address conceptual differences in upper age limits and definitions of employment and unemployment, provided that reliable data are available to make these adjustments. Adjustments are made where applicable to include employed and unemployed persons above upper age limits; some European countries do not include persons older than age 64 in their labor force measures, because a large portion

of this population has retired. Adjustments are made to exclude active duty military from employment figures, although a small number of career military may be included in some European countries. Adjustments are made to exclude unpaid family workers who worked fewer than 15 hours per week from employment figures; U.S. concepts do not include them in employment, whereas most foreign countries include all unpaid family workers regardless of the number of hours worked. Adjustments are made to include full-time students seeking work and available for work as unemployed when they are classified as not in the labor force.

Where possible, lower age limits are based on the age at which compulsory schooling ends in each country, rather than based on the U.S. standard of 16. Lower age limits have ranged between 13 and 16 over the years covered; currently, the lower age limits are either 15 or 16 in all 10 countries.

Some adjustments for comparability are not made because data are unavailable for adjustment purposes. For example, no adjustments to unemployment are usually made for deviations from U.S. concepts in the treatment of persons waiting to start a new job or passive job seekers. These conceptual differences have little impact on the measures. Furthermore, BLS studies have concluded that no adjustments should be made for persons on layoff who are counted as employed in some countries because of their strong job attachment as evidenced by, for example, payment of salary or the existence of a recall date. In the United States, persons on layoff have weaker job attachment and are classified as unemployed.

The annual labor force measures are obtained from monthly, quarterly, or continuous household surveys and may be calculated as averages of monthly or quarterly data. Quarterly and monthly unemployment rates are based on household surveys. For some countries, they are calculated by applying annual adjustment factors to current published data and, therefore, are less precise indicators of unemployment under U.S. concepts than the annual figures. The labor force measures may have breaks in series over time due to changes in surveys, sources, or estimation methods. Breaks are noted in data tables.

For up-to-date information on adjustments and breaks in series, see the Technical Notes of *Comparative Civilian Labor Force Statistics, 10 Countries*, on the Internet at [www.bls.gov/fls/flscompare1f.htm](http://www.bls.gov/fls/flscompare1f.htm), and the Notes of *Unemployment rates in 10 countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted*, on the Internet at [www.bls.gov/fls/flsjec.pdf](http://www.bls.gov/fls/flsjec.pdf).

FOR ADDITIONAL INFORMATION on

this series, contact the Division of Foreign Labor Statistics: (202) 691-5654 or [flshelp@bls.gov](mailto:flshelp@bls.gov).

## Manufacturing productivity and labor costs

### Description of the series

Table 53 presents comparative indexes of manufacturing output per hour (labor productivity), output, total hours, compensation per hour, and unit labor costs for the United States, Australia, Canada, Japan, the Republic of Korea, Singapore, Taiwan, and 10 European countries. These measures are trend comparisons—that is, series that measure changes over time—rather than level comparisons. BLS does *not* recommend using these series for level comparisons because of technical problems.

BLS constructs the comparative indexes from three basic aggregate measures—output, total labor hours, and total compensation. The hours and compensation measures refer to employees (wage and salary earners) in Belgium and Taiwan. For all other economies, the measures refer to all employed persons, including employees, self-employed persons, and unpaid family workers.

The data for recent years are based on the United Nations System of National Accounts 1993 (SNA 93). Manufacturing is generally defined according to the International Standard Industrial Classification (ISIC). However, the measures for France include parts of mining as well. For the United States and Canada, manufacturing is defined according to the North American Industry Classification System.

### Definitions

**Output.** For most economies, the output measures are real value added in manufacturing from national accounts. However, output for Japan prior to 1970 and for the Netherlands prior to 1960 are indexes of industrial production. The manufacturing value added measures for the United Kingdom are essentially identical to their indexes of industrial production.

For United States, the output measure for the manufacturing sector is a chain-weighted index of real gross product originating (deflated value added) produced by the Bureau of Economic Analysis of the U.S. Department of Commerce. Most of the other economies now also use chain-weighted as opposed to fixed-year weights that are periodically updated.

To preserve the comparability of the U.S.

measures with those of other economies, BLS uses gross product originating in manufacturing for the United States. The gross product originating series differs from the manufacturing output series that BLS publishes in its quarterly news releases on U.S. productivity and costs (and that underlies the measures that appear in tables 48 and 50 in this section). The quarterly measures are on a “sectoral output” basis, rather than a value-added basis. Sectoral output is gross output less intrasector transactions.

**Total hours** refer to hours worked in all economies. The measures are developed from statistics of manufacturing employment and average hours. For most other economies, recent years’ aggregate hours series are obtained from national statistical offices, usually from national accounts. However, for some economies and for earlier years, BLS calculates the aggregate hours series using employment figures published with the national accounts, or other comprehensive employment series, and data on average hours worked.

**Hourly compensation** is total compensation divided by total hours. Total compensation includes all payments in cash or in-kind made directly to employees plus employer expenditures for legally required insurance programs and contractual and private benefit plans. For Australia, Canada, France, Singapore, and Sweden, compensation is increased to account for important taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for subsidies.

**Labor productivity** is defined as real output per hour worked. Although the labor productivity measure presented in this release relates output to the hours worked of persons employed in manufacturing, it does not measure the specific contributions of labor as a single factor of production. Rather, it reflects the joint effects of many influences, including new technology, capital investment, capacity utilization, energy use, and managerial skills, as well as the skills and efforts of the workforce.

**Unit labor costs** are defined as the cost of labor input required to produce one unit of output. They are computed as compensation in nominal terms divided by real output. Unit labor costs can also be computed by dividing hourly compensation by output per hour, that is, by labor productivity.

### Notes on the data

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national ac-

counts and other statistics used for the long-term measures become available.

FOR ADDITIONAL INFORMATION on this series, go to <http://www.bls.gov/news.release/prod4.toc.htm> or contact the Division of International Labor Comparison at (202) 691-5654.

## Occupational Injury and Illness Data

(Tables 54–55)

### Survey of Occupational Injuries and Illnesses

#### Description of the series

The Survey of Occupational Injuries and Illnesses collects data from employers about their workers’ job-related nonfatal injuries and illnesses. The information that employers provide is based on records that they maintain under the Occupational Safety and Health Act of 1970. Self-employed individuals, farms with fewer than 11 employees, employers regulated by other Federal safety and health laws, and Federal, State, and local government agencies are excluded from the survey.

The survey is a Federal-State cooperative program with an independent sample selected for each participating State. A stratified random sample with a Neyman allocation is selected to represent all private industries in the State. The survey is stratified by Standard Industrial Classification and size of employment.

#### Definitions

Under the Occupational Safety and Health Act, employers maintain records of nonfatal work-related injuries and illnesses that involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid.

**Occupational injury** is any injury such as a cut, fracture, sprain, or amputation that results from a work-related event or a single, instantaneous exposure in the work environment.

**Occupational illness** is an abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment. It includes acute and chronic illnesses or disease which may be caused by inhalation, absorption, ingestion, or direct contact.

**Lost workday injuries and illnesses** are cases that involve days away from work, or

days of restricted work activity, or both.

**Lost workdays** include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both, because of an occupational injury or illness. BLS measures of the number and incidence rate of lost workdays were discontinued beginning with the 1993 survey. The number of days away from work or days of restricted work activity does not include the day of injury or onset of illness or any days on which the employee would not have worked, such as a Federal holiday, even though able to work.

**Incidence rates** are computed as the number of injuries and/or illnesses or lost work days per 100 full-time workers.

### Notes on the data

The definitions of occupational injuries and illnesses are from *Recordkeeping Guidelines for Occupational Injuries and Illnesses* (U.S. Department of Labor, Bureau of Labor Statistics, September 1986).

Estimates are made for industries and employment size classes for total recordable cases, lost workday cases, days away from work cases, and nonfatal cases without lost workdays. These data also are shown separately for injuries. Illness data are available for seven categories: occupational skin diseases or disorders, dust diseases of the lungs, respiratory conditions due to toxic agents, poisoning (systemic effects of toxic agents), disorders due to physical agents (other than toxic materials), disorders associated with repeated trauma, and all other occupational illnesses.

The survey continues to measure the number of new work-related illness cases which are recognized, diagnosed, and reported during the year. Some conditions, for example, long-term latent illnesses caused by exposure to carcinogens, often are difficult to relate to the workplace and are not adequately recognized and reported. These long-term latent illnesses are believed to be understated in the survey's illness measure. In contrast, the overwhelming majority of the reported new illnesses are those which are easier to directly relate to workplace activity (for example, contact dermatitis and carpal

tunnel syndrome).

Most of the estimates are in the form of incidence rates, defined as the number of injuries and illnesses per 100 equivalent full-time workers. For this purpose, 200,000 employee hours represent 100 employee years (2,000 hours per employee). Full detail on the available measures is presented in the annual bulletin, *Occupational Injuries and Illnesses: Counts, Rates, and Characteristics*.

Comparable data for more than 40 States and territories are available from the BLS Office of Safety, Health and Working Conditions. Many of these States publish data on State and local government employees in addition to private industry data.

Mining and railroad data are furnished to BLS by the Mine Safety and Health Administration and the Federal Railroad Administration. Data from these organizations are included in both the national and State data published annually.

With the 1992 survey, BLS began publishing details on serious, nonfatal incidents resulting in days away from work. Included are some major characteristics of the injured and ill workers, such as occupation, age, gender, race, and length of service, as well as the circumstances of their injuries and illnesses (nature of the disabling condition, part of body affected, event and exposure, and the source directly producing the condition). In general, these data are available nationwide for detailed industries and for individual States at more aggregated industry levels.

FOR ADDITIONAL INFORMATION on occupational injuries and illnesses, contact the Office of Occupational Safety, Health and Working Conditions at (202) 691-6180, or access the Internet at: [www.bls.gov/iif/](http://www.bls.gov/iif/)

### Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers'

compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

In addition to private wage and salary workers, the self-employed, family members, and Federal, State, and local government workers are covered by the program. To be included in the fatality census, the decedent must have been employed (that is working for pay, compensation, or profit) at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job.

### Definition

**A fatal work injury** is any intentional or unintentional wound or damage to the body resulting in death from acute exposure to energy, such as heat or electricity, or kinetic energy from a crash, or from the absence of such essentials as heat or oxygen caused by a specific event or incident or series of events within a single workday or shift. Fatalities that occur during a person's commute to or from work are excluded from the census, as well as work-related illnesses, which can be difficult to identify due to long latency periods.

### Notes on the data

Twenty-eight data elements are collected, coded, and tabulated in the fatality program, including information about the fatally injured worker, the fatal incident, and the machinery or equipment involved. Summary worker demographic data and event characteristics are included in a national news release that is available about 8 months after the end of the reference year. The Census of Fatal Occupational Injuries was initiated in 1992 as a joint Federal-State effort. Most States issue summary information at the time of the national news release.

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 691-6175, or the Internet at: [www.bls.gov/iif/](http://www.bls.gov/iif/)

## 1. Labor market indicators

Selected indicators	2008	2009	2007	2008				2009			
			IV	I	II	III	IV	I	II	III	IV
<b>Employment data</b>											
Employment status of the civilian noninstitutional population (household survey): <sup>1</sup>											
Labor force participation rate.....	66.0	65.4	66.0	66.1	66.1	66.0	65.9	65.7	65.7	65.3	64.9
Employment-population ratio.....	62.2	59.3	62.8	62.8	62.6	62.0	61.3	60.3	59.7	59.0	58.4
Unemployment rate.....	5.8	9.3	4.8	5.0	5.3	6.0	6.9	8.2	9.3	9.7	10.0
Men.....	6.1	10.3	4.9	5.1	5.5	6.4	7.6	9.0	10.4	10.8	11.2
16 to 24 years.....	14.4	20.1	12.1	12.7	13.3	14.9	16.5	18.1	19.9	20.7	22.0
25 years and older.....	4.8	8.8	3.7	3.9	4.2	5.1	6.1	7.6	8.9	9.4	9.5
Women.....	5.4	8.1	4.7	4.8	5.1	5.6	6.2	7.3	8.0	8.3	8.7
16 to 24 years.....	11.2	14.9	9.9	10.2	11.0	11.7	11.7	13.2	14.6	15.6	15.9
25 years and older.....	4.4	6.9	3.8	3.9	4.1	4.5	5.3	6.2	6.9	7.1	7.5
Employment, nonfarm (payroll data), in thousands: <sup>1</sup>											
Total nonfarm.....	136,790	130,912	138,152	137,858	137,285	136,283	134,328	132,070	130,637	129,857	129,547
Total private.....	114,281	108,369	115,783	115,419	114,775	113,715	111,767	109,510	108,075	107,377	107,067
Goods-producing.....	21,334	18,620	22,043	21,815	21,511	21,092	20,294	19,233	18,503	18,124	17,906
Manufacturing.....	13,406	11,883	13,777	13,654	13,528	13,270	12,822	12,212	11,782	11,634	11,529
Service-providing.....	115,456	112,292	116,109	116,043	115,774	115,191	114,031	112,837	112,134	111,733	111,641
Average hours:											
Total private.....	33.6	33.1	33.8	33.8	33.7	33.5	33.3	33.1	33.0	33.1	33.2
Manufacturing.....	40.8	39.8	41.2	41.3	41.0	40.4	39.8	39.4	39.5	39.9	40.6
Overtime.....	3.7	2.9	4.1	4.1	3.9	3.5	2.9	2.6	2.8	3.0	3.4
<b>Employment Cost Index<sup>1, 2, 3</sup></b>											
Total compensation:											
Civilian nonfarm <sup>4</sup> .....	2.6	1.5	.6	.8	.7	.8	.3	.4	.4	.5	.3
Private nonfarm.....	2.4	1.2	.6	.9	.7	.6	.2	.4	.3	.4	.2
Goods-producing <sup>5</sup> .....	2.4	1.0	.6	1.0	.7	.4	.3	.4	.3	.2	.2
Service-providing <sup>5</sup> .....	2.5	1.3	.6	.9	.7	.6	.3	.4	.3	.4	.3
State and local government.....	3.0	2.4	.7	.5	.5	1.7	.3	.6	.5	1.0	.3
Workers by bargaining status (private nonfarm):											
Union.....	2.8	2.9	.7	.8	.8	.7	.6	1.0	.6	.6	.5
Nonunion.....	2.4	.9	.6	.9	.7	.6	.2	.3	.2	.3	.2

<sup>1</sup> Quarterly data seasonally adjusted.

<sup>2</sup> Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter.

<sup>3</sup> The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

<sup>4</sup> Excludes Federal and private household workers.

<sup>5</sup> Goods-producing industries include mining, construction, and manufacturing. Service-providing industries include all other private sector industries.

NOTE: Beginning in January 2003, household survey data reflect revised population controls. Nonfarm data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.

**2. Annual and quarterly percent changes in compensation, prices, and productivity**

Selected measures	2008	2009	2007	2008					2009			
			IV	I	II	III	IV	I	II	III	IV	
<b>Compensation data<sup>1, 2, 3</sup></b>												
Employment Cost Index—compensation:												
Civilian nonfarm.....	2.6	1.5	0.6	0.8	0.7	0.8	0.3	0.4	0.4	0.5	0.3	
Private nonfarm.....	2.4	1.2	.6	.9	.7	.6	.2	.4	.3	.4	.2	
Employment Cost Index—wages and salaries:												
Civilian nonfarm.....	2.7	1.5	.7	.8	.7	.8	.3	.4	.4	.5	.3	
Private nonfarm.....	2.6	1.4	.6	.9	.7	.6	.3	.4	.3	.5	.3	
<b>Price data<sup>1</sup></b>												
Consumer Price Index (All Urban Consumers): All Items.....	3.8	-4	.7	1.7	2.5	0	-3.9	1.2	1.4	.1	.0	
Producer Price Index:												
Finished goods.....	6.3	-2.5	1.8	2.8	4.2	-1	-7.4	.2	3.1	-5	1.6	
Finished consumer goods.....	7.4	-3.8	1.9	3.4	5.2	-4	-10.0	.3	4.3	-6	1.9	
Capital equipment.....	2.9	2.0	1.2	.7	.6	1.0	1.9	-2	-2	-3	.7	
Intermediate materials, supplies, and components.....	10.3	-8.3	2.0	5.0	6.9	.7	-13.6	-2.1	2.8	1.5	.8	
Crude materials.....	21.6	-30.5	11.9	14.5	14.9	-15.6	-32.1	-7.2	12.3	-3.2	11.3	
<b>Productivity data<sup>4</sup></b>												
Output per hour of all persons:												
Business sector.....	1.9	3.0	1.6	.2	3.1	.3	.8	.2	6.8	7.4	6.5	
Nonfarm business sector.....	1.8	2.9	2.0	-1	3.1	-1	.8	.3	6.9	7.2	6.2	
Nonfinancial corporations <sup>5</sup> .....	1.9	—	5.3	-2.7	6.9	3.2	-1.4	-7.3	8.4	6.3	—	

<sup>1</sup> Annual changes are December-to-December changes. Quarterly changes are calculated using the last month of each quarter. Compensation and price data are not seasonally adjusted, and the price data are not compounded.

<sup>2</sup> Excludes Federal and private household workers.

<sup>3</sup> The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes

only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

<sup>4</sup> Annual rates of change are computed by comparing annual averages. Quarterly percent changes reflect annual rates of change in quarterly indexes. The data are seasonally adjusted.

<sup>5</sup> Output per hour of all employees.

**3. Alternative measures of wage and compensation changes**

Components	Quarterly change					Four quarters ending—					
	2008	2009				2008	2009				
	IV	I	II	III	IV	IV	I	II	III	IV	
Average hourly compensation: <sup>1</sup>											
All persons, business sector.....	2.6	-4.7	6.7	5.9	1.6	2.5	0.9	2.2	2.5	2.2	
All persons, nonfarm business sector.....	2.9	-4.7	6.9	5.5	1.5	2.6	.9	2.3	2.5	2.2	
Employment Cost Index—compensation: <sup>2</sup>											
Civilian nonfarm <sup>3</sup> .....	.3	.4	.4	.5	.3	2.6	2.1	1.8	1.5	1.5	
Private nonfarm.....	.2	.4	.3	.4	.2	2.4	1.9	1.5	1.2	1.2	
Union.....	.6	1.0	.6	.6	.5	2.8	3.0	2.9	2.9	2.9	
Nonunion.....	.2	.3	.2	.3	.3	2.4	1.8	1.2	.9	.9	
State and local government.....	.3	.6	.5	1.0	.3	3.0	3.1	3.2	2.4	2.4	
Employment Cost Index—wages and salaries: <sup>2</sup>											
Civilian nonfarm <sup>3</sup> .....	.3	.4	.4	.5	.3	2.7	2.2	1.8	1.5	1.5	
Private nonfarm.....	.3	.4	.3	.5	.3	2.6	2.0	1.6	1.4	1.4	
Union.....	.7	.6	.7	.5	.6	3.2	3.1	2.7	2.6	2.6	
Nonunion.....	.2	.4	.2	.4	.3	2.5	1.9	1.4	1.1	1.2	
State and local government.....	.3	.5	.5	.8	.2	3.1	3.0	3.0	2.1	2.0	

<sup>1</sup> Seasonally adjusted. "Quarterly average" is percent change from a quarter ago, at an annual rate.

<sup>2</sup> The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard

Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

<sup>3</sup> Excludes Federal and private household workers.



**4. Continued—Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted**

[Numbers in thousands]

Employment status	Annual average		2009										2010		
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>Hispanic or Latino ethnicity</b>															
Civilian noninstitutional population <sup>1</sup> .....	32,141	32,891	32,501	32,585	32,671	32,753	32,839	32,926	33,017	33,110	33,202	33,291	33,379	33,251	33,335
Civilian labor force.....	22,024	22,352	22,120	22,236	22,403	22,459	22,348	22,540	22,320	22,444	22,492	22,564	22,404	22,578	22,648
Participation rate.....	68.5	68.0	68.1	68.2	68.6	68.6	68.1	68.5	67.6	67.8	67.7	67.8	67.1	67.9	67.9
Employed.....	20,346	19,647	19,687	19,664	19,855	19,599	19,609	19,748	19,411	19,595	19,553	19,692	19,513	19,730	19,848
Employment-population ratio <sup>2</sup> .....	63.3	59.7	60.6	60.3	60.8	59.8	59.7	60.0	58.8	59.2	58.9	59.2	58.5	59.3	59.5
Unemployed.....	1,678	2,706	2,433	2,571	2,548	2,860	2,739	2,792	2,908	2,849	2,939	2,872	2,891	2,848	2,800
Unemployment rate.....	7.6	12.1	11.0	11.6	11.4	12.7	12.3	12.4	13.0	12.7	13.1	12.7	12.9	12.6	12.4
Not in the labor force.....	10,116	10,539	10,382	10,350	10,268	10,294	10,491	10,386	10,697	10,666	10,710	10,727	10,976	10,674	10,687

<sup>1</sup> The population figures are not seasonally adjusted.  
<sup>2</sup> Civilian employment as a percent of the civilian noninstitutional population.  
<sup>3</sup> Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

NOTE: Estimates for the above race groups (white and black or African American) do not sum to totals because data are not presented for all races. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Beginning in January 2003, data reflect revised population controls used in the household survey.

**5. Selected employment indicators, monthly data seasonally adjusted**

[In thousands]

Selected categories	Annual average		2009										2010		
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>Characteristic</b>															
Employed, 16 years and older.....	145,362	139,877	141,687	140,854	140,902	140,438	140,038	139,817	139,433	138,768	138,242	138,381	137,792	138,333	138,641
Men.....	77,486	73,670	74,756	74,072	74,107	73,974	73,727	73,613	73,436	73,120	72,844	72,794	72,499	72,516	72,813
Women.....	67,876	66,208	66,931	66,782	66,794	66,463	66,311	66,205	65,997	65,648	65,398	65,587	65,293	65,817	65,828
Married men, spouse present.....	45,860	43,998	44,449	44,451	44,424	44,214	44,242	43,955	43,847	43,656	43,401	43,336	43,312	43,126	43,168
Married women, spouse present.....	35,869	35,207	35,545	35,465	35,438	35,347	35,402	35,321	35,151	34,891	34,736	34,867	35,004	35,073	35,248
<b>Persons at work part time<sup>1</sup></b>															
All industries:															
Part time for economic reasons.....	5,875	8,913	8,672	9,023	8,888	9,048	8,962	8,808	9,077	9,158	9,240	9,225	9,165	8,316	8,791
Slack work or business conditions.....	4,169	6,648	6,511	6,839	6,699	6,788	6,779	6,831	6,895	6,815	6,882	6,684	6,453	5,873	6,185
Could only find part-time work.....	1,389	1,966	1,771	1,847	1,819	1,917	1,970	1,826	2,065	2,081	2,084	2,238	2,346	2,295	2,212
Part time for noneconomic reasons.....	19,343	18,710	18,861	18,829	18,976	18,848	18,715	18,993	18,768	18,590	18,632	18,354	18,364	18,563	18,360
Nonagricultural industries:															
Part time for economic reasons.....	5,773	8,791	8,584	8,910	8,795	8,894	8,825	8,664	8,946	8,983	9,158	9,137	9,055	8,193	8,651
Slack work or business conditions.....	4,097	6,556	6,455	6,761	6,634	6,670	6,685	6,713	6,797	6,695	6,797	6,616	6,378	5,792	6,079
Could only find part-time work.....	1,380	1,955	1,771	1,848	1,826	1,910	1,964	1,789	2,046	2,063	2,033	2,241	2,349	2,288	2,199
Part time for noneconomic reasons.....	19,005	18,372	18,556	18,494	18,595	18,478	18,358	18,610	18,383	18,251	18,317	18,066	18,056	18,218	18,043

<sup>1</sup> Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.  
 NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

## 6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		2009												2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
<b>Characteristic</b>																
Total, 16 years and older.....	5.8	9.3	8.2	8.6	8.9	9.4	9.5	9.4	9.7	9.8	10.1	10.0	10.0	9.7	9.7	
Both sexes, 16 to 19 years.....	18.7	24.3	21.8	22.0	21.8	23.2	24.3	24.5	25.7	26.1	27.6	26.8	27.1	26.4	25.0	
Men, 20 years and older.....	5.4	9.6	8.4	8.9	9.4	9.8	10.0	9.8	10.2	10.3	10.6	10.4	10.2	10.0	10.0	
Women, 20 years and older.....	4.9	7.5	6.8	7.1	7.2	7.5	7.6	7.6	7.7	7.9	8.1	8.0	8.2	7.9	8.0	
White, total <sup>1</sup> .....	5.2	8.5	7.5	8.0	8.1	8.6	8.7	8.7	8.9	9.1	9.4	9.3	9.0	8.7	8.8	
Both sexes, 16 to 19 years.....	16.8	21.8	19.3	20.3	20.0	20.7	21.7	22.5	24.3	23.3	25.1	23.0	23.6	23.5	22.5	
Men, 16 to 19 years.....	19.1	25.2	22.4	23.5	22.9	24.6	24.4	26.1	28.1	26.8	28.6	26.0	27.4	27.9	25.0	
Women, 16 to 19 years.....	14.4	18.4	16.3	17.1	17.1	16.6	19.0	18.7	20.2	19.7	21.4	20.0	19.8	18.8	19.9	
Men, 20 years and older.....	4.9	8.8	7.6	8.1	8.5	9.0	9.2	9.1	9.3	9.6	9.9	9.8	9.3	9.1	9.0	
Women, 20 years and older.....	4.4	6.8	6.1	6.5	6.4	6.9	6.8	6.8	7.0	7.1	7.4	7.4	7.4	6.8	7.3	
Black or African American, total <sup>1</sup> .....	10.1	14.8	13.5	13.5	15.0	15.0	14.8	14.7	15.2	15.5	15.7	15.6	16.2	16.5	15.8	
Both sexes, 16 to 19 years.....	31.2	39.5	38.9	33.1	35.1	39.9	38.5	36.2	35.0	41.7	42.1	49.8	48.4	43.8	42.0	
Men, 16 to 19 years.....	35.9	46.0	45.6	41.7	41.7	46.2	44.8	39.2	46.8	50.8	43.6	57.1	52.2	48.3	44.9	
Women, 16 to 19 years.....	26.8	33.4	32.5	26.0	28.2	34.8	33.1	33.5	24.5	32.7	40.7	41.4	44.8	39.4	39.1	
Men, 20 years and older.....	10.2	16.3	15.1	15.6	17.2	16.7	16.4	16.0	17.0	16.5	17.0	16.8	16.6	17.6	17.8	
Women, 20 years and older.....	8.1	11.5	10.1	10.1	11.4	11.3	11.5	11.9	12.2	12.5	12.5	11.7	13.1	13.3	12.1	
Hispanic or Latino ethnicity.....	7.6	12.1	11.0	11.6	11.4	12.7	12.3	12.4	13.0	12.7	13.1	12.7	12.9	12.6	12.4	
Married men, spouse present.....	3.4	6.6	5.6	6.0	6.3	6.7	6.9	6.9	7.1	7.3	7.5	7.5	7.3	6.6	6.8	
Married women, spouse present.....	3.6	5.5	5.2	5.5	5.5	5.6	5.6	5.5	5.5	5.8	5.9	5.7	5.8	5.8	6.1	
Full-time workers.....	5.8	10.0	8.8	9.3	9.6	10.2	10.3	10.2	10.5	10.7	11.1	11.0	10.9	10.4	10.5	
Part-time workers.....	5.5	6.0	5.8	5.9	6.0	6.1	6.0	6.0	6.3	6.4	6.1	5.6	6.0	6.4	6.2	
<b>Educational attainment<sup>2</sup></b>																
Less than a high school diploma.....	9.0	14.6	13.0	13.8	14.9	15.4	15.4	15.3	15.5	15.0	15.5	15.0	15.3	15.2	15.6	
High school graduates, no college <sup>3</sup> .....	5.7	9.7	8.4	9.1	9.4	10.0	9.8	9.4	9.8	10.8	11.2	10.4	10.5	10.1	10.5	
Some college or associate degree.....	4.6	8.0	7.1	7.3	7.5	7.8	8.0	8.0	8.2	8.6	9.0	9.0	9.0	8.5	8.0	
Bachelor's degree and higher <sup>4</sup> .....	2.6	4.6	4.2	4.4	4.4	4.8	4.7	4.7	4.7	4.8	4.7	4.9	5.0	4.9	5.0	

<sup>1</sup> Beginning in 2003, persons who selected this race group only; persons who selected more than one race group are not included. Prior to 2003, persons who reported more than one race were included in the group they identified as the main race.

<sup>2</sup> Data refer to persons 25 years and older.

## 7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2009												2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Less than 5 weeks.....	2,932	3,165	3,364	3,314	3,284	3,219	3,152	3,181	2,992	2,938	3,131	2,774	2,929	3,008	2,748	
5 to 14 weeks.....	2,804	3,828	3,961	4,032	3,962	4,300	3,994	3,539	4,093	3,838	3,671	3,517	3,486	3,362	3,412	
15 weeks and over.....	3,188	7,272	5,369	5,815	6,296	7,013	7,844	7,819	7,849	8,405	8,804	8,976	8,969	8,945	8,829	
15 to 26 weeks.....	1,427	2,775	2,405	2,574	2,571	2,983	3,404	2,847	2,825	2,958	3,184	3,075	2,840	2,632	2,696	
27 weeks and over.....	1,761	4,496	2,964	3,241	3,725	4,030	4,440	4,972	5,024	5,447	5,620	5,901	6,130	6,313	6,133	
Mean duration, in weeks.....	17.9	24.4	20.0	20.8	21.8	22.9	24.4	25.3	25.2	26.5	27.2	28.6	29.1	30.2	29.7	
Median duration, in weeks.....	9.4	15.1	11.4	11.9	13.1	14.9	18.2	15.9	15.5	17.8	19.0	20.2	20.5	19.9	19.4	

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.



**8. Unemployed persons by reason for unemployment, monthly data seasonally adjusted**

[Numbers in thousands]

Reason for unemployment	Annual average		2009												2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Job losers <sup>1</sup> .....	4,789	9,160	7,878	8,434	8,867	9,428	9,562	9,549	9,814	10,236	10,261	9,965	9,701	9,323	9,550	
On temporary layoff.....	1,176	1,630	1,519	1,581	1,638	1,842	1,741	1,670	1,704	1,918	1,671	1,548	1,558	1,454	1,558	
Not on temporary layoff.....	3,614	7,530	6,359	6,853	7,229	7,586	7,821	7,880	8,110	8,318	8,590	8,418	8,143	7,869	7,992	
Job leavers.....	896	882	820	884	887	909	822	882	835	869	909	929	932	914	866	
Reentrants.....	2,472	3,187	2,912	3,017	3,127	3,200	3,322	3,306	3,294	3,255	3,461	3,221	3,334	3,585	3,451	
New entrants.....	766	1,035	1,016	881	919	977	969	994	1,096	1,134	1,114	1,270	1,270	1,235	1,238	
<b>Percent of unemployed</b>																
Job losers <sup>1</sup> .....	53.7	64.2	62.4	63.8	64.3	65.0	65.2	64.8	65.3	66.1	65.2	64.8	63.7	61.9	63.2	
On temporary layoff.....	13.2	11.4	12.0	12.0	11.9	12.7	11.9	11.3	11.3	12.4	10.6	10.1	10.2	9.7	10.3	
Not on temporary layoff.....	40.5	52.8	50.4	51.9	52.4	52.3	53.3	53.5	53.9	53.7	54.6	54.7	53.4	52.3	52.9	
Job leavers.....	10.0	6.2	6.5	6.7	6.4	6.3	5.6	6.0	5.6	5.6	5.8	6.0	6.1	6.1	5.7	
Reentrants.....	27.7	22.3	23.1	22.8	22.7	22.0	22.6	22.4	21.9	21.0	22.0	20.9	21.9	23.8	22.8	
New entrants.....	8.6	7.3	8.0	6.7	6.7	6.7	6.6	6.8	7.3	7.3	7.1	8.3	8.3	8.2	8.2	
<b>Percent of civilian labor force</b>																
Job losers <sup>1</sup> .....	3.1	5.9	5.1	5.5	5.7	6.1	6.2	6.2	6.4	6.6	6.7	6.5	6.3	6.1	6.2	
Job leavers.....	.6	.6	.5	.6	.6	.6	.5	.6	.5	.6	.6	.6	.6	.6	.6	
Reentrants.....	1.6	2.1	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3	2.2	
New entrants.....	.5	.7	.7	.6	.6	.6	.6	.6	.7	.7	.7	.8	.8	.8	.8	

<sup>1</sup> Includes persons who completed temporary jobs.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

**9. Unemployment rates by sex and age, monthly data seasonally adjusted**

[Civilian workers]

Sex and age	Annual average		2009												2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Total, 16 years and older.....	5.8	9.3	8.2	8.6	8.9	9.4	9.5	9.4	9.7	9.8	10.1	10.0	10.0	9.7	9.7	
16 to 24 years.....	12.8	17.6	15.8	16.4	16.7	17.5	17.9	18.0	18.3	18.3	19.2	19.1	18.9	18.9	18.5	
16 to 19 years.....	18.7	24.3	21.8	22.0	21.8	23.2	24.3	24.5	25.7	26.1	27.6	26.8	27.1	26.4	25.0	
16 to 17 years.....	22.1	25.9	23.1	23.9	23.4	23.8	25.5	26.0	26.5	28.2	30.2	28.8	29.9	27.9	28.2	
18 to 19 years.....	16.8	23.4	21.2	21.1	21.7	23.2	23.8	23.3	25.2	24.4	25.7	26.1	25.8	25.4	23.7	
20 to 24 years.....	10.2	14.7	13.2	14.0	14.6	15.1	15.2	15.3	15.1	15.0	15.6	15.9	15.6	15.8	16.0	
25 years and older.....	4.6	7.9	7.0	7.3	7.6	8.1	8.2	8.1	8.4	8.6	8.7	8.5	8.5	8.2	8.3	
25 to 54 years.....	4.8	8.3	7.3	7.7	7.9	8.5	8.5	8.4	8.8	9.1	9.2	8.9	8.9	8.6	8.6	
55 years and older.....	3.8	6.6	5.7	6.2	6.4	6.7	7.0	6.7	6.8	6.8	7.0	7.1	7.2	6.8	7.1	
Men, 16 years and older.....	6.1	10.3	9.0	9.6	10.1	10.5	10.6	10.5	11.0	11.0	11.4	11.2	11.0	10.8	10.7	
16 to 24 years.....	14.4	20.1	17.9	19.2	19.6	20.3	19.9	20.3	20.8	20.9	22.2	21.8	22.0	22.5	21.2	
16 to 19 years.....	21.2	27.8	25.0	25.9	25.9	27.1	26.5	27.9	29.9	29.9	31.0	30.4	30.9	30.6	27.6	
16 to 17 years.....	25.2	28.7	26.6	28.2	26.4	26.5	26.5	28.5	29.6	31.1	33.5	30.5	33.1	30.8	30.4	
18 to 19 years.....	19.0	27.4	24.9	24.8	25.7	28.0	27.1	27.3	29.9	28.3	28.9	30.5	30.2	30.3	27.3	
20 to 24 years.....	11.4	17.0	14.9	16.5	17.0	17.4	17.2	17.1	17.0	17.2	18.6	18.3	18.4	19.2	18.7	
25 years and older.....	4.8	8.8	7.7	8.0	8.5	9.0	9.2	9.1	9.5	9.7	9.7	9.5	9.2	9.0	9.1	
25 to 54 years.....	5.0	9.2	8.1	8.4	8.9	9.5	9.6	9.6	10.0	10.3	10.2	10.0	9.6	9.4	9.5	
55 years and older.....	3.9	7.0	6.1	6.4	6.8	7.0	7.8	7.4	7.5	7.3	7.8	7.8	7.9	7.5	7.8	
Women, 16 years and older.....	5.4	8.1	7.3	7.6	7.6	8.1	8.3	8.2	8.3	8.5	8.8	8.6	8.8	8.4	8.6	
16 to 24 years.....	11.2	14.9	13.6	13.4	13.6	14.5	15.8	15.6	15.6	15.5	15.9	16.2	15.7	15.0	15.8	
16 to 19 years.....	16.2	20.7	18.6	18.2	17.6	19.1	22.1	20.9	21.4	22.2	24.0	23.1	23.1	21.9	22.3	
16 to 17 years.....	19.1	23.1	19.9	19.7	20.4	21.2	24.6	23.6	23.3	25.1	26.8	27.1	26.8	25.0	26.2	
18 to 19 years.....	14.3	19.4	17.3	17.4	17.5	18.0	20.3	19.2	20.2	20.2	22.4	21.5	21.3	20.1	19.9	
20 to 24 years.....	8.8	12.3	11.4	11.3	11.8	12.5	12.9	13.2	13.1	12.7	12.4	13.3	12.5	12.2	13.1	
25 years and older.....	4.4	6.9	6.2	6.6	6.6	7.0	7.0	7.0	7.1	7.3	7.6	7.3	7.6	7.3	7.4	
25 to 54 years.....	4.6	7.2	6.5	6.8	6.8	7.2	7.2	7.2	7.3	7.7	8.0	7.5	8.1	7.7	7.7	
55 years and older <sup>1</sup> .....	3.7	6.0	5.3	5.8	5.4	5.8	6.4	7.1	6.7	6.3	6.1	6.2	5.8	6.1	6.5	

<sup>1</sup> Data are not seasonally adjusted.

NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.

**10. Unemployment rates by State, seasonally adjusted**

State	Jan. 2009	Dec. 2009 <sup>P</sup>	Jan. 2010 <sup>P</sup>	State	Jan. 2009	Dec. 2009 <sup>P</sup>	Jan. 2010 <sup>P</sup>
Alabama.....	8.1	10.9	11.1	Missouri.....	8.1	9.6	9.4
Alaska.....	7.1	8.6	8.5	Montana.....	5.6	6.7	6.8
Arizona.....	8.0	9.2	9.2	Nebraska.....	4.1	4.6	4.7
Arkansas.....	6.5	7.6	7.6	Nevada.....	9.6	13.0	13.0
California.....	9.7	12.3	12.5	New Hampshire.....	5.2	6.9	7.0
Colorado.....	6.7	7.3	7.4	New Jersey.....	7.5	10.0	9.9
Connecticut.....	7.1	8.8	9.0	New Mexico.....	5.9	8.2	8.5
Delaware.....	7.0	8.8	8.9	New York.....	7.1	8.9	8.8
District of Columbia.....	8.4	11.9	12.0	North Carolina.....	9.2	10.9	11.1
Florida.....	8.7	11.7	12.0	North Dakota.....	4.0	4.3	4.2
Georgia.....	8.4	10.3	10.4	Ohio.....	8.6	10.8	10.8
Hawaii.....	6.0	6.8	6.9	Oklahoma.....	5.0	6.8	6.7
Idaho.....	6.7	9.1	9.3	Oregon.....	9.9	10.6	10.7
Illinois.....	8.1	11.0	11.3	Pennsylvania.....	6.8	8.8	8.8
Indiana.....	8.8	9.7	9.7	Rhode Island.....	9.6	12.7	12.7
Iowa.....	5.2	6.5	6.6	South Carolina.....	10.0	12.4	12.5
Kansas.....	5.6	6.5	6.5	South Dakota.....	4.3	4.7	4.8
Kentucky.....	9.1	10.6	10.7	Tennessee.....	9.1	10.7	10.7
Louisiana.....	5.7	7.3	7.4	Texas.....	6.4	8.2	8.2
Maine.....	7.3	8.1	8.2	Utah.....	5.6	6.6	6.8
Maryland.....	6.1	7.4	7.5	Vermont.....	6.2	6.7	6.7
Massachusetts.....	7.1	9.3	9.5	Virginia.....	5.7	6.8	6.9
Michigan.....	11.3	14.5	14.3	Washington.....	7.5	9.2	9.3
Minnesota.....	7.2	7.4	7.3	West Virginia.....	5.8	9.0	9.2
Mississippi.....	8.2	10.5	11.0	Wisconsin.....	7.1	8.5	8.7
				Wyoming.....	4.4	7.5	7.6

<sup>P</sup> = preliminary

**11. Employment of workers on nonfarm payrolls by State, seasonally adjusted**

State	Jan. 2009	Dec. 2009 <sup>P</sup>	Jan. 2010 <sup>P</sup>	State	Jan. 2009	Dec. 2009 <sup>P</sup>	Jan. 2010 <sup>P</sup>
Alabama.....	2,146,492	2,057,716	2,056,589	Missouri.....	3,053,012	3,001,419	2,993,859
Alaska.....	359,073	362,270	362,932	Montana.....	504,456	495,845	495,774
Arizona.....	3,150,268	3,135,546	3,137,804	Nebraska.....	989,719	980,702	984,103
Arkansas.....	1,373,612	1,375,874	1,377,005	Nevada.....	1,363,571	1,374,139	1,373,224
California.....	18,362,232	18,101,557	18,118,429	New Hampshire.....	742,709	741,443	743,208
Colorado.....	2,731,416	2,644,550	2,644,485	New Jersey.....	4,526,577	4,527,795	4,533,371
Connecticut.....	1,882,866	1,890,282	1,897,295	New Mexico.....	960,869	959,469	962,289
Delaware.....	440,794	428,462	428,226	New York.....	9,721,944	9,639,438	9,635,330
District of Columbia.....	332,275	332,938	335,581	North Carolina.....	4,580,075	4,523,283	4,538,076
Florida.....	9,206,310	9,212,292	9,235,310	North Dakota.....	365,645	363,824	364,875
Georgia.....	4,829,591	4,699,032	4,700,613	Ohio.....	5,994,797	5,905,107	5,910,922
Hawaii.....	642,190	633,579	633,401	Oklahoma.....	1,762,774	1,776,164	1,777,523
Idaho.....	752,506	751,184	753,185	Oregon.....	1,976,340	1,935,774	1,939,343
Illinois.....	6,607,158	6,591,334	6,616,993	Pennsylvania.....	6,457,958	6,393,381	6,421,703
Indiana.....	3,244,418	3,105,942	3,112,330	Rhode Island.....	564,248	574,064	576,653
Iowa.....	1,676,002	1,677,426	1,680,897	South Carolina.....	2,176,880	2,171,648	2,173,981
Kansas.....	1,507,560	1,515,426	1,516,142	South Dakota.....	447,758	445,209	445,079
Kentucky.....	2,073,262	2,067,913	2,070,714	Tennessee.....	3,048,609	2,991,808	2,996,682
Louisiana.....	2,075,123	2,067,997	2,074,018	Texas.....	11,796,278	12,046,336	12,091,623
Maine.....	705,552	704,488	705,260	Utah.....	1,375,398	1,344,294	1,342,627
Maryland.....	3,014,841	2,955,767	2,956,926	Vermont.....	360,687	358,518	359,916
Massachusetts.....	3,477,232	3,469,072	3,472,156	Virginia.....	4,175,428	4,141,793	4,149,845
Michigan.....	4,932,968	4,836,079	4,839,634	Washington.....	3,526,565	3,511,095	3,515,653
Minnesota.....	2,965,175	2,962,237	2,970,308	West Virginia.....	802,632	786,063	786,557
Mississippi.....	1,294,238	1,291,183	1,296,244	Wisconsin.....	3,101,838	3,026,400	3,030,254
				Wyoming.....	293,856	292,514	292,412

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the database.

<sup>P</sup> = preliminary







**13. Average weekly hours of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls, by industry, monthly data seasonally adjusted**

Industry	Annual average		2009												2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>P</sup>	Feb. <sup>P</sup>	
<b>TOTAL PRIVATE</b> .....	33.6	33.1	33.2	33.1	33.1	33.1	33.0	33.1	33.1	33.1	33.0	33.2	33.2	33.3	33.1	
<b>GOODS-PRODUCING</b> .....	40.2	39.2	39.2	38.9	39.0	39.0	39.0	39.3	39.4	39.2	39.1	39.7	39.6	40.0	39.4	
<b>Natural resources and mining</b> .....	45.1	43.3	44.0	43.4	43.1	43.3	43.2	42.9	43.3	43.1	42.8	43.0	43.4	44.2	43.5	
<b>Construction</b> .....	38.5	37.6	38.0	37.6	37.5	37.6	37.5	37.8	38.0	37.4	36.9	37.8	37.5	37.9	37.0	
<b>Manufacturing</b> .....	40.8	39.8	39.5	39.4	39.6	39.5	39.5	39.9	40.0	39.9	40.0	40.5	40.5	40.9	40.5	
Overtime hours.....	3.7	2.9	2.7	2.6	2.8	2.8	2.8	3.0	3.0	3.0	3.2	3.4	3.4	3.6	3.5	
Durable goods.....	41.1	39.9	39.6	39.3	39.6	39.4	39.5	39.9	40.0	40.0	40.1	40.6	40.6	40.9	40.6	
Overtime hours.....	3.7	2.7	2.5	2.4	2.5	2.6	2.6	2.8	2.8	2.8	3.0	3.2	3.3	3.5	3.4	
Wood products.....	38.6	37.4	37.0	36.9	37.0	37.0	37.5	37.7	37.7	37.8	37.6	38.2	38.2	39.2	38.2	
Nonmetallic mineral products.....	42.1	40.9	40.2	39.9	40.4	40.6	40.8	41.5	41.3	40.9	40.8	41.9	40.2	41.4	39.9	
Primary metals.....	42.2	40.7	40.1	40.2	40.1	40.1	39.8	40.2	40.8	40.7	41.0	42.4	42.7	42.9	42.7	
Fabricated metal products.....	41.3	39.4	39.5	39.0	39.3	39.2	39.3	39.4	39.5	39.4	39.5	39.9	40.1	40.5	40.4	
Machinery.....	42.3	40.1	40.5	40.1	40.2	39.9	39.8	39.9	39.9	39.7	40.0	40.6	41.0	41.2	41.0	
Computer and electronic products.....	41.0	40.4	40.5	39.9	40.2	40.0	40.0	40.2	40.5	40.4	40.5	41.0	40.8	41.1	41.2	
Electrical equipment and appliances.....	40.9	39.3	38.9	38.8	39.6	39.4	38.8	39.0	39.1	39.3	39.4	40.0	40.5	40.8	39.6	
Transportation equipment.....	41.9	41.2	40.1	40.2	40.8	40.0	40.4	41.9	41.6	41.9	41.9	42.4	42.5	42.5	42.4	
Furniture and related products.....	38.1	37.7	37.5	37.7	37.6	37.8	37.8	37.9	37.5	38.0	38.2	37.9	37.8	37.8	37.5	
Miscellaneous manufacturing.....	38.9	38.5	38.2	38.2	38.3	38.1	38.0	38.4	38.6	38.6	38.7	39.3	38.9	38.8	38.8	
Nondurable goods.....	40.4	39.8	39.5	39.4	39.6	39.6	39.6	39.8	39.9	39.9	40.0	40.3	40.4	40.8	40.3	
Overtime hours.....	3.7	3.2	3.1	3.0	3.2	3.2	3.2	3.3	3.3	3.2	3.4	3.6	3.6	3.7	3.6	
Food manufacturing.....	40.5	40.0	39.9	40.0	40.1	40.1	39.9	39.7	40.1	39.8	40.0	40.5	40.5	40.9	40.4	
Beverage and tobacco products.....	38.8	35.7	36.9	36.0	35.8	36.6	35.3	35.1	35.4	35.8	36.1	34.6	34.7	35.4	35.1	
Textile mills.....	38.7	37.7	36.4	36.4	36.9	36.8	37.9	37.8	37.9	38.0	38.8	40.1	39.4	40.5	40.0	
Textile product mills.....	38.6	37.9	37.3	37.3	37.6	38.3	37.9	38.3	38.1	38.3	38.3	37.6	38.9	39.8	39.3	
Apparel.....	36.4	36.0	35.7	36.0	36.0	36.1	35.7	36.2	35.6	36.0	36.0	36.3	36.2	36.7	36.0	
Leather and allied products.....	37.6	33.6	33.2	32.9	32.5	31.9	32.0	33.6	33.8	33.7	35.0	35.6	36.2	38.3	37.9	
Paper and paper products.....	42.9	41.8	41.6	41.1	41.5	41.2	41.9	42.2	42.0	42.3	42.2	42.4	42.1	42.9	42.1	
Printing and related support activities.....	38.3	38.0	37.3	37.6	37.7	37.6	38.1	38.4	38.7	38.3	38.2	38.3	38.2	38.2	38.0	
Petroleum and coal products.....	44.6	43.4	43.8	44.2	43.7	43.4	43.3	43.1	44.1	43.3	42.2	41.7	42.7	42.4	42.0	
Chemicals.....	41.5	41.4	41.1	41.0	41.0	41.1	41.2	41.5	41.5	41.4	41.7	42.1	42.7	42.8	41.8	
Plastics and rubber products.....	41.0	40.2	39.7	39.5	39.9	39.8	39.8	40.5	40.3	40.6	40.7	41.0	41.4	41.5	41.3	
<b>PRIVATE SERVICE-PROVIDING</b> .....	32.3	32.1	32.1	32.0	32.0	32.0	31.9	32.0	32.0	32.0	32.0	32.1	32.1	32.2	32.1	
<b>Trade, transportation, and utilities</b> .....	33.2	32.9	32.9	32.7	32.8	32.9	32.8	32.9	32.8	32.8	32.9	33.0	32.9	33.1	33.0	
Wholesale trade.....	38.2	37.6	37.9	37.7	37.7	37.6	37.6	37.4	37.5	37.4	37.4	37.6	37.6	37.7	37.6	
Retail trade.....	30.0	29.9	29.8	29.7	29.8	29.9	29.8	29.9	29.8	29.8	29.9	30.0	30.0	30.1	30.0	
Transportation and warehousing.....	36.4	36.0	35.9	35.7	35.9	35.9	35.8	36.2	36.1	36.4	36.3	36.4	36.2	36.4	36.3	
Utilities.....	42.7	42.1	43.1	42.4	42.3	42.1	41.9	41.9	41.9	41.5	41.7	41.6	41.4	41.4	41.5	
<b>Information</b> .....	36.7	36.6	36.8	36.7	36.5	36.6	36.5	36.5	36.5	36.4	36.4	36.7	36.5	36.6	36.5	
<b>Financial activities</b> .....	35.8	36.1	36.1	36.1	36.0	36.0	35.9	35.9	36.1	36.0	36.0	36.1	35.9	36.1	36.0	
<b>Professional and business services</b> .....	34.8	34.7	34.8	34.6	34.7	34.7	34.6	34.6	34.7	34.7	34.6	34.8	34.8	34.9	34.7	
<b>Education and health services</b> .....	32.5	32.3	32.2	32.3	32.3	32.3	32.2	32.2	32.2	32.2	32.2	32.2	32.3	32.3	32.2	
<b>Leisure and hospitality</b> .....	25.2	24.8	24.9	24.8	24.8	24.8	24.7	24.7	24.7	24.8	24.6	24.9	24.8	24.8	24.8	
<b>Other services</b> .....	30.8	30.5	30.6	30.5	30.5	30.5	30.4	30.4	30.5	30.5	30.5	30.5	30.5	30.7	30.6	

<sup>1</sup> Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision.  
p = preliminary.

**14. Average hourly earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls, by industry, monthly data seasonally adjusted**

Industry	Annual average		2009											2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>P</sup>	Feb. <sup>P</sup>
<b>TOTAL PRIVATE</b>															
Current dollars.....	\$18.08	\$18.62	\$18.47	\$18.52	\$18.53	\$18.55	\$18.57	\$18.62	\$18.69	\$18.71	\$18.78	\$18.80	\$18.85	\$18.90	\$18.92
Constant (1982) dollars.....	8.57	8.88	8.90	8.93	8.93	8.93	8.86	8.87	8.86	8.85	8.86	8.85	8.85	8.85	8.86
<b>GOODS-PRODUCING.....</b>	19.33	19.90	19.78	19.85	19.83	19.85	19.86	19.92	19.95	19.92	20.04	20.02	20.04	20.10	20.14
<b>Natural resources and mining.....</b>	22.50	23.29	23.15	23.27	23.34	23.33	23.33	23.31	23.27	23.29	23.45	23.28	23.47	23.29	23.63
<b>Construction.....</b>	21.87	22.67	22.46	22.61	22.58	22.63	22.62	22.69	22.70	22.54	22.91	22.89	22.95	23.08	23.17
<b>Manufacturing.....</b>	17.75	18.23	18.09	18.14	18.15	18.15	18.17	18.26	18.31	18.39	18.41	18.38	18.38	18.42	18.46
Excluding overtime.....	16.97	17.58	17.49	17.56	17.53	17.53	17.55	17.60	17.65	17.72	17.70	17.64	17.64	17.64	17.70
Durable goods.....	18.70	19.35	19.12	19.22	19.24	19.27	19.27	19.40	19.45	19.53	19.55	19.55	19.57	19.63	19.69
Nondurable goods.....	16.15	16.56	16.48	16.47	16.49	16.47	16.55	16.56	16.63	16.70	16.72	16.66	16.64	16.64	16.63
<b>PRIVATE SERVICE-PRIVATE SERVICE-PROVIDING.....</b>	17.77	18.35	18.17	18.22	18.25	18.27	18.29	18.34	18.42	18.46	18.51	18.54	18.60	18.64	18.67
<b>Trade, transportation, and utilities.....</b>	16.16	16.50	16.38	16.40	16.42	16.45	16.41	16.44	16.54	16.56	16.59	16.65	16.73	16.78	16.79
Wholesale trade.....	20.13	20.85	20.50	20.57	20.70	20.86	20.78	20.86	20.98	21.03	21.08	21.16	21.35	21.49	21.47
Retail trade.....	12.87	13.02	12.94	12.95	12.95	12.96	12.96	12.96	13.04	13.07	13.05	13.12	13.16	13.18	13.21
Transportation and warehousing.....	18.41	18.80	18.70	18.82	18.77	18.77	18.67	18.75	18.82	18.77	18.91	18.94	19.00	19.14	19.10
Utilities.....	28.83	29.56	29.64	29.25	29.31	29.42	29.38	29.45	29.71	29.64	29.69	29.92	29.91	29.79	29.88
<b>Information.....</b>	24.78	25.45	25.13	25.33	25.30	25.45	25.48	25.48	25.67	25.54	25.69	25.68	25.64	25.58	25.62
<b>Financial activities.....</b>	20.28	20.83	20.59	20.66	20.66	20.79	20.83	20.79	20.90	20.94	21.03	21.07	21.11	21.37	21.25
<b>Professional and business services.....</b>	21.18	22.35	22.11	22.21	22.24	22.23	22.30	22.39	22.45	22.53	22.52	22.50	22.58	22.62	22.70
<b>Education and health services.....</b>	18.87	19.49	19.25	19.28	19.39	19.40	19.45	19.51	19.55	19.61	19.70	19.73	19.76	19.76	19.82
<b>Leisure and hospitality.....</b>	10.84	11.11	10.99	11.00	11.01	11.01	11.07	11.12	11.16	11.24	11.23	11.28	11.27	11.28	11.30
<b>Other services.....</b>	16.09	16.59	16.39	16.43	16.45	16.50	16.51	16.57	16.65	16.71	16.78	16.81	16.85	16.85	16.89

<sup>1</sup> Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

NOTE: See "Notes on the data" for a description of the most recent benchmark revision. p = preliminary.

15. Average hourly earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls, by industry

Industry	Annual average		2009											2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>P</sup>	Feb. <sup>P</sup>
<b>TOTAL PRIVATE</b> .....	\$18.08	\$18.62	\$18.56	\$18.60	\$18.55	\$18.50	\$18.45	\$18.51	\$18.63	\$18.73	\$18.76	\$18.88	\$18.85	\$18.98	\$18.99
Seasonally adjusted.....	-	-	18.47	18.52	18.53	18.55	18.57	18.62	18.69	18.71	18.78	18.80	18.85	18.90	18.92
<b>GOODS-PRODUCING</b> .....	19.33	19.90	19.65	19.75	19.79	19.84	19.84	19.98	20.01	20.04	20.08	20.06	20.08	20.02	19.99
<b>Natural resources and mining</b> .....	22.50	23.29	23.22	23.45	23.45	23.15	22.99	23.15	23.13	23.26	23.29	23.27	23.73	23.43	23.69
<b>Construction</b> .....	21.87	22.67	22.29	22.49	22.48	22.59	22.52	22.74	22.79	22.74	23.07	22.94	23.03	23.00	23.03
<b>Manufacturing</b> .....	17.75	18.23	18.10	18.12	18.16	18.12	18.15	18.21	18.26	18.43	18.33	18.39	18.46	18.47	18.46
Durable goods.....	18.70	19.35	19.12	19.21	19.24	19.24	19.25	19.36	19.43	19.60	19.51	19.56	19.67	19.64	19.70
Wood products .....	14.19	14.93	14.76	14.65	14.70	14.89	14.83	15.02	15.09	15.08	15.09	15.18	15.16	14.97	14.79
Nonmetallic mineral products .....	16.90	17.28	17.01	17.18	17.36	17.24	17.38	17.42	17.43	17.46	17.34	17.45	17.25	17.28	17.20
Primary metals .....	20.19	20.08	19.77	19.72	20.01	19.83	19.94	20.23	20.28	20.57	20.42	20.29	20.19	20.06	20.09
Fabricated metal products .....	16.99	17.49	17.30	17.30	17.42	17.40	17.45	17.48	17.52	17.65	17.61	17.66	17.87	17.79	17.85
Machinery .....	17.97	18.38	18.16	18.25	18.20	18.35	18.24	18.36	18.36	18.62	18.55	18.70	18.76	18.81	18.76
Computer and electronic products .....	21.04	21.88	21.43	21.73	21.74	21.71	21.67	21.86	22.08	22.00	22.05	22.40	22.42	22.52	22.88
Electrical equipment and appliances .....	15.78	16.27	15.93	15.95	15.99	16.15	16.23	16.39	16.58	16.61	16.48	16.55	16.65	16.76	16.62
Transportation equipment .....	23.85	24.93	24.78	24.89	24.85	24.94	25.05	25.10	24.92	25.18	24.98	24.82	24.96	24.89	24.86
Furniture and related products .....	14.54	15.04	14.84	15.00	14.97	15.00	15.09	15.20	15.12	15.28	14.98	14.98	15.05	15.04	14.99
Miscellaneous manufacturing .....	15.20	16.13	15.99	16.04	16.09	16.21	16.10	16.21	16.20	16.21	16.23	16.27	16.30	16.22	16.35
Nondurable goods.....	16.15	16.56	16.49	16.44	16.52	16.45	16.52	16.52	16.54	16.74	16.60	16.67	16.67	16.72	16.63
Food manufacturing .....	14.01	14.40	14.31	14.25	14.29	14.27	14.35	14.35	14.44	14.66	14.51	14.49	14.46	14.41	14.30
Beverages and tobacco products .....	19.35	20.49	20.25	20.40	20.25	20.38	20.20	20.15	20.27	20.29	20.60	21.34	21.71	22.12	21.99
Textile mills .....	13.58	13.71	13.76	13.88	13.79	13.64	13.63	13.50	13.78	13.77	13.62	13.62	13.64	13.50	13.56
Textile product mills .....	11.73	11.44	11.52	11.34	11.34	11.35	11.56	11.18	11.34	11.29	11.41	11.61	11.72	11.95	11.65
Apparel .....	11.40	11.37	11.40	11.25	11.44	11.28	11.38	11.30	11.53	11.15	11.35	11.55	11.28	11.36	
Leather and allied products .....	12.96	13.90	14.19	14.21	14.34	13.85	14.06	13.69	13.59	13.46	13.83	13.93	13.49	13.56	13.37
Paper and paper products .....	18.89	19.28	19.02	18.93	19.32	19.12	19.32	19.48	19.12	19.53	19.21	19.43	19.55	19.60	19.56
Printing and related support activities.....	16.75	16.75	16.79	16.69	16.76	16.61	16.56	16.54	16.76	16.87	16.79	16.88	16.93	17.01	17.06
Petroleum and coal products .....	27.41	29.63	29.40	29.62	29.06	28.99	29.23	29.48	29.41	29.72	30.35	30.61	30.81	31.49	31.30
Chemicals .....	19.50	20.30	19.98	19.96	20.05	20.19	20.21	20.38	20.41	20.61	20.60	20.61	20.68	20.62	20.57
Plastics and rubber products .....	15.85	16.01	16.21	16.20	16.19	16.09	16.05	15.82	15.90	16.05	15.78	15.83	15.72	15.90	15.69
<b>PRIVATE SERVICE-PROVIDING</b> .....	17.77	18.35	18.33	18.35	18.28	18.21	18.14	18.19	18.32	18.44	18.48	18.63	18.59	18.76	18.78
<b>Trade, transportation, and utilities</b> .....	16.16	16.50	16.47	16.48	16.45	16.42	16.37	16.42	16.58	16.62	16.59	16.63	16.57	16.83	16.86
Wholesale trade .....	20.13	20.85	20.63	20.62	20.67	20.75	20.64	20.81	21.00	21.01	21.05	21.25	21.40	21.55	21.52
Retail trade .....	12.87	13.02	12.97	13.00	12.99	12.97	12.94	12.97	13.10	13.20	13.05	13.05	12.99	13.20	13.24
Transportation and warehousing .....	18.41	18.80	18.74	18.79	18.73	18.69	18.69	18.80	18.89	18.77	18.89	18.97	18.98	19.14	19.15
Utilities .....	28.83	29.56	29.67	29.38	29.45	29.45	29.23	29.29	29.47	29.71	29.79	29.97	30.09	29.80	29.90
<b>Information</b> .....	24.78	25.45	25.15	25.43	25.29	25.45	25.31	25.35	25.73	25.65	25.77	25.76	25.50	25.60	25.57
<b>Financial activities</b> .....	20.28	20.83	20.72	20.72	20.69	20.76	20.71	20.69	20.92	20.94	21.01	21.19	21.08	21.35	21.25
<b>Professional and business services</b> .....	21.18	22.35	22.47	22.48	22.25	22.11	22.08	22.22	22.37	22.40	22.33	22.69	22.63	22.76	22.90
<b>Education and health services</b> .....	18.87	19.49	19.23	19.31	19.41	19.37	19.39	19.54	19.49	19.65	19.67	19.72	19.79	19.83	19.82
<b>Leisure and hospitality</b> .....	10.84	11.11	11.08	11.02	11.01	11.00	10.99	10.98	11.04	11.23	11.24	11.34	11.41	11.34	11.39
<b>Other services</b> .....	16.09	16.59	16.36	16.61	16.55	16.57	16.45	16.45	16.59	16.72	16.73	16.80	16.85	16.86	16.90

<sup>1</sup> Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.



16. Average weekly earnings of production or nonsupervisory workers<sup>1</sup> on private nonfarm payrolls, by industry

Industry	Annual average												2010		
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>P</sup>	Feb. <sup>P</sup>
<b>TOTAL PRIVATE</b> .....	\$607.95	\$617.11	\$616.19	\$615.66	\$608.44	\$610.50	\$610.70	\$614.53	\$625.97	\$618.09	\$620.96	\$632.48	\$623.94	\$626.34	\$622.87
Seasonally adjusted.....	-	-	613.20	613.01	613.34	614.01	612.81	616.32	618.64	619.30	619.74	624.16	625.82	629.37	626.25
<b>GOODS-PRODUCING</b> .....	776.66	779.83	758.49	764.33	759.94	773.76	781.70	789.21	798.40	781.56	791.15	800.39	799.18	794.79	775.61
<b>Natural resources and mining</b> .....	1014.69	1007.85	1010.07	1006.01	998.97	993.14	1002.36	990.82	1020.03	1002.51	1003.80	1014.57	1027.51	1026.23	1016.30
<b>CONSTRUCTION</b> .....	842.61	852.45	824.73	836.63	831.76	858.42	860.26	882.31	888.81	832.28	860.51	871.72	849.81	855.60	822.17
<b>Manufacturing</b> .....	724.46	725.87	709.52	710.30	706.42	712.12	720.56	721.12	734.05	737.20	740.53	750.31	758.71	749.88	738.40
Durable goods.....	767.95	771.03	751.42	753.03	748.44	756.13	764.23	766.66	781.09	784.00	790.16	800.00	812.37	799.35	791.94
Wood products.....	547.53	559.05	531.36	530.33	533.61	552.42	572.44	576.77	582.47	574.55	573.42	581.39	580.63	571.85	550.19
Nonmetallic mineral products.....	711.11	706.16	656.59	673.46	696.14	699.94	721.27	742.09	744.26	735.07	721.34	741.63	686.55	691.20	650.16
Primary metals.....	851.29	816.93	786.85	794.72	784.39	789.23	797.60	803.13	833.51	835.14	843.35	868.41	878.27	862.58	851.82
Fabricated metal products.....	701.57	689.35	678.16	671.24	668.93	678.60	685.79	683.47	695.54	691.88	704.40	709.93	727.31	716.94	715.79
Machinery.....	759.94	737.88	735.48	730.00	720.72	726.66	724.13	723.38	727.06	731.77	749.42	766.70	782.29	776.85	769.16
Computer and electronic products.....	861.58	883.07	863.63	864.85	860.90	864.06	873.30	870.03	889.82	886.60	897.44	931.84	932.67	921.07	940.37
Electrical equipment and appliances.....	645.60	639.50	613.31	615.67	615.62	633.08	631.35	631.02	646.62	652.77	657.55	668.62	695.97	685.48	646.52
Transportation equipment.....	1000.67	1026.61	993.68	995.60	991.52	995.11	1019.54	1024.08	1046.64	1062.60	1059.15	1054.85	1085.76	1055.34	1049.09
Furniture and related products.....	553.93	566.48	547.60	562.50	550.90	565.50	576.44	579.12	576.07	571.47	570.74	564.75	577.92	559.49	550.13
Miscellaneous manufacturing.....	591.95	620.78	604.42	614.33	611.42	615.98	613.41	619.22	635.04	624.09	628.10	642.67	640.59	629.34	626.21
Nondurable goods.....	652.22	658.36	644.76	644.45	640.98	648.13	657.50	655.84	661.60	669.60	668.98	676.80	681.80	677.16	661.87
Food manufacturing.....	566.91	575.89	562.38	562.88	555.88	570.80	574.00	569.70	581.93	587.87	587.66	592.64	592.86	585.05	569.14
Beverages and tobacco products.....	750.25	731.37	741.15	730.32	706.73	754.06	719.12	705.25	725.67	734.50	741.60	744.77	744.65	774.20	763.05
Textile mills.....	525.00	517.15	493.98	502.46	496.44	497.86	520.67	507.60	525.02	521.88	533.90	555.70	541.51	544.05	535.62
Textile product mills.....	453.10	433.13	426.24	420.71	417.31	432.44	448.53	429.31	435.46	434.67	433.58	436.54	461.77	467.25	455.52
Apparel.....	415.14	408.92	403.56	407.25	409.55	408.34	407.40	414.23	403.41	405.86	403.63	416.55	420.42	410.59	403.28
Leather and allied products.....	486.58	466.73	465.43	470.35	457.45	445.97	451.33	451.77	462.06	438.80	495.11	497.30	499.13	517.99	504.05
Paper and paper products.....	809.57	805.86	781.72	770.45	794.05	782.01	807.58	818.16	801.13	835.88	814.50	831.60	836.74	836.92	813.70
Printing and related support activities.....	642.50	635.72	622.91	627.54	625.15	617.89	625.97	628.52	646.94	649.50	649.77	653.26	656.88	644.68	638.04
Petroleum and coal products.....	1222.07	1285.64	1278.90	1282.55	1249.58	1246.57	1280.27	1300.07	1299.92	1289.85	1302.02	1291.74	1303.26	1332.03	1302.08
Chemicals.....	809.29	841.33	821.18	816.36	818.04	821.73	836.69	845.77	847.02	857.38	859.02	873.86	889.24	880.47	859.83
Plastics and rubber products.....	648.98	643.81	638.67	636.66	633.03	635.56	643.61	632.80	643.95	653.24	646.98	653.78	660.24	658.26	641.72
<b>PRIVATE SERVICE-PROVIDING</b> .....	574.35	588.07	592.06	589.04	581.30	580.90	578.67	583.90	595.40	588.24	589.51	603.61	594.88	596.57	597.20
<b>Trade, transportation, and utilities</b> .....	536.06	542.36	540.22	538.90	536.27	538.58	536.94	543.50	552.11	548.46	545.81	550.45	546.81	548.66	547.95
Wholesale trade.....	769.62	784.75	786.00	781.50	775.13	778.13	776.06	776.21	795.90	779.47	787.27	809.63	802.50	805.97	802.70
Retail trade.....	386.21	388.72	383.91	383.50	384.50	387.80	386.91	392.99	396.93	397.32	390.20	390.20	392.30	389.40	390.58
Transportation and warehousing.....	670.37	677.44	665.27	670.80	661.17	665.36	667.23	682.44	695.15	685.11	685.71	698.10	690.87	689.04	681.74
Utilities.....	1230.69	1243.76	1284.71	1239.84	1248.68	1239.85	1224.74	1221.39	1234.79	1238.91	1245.22	1258.74	1245.73	1224.78	1246.83
Information.....	908.99	931.93	933.07	938.37	915.50	918.75	916.22	925.28	952.01	936.23	938.03	958.27	930.75	931.84	928.19
Financial activities.....	727.07	751.21	764.57	756.28	740.70	741.13	739.35	738.63	767.76	747.56	750.06	777.67	754.66	766.47	760.75
Professional and business services.....	737.70	775.81	784.20	784.55	765.40	765.01	766.18	766.59	789.66	768.32	774.85	800.96	783.00	785.22	787.76
Education and health services.....	613.73	628.56	623.05	625.64	623.06	621.78	622.42	631.14	631.48	632.73	631.41	640.90	637.24	638.53	634.24
Leisure and hospitality.....	273.39	275.80	277.00	273.30	270.85	272.80	274.75	277.79	283.73	277.38	275.38	282.37	278.40	272.16	277.92
Other services.....	495.57	506.28	502.25	506.61	503.12	503.73	500.08	501.73	512.63	508.29	510.27	515.76	512.24	514.23	513.76

<sup>1</sup> Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries. NOTE: See "Notes on the data" for a description of the most recent benchmark revision. Dash indicates data not available. p = preliminary.

## 17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Private nonfarm payrolls, 278 industries</b>												
Over 1-month span:												
2006.....	65.1	66.9	66.0	61.0	49.6	53.0	56.5	54.3	52.0	52.4	55.8	58.2
2007.....	58.4	59.1	55.4	51.5	56.7	49.1	49.1	43.1	52.4	52.2	53.7	50.6
2008.....	48.9	48.9	51.1	44.1	38.8	33.3	35.1	32.3	27.3	30.7	22.3	18.2
2009.....	19.7	17.1	16.5	20.6	27.3	23.0	26.4	32.9	32.9	31.0	46.8	39.6
2010.....	48.9	50.0										
Over 3-month span:												
2006.....	67.7	67.8	69.0	69.5	62.5	60.6	55.0	57.4	52.6	49.3	54.8	58.0
2007.....	60.2	59.7	62.8	58.7	57.1	52.2	53.7	45.5	49.6	49.1	53.5	54.6
2008.....	56.3	48.1	48.5	46.3	39.6	33.1	31.6	29.0	27.1	26.8	20.8	18.8
2009.....	17.7	12.3	12.6	10.8	14.9	20.8	21.6	21.7	28.4	27.3	33.8	36.1
2010.....	42.4	39.6										
Over 6-month span:												
2006.....	64.1	65.1	66.7	67.3	66.9	69.1	62.5	60.8	58.2	57.2	58.2	55.2
2007.....	58.6	57.1	62.5	61.9	59.5	59.1	56.7	54.8	56.3	51.5	53.5	51.3
2008.....	49.1	50.6	51.7	49.6	43.9	39.2	36.1	31.6	28.1	26.4	23.0	21.4
2009.....	17.5	13.2	12.1	11.9	12.5	13.4	13.2	15.8	20.4	20.4	21.0	24.7
2010.....	31.6	31.2										
Over 12-month span:												
2006.....	67.7	66.0	66.4	63.4	65.6	67.3	64.9	64.5	66.7	65.8	65.1	66.0
2007.....	63.4	59.5	61.2	59.7	59.3	58.4	57.2	57.4	59.9	59.3	58.6	60.0
2008.....	54.8	56.5	53.0	47.4	48.1	44.2	41.1	39.8	36.4	33.1	29.0	26.8
2009.....	24.9	17.7	15.4	15.1	15.1	13.8	12.6	11.5	14.1	13.0	13.4	13.0
2010.....	14.5	16.2										
<b>Manufacturing payrolls, 84 industries</b>												
Over 1-month span:												
2006.....	59.1	56.1	55.5	50.0	39.6	51.8	48.8	40.9	34.1	39.0	36.0	41.5
2007.....	55.5	45.7	31.7	28.7	42.7	36.0	40.2	22.6	32.3	37.2	51.8	42.1
2008.....	40.9	39.6	45.1	37.2	42.7	23.2	21.3	21.3	16.5	20.1	12.8	4.9
2009.....	4.9	10.4	9.1	16.5	11.0	11.0	19.5	26.2	20.1	18.9	45.7	41.5
2010.....	42.7	54.3										
Over 3-month span:												
2006.....	54.9	58.5	54.9	54.3	48.8	53.7	43.9	41.5	33.5	28.0	29.3	27.4
2007.....	39.6	40.2	45.7	32.3	31.7	34.1	31.7	25.0	24.4	25.0	32.9	39.0
2008.....	48.2	36.6	35.4	38.4	39.6	30.5	20.1	9.8	14.0	17.1	13.4	6.1
2009.....	4.9	2.4	2.4	7.3	8.5	11.0	7.3	10.4	17.7	17.7	21.3	29.9
2010.....	37.2	39.6										
Over 6-month span:												
2006.....	43.3	47.6	48.2	51.2	53.0	52.4	47.0	48.8	43.9	39.6	34.1	29.9
2007.....	34.8	31.7	32.3	32.9	35.4	39.0	34.1	27.4	28.7	24.4	30.5	25.6
2008.....	27.4	29.9	42.1	38.4	38.4	31.7	26.2	20.1	13.4	12.2	13.4	12.2
2009.....	7.3	4.9	2.4	6.1	2.4	6.1	7.3	6.1	7.3	8.5	8.5	15.2
2010.....	24.4	25.0										
Over 12-month span:												
2006.....	44.5	41.5	41.5	40.2	40.2	45.7	42.7	43.3	47.6	48.8	46.3	43.9
2007.....	40.2	37.2	37.8	31.1	29.3	29.9	31.1	29.3	33.5	29.3	34.8	36.0
2008.....	28.0	29.3	26.2	25.6	31.1	26.8	23.2	19.5	24.4	20.1	16.5	14.6
2009.....	7.9	3.7	4.9	6.7	3.7	4.9	6.1	4.9	5.5	4.9	4.9	4.9
2010.....	6.1	6.1										

NOTE: Figures are the percent of industries with employment increasing plus one-half of the industries with unchanged employment, where 50 percent indicates an equal balance between industries with increasing and decreasing employment.

See the "Definitions" in this section. See "Notes on the data" for a description of the most recent benchmark revision.

Data for the two most recent months are preliminary.

18. Job openings levels and rates by industry and region, seasonally adjusted

Industry and region	Levels <sup>1</sup> (in thousands)							Percent						
	2009					2010		2009					2010	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>
Total <sup>2</sup> .....	2,411	2,624	2,546	2,456	2,531	2,854	2,723	1.8	2.0	1.9	1.9	1.9	2.2	2.1
<b>Industry</b>														
Total private <sup>2</sup> .....	2,098	2,333	2,164	2,113	2,130	2,471	2,368	1.9	2.1	2.0	1.9	2.0	2.3	2.2
Construction.....	66	73	65	71	67	62	62	1.1	1.2	1.1	1.2	1.2	1.1	1.1
Manufacturing.....	134	139	141	155	171	154	171	1.1	1.2	1.2	1.3	1.5	1.3	1.5
Trade, transportation, and utilities.....	425	415	363	334	378	395	462	1.7	1.7	1.4	1.3	1.5	1.6	1.8
Professional and business services.....	404	446	436	425	404	424	401	2.4	2.7	2.6	2.5	2.4	2.5	2.4
Education and health services.....	531	573	529	537	545	624	552	2.7	2.9	2.7	2.7	2.7	3.1	2.8
Leisure and hospitality.....	241	305	268	236	227	268	274	1.8	2.3	2.0	1.8	1.7	2.0	2.1
Government.....	313	292	382	343	401	383	354	1.4	1.3	1.7	1.5	1.8	1.7	1.6
<b>Region<sup>3</sup></b>														
Northeast.....	504	532	532	482	547	585	590	2.0	2.1	2.1	1.9	2.2	2.3	2.3
South.....	883	952	915	859	943	986	916	1.8	2.0	1.9	1.8	2.0	2.1	1.9
Midwest.....	478	565	566	553	495	613	579	1.6	1.9	1.9	1.8	1.7	2.0	1.9
West.....	535	566	605	586	603	648	695	1.8	1.9	2.1	2.0	2.1	2.2	2.4

<sup>1</sup> Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

<sup>2</sup> Includes natural resources and mining, information, financial activities, and other services, not shown separately.

<sup>3</sup> **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia,

West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The job openings level is the number of job openings on the last business day of the month; the job openings rate is the number of job openings on the last business day of the month as a percent of total employment plus job openings.

<sup>P</sup> = preliminary.

19. Hires levels and rates by industry and region, seasonally adjusted

Industry and region	Levels <sup>1</sup> (in thousands)							Percent						
	2009					2010		2009					2010	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>
Total <sup>2</sup> .....	3,975	4,091	4,001	4,160	3,997	4,087	3,961	3.1	3.2	3.1	3.2	3.1	3.2	3.1
<b>Industry</b>														
Total private <sup>2</sup> .....	3,696	3,833	3,689	3,878	3,715	3,790	3,664	3.4	3.6	3.4	3.6	3.5	3.5	3.4
Construction.....	278	349	325	329	335	312	302	4.7	6.0	5.7	5.7	5.9	5.6	5.4
Manufacturing.....	254	271	243	259	244	289	259	2.2	2.3	2.1	2.2	2.1	2.5	2.2
Trade, transportation, and utilities.....	798	854	772	847	849	822	814	3.2	3.4	3.1	3.4	3.4	3.3	3.3
Professional and business services.....	680	698	709	808	652	729	735	4.2	4.3	4.3	4.9	4.0	4.4	4.4
Education and health services.....	531	532	522	512	496	487	483	2.8	2.8	2.7	2.7	2.6	2.5	2.5
Leisure and hospitality.....	711	693	663	693	657	715	648	5.4	5.3	5.1	5.3	5.1	5.5	5.0
Government.....	279	258	312	282	282	297	297	1.2	1.1	1.4	1.3	1.3	1.3	1.3
<b>Region<sup>3</sup></b>														
Northeast.....	676	731	805	758	746	836	699	2.7	3.0	3.3	3.1	3.0	3.4	2.8
South.....	1,436	1,518	1,420	1,555	1,463	1,449	1,338	3.1	3.2	3.0	3.3	3.1	3.1	2.9
Midwest.....	915	926	949	896	900	936	918	3.1	3.1	3.2	3.0	3.1	3.2	3.1
West.....	838	954	933	970	879	922	812	2.9	3.3	3.2	3.4	3.1	3.2	2.8

<sup>1</sup> Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

<sup>2</sup> Includes natural resources and mining, information, financial activities, and other services, not shown separately.

<sup>3</sup> **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia;

**Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The hires level is the number of hires during the entire month; the hires rate is the number of hires during the entire month as a percent of total employment.

<sup>P</sup> = preliminary.

## 20. Total separations levels and rates by industry and region, seasonally adjusted

Industry and region	Levels <sup>1</sup> (in thousands)							Percent						
	2009					2010		2009					2010	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>
Total <sup>2</sup> .....	4,166	4,274	4,171	4,130	4,195	4,155	3,957	3.2	3.3	3.2	3.2	3.2	3.2	3.1
<b>Industry</b>														
Total private <sup>2</sup> .....	3,883	3,990	3,901	3,846	3,884	3,858	3,661	3.6	3.7	3.6	3.6	3.6	3.6	3.4
Construction.....	335	415	381	347	382	405	359	5.7	7.1	6.6	6.1	6.7	7.2	6.5
Manufacturing.....	297	313	293	285	273	276	264	2.5	2.7	2.5	2.5	2.4	2.4	2.3
Trade, transportation, and utilities.....	826	916	844	853	901	856	810	3.3	3.7	3.4	3.5	3.7	3.5	3.3
Professional and business services.....	711	705	717	706	649	698	690	4.3	4.3	4.4	4.3	3.9	4.2	4.2
Education and health services.....	501	503	473	486	486	457	455	2.6	2.6	2.5	2.5	2.5	2.4	2.3
Leisure and hospitality.....	718	677	707	716	688	709	626	5.5	5.2	5.4	5.5	5.3	5.5	4.8
Government.....	283	284	269	284	311	296	295	1.3	1.3	1.2	1.3	1.4	1.3	1.3
<b>Region<sup>3</sup></b>														
Northeast.....	698	744	727	728	817	789	703	2.8	3.0	3.0	3.0	3.3	3.2	2.9
South.....	1,419	1,598	1,544	1,531	1,499	1,561	1,437	3.0	3.4	3.3	3.3	3.2	3.3	3.1
Midwest.....	913	948	920	752	1,016	988	859	3.1	3.2	3.1	2.6	3.5	3.4	2.9
West.....	992	1,037	939	894	1,061	1,034	925	3.4	3.6	3.3	3.1	3.7	3.6	3.2

<sup>1</sup> Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

<sup>2</sup> Includes natural resources and mining, information, financial activities, and other services, not shown separately.

<sup>3</sup> **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia;

**Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The total separations level is the number of total separations during the entire month; the total separations rate is the number of total separations during the entire month as a percent of total employment.

<sup>P</sup>= preliminary

## 21. Quits levels and rates by industry and region, seasonally adjusted

Industry and region	Levels <sup>1</sup> (in thousands)							Percent						
	2009					2010		2009					2010	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>P</sup>
Total <sup>2</sup> .....	1,779	1,716	1,723	1,837	1,753	1,772	1,848	1.4	1.3	1.3	1.4	1.4	1.4	1.4
<b>Industry</b>														
Total private <sup>2</sup> .....	1,669	1,616	1,620	1,731	1,639	1,661	1,712	1.6	1.5	1.5	1.6	1.5	1.6	1.6
Construction.....	68	77	62	92	76	99	81	1.2	1.3	1.1	1.6	1.3	1.8	1.5
Manufacturing.....	82	90	80	75	75	85	96	.7	.8	.7	.6	.7	.7	.8
Trade, transportation, and utilities.....	408	387	382	413	392	368	461	1.6	1.6	1.6	1.7	1.6	1.5	1.9
Professional and business services.....	263	265	277	264	248	259	270	1.6	1.6	1.7	1.6	1.5	1.6	1.6
Education and health services.....	247	270	267	262	271	248	241	1.3	1.4	1.4	1.4	1.4	1.3	1.2
Leisure and hospitality.....	410	345	356	397	375	401	391	3.1	2.6	2.7	3.0	2.9	3.1	3.0
Government.....	110	100	102	106	114	112	136	.5	.4	.5	.5	.5	.5	.6
<b>Region<sup>3</sup></b>														
Northeast.....	275	245	300	276	280	268	344	1.1	1.0	1.2	1.1	1.1	1.1	1.4
South.....	696	659	677	757	722	736	787	1.5	1.4	1.4	1.6	1.5	1.6	1.7
Midwest.....	383	359	382	377	391	380	440	1.3	1.2	1.3	1.3	1.3	1.3	1.5
West.....	454	371	388	446	382	362	446	1.6	1.3	1.3	1.6	1.3	1.3	1.6

<sup>1</sup> Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.

<sup>2</sup> Includes natural resources and mining, information, financial activities, and other services, not shown separately.

<sup>3</sup> **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia;

**Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

NOTE: The quits level is the number of quits during the entire month; the quits rate is the number of quits during the entire month as a percent of total employment.

<sup>P</sup> = preliminary.

22. Quarterly Census of Employment and Wages: 10 largest counties, first quarter 2009.

County by NAICS supersector	Establishments, first quarter 2009 (thousands)	Employment		Average weekly wage <sup>1</sup>	
		March 2009 (thousands)	Percent change, March 2008-09 <sup>2</sup>	First quarter 2009	Percent change, first quarter 2008-09 <sup>2</sup>
United States <sup>3</sup> .....	9,113.9	128,992.2	-4.2	\$882	-2.5
Private industry .....	8,819.8	106,866.1	-5.1	882	-3.3
Natural resources and mining .....	126.3	1,670.1	-3.8	993	-2.3
Construction .....	860.9	5,937.8	-15.4	906	.9
Manufacturing .....	356.4	12,096.6	-10.6	1,062	-1.3
Trade, transportation, and utilities .....	1,912.2	24,597.3	-5.5	733	-1.6
Information .....	148.0	2,858.8	-5.0	1,439	-2.0
Financial activities .....	853.1	7,651.3	-4.4	1,596	-15.9
Professional and business services .....	1,533.8	16,534.8	-6.4	1,129	-.2
Education and health services .....	861.3	18,245.7	2.2	776	1.2
Leisure and hospitality .....	739.1	12,715.3	-3.1	351	-2.2
Other services .....	1,234.6	4,357.1	-2.1	543	-.5
Government .....	294.2	22,126.1	.5	884	1.6
Los Angeles, CA .....	431.2	3,996.3	-4.9	967	-2.4
Private industry .....	427.3	3,395.0	-5.7	945	-3.0
Natural resources and mining .....	.5	10.7	-6.2	1,479	-15.8
Construction .....	14.0	123.3	-17.4	973	.3
Manufacturing .....	14.4	401.4	-9.3	1,063	-1.8
Trade, transportation, and utilities .....	54.0	744.8	-7.2	776	-1.5
Information .....	8.9	197.3	-7.3	1,755	1.8
Financial activities .....	24.0	223.4	-6.8	1,577	-12.1
Professional and business services .....	43.3	541.8	-8.3	1,149	-2.1
Education and health services .....	28.6	499.8	1.1	865	2.4
Leisure and hospitality .....	27.5	384.1	-3.9	519	-2.4
Other services .....	202.9	258.5	3.0	424	-3.9
Government .....	3.9	601.3	-.3	1,090	-.2
Cook, IL .....	141.1	2,381.5	-4.4	1,084	-5.4
Private industry .....	139.8	2,069.2	-5.0	1,093	-6.3
Natural resources and mining .....	.1	.9	-3.7	792	-12.8
Construction .....	12.3	71.9	-14.4	1,317	.5
Manufacturing .....	6.9	206.7	-9.5	1,013	-4.1
Trade, transportation, and utilities .....	27.5	438.8	-6.5	797	-4.3
Information .....	2.6	53.5	( <sup>4</sup> )	1,644	-8.7
Financial activities .....	15.6	197.7	-5.0	2,397	-17.4
Professional and business services .....	29.1	398.3	-8.0	1,403	-.6
Education and health services .....	14.1	385.9	3.1	839	1.0
Leisure and hospitality .....	11.9	216.4	-3.6	404	-2.9
Other services .....	14.7	94.8	-1.4	729	1.1
Government .....	1.4	312.3	.0	1,022	1.6
New York, NY .....	119.1	2,290.3	-3.6	2,149	-23.4
Private industry .....	118.8	1,837.8	-4.4	2,425	-24.9
Natural resources and mining .....	.0	.2	1.3	1,967	-16.9
Construction .....	2.4	34.0	-7.2	1,479	-6.4
Manufacturing .....	2.9	30.4	-15.3	1,365	-8.3
Trade, transportation, and utilities .....	21.7	230.7	-6.6	1,136	-5.4
Information .....	4.5	129.0	-4.7	2,449	-7.9
Financial activities .....	19.0	355.9	-6.2	6,379	-35.2
Professional and business services .....	25.4	463.7	-5.6	2,095	-10.2
Education and health services .....	8.8	293.9	.7	998	.8
Leisure and hospitality .....	11.9	208.9	-3.0	725	-5.0
Other services .....	18.2	86.9	-1.3	999	-9.0
Government .....	.3	452.6	.0	1,017	1.2
Harris, TX .....	97.9	2,028.4	-1.1	1,143	-2.6
Private industry .....	97.4	1,766.7	-1.5	1,175	-3.1
Natural resources and mining .....	1.5	82.8	( <sup>4</sup> )	3,483	-5.5
Construction .....	6.7	149.0	-6.5	1,051	.0
Manufacturing .....	4.6	182.5	-2.0	1,411	-7.0
Trade, transportation, and utilities .....	22.3	418.9	-1.5	1,029	-3.1
Information .....	1.4	31.3	-3.4	1,314	-3.2
Financial activities .....	10.5	116.2	-3.9	1,511	-12.7
Professional and business services .....	19.6	321.4	-4.5	1,321	2.1
Education and health services .....	10.4	224.3	3.9	851	1.3
Leisure and hospitality .....	7.7	179.8	1.2	374	-2.3
Other services .....	11.9	59.1	.3	628	-.8
Government .....	.5	261.7	2.2	926	3.7
Maricopa, AZ .....	104.0	1,671.0	-7.4	854	-1.3
Private industry .....	103.3	1,444.9	-8.6	852	-1.3
Natural resources and mining .....	.5	8.5	-1.0	855	-14.2
Construction .....	10.8	100.5	-30.7	877	-.9
Manufacturing .....	3.5	111.9	-11.2	1,227	-2.1
Trade, transportation, and utilities .....	23.2	344.5	-7.7	801	-.7
Information .....	1.7	29.0	-5.0	1,166	.0
Financial activities .....	12.8	137.5	-4.9	1,145	-7.5
Professional and business services .....	23.0	270.4	-11.5	896	3.1
Education and health services .....	10.3	214.8	3.6	875	.0
Leisure and hospitality .....	7.5	178.1	-5.2	398	-1.7
Other services .....	7.3	47.8	-6.5	567	-1.2
Government .....	.7	226.1	.5	868	-1.3

See footnotes at end of table.

22. Continued—Quarterly Census of Employment and Wages: 10 largest counties, first quarter 2009.

County by NAICS supersector	Establishments, first quarter 2009 (thousands)	Employment		Average weekly wage <sup>1</sup>	
		March 2009 (thousands)	Percent change, March 2008-09 <sup>2</sup>	First quarter 2009	Percent change, first quarter 2008-09 <sup>2</sup>
Dallas, TX .....	67.9	1,425.7	-3.3	\$1,085	-3.3
Private industry .....	67.3	1,257.6	-3.8	1,103	-3.9
Natural resources and mining .....	.6	8.3	( <sup>4</sup> )	3,066	-13.0
Construction .....	4.3	76.3	-9.8	942	-.8
Manufacturing .....	3.1	123.7	-8.2	1,267	-3.8
Trade, transportation, and utilities .....	15.0	287.9	( <sup>4</sup> )	964	-4.1
Information .....	1.7	46.7	-6.5	1,823	( <sup>4</sup> )
Financial activities .....	8.7	140.3	( <sup>4</sup> )	1,632	-13.3
Professional and business services .....	14.8	255.0	-6.4	1,219	-2.5
Education and health services .....	6.7	154.6	4.5	920	3.1
Leisure and hospitality .....	5.4	126.3	( <sup>4</sup> )	499	-1.4
Other services .....	6.7	37.7	-3.0	624	.8
Government .....	.5	168.0	.7	950	3.6
Orange, CA .....	102.3	1,399.5	-6.8	992	-2.7
Private industry .....	100.9	1,244.8	-7.4	967	-3.6
Natural resources and mining .....	.2	5.1	-16.0	561	-3.4
Construction .....	6.9	78.3	-18.1	1,072	-1.0
Manufacturing .....	5.3	159.9	-8.8	1,148	-3.1
Trade, transportation, and utilities .....	17.3	253.7	-8.5	916	-.1
Information .....	1.4	28.2	-4.8	1,567	.8
Financial activities .....	10.7	106.7	( <sup>4</sup> )	1,502	-12.0
Professional and business services .....	19.4	244.0	-10.4	1,121	-2.4
Education and health services .....	10.2	150.7	1.7	873	1.6
Leisure and hospitality .....	7.2	167.0	-4.7	382	-3.3
Other services .....	19.2	47.7	-3.0	513	-4.6
Government .....	1.4	154.7	-1.8	1,188	1.5
San Diego, CA .....	99.6	1,263.0	-4.7	934	-1.1
Private industry .....	98.3	1,035.8	-5.5	916	-1.9
Natural resources and mining .....	.7	9.7	-13.8	540	-.7
Construction .....	7.0	64.1	-18.1	975	-.3
Manufacturing .....	3.1	99.3	( <sup>4</sup> )	1,309	-.2
Trade, transportation, and utilities .....	14.4	197.1	-7.9	744	( <sup>4</sup> )
Information .....	1.3	37.8	-1.2	1,604	-16.1
Financial activities .....	9.4	71.4	-6.0	1,257	-5.6
Professional and business services .....	16.5	201.2	-6.9	1,208	2.7
Education and health services .....	8.3	142.2	3.2	851	1.7
Leisure and hospitality .....	7.0	152.2	-5.6	393	-6.9
Other services .....	27.6	57.4	.2	466	-2.1
Government .....	1.3	227.2	-.4	1,017	2.7
King, WA .....	75.4	1,135.9	-3.9	1,127	.2
Private industry .....	74.9	979.2	-4.6	1,136	-.5
Natural resources and mining .....	.4	2.8	-9.6	1,553	-1.2
Construction .....	6.4	57.1	-18.7	1,130	4.1
Manufacturing .....	2.4	104.2	-7.2	1,366	-5.5
Trade, transportation, and utilities .....	14.7	206.7	-5.7	967	1.5
Information .....	1.8	80.7	4.0	2,125	-.9
Financial activities .....	6.8	69.7	-6.7	1,579	-5.0
Professional and business services .....	13.6	176.9	-6.8	1,311	-.2
Education and health services .....	6.6	130.4	5.1	857	2.4
Leisure and hospitality .....	6.1	105.0	-4.2	422	-5.8
Other services .....	16.3	45.8	.6	634	5.8
Government .....	.5	156.6	.8	1,074	6.0
Miami-Dade, FL .....	84.7	963.9	-6.1	858	-1.2
Private industry .....	84.4	813.6	-6.9	818	-1.8
Natural resources and mining .....	.5	10.0	-8.8	403	-12.6
Construction .....	6.1	37.7	-25.4	861	6.6
Manufacturing .....	2.6	38.4	-16.7	783	-.3
Trade, transportation, and utilities .....	23.0	238.8	-6.0	765	-.6
Information .....	1.5	18.5	-7.1	1,308	-3.5
Financial activities .....	9.8	63.7	-9.0	1,353	-9.7
Professional and business services .....	17.7	124.5	-8.7	992	-.1
Education and health services .....	9.4	144.1	1.8	801	1.0
Leisure and hospitality .....	5.9	102.0	-4.2	471	-1.5
Other services .....	7.5	35.3	-5.5	529	-.4
Government .....	.4	150.3	-1.7	1,074	.8

<sup>1</sup> Average weekly wages were calculated using unrounded data.

<sup>2</sup> Percent changes were computed from quarterly employment and pay data adjusted for noneconomic county reclassifications. See Notes on Current Labor Statistics.

<sup>3</sup> Totals for the United States do not include data for Puerto Rico or the

Virgin Islands.

<sup>4</sup> Data do not meet BLS or State agency disclosure standards.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

23. Quarterly Census of Employment and Wages: by State, first quarter 2009.

State	Establishments, first quarter 2009 (thousands)	Employment		Average weekly wage <sup>1</sup>	
		March 2009 (thousands)	Percent change, March 2008-09	First quarter 2009	Percent change, first quarter 2008-09
United States <sup>2</sup> .....	9,113.9	128,992.2	-4.2	\$882	-2.5
Alabama .....	119.2	1,844.6	-5.2	736	-.4
Alaska .....	21.3	303.5	.1	887	2.5
Arizona .....	164.6	2,459.7	-6.9	807	-1.3
Arkansas .....	86.4	1,144.5	-2.9	695	4.2
California .....	1,369.6	14,742.5	-5.0	994	-1.2
Colorado .....	176.6	2,211.0	-3.9	913	-.8
Connecticut .....	113.0	1,620.1	-3.8	1,189	-5.6
Delaware .....	29.3	399.9	-5.1	975	-.8
District of Columbia .....	33.3	679.2	-.1	1,461	-1.9
Florida .....	612.2	7,352.2	-7.0	771	-.8
Georgia .....	274.4	3,835.9	-5.4	831	-1.4
Hawaii .....	39.2	599.1	-4.9	775	.4
Idaho .....	56.7	603.4	-6.3	638	.3
Illinois .....	372.2	5,552.0	-4.2	951	-3.0
Indiana .....	161.3	2,701.1	-5.6	739	-2.4
Iowa .....	94.6	1,432.5	-2.5	709	-.1
Kansas .....	87.3	1,326.2	-2.6	719	-2.3
Kentucky .....	109.1	1,710.0	-4.6	712	-.3
Louisiana .....	124.2	1,867.4	-1.1	772	.8
Maine .....	51.0	563.1	-3.7	688	-1.9
Maryland .....	164.5	2,452.8	-3.1	964	.1
Massachusetts .....	213.0	3,102.8	-3.3	1,101	-3.7
Michigan .....	253.8	3,765.9	-7.2	825	-3.7
Minnesota .....	168.6	2,538.5	-4.0	882	-2.9
Mississippi .....	71.0	1,087.9	-4.5	633	-.2
Missouri .....	173.7	2,618.3	-3.4	771	.1
Montana .....	42.9	413.9	-4.2	628	.5
Nebraska .....	59.6	894.8	-2.0	699	1.7
Nevada .....	76.6	1,150.8	-9.1	810	-3.5
New Hampshire .....	48.8	601.2	-3.2	837	-3.0
New Jersey .....	271.3	3,775.1	-4.0	1,100	-2.8
New Mexico .....	54.9	794.1	-3.5	723	.7
New York .....	588.1	8,332.4	-2.6	1,207	-13.8
North Carolina .....	260.6	3,852.4	-5.2	766	-2.8
North Dakota .....	25.6	341.8	-.4	666	2.0
Ohio .....	293.6	4,937.1	-4.9	790	-1.0
Oklahoma .....	100.5	1,517.0	-2.0	709	-.3
Oregon .....	130.7	1,602.8	-6.3	772	-.6
Pennsylvania .....	342.4	5,449.4	-2.9	862	-.7
Rhode Island .....	35.5	441.8	-4.9	831	-2.4
South Carolina .....	115.3	1,779.4	-5.9	692	-.4
South Dakota .....	30.6	382.9	-1.7	630	-.3
Tennessee .....	142.7	2,586.1	-5.7	751	-1.3
Texas .....	564.9	10,237.9	-1.8	886	-1.9
Utah .....	85.3	1,162.2	-4.6	726	1.1
Vermont .....	24.8	291.7	-3.2	719	-2.0
Virginia .....	232.6	3,541.6	-3.0	920	.1
Washington .....	216.4	2,810.6	-3.8	906	.8
West Virginia .....	48.4	690.2	-1.4	704	4.0
Wisconsin .....	156.8	2,619.0	-4.3	747	-1.6
Wyoming .....	25.1	272.1	-2.0	778	-.1
Puerto Rico .....	53.4	967.1	-4.1	496	1.4
Virgin Islands .....	3.6	44.6	-4.3	685	-3.1

<sup>1</sup> Average weekly wages were calculated using unrounded data.

NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.

<sup>2</sup> Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

**24. Annual data: Quarterly Census of Employment and Wages, by ownership**

Year	Average establishments	Average annual employment	Total annual wages (in thousands)	Average annual wage per employee	Average weekly wage
<b>Total covered (UI and UCFE)</b>					
1999 .....	7,820,860	127,042,282	\$4,235,579,204	\$33,340	\$641
2000 .....	7,879,116	129,877,063	4,587,708,584	35,323	679
2001 .....	7,984,529	129,635,800	4,695,225,123	36,219	697
2002 .....	8,101,872	128,233,919	4,714,374,741	36,764	707
2003 .....	8,228,840	127,795,827	4,826,251,547	37,765	726
2004 .....	8,364,795	129,278,176	5,087,561,796	39,354	757
2005 .....	8,571,144	131,571,623	5,351,949,496	40,677	782
2006 .....	8,784,027	133,833,834	5,692,569,465	42,535	818
2007 .....	8,971,897	135,366,106	6,018,089,108	44,458	855
2008 .....	9,082,049	134,805,659	6,142,159,200	45,563	876
<b>UI covered</b>					
1999 .....	7,771,198	124,255,714	\$4,112,169,533	\$33,094	\$636
2000 .....	7,828,861	127,005,574	4,454,966,824	35,077	675
2001 .....	7,933,536	126,883,182	4,560,511,280	35,943	691
2002 .....	8,051,117	125,475,293	4,570,787,218	36,428	701
2003 .....	8,177,087	125,031,551	4,676,319,378	37,401	719
2004 .....	8,312,729	126,538,579	4,929,262,369	38,955	749
2005 .....	8,518,249	128,837,948	5,188,301,929	40,270	774
2006 .....	8,731,111	131,104,860	5,522,624,197	42,124	810
2007 .....	8,908,198	132,639,806	5,841,231,314	44,038	847
2008 .....	9,017,717	132,043,604	5,959,055,276	45,129	868
<b>Private industry covered</b>					
1999 .....	7,560,567	107,619,457	\$3,577,738,557	\$33,244	\$639
2000 .....	7,622,274	110,015,333	3,887,626,769	35,337	680
2001 .....	7,724,965	109,304,802	3,952,152,155	36,157	695
2002 .....	7,839,903	107,577,281	3,930,767,025	36,539	703
2003 .....	7,963,340	107,065,553	4,015,823,311	37,508	721
2004 .....	8,093,142	108,490,066	4,245,640,890	39,134	753
2005 .....	8,294,662	110,611,016	4,480,311,193	40,505	779
2006 .....	8,505,496	112,718,858	4,780,833,389	42,414	816
2007 .....	8,681,001	114,012,221	5,057,840,759	44,362	853
2008 .....	8,789,360	113,188,643	5,135,487,891	45,371	873
<b>State government covered</b>					
1999 .....	70,538	4,296,673	\$149,011,194	\$34,681	\$667
2000 .....	65,096	4,370,160	158,618,365	36,296	698
2001 .....	64,583	4,452,237	168,358,331	37,814	727
2002 .....	64,447	4,485,071	175,866,492	39,212	754
2003 .....	64,467	4,481,845	179,528,728	40,057	770
2004 .....	64,544	4,484,997	184,414,992	41,118	791
2005 .....	66,278	4,527,514	191,281,126	42,249	812
2006 .....	66,921	4,565,908	200,329,294	43,875	844
2007 .....	67,381	4,611,395	211,677,002	45,903	883
2008 .....	67,675	4,642,650	222,754,925	47,980	923
<b>Local government covered</b>					
1999 .....	140,093	12,339,584	\$385,419,781	\$31,234	\$601
2000 .....	141,491	12,620,081	408,721,690	32,387	623
2001 .....	143,989	13,126,143	440,000,795	33,521	645
2002 .....	146,767	13,412,941	464,153,701	34,605	665
2003 .....	149,281	13,484,153	480,967,339	35,669	686
2004 .....	155,043	13,563,517	499,206,488	36,805	708
2005 .....	157,309	13,699,418	516,709,610	37,718	725
2006 .....	158,695	13,820,093	541,461,514	39,179	753
2007 .....	159,816	14,016,190	571,713,553	40,790	784
2008 .....	160,683	14,212,311	600,812,461	42,274	813
<b>Federal government covered (UCFE)</b>					
1999 .....	49,661	2,786,567	\$123,409,672	\$44,287	\$852
2000 .....	50,256	2,871,489	132,741,760	46,228	889
2001 .....	50,993	2,752,619	134,713,843	48,940	941
2002 .....	50,755	2,758,627	143,587,523	52,050	1,001
2003 .....	51,753	2,764,275	149,932,170	54,239	1,043
2004 .....	52,066	2,739,596	158,299,427	57,782	1,111
2005 .....	52,895	2,733,675	163,647,568	59,864	1,151
2006 .....	52,916	2,728,974	169,945,269	62,274	1,198
2007 .....	63,699	2,726,300	176,857,794	64,871	1,248
2008 .....	64,332	2,762,055	183,103,924	66,293	1,275

NOTE: Data are final. Detail may not add to total due to rounding.



**25. Annual data: Quarterly Census of Employment and Wages, establishment size and employment, private ownership, by supersector, first quarter 2008**

Industry, establishments, and employment	Total	Size of establishments								
		Fewer than 5 workers <sup>1</sup>	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 or more workers
<b>Total all industries<sup>2</sup></b>										
Establishments, first quarter .....	8,737,209	5,347,059	1,405,989	940,355	649,897	221,242	125,680	30,651	10,833	5,503
Employment, March .....	112,661,107	7,726,320	9,317,598	12,712,673	19,590,026	15,200,470	18,769,975	10,490,782	7,355,848	11,497,415
<b>Natural resources and mining</b>										
Establishments, first quarter .....	125,210	70,167	23,540	15,213	10,230	3,338	1,888	574	192	68
Employment, March .....	1,735,716	113,349	155,594	205,063	309,062	229,769	285,052	198,874	129,465	109,488
<b>Construction</b>										
Establishments, first quarter .....	884,900	596,761	135,351	80,118	49,933	14,548	6,455	1,305	337	92
Employment, March .....	7,015,698	820,427	887,949	1,076,415	1,494,411	990,273	953,252	438,169	221,521	133,281
<b>Manufacturing</b>										
Establishments, first quarter .....	360,128	138,761	61,564	53,932	52,329	25,129	18,998	6,052	2,298	1,065
Employment, March .....	13,530,440	239,464	413,129	741,464	1,631,131	1,758,241	2,909,766	2,072,004	1,554,107	2,211,134
<b>Trade, transportation, and utilities</b>										
Establishments, first quarter .....	1,918,453	1,025,889	381,783	253,919	158,449	53,773	34,906	7,571	1,654	509
Employment, March .....	26,025,160	1,686,285	2,543,460	3,411,060	4,758,401	3,726,557	5,155,843	2,600,592	1,090,853	1,052,109
<b>Information</b>										
Establishments, first quarter .....	144,342	82,456	21,073	16,279	13,502	5,634	3,580	1,093	490	235
Employment, March .....	3,007,840	113,866	140,161	222,141	415,963	388,105	542,466	380,246	334,589	470,303
<b>Financial activities</b>										
Establishments, first quarter .....	866,044	571,395	153,677	80,370	39,542	11,675	6,176	1,823	911	475
Employment, March .....	8,002,154	880,298	1,013,702	1,059,248	1,176,225	798,971	929,717	631,696	630,185	882,112
<b>Professional and business services</b>										
Establishments, first quarter .....	1,500,983	1,026,478	199,658	126,947	85,319	32,918	20,556	5,907	2,267	933
Employment, March .....	17,672,891	1,403,930	1,312,525	1,712,339	2,594,343	2,279,648	3,116,492	2,019,588	1,542,704	1,691,322
<b>Education and health services</b>										
Establishments, first quarter .....	838,101	403,555	181,824	119,131	77,795	28,219	19,577	4,258	1,933	1,809
Employment, March .....	17,855,618	715,158	1,208,328	1,604,008	2,344,710	1,961,088	2,946,642	1,449,126	1,343,470	4,283,088
<b>Leisure and hospitality</b>										
Establishments, first quarter .....	729,550	280,079	122,835	135,822	137,270	40,241	10,754	1,610	642	297
Employment, March .....	13,121,259	443,453	829,466	1,908,049	4,122,254	2,674,380	1,523,474	547,993	438,685	633,505
<b>Other services</b>										
Establishments, first quarter .....	1,157,207	946,782	118,658	57,400	25,255	5,738	2,787	458	109	20
Employment, March .....	4,450,274	1,128,799	775,868	757,235	736,119	391,483	406,934	152,494	70,269	31,073

<sup>1</sup> Includes establishments that reported no workers in March 2008.

NOTE: Data are final. Detail may not add to total due to rounding.

<sup>2</sup> Includes data for unclassified establishments, not shown separately.

**26. Average annual wages for 2007 and 2008 for all covered workers<sup>1</sup> by metropolitan area**

Metropolitan area <sup>2</sup>	Average annual wages <sup>3</sup>		
	2007	2008	Percent change, 2007-08
Metropolitan areas <sup>4</sup> .....	\$46,139	\$47,194	2.3
Abilene, TX .....	31,567	32,649	3.4
Aguadilla-Isabela-San Sebastian, PR .....	20,295	20,714	2.1
Akron, OH .....	39,499	40,376	2.2
Albany, GA .....	33,378	34,314	2.8
Albany-Schenectady-Troy, NY .....	42,191	43,912	4.1
Albuquerque, NM .....	38,191	39,342	3.0
Alexandria, LA .....	32,757	34,783	6.2
Allentown-Bethlehem-Easton, PA-NJ .....	41,784	42,500	1.7
Altoona, PA .....	31,988	32,986	3.1
Amarillo, TX .....	35,574	38,215	7.4
Ames, IA .....	37,041	38,558	4.1
Anchorage, AK .....	45,237	46,935	3.8
Anderson, IN .....	32,850	31,326	-4.6
Anderson, SC .....	31,086	32,322	4.0
Ann Arbor, MI .....	49,427	48,987	-0.9
Anniston-Oxford, AL .....	34,593	36,227	4.7
Appleton, WI .....	36,575	37,522	2.6
Asheville, NC .....	33,406	34,070	2.0
Athens-Clarke County, GA .....	34,256	35,503	3.6
Atlanta-Sandy Springs-Marietta, GA .....	48,111	48,064	-0.1
Atlantic City, NJ .....	39,276	40,337	2.7
Auburn-Opelika, AL .....	31,554	32,651	3.5
Augusta-Richmond County, GA-SC .....	36,915	38,068	3.1
Austin-Round Rock, TX .....	46,458	47,355	1.9
Bakersfield, CA .....	38,254	39,476	3.2
Baltimore-Towson, MD .....	47,177	48,438	2.7
Bangor, ME .....	32,829	33,829	3.0
Barnstable Town, MA .....	37,691	38,839	3.0
Baton Rouge, LA .....	39,339	41,961	6.7
Battle Creek, MI .....	40,628	42,782	5.3
Bay City, MI .....	35,680	36,489	2.3
Beaumont-Port Arthur, TX .....	40,682	43,302	6.4
Bellingham, WA .....	34,239	35,864	4.7
Bend, OR .....	34,318	35,044	2.1
Billings, MT .....	35,372	36,155	2.2
Binghamton, NY .....	36,322	37,731	3.9
Birmingham-Hoover, AL .....	42,570	43,651	2.5
Bismarck, ND .....	34,118	35,389	3.7
Blacksburg-Christiansburg-Radford, VA .....	35,248	35,272	0.1
Bloomington, IN .....	32,028	33,220	3.7
Bloomington-Normal, IL .....	42,082	43,918	4.4
Boise City-Nampa, ID .....	37,553	37,315	-0.6
Boston-Cambridge-Quincy, MA-NH .....	59,817	61,128	2.2
Boulder, CO .....	52,745	53,455	1.3
Bowling Green, KY .....	33,308	34,861	4.7
Bremerton-Silverdale, WA .....	39,506	40,421	2.3
Bridgeport-Stamford-Norwalk, CT .....	79,973	80,018	0.1
Brownsville-Harlingen, TX .....	27,126	28,342	4.5
Brunswick, GA .....	32,705	34,458	5.4
Buffalo-Niagara Falls, NY .....	38,218	38,984	2.0
Burlington, NC .....	33,132	34,283	3.5
Burlington-South Burlington, VT .....	41,907	43,559	3.9
Canton-Massillon, OH .....	34,091	34,897	2.4
Cape Coral-Fort Myers, FL .....	37,658	37,866	0.6
Carson City, NV .....	42,030	43,858	4.3
Casper, WY .....	41,105	43,851	6.7
Cedar Rapids, IA .....	41,059	42,356	3.2
Champaign-Urbana, IL .....	35,788	37,408	4.5
Charleston, WV .....	38,687	40,442	4.5
Charleston-North Charleston, SC .....	36,954	38,035	2.9
Charlotte-Gastonia-Concord, NC-SC .....	46,975	47,332	0.8
Charlottesville, VA .....	40,819	41,777	2.3
Chattanooga, TN-GA .....	36,522	37,258	2.0
Cheyenne, WY .....	36,191	37,452	3.5
Chicago-Naperville-Joliet, IL-IN-WI .....	50,823	51,775	1.9
Chico, CA .....	33,207	34,310	3.3
Cincinnati-Middletown, OH-KY-IN .....	42,969	43,801	1.9
Clarksville, TN-KY .....	32,216	32,991	2.4
Cleveland, TN .....	34,666	35,010	1.0
Cleveland-Elyria-Mentor, OH .....	42,783	43,467	1.6
Coeur d'Alene, ID .....	31,035	31,353	1.0
College Station-Bryan, TX .....	32,630	33,967	4.1
Colorado Springs, CO .....	39,745	40,973	3.1
Columbia, MO .....	33,266	34,331	3.2
Columbia, SC .....	36,293	37,514	3.4
Columbus, GA-AL .....	34,511	35,067	1.6
Columbus, IN .....	41,078	42,610	3.7
Columbus, OH .....	42,655	43,533	2.1
Corpus Christi, TX .....	37,186	38,771	4.3
Corvallis, OR .....	41,981	42,343	0.9

See footnotes at end of table.

**26. Continued — Average annual wages for 2007 and 2008 for all covered workers<sup>1</sup> by metropolitan area**

Metropolitan area <sup>2</sup>	Average annual wages <sup>3</sup>		
	2007	2008	Percent change, 2007-08
Cumberland, MD-WV .....	\$31,373	\$32,583	3.9
Dallas-Fort Worth-Arlington, TX .....	49,627	50,331	1.4
Dalton, GA .....	34,433	34,403	-0.1
Danville, IL .....	34,086	35,602	4.4
Danville, VA .....	30,212	30,580	1.2
Davenport-Moline-Rock Island, IA-IL .....	39,385	40,425	2.6
Dayton, OH .....	40,223	40,824	1.5
Decatur, AL .....	35,931	36,855	2.6
Decatur, IL .....	41,039	42,012	2.4
Deltona-Daytona Beach-Ormond Beach, FL .....	32,196	32,938	2.3
Denver-Aurora, CO .....	50,180	51,270	2.2
Des Moines, IA .....	42,895	43,918	2.4
Detroit-Warren-Livonia, MI .....	49,019	50,081	2.2
Dothan, AL .....	32,367	32,965	1.8
Dover, DE .....	35,978	36,375	1.1
Dubuque, IA .....	34,240	35,656	4.1
Duluth, MN-WI .....	35,202	36,307	3.1
Durham, NC .....	52,420	53,700	2.4
Eau Claire, WI .....	32,792	33,549	2.3
El Centro, CA .....	32,419	33,239	2.5
Elizabethtown, KY .....	32,701	33,728	3.1
Elkhart-Goshen, IN .....	36,566	35,858	-1.9
Elmira, NY .....	34,879	36,984	6.0
El Paso, TX .....	31,354	31,837	1.5
Erie, PA .....	34,788	35,992	3.5
Eugene-Springfield, OR .....	34,329	35,380	3.1
Evansville, IN-KY .....	37,182	38,304	3.0
Fairbanks, AK .....	42,345	44,225	4.4
Fajardo, PR .....	22,075	22,984	4.1
Fargo, ND-MN .....	35,264	36,745	4.2
Farmington, NM .....	38,572	41,155	6.7
Fayetteville, NC .....	33,216	34,619	4.2
Fayetteville-Springdale-Rogers, AR-MO .....	37,325	39,025	4.6
Flagstaff, AZ .....	34,473	35,353	2.6
Flint, MI .....	39,310	39,206	-0.3
Florence, SC .....	34,305	34,841	1.6
Florence-Muscle Shoals, AL .....	30,699	32,088	4.5
Fond du Lac, WI .....	34,664	36,166	4.3
Fort Collins-Loveland, CO .....	39,335	40,154	2.1
Fort Smith, AR-OK .....	31,236	32,130	2.9
Fort Walton Beach-Crestview-Destin, FL .....	35,613	36,454	2.4
Fort Wayne, IN .....	36,542	36,806	0.7
Fresno, CA .....	35,111	36,038	2.6
Gadsden, AL .....	30,979	31,718	2.4
Gainesville, FL .....	36,243	37,282	2.9
Gainesville, GA .....	36,994	37,929	2.5
Glens Falls, NY .....	33,564	34,531	2.9
Goldsboro, NC .....	30,177	30,607	1.4
Grand Forks, ND-MN .....	30,745	32,207	4.8
Grand Junction, CO .....	36,221	39,246	8.4
Grand Rapids-Wyoming, MI .....	38,953	39,868	2.3
Great Falls, MT .....	31,009	31,962	3.1
Greeley, CO .....	37,066	38,700	4.4
Green Bay, WI .....	37,788	39,247	3.9
Greensboro-High Point, NC .....	37,213	37,919	1.9
Greenville, NC .....	33,703	34,672	2.9
Greenville, SC .....	36,536	37,592	2.9
Guayama, PR .....	26,094	27,189	4.2
Gulfport-Biloxi, MS .....	34,971	35,700	2.1
Hagerstown-Martinsburg, MD-WV .....	35,468	36,472	2.8
Hanford-Corcoran, CA .....	32,504	35,374	8.8
Harrisburg-Carlisle, PA .....	41,424	42,330	2.2
Harrisonburg, VA .....	32,718	34,197	4.5
Hartford-West Hartford-East Hartford, CT .....	54,188	54,446	0.5
Hattiesburg, MS .....	30,729	31,629	2.9
Hickory-Lenoir-Morganton, NC .....	32,364	32,810	1.4
Hinesville-Fort Stewart, GA .....	33,210	33,854	1.9
Holland-Grand Haven, MI .....	37,470	37,953	1.3
Honolulu, HI .....	40,748	42,090	3.3
Hot Springs, AR .....	28,448	29,042	2.1
Houma-Bayou Cane-Thibodaux, LA .....	41,604	44,345	6.6
Houston-Baytown-Sugar Land, TX .....	53,494	55,407	3.6
Huntington-Ashland, WV-KY-OH .....	33,973	35,717	5.1
Huntsville, AL .....	45,763	47,427	3.6
Idaho Falls, ID .....	29,878	30,485	2.0
Indianapolis, IN .....	42,227	43,128	2.1
Iowa City, IA .....	37,457	39,070	4.3
Ithaca, NY .....	39,387	41,689	5.8
Jackson, MI .....	38,267	38,672	1.1
Jackson, MS .....	35,771	36,730	2.7

See footnotes at end of table.

**26. Continued — Average annual wages for 2007 and 2008 for all covered workers<sup>1</sup> by metropolitan area**

Metropolitan area <sup>2</sup>	Average annual wages <sup>3</sup>		
	2007	2008	Percent change, 2007-08
Jackson, TN .....	\$35,059	\$35,975	2.6
Jacksonville, FL .....	41,437	41,524	0.2
Jacksonville, NC .....	27,005	27,893	3.3
Janesville, WI .....	36,790	36,906	0.3
Jefferson City, MO .....	32,903	33,766	2.6
Johnson City, TN .....	31,985	32,759	2.4
Johnstown, PA .....	31,384	32,464	3.4
Jonesboro, AR .....	30,378	31,532	3.8
Joplin, MO .....	31,068	32,156	3.5
Kalamazoo-Portage, MI .....	38,402	40,333	5.0
Kankakee-Bradley, IL .....	33,340	34,451	3.3
Kansas City, MO-KS .....	42,921	44,155	2.9
Kennewick-Richland-Pasco, WA .....	40,439	41,878	3.6
Killeen-Temple-Fort Hood, TX .....	32,915	34,299	4.2
Kingsport-Bristol-Bristol, TN-VA .....	36,399	37,260	2.4
Kingston, NY .....	35,018	35,883	2.5
Knoxville, TN .....	38,386	38,912	1.4
Kokomo, IN .....	47,269	44,117	-6.7
La Crosse, WI-MN .....	32,949	34,078	3.4
Lafayette, IN .....	36,419	37,832	3.9
Lafayette, LA .....	40,684	42,748	5.1
Lake Charles, LA .....	37,447	39,982	6.8
Lakeland, FL .....	34,394	35,195	2.3
Lancaster, PA .....	37,043	38,127	2.9
Lansing-East Lansing, MI .....	40,866	42,339	3.6
Laredo, TX .....	29,009	29,572	1.9
Las Cruces, NM .....	31,422	32,894	4.7
Las Vegas-Paradise, NV .....	42,336	43,120	1.9
Lawrence, KS .....	30,830	32,313	4.8
Lawton, OK .....	30,617	32,258	5.4
Lebanon, PA .....	32,876	33,900	3.1
Lewiston, ID-WA .....	31,961	32,783	2.6
Lewiston-Auburn, ME .....	33,118	34,396	3.9
Lexington-Fayette, KY .....	39,290	40,034	1.9
Lima, OH .....	35,177	35,381	0.6
Lincoln, NE .....	34,750	35,834	3.1
Little Rock-North Little Rock, AR .....	39,305	38,902	-1.0
Logan, UT-ID .....	27,810	29,392	5.7
Longview, TX .....	36,956	38,902	5.3
Longview, WA .....	37,101	37,806	1.9
Los Angeles-Long Beach-Santa Ana, CA .....	50,480	51,520	2.1
Louisville, KY-IN .....	40,125	40,596	1.2
Lubbock, TX .....	32,761	33,867	3.4
Lynchburg, VA .....	34,412	35,207	2.3
Macon, GA .....	34,243	34,823	1.7
Madera, CA .....	33,266	34,405	3.4
Madison, WI .....	41,201	42,623	3.5
Manchester-Nashua, NH .....	49,235	50,629	2.8
Manfield, OH .....	33,109	33,946	2.5
Mayaguez, PR .....	21,326	22,394	5.0
McAllen-Edinburg-Pharr, TX .....	27,651	28,498	3.1
Medford, OR .....	32,877	33,402	1.6
Memphis, TN-MS-AR .....	42,339	43,124	1.9
Merced, CA .....	32,351	33,903	4.8
Miami-Fort Lauderdale-Miami Beach, FL .....	43,428	44,199	1.8
Michigan City-La Porte, IN .....	32,570	33,507	2.9
Midland, TX .....	45,574	50,116	10.0
Milwaukee-Waukesha-West Allis, WI .....	43,261	44,462	2.8
Minneapolis-St. Paul-Bloomington, MN-WI .....	49,542	51,044	3.0
Missoula, MT .....	32,233	33,414	3.7
Mobile, AL .....	36,890	38,180	3.5
Modesto, CA .....	36,739	37,867	3.1
Monroe, LA .....	31,992	32,796	2.5
Monroe, MI .....	41,636	41,849	0.5
Montgomery, AL .....	36,223	37,552	3.7
Morgantown, WV .....	35,241	37,082	5.2
Morristown, TN .....	32,806	32,858	0.2
Mount Vernon-Anacortes, WA .....	34,620	36,230	4.7
Muncie, IN .....	31,326	32,420	3.5
Muskegon-Norton Shores, MI .....	34,982	36,033	3.0
Myrtle Beach-Conway-North Myrtle Beach, SC .....	28,576	28,450	-0.4
Napa, CA .....	44,171	45,061	2.0
Naples-Marco Island, FL .....	41,300	40,178	-2.7
Nashville-Davidson--Murfreesboro, TN .....	42,728	43,964	2.9
New Haven-Milford, CT .....	47,039	48,239	2.6
New Orleans-Metairie-Kenner, LA .....	43,255	45,108	4.3
New York-Northern New Jersey-Long Island, NY-NJ-PA .....	65,685	66,548	1.3
Niles-Benton Harbor, MI .....	38,140	38,814	1.8
Norwich-New London, CT .....	45,463	46,727	2.8
Ocala, FL .....	31,623	32,579	3.0

See footnotes at end of table.

**26. Continued — Average annual wages for 2007 and 2008 for all covered workers<sup>1</sup> by metropolitan area**

Metropolitan area <sup>2</sup>	Average annual wages <sup>3</sup>		
	2007	2008	Percent change, 2007-08
Ocean City, NJ .....	\$32,452	\$33,529	3.3
Odessa, TX .....	41,758	44,316	6.1
Ogden-Clearfield, UT .....	34,067	34,778	2.1
Oklahoma City, OK .....	37,192	39,363	5.8
Olympia, WA .....	39,678	40,714	2.6
Omaha-Council Bluffs, NE-IA .....	39,273	40,097	2.1
Orlando, FL .....	38,633	39,322	1.8
Oshkosh-Neenah, WI .....	41,014	41,781	1.9
Owensboro, KY .....	33,593	34,956	4.1
Oxnard-Thousand Oaks-Ventura, CA .....	47,669	46,490	-2.5
Palm Bay-Melbourne-Titusville, FL .....	40,975	42,089	2.7
Panama City-Lynn Haven, FL .....	33,950	34,361	1.2
Parkersburg-Marietta, WV-OH .....	33,547	35,102	4.6
Pascagoula, MS .....	39,131	42,734	9.2
Pensacola-Ferry Pass-Brent, FL .....	34,165	34,829	1.9
Peoria, IL .....	43,470	44,562	2.5
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD .....	50,611	51,814	2.4
Phoenix-Mesa-Scottsdale, AZ .....	43,697	44,482	1.8
Pine Bluff, AR .....	33,094	34,106	3.1
Pittsburgh, PA .....	42,910	44,124	2.8
Pittsfield, MA .....	38,075	38,957	2.3
Pocatello, ID .....	29,268	30,608	4.6
Ponce, PR .....	21,019	21,818	3.8
Portland-South Portland-Biddeford, ME .....	38,497	39,711	3.2
Portland-Vancouver-Beaverton, OR-WA .....	44,335	45,326	2.2
Port St. Lucie-Fort Pierce, FL .....	36,375	36,174	-0.6
Poughkeepsie-Newburgh-Middletown, NY .....	40,793	42,148	3.3
Prescott, AZ .....	32,048	33,004	3.0
Providence-New Bedford-Fall River, RI-MA .....	40,674	42,141	3.6
Provo-Orem, UT .....	34,141	35,516	4.0
Pueblo, CO .....	32,552	34,055	4.6
Punta Gorda, FL .....	32,833	32,927	0.3
Racine, WI .....	40,746	41,232	1.2
Raleigh-Cary, NC .....	42,801	43,912	2.6
Rapid City, SD .....	31,119	32,227	3.6
Reading, PA .....	39,945	40,691	1.9
Redding, CA .....	34,953	35,655	2.0
Reno-Sparks, NV .....	41,365	42,167	1.9
Richmond, VA .....	44,530	45,244	1.6
Riverside-San Bernardino-Ontario, CA .....	37,846	38,617	2.0
Roanoke, VA .....	35,419	36,475	3.0
Rochester, MN .....	44,786	46,196	3.1
Rochester, NY .....	40,752	41,728	2.4
Rockford, IL .....	38,304	39,210	2.4
Rocky Mount, NC .....	32,527	33,110	1.8
Rome, GA .....	33,041	35,229	6.6
Sacramento-Arden-Arcade-Roseville, CA .....	46,385	47,924	3.3
Saginaw-Saginaw Township North, MI .....	37,507	37,549	0.1
St. Cloud, MN .....	33,996	35,069	3.2
St. George, UT .....	29,052	29,291	0.8
St. Joseph, MO-KS .....	31,828	32,651	2.6
St. Louis, MO-IL .....	42,873	45,419	5.9
Salem, OR .....	33,986	34,891	2.7
Salinas, CA .....	39,419	40,235	2.1
Salisbury, MD .....	34,833	35,901	3.1
Salt Lake City, UT .....	40,935	41,628	1.7
San Angelo, TX .....	30,920	32,852	6.2
San Antonio, TX .....	38,274	38,876	1.6
San Diego-Carlsbad-San Marcos, CA .....	47,657	49,079	3.0
Sandusky, OH .....	33,471	33,760	0.9
San Francisco-Oakland-Fremont, CA .....	64,559	65,100	0.8
San German-Cabo Rojo, PR .....	19,777	19,875	0.5
San Jose-Sunnyvale-Santa Clara, CA .....	82,038	80,063	-2.4
San Juan-Caguas-Guaynabo, PR .....	25,939	26,839	3.5
San Luis Obispo-Paso Robles, CA .....	36,740	38,134	3.8
Santa Barbara-Santa Maria-Goleta, CA .....	41,967	42,617	1.5
Santa Cruz-Watsonville, CA .....	41,540	41,471	-0.2
Santa Fe, NM .....	37,395	38,646	3.3
Santa Rosa-Petaluma, CA .....	42,824	43,757	2.2
Sarasota-Bradenton-Venice, FL .....	36,424	36,781	1.0
Savannah, GA .....	36,695	37,846	3.1
Scranton-Wilkes-Barre, PA .....	34,205	34,902	2.0
Seattle-Tacoma-Bellevue, WA .....	51,924	53,667	3.4
Sheboygan, WI .....	37,049	37,834	2.1
Sherman-Denison, TX .....	35,672	36,081	1.1
Shreveport-Bossier City, LA .....	34,892	36,308	4.1
Sioux City, IA-NE-SD .....	33,025	34,326	3.9
Sioux Falls, SD .....	36,056	36,982	2.6
South Bend-Mishawaka, IN-MI .....	36,266	37,654	3.8
Spartanburg, SC .....	37,967	39,313	3.5

See footnotes at end of table.

**26. Continued — Average annual wages for 2007 and 2008 for all covered workers<sup>1</sup> by metropolitan area**

Metropolitan area <sup>2</sup>	Average annual wages <sup>3</sup>		
	2007	2008	Percent change, 2007-08
Spokane, WA .....	\$35,539	\$36,792	3.5
Springfield, IL .....	42,420	44,416	4.7
Springfield, MA .....	39,487	40,969	3.8
Springfield, MO .....	31,868	32,971	3.5
Springfield, OH .....	32,017	33,158	3.6
State College, PA .....	36,797	38,050	3.4
Stockton, CA .....	37,906	39,075	3.1
Sumter, SC .....	30,267	30,842	1.9
Syracuse, NY .....	39,620	40,554	2.4
Tallahassee, FL .....	36,543	37,433	2.4
Tampa-St. Petersburg-Clearwater, FL .....	39,215	40,521	3.3
Terre Haute, IN .....	32,349	33,562	3.7
Texarkana, TX-Texarkana, AR .....	34,079	35,002	2.7
Toledo, OH .....	38,538	39,686	3.0
Topeka, KS .....	36,109	36,714	1.7
Trenton-Ewing, NJ .....	56,645	60,135	6.2
Tucson, AZ .....	38,524	39,973	3.8
Tulsa, OK .....	38,942	40,205	3.2
Tuscaloosa, AL .....	36,737	37,949	3.3
Tyler, TX .....	37,184	38,817	4.4
Utica-Rome, NY .....	33,916	34,936	3.0
Valdosta, GA .....	27,842	29,288	5.2
Vallejo-Fairfield, CA .....	42,932	45,264	5.4
Vero Beach, FL .....	35,901	36,557	1.8
Victoria, TX .....	38,317	39,888	4.1
Vineland-Millville-Bridgeton, NJ .....	39,408	40,709	3.3
Virginia Beach-Norfolk-Newport News, VA-NC .....	37,734	38,696	2.5
Visalia-Porterville, CA .....	30,968	32,018	3.4
Waco, TX .....	34,679	35,698	2.9
Warner Robins, GA .....	39,220	40,457	3.2
Washington-Arlington-Alexandria, DC-VA-MD-WV .....	60,711	62,653	3.2
Waterloo-Cedar Falls, IA .....	35,899	37,363	4.1
Wausau, WI .....	35,710	36,477	2.1
Weirton-Steubenville, WV-OH .....	32,893	35,356	7.5
Wenatchee, WA .....	29,475	30,750	4.3
Wheeling, WV-OH .....	31,169	32,915	5.6
Wichita, KS .....	39,662	40,423	1.9
Wichita Falls, TX .....	32,320	34,185	5.8
Williamsport, PA .....	32,506	33,340	2.6
Wilmington, NC .....	34,239	35,278	3.0
Winchester, VA-WV .....	36,016	37,035	2.8
Winston-Salem, NC .....	38,921	39,770	2.2
Worcester, MA .....	44,652	45,955	2.9
Yakima, WA .....	29,743	30,821	3.6
Yauco, PR .....	19,380	19,821	2.3
York-Hanover, PA .....	38,469	39,379	2.4
Youngstown-Warren-Boardman, OH-PA .....	34,698	34,403	-0.9
Yuba City, CA .....	35,058	36,538	4.2
Yuma, AZ .....	30,147	31,351	4.0

<sup>1</sup> Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

<sup>2</sup> Includes data for Metropolitan Statistical Areas (MSA) as defined by OMB Bulletin No. 04-03 as of February 18, 2004.

<sup>3</sup> Each year's total is based on the MSA definition for the specific year. Annual changes include differences resulting from changes in MSA definitions.

<sup>4</sup> Totals do not include the six MSAs within Puerto Rico.

**27. Annual data: Employment status of the population**

[Numbers in thousands]

Employment status	1999 <sup>1</sup>	2000 <sup>1</sup>	2001 <sup>1</sup>	2002 <sup>1</sup>	2003	2004	2005	2006	2007	2008	2009
Civilian noninstitutional population.....	207,753	212,577	215,092	217,570	221,168	223,357	226,082	228,815	231,867	233,788	235,801
Civilian labor force.....	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428	153,124	154,287	154,142
Labor force participation rate.....	67.1	67.1	66.8	66.6	66.2	66.0	66.0	66.2	66.0	66.0	65.4
Employed.....	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427	146,047	145,362	139,877
Employment-population ratio.....	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1	63.0	62.2	59.3
Unemployed.....	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001	7,078	8,924	14,265
Unemployment rate.....	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3
Not in the labor force.....	68,385	69,994	71,359	72,707	74,658	75,956	76,762	77,387	78,743	79,501	81,659

<sup>1</sup> Not strictly comparable with prior years.

**28. Annual data: Employment levels by industry**

[In thousands]

Industry	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total private employment.....	108,686	110,995	110,708	108,828	108,416	109,814	111,899	114,113	115,380	114,281	108,369
Total nonfarm employment.....	128,993	131,785	131,826	130,341	129,999	131,435	133,703	136,086	137,598	136,790	130,912
Goods-producing.....	24,465	24,649	23,873	22,557	21,816	21,882	22,190	22,531	22,233	21,334	18,620
Natural resources and mining.....	598	599	606	583	572	591	628	684	724	767	700
Construction.....	6,545	6,787	6,826	6,716	6,735	6,976	7,336	7,691	7,630	7,162	6,037
Manufacturing.....	17,322	17,263	16,441	15,259	14,510	14,315	14,226	14,155	13,879	13,406	11,883
Private service-providing.....	84,221	86,346	86,834	86,271	86,600	87,932	89,709	91,582	93,147	92,947	89,749
Trade, transportation, and utilities.....	25,771	26,225	25,983	25,497	25,287	25,533	25,959	26,276	26,630	26,293	24,947
Wholesale trade.....	5,893	5,933	5,773	5,652	5,608	5,663	5,764	5,905	6,015	5,943	5,625
Retail trade.....	14,970	15,280	15,239	15,025	14,917	15,058	15,280	15,353	15,520	15,283	14,528
Transportation and warehousing.....	4,300	4,410	4,372	4,224	4,185	4,249	4,361	4,470	4,541	4,508	4,234
Utilities.....	609	601	599	596	577	564	554	549	553	559	561
Information.....	3,419	3,630	3,629	3,395	3,188	3,118	3,061	3,038	3,032	2,984	2,807
Financial activities.....	7,648	7,687	7,808	7,847	7,977	8,031	8,153	8,328	8,301	8,145	7,758
Professional and business services.....	15,957	16,666	16,476	15,976	15,987	16,394	16,954	17,566	17,942	17,735	16,580
Education and health services.....	14,798	15,109	15,645	16,199	16,588	16,953	17,372	17,826	18,322	18,838	19,190
Leisure and hospitality.....	11,543	11,862	12,036	11,986	12,173	12,493	12,816	13,110	13,427	13,436	13,102
Other services.....	5,087	5,168	5,258	5,372	5,401	5,409	5,395	5,438	5,494	5,515	5,364
Government.....	20,307	20,790	21,118	21,513	21,583	21,621	21,804	21,974	22,218	22,509	22,544

**29. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm payrolls, by industry**

Industry	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Private sector:</b>											
Average weekly hours.....	34.3	34.3	34.0	33.9	33.7	33.7	33.8	33.9	33.9	33.6	33.1
Average hourly earnings (in dollars).....	13.49	14.02	14.54	14.97	15.37	15.69	16.13	16.76	17.43	18.08	18.62
Average weekly earnings (in dollars).....	463.15	481.01	493.79	506.75	518.06	529.09	544.33	567.87	590.04	607.95	617.11
<b>Goods-producing:</b>											
Average weekly hours.....	40.8	40.7	39.9	39.9	39.8	40.0	40.1	40.5	40.6	40.2	39.2
Average hourly earnings (in dollars).....	14.71	15.27	15.78	16.33	16.80	17.19	17.60	18.02	18.67	19.33	19.90
Average weekly earnings (in dollars).....	599.99	621.86	630.01	651.61	669.13	688.13	705.31	730.16	757.34	776.66	779.79
<b>Natural resources and mining</b>											
Average weekly hours.....	44.2	44.4	44.6	43.2	43.6	44.5	45.6	45.6	45.9	45.1	43.3
Average hourly earnings (in dollars).....	16.33	16.55	17.00	17.19	17.56	18.07	18.72	19.90	20.97	22.50	23.29
Average weekly earnings (in dollars).....	721.74	734.92	757.92	741.97	765.94	803.82	853.71	907.95	962.64	1014.69	1007.92
<b>Construction:</b>											
Average weekly hours.....	39.0	39.2	38.7	38.4	38.4	38.3	38.6	39.0	39.0	38.5	37.6
Average hourly earnings (in dollars).....	16.80	17.48	18.00	18.52	18.95	19.23	19.46	20.02	20.95	21.87	22.67
Average weekly earnings (in dollars).....	655.11	685.78	695.89	711.82	726.83	735.55	750.22	781.21	816.66	842.61	852.48
<b>Manufacturing:</b>											
Average weekly hours.....	41.4	41.3	40.3	40.5	40.4	40.8	40.7	41.1	41.2	40.8	39.8
Average hourly earnings (in dollars).....	13.85	14.32	14.76	15.29	15.74	16.14	16.56	16.81	17.26	17.75	18.23
Average weekly earnings (in dollars).....	573.14	590.77	595.19	618.75	635.99	658.49	673.30	691.02	711.56	724.46	725.87
<b>Private service-providing:</b>											
Average weekly hours.....	32.7	32.7	32.5	32.5	32.3	32.3	32.4	32.5	32.4	32.3	32.1
Average hourly earnings (in dollars).....	13.09	13.62	14.18	14.59	14.99	15.29	15.74	16.42	17.11	17.77	18.35
Average weekly earnings (in dollars).....	427.98	445.74	461.08	473.80	484.68	494.22	509.58	532.78	554.89	574.35	588.07
<b>Trade, transportation, and utilities:</b>											
Average weekly hours.....	33.9	33.8	33.5	33.6	33.6	33.5	33.4	33.4	33.3	33.2	32.9
Average hourly earnings (in dollars).....	12.82	13.31	13.70	14.02	14.34	14.58	14.92	15.39	15.78	16.16	16.50
Average weekly earnings (in dollars).....	434.31	449.88	459.53	471.27	481.14	488.42	498.43	514.34	526.07	536.06	542.47
<b>Wholesale trade:</b>											
Average weekly hours.....	38.6	38.8	38.4	38.0	37.9	37.8	37.7	38.0	38.2	38.2	37.6
Average hourly earnings (in dollars).....	15.62	16.28	16.77	16.98	17.36	17.65	18.16	18.91	19.59	20.13	20.85
Average weekly earnings (in dollars).....	602.77	631.40	643.45	644.38	657.29	667.09	685.00	718.63	748.94	769.62	784.72
<b>Retail trade:</b>											
Average weekly hours.....	30.8	30.7	30.7	30.9	30.9	30.7	30.6	30.5	30.2	30.0	29.9
Average hourly earnings (in dollars).....	10.45	10.86	11.29	11.67	11.90	12.08	12.36	12.57	12.75	12.87	13.02
Average weekly earnings (in dollars).....	602.77	631.40	643.45	644.38	657.29	667.09	685.00	718.63	748.94	769.62	784.72
<b>Transportation and warehousing:</b>											
Average weekly hours.....	37.6	37.4	36.7	36.8	36.8	37.2	37.0	36.9	37.0	36.4	36.1
Average hourly earnings (in dollars).....	14.55	15.05	15.33	15.76	16.25	16.52	16.70	17.28	17.72	18.41	18.80
Average weekly earnings (in dollars).....	547.97	562.31	562.70	579.88	598.41	614.96	618.58	636.97	654.95	670.37	677.72
<b>Utilities:</b>											
Average weekly hours.....	42.0	42.0	41.4	40.9	41.1	40.9	41.1	41.4	42.4	42.7	42.1
Average hourly earnings (in dollars).....	22.03	22.75	23.58	23.96	24.77	25.61	26.68	27.40	27.88	28.83	29.56
Average weekly earnings (in dollars).....	924.59	955.66	977.18	979.09	1017.27	1048.44	1095.90	1135.34	1182.65	1230.69	1243.79
<b>Information:</b>											
Average weekly hours.....	36.7	36.8	36.9	36.5	36.2	36.3	36.5	36.6	36.5	36.7	36.6
Average hourly earnings (in dollars).....	18.40	19.07	19.80	20.20	21.01	21.40	22.06	23.23	23.96	24.78	25.45
Average weekly earnings (in dollars).....	675.47	700.86	730.88	737.77	760.45	777.25	805.08	850.42	874.65	908.99	931.81
<b>Financial activities:</b>											
Average weekly hours.....	35.8	35.9	35.8	35.6	35.5	35.5	35.9	35.7	35.9	35.8	36.1
Average hourly earnings (in dollars).....	14.47	14.98	15.59	16.17	17.14	17.52	17.95	18.80	19.64	20.28	20.83
Average weekly earnings (in dollars).....	517.57	537.37	557.92	575.54	609.08	622.87	644.99	672.21	705.13	727.07	751.04
<b>Professional and business services:</b>											
Average weekly hours.....	34.4	34.5	34.2	34.2	34.1	34.2	34.2	34.6	34.8	34.8	34.7
Average hourly earnings (in dollars).....	14.85	15.52	16.33	16.81	17.21	17.48	18.08	19.13	20.15	21.18	22.35
Average weekly earnings (in dollars).....	510.99	535.07	557.84	574.66	587.02	597.56	618.87	662.27	700.82	737.70	775.78
<b>Education and health services:</b>											
Average weekly hours.....	32.1	32.2	32.3	32.4	32.3	32.4	32.6	32.5	32.6	32.5	32.3
Average hourly earnings (in dollars).....	13.44	13.95	14.64	15.21	15.64	16.15	16.71	17.38	18.11	18.87	19.49
Average weekly earnings (in dollars).....	431.35	449.29	473.39	492.74	505.69	523.78	544.59	564.94	590.09	613.73	628.59
<b>Leisure and hospitality:</b>											
Average weekly hours.....	26.1	26.1	25.8	25.8	25.6	25.7	25.7	25.7	25.5	25.2	24.8
Average hourly earnings (in dollars).....	7.96	8.32	8.57	8.81	9.00	9.15	9.38	9.75	10.41	10.84	11.11
Average weekly earnings (in dollars).....	208.05	217.20	220.73	227.17	230.42	234.86	241.36	250.34	265.52	273.39	275.78
<b>Other services:</b>											
Average weekly hours.....	32.5	32.5	32.3	32.0	31.4	31.0	30.9	30.9	30.9	30.8	30.5
Average hourly earnings (in dollars).....	12.26	12.73	13.27	13.72	13.84	13.98	14.34	14.77	15.42	16.09	16.59
Average weekly earnings (in dollars).....	398.77	413.41	428.64	439.76	434.41	433.04	443.37	456.50	477.06	495.57	506.31

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.



**30. Employment Cost Index, compensation,<sup>1</sup> by occupation and industry group**

[December 2005 = 100]

Series	2007		2008				2009				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended	
	Dec. 2009											
<b>Civilian workers<sup>2</sup></b> .....	106.7	107.6	108.3	109.2	109.5	109.9	110.3	110.8	111.1		0.3	1.5
Workers by occupational group												
Management, professional, and related.....	107.2	108.3	109.0	110.1	110.4	110.9	111.1	111.5	111.7		.2	1.2
Management, business, and financial.....	106.6	108.2	108.9	109.7	109.8	110.0	110.1	110.2	110.4		.2	.5
Professional and related.....	107.6	108.4	109.0	110.4	110.7	111.3	111.6	112.2	112.4		.2	1.5
Sales and office.....	106.4	106.8	107.7	108.2	108.3	108.4	108.7	109.4	109.7		.3	1.3
Sales and related.....	105.2	105.0	106.1	106.0	105.5	104.3	104.5	105.4	105.8		.4	.3
Office and administrative support.....	107.1	108.0	108.6	109.5	110.0	110.8	111.3	111.8	112.1		.3	1.9
Natural resources, construction, and maintenance.....	106.8	107.7	108.4	109.3	109.8	110.1	110.7	111.2	111.6		.4	1.6
Construction and extraction.....	107.4	108.5	109.6	110.3	110.8	111.0	111.6	112.2	112.5		.3	1.5
Installation, maintenance, and repair.....	106.2	106.7	107.0	108.0	108.6	109.1	109.5	110.0	110.4		.4	1.7
Production, transportation, and material moving.....	104.7	105.6	106.2	106.9	107.2	108.0	108.5	109.1	109.3		.2	2.0
Production.....	104.1	104.8	105.3	105.9	106.2	107.2	107.7	108.1	108.4		.3	2.1
Transportation and material moving.....	105.6	106.6	107.3	108.1	108.4	108.9	109.5	110.2	110.4		.2	1.8
Service occupations.....	107.7	108.4	109.1	110.2	110.6	111.5	111.9	112.6	113.0		.4	2.2
Workers by industry												
Goods-producing.....	105.0	106.1	106.8	107.3	107.5	108.0	108.2	108.5	108.7		.2	1.1
Manufacturing.....	103.8	104.7	105.1	105.6	105.9	106.5	106.7	106.8	107.0		.2	1.0
Service-providing.....	107.0	107.8	108.5	109.5	109.8	110.3	110.6	111.3	111.5		.2	1.5
Education and health services.....	107.9	108.6	109.2	110.8	111.1	111.7	112.2	113.2	113.4		.2	2.1
Health care and social assistance.....	107.9	108.9	109.6	110.4	110.8	111.7	112.2	112.8	113.2		.4	2.2
Hospitals.....	107.5	108.4	109.2	110.2	110.8	111.7	112.3	112.9	113.4		.4	2.3
Nursing and residential care facilities.....	106.3	107.3	108.2	109.0	109.6	110.3	110.8	111.3	111.5		.2	1.7
Education services.....	107.9	108.3	108.9	111.1	111.3	111.8	112.1	113.5	113.6		.1	2.1
Elementary and secondary schools.....	107.9	108.2	108.8	111.1	111.4	111.9	112.1	113.9	114.0		.1	2.3
Public administration <sup>3</sup> .....	109.1	109.7	110.1	111.6	112.0	113.0	113.8	114.5	115.1		.5	2.8
<b>Private industry workers</b> .....	106.3	107.3	108.0	108.7	108.9	109.3	109.6	110.0	110.2		.2	1.2
Workers by occupational group												
Management, professional, and related.....	106.8	108.1	108.9	109.6	109.9	110.4	110.5	110.6	110.7		.1	.7
Management, business, and financial.....	106.3	108.0	108.7	109.3	109.5	109.6	109.7	109.7	109.9		.2	.4
Professional and related.....	107.3	108.3	109.0	109.9	110.3	111.0	111.1	111.4	111.4		.0	1.0
Sales and office.....	106.1	106.6	107.5	107.9	107.9	107.9	108.3	108.8	109.2		.4	1.2
Sales and related.....	105.2	105.0	106.2	106.0	105.5	104.3	104.5	105.3	105.8		.5	.3
Office and administrative support.....	106.7	107.8	108.5	109.2	109.6	110.5	110.9	111.3	111.6		.3	1.8
Natural resources, construction, and maintenance.....	106.7	107.6	108.3	109.0	109.6	109.9	110.3	110.9	111.2		.3	1.5
Construction and extraction.....	107.4	108.6	109.7	110.3	110.8	110.9	111.5	112.0	112.4		.4	1.4
Installation, maintenance, and repair.....	105.8	106.3	106.6	107.4	108.1	108.6	108.9	109.4	109.8		.4	1.6
Production, transportation, and material moving.....	104.5	105.5	106.0	106.6	106.9	107.7	108.1	108.6	108.9		.3	1.9
Production.....	104.0	104.8	105.2	105.8	106.1	107.1	107.6	108.0	108.3		.3	2.1
Transportation and material moving.....	105.3	106.4	107.2	107.7	107.9	108.4	108.9	109.6	109.7		.1	1.7
Service occupations.....	107.0	107.8	108.7	109.4	109.8	110.7	110.9	111.7	111.8		.1	1.8
Workers by industry and occupational group												
Goods-producing industries.....	105.0	106.1	106.8	107.2	107.5	107.9	108.2	108.4	108.6		.2	1.0
Management, professional, and related.....	104.4	106.1	106.6	106.7	106.6	106.8	106.7	106.5	106.4		-.1	-.2
Sales and office.....	104.8	105.1	106.3	106.7	107.1	107.3	107.4	107.5	107.8		.3	.7
Natural resources, construction, and maintenance.....	107.0	108.1	109.0	109.8	110.4	110.4	110.9	111.3	111.7		.4	1.2
Production, transportation, and material moving.....	104.0	104.8	105.3	105.8	106.2	107.0	107.5	107.8	108.0		.2	1.7
Construction.....	107.6	108.9	110.1	110.6	110.9	110.9	111.2	111.5	111.7		.2	.7
Manufacturing.....	103.8	104.7	105.1	105.6	105.9	106.5	106.7	106.8	107.0		.2	1.0
Management, professional, and related.....	103.5	104.9	105.2	105.4	105.4	105.7	105.7	105.4	105.5		.1	.1
Sales and office.....	104.3	105.0	106.1	106.7	107.0	107.3	107.1	107.2	107.5		.3	.5
Natural resources, construction, and maintenance.....	103.9	104.6	104.5	105.3	106.0	106.6	107.1	107.4	107.7		.3	1.6
Production, transportation, and material moving.....	103.8	104.5	105.0	105.5	105.8	106.7	107.2	107.5	107.8		.3	1.9
Service-providing industries.....	106.7	107.7	108.5	109.1	109.4	109.8	110.1	110.5	110.8		.3	1.3
Management, professional, and related.....	107.3	108.5	109.3	110.2	110.6	111.1	111.2	111.4	111.6		.2	.9
Sales and office.....	106.3	106.8	107.7	108.0	108.0	108.0	108.4	109.0	109.4		.4	1.3
Natural resources, construction, and maintenance.....	106.2	106.7	107.3	107.8	108.4	109.0	109.5	110.1	110.4		.3	1.8
Production, transportation, and material moving.....	105.2	106.4	107.0	107.6	107.8	108.5	109.0	109.7	109.9		.2	1.9
Service occupations.....	107.1	107.9	108.7	109.5	109.8	110.7	111.0	111.7	111.9		.2	1.9
Trade, transportation, and utilities.....	105.5	106.1	107.3	107.6	107.5	107.8	108.1	108.6	108.8		.2	1.2

See footnotes at end of table.

### 30. Continued—Employment Cost Index, compensation,<sup>1</sup> by occupation and industry group

[December 2005 = 100]

Series	2007		2008				2009				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended	
	Dec. 2009											
Wholesale trade.....	105.3	105.7	107.2	107.1	106.8	107.1	106.9	106.8	107.0	0.2	0.2	
Retail trade.....	106.1	106.6	107.6	108.2	108.1	108.3	108.8	109.7	110.0	.3	1.8	
Transportation and warehousing.....	104.5	105.6	106.4	106.8	106.9	107.4	107.9	108.3	108.2	-.1	1.2	
Utilities.....	105.6	106.5	108.1	108.1	108.9	109.6	110.9	111.2	112.0	.7	2.8	
Information.....	106.1	106.1	106.2	107.2	107.4	107.7	107.5	108.0	108.3	.3	.8	
Financial activities.....	105.6	106.8	107.3	107.4	107.1	106.8	107.9	108.3	108.6	.3	1.4	
Finance and insurance.....	106.1	107.0	107.7	107.6	107.2	106.9	108.1	108.6	108.8	.2	1.5	
Real estate and rental and leasing.....	103.7	105.5	105.7	106.4	106.6	106.6	106.9	107.4	107.7	.3	1.0	
Professional and business services.....	107.5	109.0	109.9	110.8	111.6	111.9	111.9	112.1	112.4	.3	.7	
Education and health services.....	107.7	108.6	109.4	110.3	110.6	111.5	111.9	112.6	112.8	.2	2.0	
Education services.....	107.5	108.1	109.1	111.4	111.3	111.9	112.0	113.2	113.2	.0	1.7	
Health care and social assistance.....	107.8	108.8	109.4	110.1	110.5	111.5	111.9	112.5	112.8	.3	2.1	
Hospitals.....	107.3	108.2	109.1	110.1	110.7	111.5	112.0	112.6	113.2	.5	2.3	
Leisure and hospitality.....	108.1	109.0	109.3	110.6	111.4	112.2	112.0	112.7	112.7	.0	1.2	
Accommodation and food services.....	108.6	109.5	110.0	111.4	112.1	113.0	112.6	113.4	113.5	.1	1.2	
Other services, except public administration.....	107.6	108.7	109.4	109.9	109.9	110.8	110.8	111.8	111.5	-.3	1.5	
<b>State and local government workers.....</b>	<b>108.4</b>	<b>108.9</b>	<b>109.4</b>	<b>111.3</b>	<b>111.6</b>	<b>112.3</b>	<b>112.9</b>	<b>114.0</b>	<b>114.3</b>	<b>.3</b>	<b>2.4</b>	
Workers by occupational group												
Management, professional, and related.....	108.3	108.8	109.3	111.3	111.6	112.0	112.6	113.7	113.9	.2	2.1	
Professional and related.....	108.2	108.6	109.1	111.1	111.4	111.9	112.4	113.7	114.0	.3	2.3	
Sales and office.....	108.6	108.8	109.3	111.0	111.3	112.4	113.0	114.3	114.7	.3	3.1	
Office and administrative support.....	108.9	109.3	109.8	111.4	111.8	112.8	113.3	114.7	115.0	.3	2.9	
Service occupations.....	109.1	109.7	110.0	111.9	112.4	113.4	114.0	114.9	115.6	.6	2.8	
Workers by industry												
Education and health services.....	108.2	108.6	109.1	111.2	111.5	111.9	112.4	113.7	114.0	.3	2.2	
Education services.....	108.0	108.4	108.8	111.0	111.2	111.8	112.1	113.5	113.7	.2	2.2	
Schools.....	108.0	108.4	108.8	111.0	111.2	111.8	112.1	113.5	113.7	.2	2.2	
Elementary and secondary schools.....	108.0	108.3	108.8	111.1	111.4	112.0	112.2	114.0	114.1	.1	2.4	
Health care and social assistance.....	109.3	110.1	111.1	112.7	113.2	113.3	114.8	115.3	115.8	.4	2.3	
Hospitals.....	108.2	109.2	109.7	110.8	111.3	112.4	113.5	114.0	114.5	.4	2.9	
Public administration <sup>3</sup> .....	109.1	109.7	110.1	111.6	112.0	113.0	113.8	114.5	115.1	.5	2.8	

<sup>1</sup> Cost (cents per hour worked) measured in the Employment Cost Index consists of wages, salaries, and employer cost of employee benefits.

<sup>2</sup> Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

<sup>3</sup> Consists of legislative, judicial, administrative, and regulatory activities.

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

**31. Employment Cost Index, wages and salaries, by occupation and industry group**

[December 2005 = 100]

Series	2007		2008				2009				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended	
	Dec. 2009											
<b>Civilian workers<sup>1</sup></b> .....	106.7	107.6	108.4	109.3	109.6	110.0	110.4	110.9	111.2	0.3	1.5	
Workers by occupational group												
Management, professional, and related.....	107.1	108.2	109.0	110.1	110.5	111.0	111.2	111.5	111.8	.3	1.2	
Management, business, and financial.....	106.7	108.2	109.0	109.8	110.1	110.4	110.5	110.6	110.9	.3	.7	
Professional and related.....	107.4	108.3	109.0	110.3	110.7	111.2	111.5	112.1	112.2	.1	1.4	
Sales and office.....	106.2	106.7	107.7	108.1	108.1	108.1	108.6	109.2	109.7	.5	1.5	
Sales and related.....	105.5	105.2	106.6	106.3	105.6	104.3	104.7	105.7	106.2	.5	.6	
Office and administrative support.....	106.8	107.8	108.5	109.3	109.8	110.6	111.2	111.6	111.9	.3	1.9	
Natural resources, construction, and maintenance.....	107.1	108.1	109.0	109.9	110.6	110.7	111.2	111.7	112.1	.4	1.4	
Construction and extraction.....	107.7	109.0	109.9	110.7	111.3	111.4	111.8	112.3	112.7	.4	1.3	
Installation, maintenance, and repair.....	106.4	107.0	107.8	108.8	109.6	110.0	110.5	111.1	111.5	.4	1.7	
Production, transportation, and material moving.....	105.1	106.1	106.9	107.7	108.0	108.5	109.0	109.6	109.9	.3	1.8	
Production.....	104.7	105.7	106.5	107.2	107.5	108.2	108.7	109.2	109.4	.2	1.8	
Transportation and material moving.....	105.5	106.6	107.3	108.2	108.5	108.8	109.5	110.2	110.4	.2	1.8	
Service occupations.....	107.3	108.0	108.7	109.9	110.3	111.2	111.6	112.4	112.7	.3	2.2	
Workers by industry												
Goods-producing.....	106.0	107.1	108.0	108.6	109.0	109.2	109.5	109.8	110.1	.3	1.0	
Manufacturing.....	104.9	105.9	106.7	107.4	107.7	108.1	108.4	108.6	108.9	.3	1.1	
Service-providing.....	106.8	107.7	108.5	109.4	109.7	110.2	110.5	111.1	111.4	.3	1.5	
Education and health services.....	107.4	108.0	108.7	110.2	110.5	111.0	111.4	112.3	112.6	.3	1.9	
Health care and social assistance.....	107.9	108.9	109.6	110.4	110.9	111.7	112.2	112.8	113.2	.4	2.1	
Hospitals.....	107.4	108.4	109.4	110.5	111.3	112.0	112.6	113.2	113.7	.4	2.2	
Nursing and residential care facilities.....	106.4	107.4	108.1	109.1	109.7	110.3	110.9	111.4	111.7	.3	1.8	
Education services.....	106.9	107.3	107.9	110.0	110.2	110.5	110.7	111.8	112.0	.2	1.6	
Elementary and secondary schools.....	106.6	107.0	107.5	109.9	110.1	110.4	110.5	112.0	112.1	.1	1.8	
Public administration <sup>2</sup> .....	107.4	108.2	108.6	109.9	110.4	111.3	112.3	112.8	113.3	.4	2.6	
<b>Private industry workers</b> .....	106.6	107.6	108.4	109.1	109.4	109.8	110.1	110.6	110.9	.3	1.4	
Workers by occupational group												
Management, professional, and related.....	107.2	108.5	109.3	110.1	110.5	111.1	111.1	111.3	111.5	.2	.9	
Management, business, and financial.....	106.6	108.2	109.0	109.7	110.0	110.3	110.3	110.4	110.8	.4	.7	
Professional and related.....	107.6	108.7	109.5	110.4	110.9	111.6	111.8	112.1	112.1	.0	1.1	
Sales and office.....	106.2	106.7	107.7	108.0	108.0	107.9	108.3	109.0	109.4	.4	1.3	
Sales and related.....	105.5	105.3	106.6	106.4	105.7	104.3	104.7	105.7	106.2	.5	.5	
Office and administrative support.....	106.7	107.7	108.5	109.2	109.7	110.6	111.1	111.4	111.8	.4	1.9	
Natural resources, construction, and maintenance.....	107.1	108.1	109.0	109.8	110.5	110.6	111.0	111.6	112.0	.4	1.4	
Construction and extraction.....	107.8	109.2	110.1	110.8	111.5	111.4	111.7	112.3	112.7	.4	1.1	
Installation, maintenance, and repair.....	106.1	106.8	107.6	108.5	109.3	109.7	110.2	110.7	111.2	.5	1.7	
Production, transportation, and material moving.....	105.0	106.0	106.8	107.5	107.8	108.3	108.8	109.4	109.6	.2	1.7	
Production.....	104.6	105.6	106.4	107.2	107.4	108.1	108.5	109.0	109.3	.3	1.8	
Transportation and material moving.....	105.4	106.5	107.4	108.0	108.3	108.5	109.2	109.9	110.1	.2	1.7	
Service occupations.....	107.1	107.9	108.8	109.7	110.1	111.0	111.2	112.1	112.3	.2	2.0	
Workers by industry and occupational group												
Goods-producing industries.....	106.0	107.1	108.0	108.6	109.0	109.2	109.5	109.8	110.0	.2	.9	
Management, professional, and related.....	106.0	107.7	108.4	108.7	108.8	109.3	109.3	109.4	109.4	.0	.6	
Sales and office.....	105.5	105.8	107.2	107.6	107.9	108.1	108.3	108.4	108.8	.4	.8	
Natural resources, construction, and maintenance.....	107.6	108.8	109.6	110.5	111.3	111.1	111.4	111.9	112.3	.4	.9	
Production, transportation, and material moving.....	104.8	105.7	106.6	107.3	107.6	108.0	108.5	108.9	109.1	.2	1.4	
Construction.....	107.8	109.0	110.0	110.6	111.1	111.2	111.4	111.7	111.9	.2	.7	
Manufacturing.....	104.9	105.9	106.7	107.4	107.7	108.1	108.4	108.6	108.9	.3	1.1	
Management, professional, and related.....	105.3	106.7	107.2	107.6	107.8	108.4	108.5	108.6	108.7	.1	.8	
Sales and office.....	104.7	105.5	106.9	107.6	108.1	108.2	108.2	108.3	108.7	.4	.6	
Natural resources, construction, and maintenance.....	105.9	106.8	107.1	108.1	109.0	108.8	109.2	109.7	109.9	.2	.8	
Production, transportation, and material moving.....	104.5	105.4	106.3	107.1	107.3	107.7	108.2	108.6	108.9	.3	1.5	
Service-providing industries.....	106.8	107.7	108.6	109.3	109.6	110.0	110.3	110.8	111.1	.3	1.4	
Management, professional, and related.....	107.4	108.6	109.4	110.3	110.8	111.4	111.5	111.7	111.9	.2	1.0	
Sales and office.....	106.3	106.8	107.7	108.0	108.0	107.9	108.3	109.0	109.5	.5	1.4	
Natural resources, construction, and maintenance.....	106.3	106.9	108.0	108.6	109.3	109.9	110.5	111.2	111.6	.4	2.1	
Production, transportation, and material moving.....	105.2	106.3	107.1	107.8	108.1	108.6	109.3	110.0	110.2	.2	1.9	
Service occupations.....	107.2	108.0	108.8	109.7	110.1	111.0	111.3	112.2	112.3	.1	2.0	
Trade, transportation, and utilities.....	105.5	105.9	107.2	107.5	107.4	107.8	108.2	108.7	108.9	.2	1.4	

**31. Continued—Employment Cost Index, wages and salaries, by occupation and industry group**

[December 2005 = 100]

Series	2007	2008				2009					Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended	
	Dec. 2009											
Wholesale trade.....	105.2	105.2	107.2	106.8	106.4	106.8	106.5	106.2	106.4	0.2	0.0	
Retail trade.....	106.1	106.4	107.6	108.1	108.1	108.3	108.9	110.0	110.4	.4	2.1	
Transportation and warehousing.....	104.2	105.0	106.0	106.7	106.9	107.2	107.9	108.3	108.3	.0	1.3	
Utilities.....	106.8	108.0	109.3	109.3	109.6	111.0	112.0	112.2	113.3	1.0	3.4	
Information.....	105.3	105.3	106.3	107.3	107.5	107.8	108.1	108.7	109.1	.4	1.5	
Financial activities.....	105.9	107.2	107.7	107.7	107.2	106.8	107.9	108.5	108.9	.4	1.6	
Finance and insurance.....	106.6	107.9	108.4	108.2	107.6	107.1	108.5	109.0	109.4	.4	1.7	
Real estate and rental and leasing.....	103.1	104.5	104.7	105.3	105.7	105.6	105.8	106.3	106.8	.5	1.0	
Professional and business services.....	107.5	109.1	110.0	111.0	111.9	112.3	112.2	112.3	112.7	.4	.7	
Education and health services.....	107.7	108.6	109.2	110.2	110.6	111.4	111.8	112.5	112.8	.3	2.0	
Education services.....	107.4	107.9	108.6	110.8	110.8	111.1	111.2	112.2	112.6	.4	1.6	
Health care and social assistance.....	107.8	108.7	109.4	110.1	110.6	111.5	111.9	112.5	112.8	.3	2.0	
Hospitals.....	107.2	108.2	109.2	110.3	111.1	111.8	112.3	112.9	113.4	.4	2.1	
Leisure and hospitality.....	108.8	109.7	109.9	111.4	112.3	113.1	112.8	113.7	113.8	.1	1.3	
Accommodation and food services.....	109.0	110.0	110.4	111.9	112.8	113.7	113.2	114.2	114.3	.1	1.3	
Other services, except public administration.....	107.9	109.2	109.9	110.4	110.4	111.4	111.4	112.5	112.1	-.4	1.5	
<b>State and local government workers.....</b>	<b>107.1</b>	<b>107.7</b>	<b>108.2</b>	<b>110.1</b>	<b>110.4</b>	<b>110.9</b>	<b>111.5</b>	<b>112.4</b>	<b>112.6</b>	<b>.2</b>	<b>2.0</b>	
Workers by occupational group												
Management, professional, and related.....	107.0	107.6	108.2	110.1	110.4	110.7	111.2	112.1	112.3	.2	1.7	
Professional and related.....	107.0	107.5	108.1	110.1	110.3	110.6	111.1	112.1	112.3	.2	1.8	
Sales and office.....	107.0	107.4	107.9	109.3	109.7	110.5	111.2	112.1	112.4	.3	2.5	
Office and administrative support.....	107.3	107.8	108.3	109.7	110.1	111.0	111.6	112.6	112.9	.3	2.5	
Service occupations.....	107.7	108.3	108.6	110.4	110.9	112.0	112.7	113.3	113.8	.4	2.6	
Workers by industry												
Education and health services.....	107.1	107.5	108.1	110.2	110.5	110.7	111.1	112.1	112.3	.2	1.6	
Education services.....	106.8	107.2	107.7	109.9	110.1	110.4	110.7	111.7	111.9	.2	1.6	
Schools.....	106.8	107.2	107.7	109.9	110.1	110.4	110.7	111.7	111.9	.2	1.6	
Elementary and secondary schools.....	106.6	106.9	107.5	109.8	110.1	110.3	110.5	112.0	112.1	.1	1.8	
Health care and social assistance.....	109.2	110.1	111.0	112.8	113.4	113.1	114.8	115.2	115.6	.3	1.9	
Hospitals.....	108.6	109.8	110.3	111.4	112.1	112.8	114.0	114.4	114.9	.4	2.5	
Public administration <sup>2</sup> .....	107.4	108.2	108.6	109.9	110.4	111.3	112.3	112.8	113.3	.4	2.6	

<sup>1</sup> Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

<sup>2</sup> Consists of legislative, judicial, administrative, and regulatory activities.

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North

American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

**32. Employment Cost Index, benefits, by occupation and industry group**

[December 2005 = 100]

Series	2007	2008				2009				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
	Dec. 2009										
<b>Civilian workers</b> .....	106.8	107.6	108.1	108.9	109.1	109.7	110.0	110.6	110.7	0.1	1.5
<b>Private industry workers</b> .....	105.6	106.5	107.0	107.5	107.7	108.2	108.4	108.7	108.8	.1	1.0
Workers by occupational group											
Management, professional, and related.....	106.0	107.3	107.9	108.5	108.5	108.8	108.8	108.9	108.8	-.1	.3
Sales and office.....	106.0	106.5	107.0	107.6	107.8	108.0	108.1	108.5	108.7	.2	.8
Natural resources, construction, and maintenance.....	105.9	106.5	107.0	107.5	107.7	108.2	108.8	109.3	109.5	.2	1.7
Production, transportation, and material moving.....	103.7	104.4	104.5	104.8	105.1	106.4	106.8	107.1	107.4	.3	2.2
Service occupations.....	106.7	107.6	108.5	108.7	108.8	109.7	110.0	110.4	110.5	.1	1.6
Workers by industry											
Goods-producing.....	103.2	104.0	104.4	104.6	104.7	105.4	105.7	105.7	105.8	.1	1.1
Manufacturing.....	101.7	102.3	102.2	102.3	102.5	103.5	103.6	103.4	103.6	.2	1.1
Service-providing.....	106.6	107.6	108.1	108.7	108.9	109.3	109.5	109.9	109.9	.0	.9
<b>State and local government workers</b> .....	111.0	111.4	111.8	113.9	114.2	115.2	115.8	117.5	117.9	.3	3.2

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior

to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

### 33. Employment Cost Index, private industry workers by bargaining status and region

[December 2005 = 100]

Series	2007		2008				2009				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended	
											Dec. 2009	
<b>COMPENSATION</b>												
<b>Workers by bargaining status<sup>1</sup></b>												
Union.....	105.1	105.9	106.7	107.4	108.0	109.1	109.8	110.5	111.1	0.5	2.9	
Goods-producing.....	104.0	104.6	105.6	106.2	106.9	108.0	108.9	109.5	110.0	.5	2.9	
Manufacturing.....	101.0	101.4	101.7	102.1	102.8	104.4	104.8	105.4	105.8	.4	2.9	
Service-providing.....	106.0	107.0	107.5	108.3	108.8	109.9	110.6	111.3	111.9	.5	2.8	
Nonunion.....	106.5	107.5	108.3	108.9	109.1	109.4	109.6	109.9	110.1	.2	.9	
Goods-producing.....	105.4	106.5	107.1	107.6	107.7	107.9	108.0	108.0	108.2	.2	.5	
Manufacturing.....	104.6	105.6	106.2	106.6	106.8	107.1	107.3	107.3	107.5	.2	.7	
Service-providing.....	106.8	107.7	108.6	109.2	109.4	109.8	110.0	110.4	110.6	.2	1.1	
<b>Workers by region<sup>1</sup></b>												
Northeast.....	106.8	107.4	108.1	108.7	109.5	109.8	110.2	110.7	111.0	.3	1.4	
South.....	106.7	107.8	108.5	109.1	109.3	109.8	110.1	110.6	110.7	.1	1.3	
Midwest.....	105.3	106.0	107.0	107.4	107.6	107.9	108.1	108.4	108.6	.2	.9	
West.....	106.5	107.8	108.4	109.3	109.4	109.9	110.1	110.3	110.7	.4	1.2	
<b>WAGES AND SALARIES</b>												
<b>Workers by bargaining status<sup>1</sup></b>												
Union.....	104.7	105.5	106.7	107.4	108.1	108.8	109.6	110.2	110.9	.6	2.6	
Goods-producing.....	104.3	105.2	106.4	107.1	107.7	108.2	108.8	109.5	109.8	.3	1.9	
Manufacturing.....	102.6	103.4	104.4	104.9	105.5	106.0	106.4	107.0	107.3	.3	1.7	
Service-providing.....	104.9	105.8	106.9	107.7	108.3	109.2	110.1	110.8	111.6	.7	3.0	
Nonunion.....	106.9	107.9	108.7	109.4	109.6	110.0	110.2	110.6	110.9	.3	1.2	
Goods-producing.....	106.4	107.7	108.4	109.0	109.3	109.5	109.7	109.9	110.1	.2	.7	
Manufacturing.....	105.5	106.6	107.3	108.0	108.2	108.6	108.9	109.1	109.3	.2	1.0	
Service-providing.....	107.0	107.9	108.8	109.4	109.7	110.1	110.3	110.8	111.0	.2	1.2	
<b>Workers by region<sup>1</sup></b>												
Northeast.....	106.6	107.5	108.2	108.7	109.6	109.9	110.3	110.8	111.1	.3	1.4	
South.....	107.0	108.1	109.1	109.8	110.0	110.4	110.7	111.3	111.5	.2	1.4	
Midwest.....	105.6	106.3	107.5	107.9	108.0	108.4	108.6	108.9	109.2	.3	1.1	
West.....	107.0	108.3	108.9	109.9	110.1	110.5	110.8	111.2	111.6	.4	1.4	

<sup>1</sup> The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the Monthly Labor Review Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

**34. National Compensation Survey: Retirement benefits in private industry by access, participation, and selected series, 2003–2007**

Series	Year				
	2003	2004	2005	2006	2007 <sup>1</sup>
<b>All retirement</b>					
<b>Percentage of workers with access</b>					
All workers.....	57	59	60	60	61
White-collar occupations <sup>2</sup> .....	67	69	70	69	-
Management, professional, and related .....	-	-	-	-	76
Sales and office .....	-	-	-	-	64
Blue-collar occupations <sup>2</sup> .....	59	59	60	62	-
Natural resources, construction, and maintenance.....	-	-	-	-	61
Production, transportation, and material moving.....	-	-	-	-	65
Service occupations.....	28	31	32	34	36
Full-time.....	67	68	69	69	70
Part-time.....	24	27	27	29	31
Union.....	86	84	88	84	84
Non-union.....	54	56	56	57	58
Average wage less than \$15 per hour.....	45	46	46	47	47
Average wage \$15 per hour or higher.....	76	77	78	77	76
Goods-producing industries.....	70	70	71	73	70
Service-providing industries.....	53	55	56	56	58
Establishments with 1-99 workers.....	42	44	44	44	45
Establishments with 100 or more workers.....	75	77	78	78	78
<b>Percentage of workers participating</b>					
All workers.....	49	50	50	51	51
White-collar occupations <sup>2</sup> .....	59	61	61	60	-
Management, professional, and related .....	-	-	-	-	69
Sales and office .....	-	-	-	-	54
Blue-collar occupations <sup>2</sup> .....	50	50	51	52	-
Natural resources, construction, and maintenance.....	-	-	-	-	51
Production, transportation, and material moving.....	-	-	-	-	54
Service occupations.....	21	22	22	24	25
Full-time.....	58	60	60	60	60
Part-time.....	18	20	19	21	23
Union.....	83	81	85	80	81
Non-union.....	45	47	46	47	47
Average wage less than \$15 per hour.....	35	36	35	36	36
Average wage \$15 per hour or higher.....	70	71	71	70	69
Goods-producing industries.....	63	63	64	64	61
Service-providing industries.....	45	47	47	47	48
Establishments with 1-99 workers.....	35	37	37	37	37
Establishments with 100 or more workers.....	65	67	67	67	66
<b>Take-up rate (all workers)<sup>3</sup>.....</b>	-	-	85	85	84
<b>Defined Benefit</b>					
<b>Percentage of workers with access</b>					
All workers.....	20	21	22	21	21
White-collar occupations <sup>2</sup> .....	23	24	25	23	-
Management, professional, and related .....	-	-	-	-	29
Sales and office .....	-	-	-	-	19
Blue-collar occupations <sup>2</sup> .....	24	26	26	25	-
Natural resources, construction, and maintenance.....	-	-	-	-	26
Production, transportation, and material moving.....	-	-	-	-	26
Service occupations.....	8	6	7	8	8
Full-time.....	24	25	25	24	24
Part-time.....	8	9	10	9	10
Union.....	74	70	73	70	69
Non-union.....	15	16	16	15	15
Average wage less than \$15 per hour.....	12	11	12	11	11
Average wage \$15 per hour or higher.....	34	35	35	34	33
Goods-producing industries.....	31	32	33	32	29
Service-providing industries.....	17	18	19	18	19
Establishments with 1-99 workers.....	9	9	10	9	9
Establishments with 100 or more workers.....	34	35	37	35	34

See footnotes at end of table.

**34. Continued—National Compensation Survey: Retirement benefits in private industry  
by access, participation, and selected series, 2003–2007**

Series	Year				
	2003	2004	2005	2006	2007 <sup>1</sup>
<b>Percentage of workers participating</b>					
All workers.....	20	21	21	20	20
White-collar occupations <sup>2</sup> .....	22	24	24	22	-
Management, professional, and related .....	-	-	-	-	28
Sales and office .....	-	-	-	-	17
Blue-collar occupations <sup>2</sup> .....	24	25	26	25	-
Natural resources, construction, and maintenance.....	-	-	-	-	25
Production, transportation, and material moving.....	-	-	-	-	25
Service occupations.....	7	6	7	7	7
Full-time.....	24	24	25	23	23
Part-time.....	8	9	9	8	9
Union.....	72	69	72	68	67
Non-union.....	15	15	15	14	15
Average wage less than \$15 per hour.....	11	11	11	10	10
Average wage \$15 per hour or higher.....	33	35	34	33	32
Goods-producing industries.....	31	31	32	31	28
Service-providing industries.....	16	18	18	17	18
Establishments with 1-99 workers.....	8	9	9	9	9
Establishments with 100 or more workers.....	33	34	36	33	32
<b>Take-up rate (all workers)<sup>3</sup>.....</b>	-	-	97	96	95
<b>Defined Contribution</b>					
<b>Percentage of workers with access</b>					
All workers.....	51	53	53	54	55
White-collar occupations <sup>2</sup> .....	62	64	64	65	-
Management, professional, and related .....	-	-	-	-	71
Sales and office .....	-	-	-	-	60
Blue-collar occupations <sup>2</sup> .....	49	49	50	53	-
Natural resources, construction, and maintenance.....	-	-	-	-	51
Production, transportation, and material moving.....	-	-	-	-	56
Service occupations.....	23	27	28	30	32
Full-time.....	60	62	62	63	64
Part-time.....	21	23	23	25	27
Union.....	45	48	49	50	49
Non-union.....	51	53	54	55	56
Average wage less than \$15 per hour.....	40	41	41	43	44
Average wage \$15 per hour or higher.....	67	68	69	69	69
Goods-producing industries.....	60	60	61	63	62
Service-providing industries.....	48	50	51	52	53
Establishments with 1-99 workers.....	38	40	40	41	42
Establishments with 100 or more workers.....	65	68	69	70	70
<b>Percentage of workers participating</b>					
All workers.....	40	42	42	43	43
White-collar occupations <sup>2</sup> .....	51	53	53	53	-
Management, professional, and related .....	-	-	-	-	60
Sales and office .....	-	-	-	-	47
Blue-collar occupations <sup>2</sup> .....	38	38	38	40	-
Natural resources, construction, and maintenance.....	-	-	-	-	40
Production, transportation, and material moving.....	-	-	-	-	41
Service occupations.....	16	18	18	20	20
Full-time.....	48	50	50	51	50
Part-time.....	14	14	14	16	18
Union.....	39	42	43	44	41
Non-union.....	40	42	41	43	43
Average wage less than \$15 per hour.....	29	30	29	31	30
Average wage \$15 per hour or higher.....	57	59	59	58	57
Goods-producing industries.....	49	49	50	51	49
Service-providing industries.....	37	40	39	40	41
Establishments with 1-99 workers.....	31	32	32	33	33
Establishments with 100 or more workers.....	51	53	53	54	53
<b>Take-up rate (all workers)<sup>3</sup>.....</b>	-	-	78	79	77

See footnotes at end of table.



**34. Continued—National Compensation Survey: Retirement benefits in private industry  
by access, participation, and selected series, 2003–2007**

Series	Year				
	2003	2004	2005	2006	2007 <sup>1</sup>
<b>Employee Contribution Requirement</b>					
Employee contribution required.....	-	-	61	61	65
Employee contribution not required.....	-	-	31	33	35
Not determinable.....	-	-	8	6	0
<b>Percent of establishments</b>					
Offering retirement plans.....	47	48	51	48	46
Offering defined benefit plans.....	10	10	11	10	10
Offering defined contribution plans.....	45	46	48	47	44

<sup>1</sup> The 2002 North American Industry Classification System (NAICS) replaced the 1987 Standard Industrial Classification (SIC) System. Estimates for goods-producing and service-providing (formerly service-producing) industries are considered comparable. Also introduced was the 2000 Standard Occupational Classification (SOC) to replace the 1990 Census of Population system. Only service occupations are considered comparable.

<sup>2</sup> The white-collar and blue-collar occupation series were discontinued effective 2007.

<sup>3</sup> The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

**35. National Compensation Survey: Health insurance benefits in private industry  
by access, participation, and selected series, 2003-2007**

Series	Year				
	2003	2004	2005	2006	2007 <sup>1</sup>
<b>Medical insurance</b>					
<b>Percentage of workers with access</b>					
All workers.....	60	69	70	71	71
White-collar occupations <sup>2</sup> .....	65	76	77	77	-
Management, professional, and related .....	-	-	-	-	85
Sales and office.....	-	-	-	-	71
Blue-collar occupations <sup>2</sup> .....	64	76	77	77	-
Natural resources, construction, and maintenance.....	-	-	-	-	76
Production, transportation, and material moving.....	-	-	-	-	78
Service occupations.....	38	42	44	45	46
Full-time.....	73	84	85	85	85
Part-time.....	17	20	22	22	24
Union.....	67	89	92	89	88
Non-union.....	59	67	68	68	69
Average wage less than \$15 per hour.....	51	57	58	57	57
Average wage \$15 per hour or higher.....	74	86	87	88	87
Goods-producing industries.....	68	83	85	86	85
Service-providing industries.....	57	65	66	66	67
Establishments with 1-99 workers.....	49	58	59	59	59
Establishments with 100 or more workers.....	72	82	84	84	84
<b>Percentage of workers participating</b>					
All workers.....	45	53	53	52	52
White-collar occupations <sup>2</sup> .....	50	59	58	57	-
Management, professional, and related .....	-	-	-	-	67
Sales and office.....	-	-	-	-	48
Blue-collar occupations <sup>2</sup> .....	51	60	61	60	-
Natural resources, construction, and maintenance.....	-	-	-	-	61
Production, transportation, and material moving.....	-	-	-	-	60
Service occupations.....	22	24	27	27	28
Full-time.....	56	66	66	64	64
Part-time.....	9	11	12	13	12
Union.....	60	81	83	80	78
Non-union.....	44	50	49	49	49
Average wage less than \$15 per hour.....	35	40	39	38	37
Average wage \$15 per hour or higher.....	61	71	72	71	70
Goods-producing industries.....	57	69	70	70	68
Service-providing industries.....	42	48	48	47	47
Establishments with 1-99 workers.....	36	43	43	43	42
Establishments with 100 or more workers.....	55	64	65	63	62
<b>Take-up rate (all workers)<sup>3</sup>.....</b>	-	-	75	74	73
<b>Dental</b>					
<b>Percentage of workers with access</b>					
All workers.....	40	46	46	46	46
White-collar occupations <sup>2</sup> .....	47	53	54	53	-
Management, professional, and related .....	-	-	-	-	62
Sales and office.....	-	-	-	-	47
Blue-collar occupations <sup>2</sup> .....	40	47	47	46	-
Natural resources, construction, and maintenance.....	-	-	-	-	43
Production, transportation, and material moving.....	-	-	-	-	49
Service occupations.....	22	25	25	27	28
Full-time.....	49	56	56	55	56
Part-time.....	9	13	14	15	16
Union.....	57	73	73	69	68
Non-union.....	38	43	43	43	44
Average wage less than \$15 per hour.....	30	34	34	34	34
Average wage \$15 per hour or higher.....	55	63	62	62	61
Goods-producing industries.....	48	56	56	56	54
Service-providing industries.....	37	43	43	43	44
Establishments with 1-99 workers.....	27	31	31	31	30
Establishments with 100 or more workers.....	55	64	65	64	64

See footnotes at end of table.

**35. Continued—National Compensation Survey: Health insurance benefits in private industry by access, participation, and selected series, 2003-2007**

Series	Year				
	2003	2004	2005	2006	2007 <sup>1</sup>
<b>Percentage of workers participating</b>					
All workers.....	32	37	36	36	36
White-collar occupations <sup>2</sup> .....	37	43	42	41	-
Management, professional, and related .....	-	-	-	-	51
Sales and office.....	-	-	-	-	33
Blue-collar occupations <sup>2</sup> .....	33	40	39	38	-
Natural resources, construction, and maintenance.....	-	-	-	-	36
Production, transportation, and material moving.....	-	-	-	-	38
Service occupations.....	15	16	17	18	20
Full-time.....	40	46	45	44	44
Part-time.....	6	8	9	10	9
Union.....	51	68	67	63	62
Non-union.....	30	33	33	33	33
Average wage less than \$15 per hour.....	22	26	24	23	23
Average wage \$15 per hour or higher.....	47	53	52	52	51
Goods-producing industries.....	42	49	49	49	45
Service-providing industries.....	29	33	33	32	33
Establishments with 1-99 workers.....	21	24	24	24	24
Establishments with 100 or more workers.....	44	52	51	50	49
<b>Take-up rate (all workers)<sup>3</sup>.....</b>	-	-	78	78	77
<b>Vision care</b>					
Percentage of workers with access.....	25	29	29	29	29
Percentage of workers participating.....	19	22	22	22	22
<b>Outpatient Prescription drug coverage</b>					
Percentage of workers with access.....	-	-	64	67	68
Percentage of workers participating.....	-	-	48	49	49
<b>Percent of establishments offering healthcare benefits .....</b>	58	61	63	62	60
<b>Percentage of medical premium paid by Employer and Employee</b>					
<b>Single coverage</b>					
Employer share.....	82	82	82	82	81
Employee share.....	18	18	18	18	19
<b>Family coverage</b>					
Employer share.....	70	69	71	70	71
Employee share.....	30	31	29	30	29

<sup>1</sup> The 2002 North American Industry Classification System (NAICS) replaced the 1987 Standard Industrial Classification (SIC) System. Estimates for goods-producing and service-providing (formerly service-producing) industries are considered comparable. Also introduced was the 2000 Standard Occupational Classification (SOC) to replace the 1990 Census of Population system. Only service occupations are considered comparable.

<sup>2</sup> The white-collar and blue-collar occupation series were discontinued effective 2007.

<sup>3</sup> The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

**36. National Compensation Survey: Percent of workers in private industry with access to selected benefits, 2003-2007**

Benefit	Year				
	2003	2004	2005	2006	2007
Life insurance.....	50	51	52	52	58
Short-term disability insurance.....	39	39	40	39	39
Long-term disability insurance.....	30	30	30	30	31
Long-term care insurance.....	11	11	11	12	12
Flexible work place.....	4	4	4	4	5
Section 125 cafeteria benefits					
Flexible benefits.....	-	-	17	17	17
Dependent care reimbursement account.....	-	-	29	30	31
Healthcare reimbursement account.....	-	-	31	32	33
Health Savings Account.....	-	-	5	6	8
Employee assistance program.....	-	-	40	40	42
Paid leave					
Holidays.....	79	77	77	76	77
Vacations.....	79	77	77	77	77
Sick leave.....	-	59	58	57	57
Personal leave.....	-	-	36	37	38
Family leave					
Paid family leave.....	-	-	7	8	8
Unpaid family leave.....	-	-	81	82	83
Employer assistance for child care.....	18	14	14	15	15
Nonproduction bonuses.....	49	47	47	46	47

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

**37. Work stoppages involving 1,000 workers or more**

Measure	Annual average		2009												2010	
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. <sup>p</sup>	
Number of stoppages:																
Beginning in period.....	15	5	0	0	0	0	1	1	1	0	0	2	0	0	0	
In effect during period.....	16	5	0	0	0	0	1	2	1	1	0	2	0	0	0	
Workers involved:																
Beginning in period (in thousands).....	72.2	12.5	0.0	0.0	0.0	0.0	2.5	1.5	1.9	0.0	0.0	6.6	0.0	0.0	0.0	
In effect during period (in thousands).....	136.8	16.9	0.0	0.0	0.0	0.0	2.5	4.0	1.9	1.9	0.0	6.6	0.0	0.0	0.0	
Days idle:																
Number (in thousands).....	1954.1	124.1	0.0	0.0	0.0	0.0	30.0	43.5	5.7	15.2	0.0	29.7	0.0	0.0	0.0	
Percent of estimated working time <sup>1</sup> .....	0.01	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	

<sup>1</sup> Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time

worked is found in "Total economy measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54-56.

NOTE: p = preliminary.







### 39. Consumer Price Index: U.S. city average and available local area data: all items

[1982-84 = 100, unless otherwise indicated]

	Pricing sched- ule <sup>1</sup>	All Urban Consumers						Urban Wage Earners					
		2009				2010		2009				2010	
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
U.S. city average.....	M	215.969	216.177	216.330	215.949	216.687	216.741	211.322	211.549	212.003	211.703	212.568	212.544
<b>Region and area size<sup>2</sup></b>													
Northeast urban.....	M	231.200	231.304	231.708	231.462	232.294	232.382	228.158	228.193	229.048	228.794	229.744	229.874
Size A—More than 1,500,000.....	M	233.695	233.415	233.785	233.475	234.109	234.183	229.067	228.720	229.541	229.180	229.919	230.099
Size B/C—50,000 to 1,500,000 <sup>3</sup> .....	M	136.691	137.348	137.646	137.597	138.416	138.491	137.400	137.959	138.527	138.522	139.364	139.379
Midwest urban <sup>4</sup> .....	M	205.601	205.706	206.247	205.613	206.564	206.563	200.658	200.781	201.553	200.999	202.180	202.044
Size A—More than 1,500,000.....	M	206.459	206.625	207.277	206.399	207.325	207.329	200.566	200.730	201.626	200.820	201.957	201.758
Size B/C—50,000 to 1,500,000 <sup>3</sup> .....	M	131.812	131.724	131.952	131.742	132.417	132.451	131.497	131.420	131.823	131.639	132.502	132.507
Size D—Nonmetropolitan (less than 50,000).....	M	201.918	202.499	203.047	202.738	203.490	203.274	199.416	200.053	200.748	200.471	201.414	201.118
South urban.....	M	208.912	209.292	209.738	209.476	210.056	210.020	205.726	206.121	206.859	206.716	207.405	207.325
Size A—More than 1,500,000.....	M	211.212	211.152	211.424	210.971	211.762	211.503	208.677	208.577	209.161	208.788	209.619	209.288
Size B/C—50,000 to 1,500,000 <sup>3</sup> .....	M	132.722	133.035	133.342	133.252	133.517	133.575	131.284	131.621	132.129	132.136	132.508	132.528
Size D—Nonmetropolitan (less than 50,000).....	M	210.911	212.423	213.372	213.159	213.873	214.007	210.922	212.368	213.396	213.184	213.984	214.172
West urban.....	M	220.294	220.447	219.728	219.307	219.989	220.179	214.490	214.718	214.228	213.919	214.664	214.710
Size A—More than 1,500,000.....	M	224.412	224.372	223.489	223.058	223.852	223.989	217.000	217.002	216.286	215.988	216.905	216.850
Size B/C—50,000 to 1,500,000 <sup>3</sup> .....	M	133.128	133.618	133.335	133.132	133.366	133.513	132.773	133.244	133.149	132.983	133.238	133.325
Size classes:													
A <sup>5</sup> .....	M	197.724	197.670	197.697	197.246	197.948	197.949	195.957	195.895	196.187	195.779	196.606	196.516
B/C <sup>3</sup> .....	M	133.165	133.489	133.663	133.535	133.954	134.028	132.450	132.764	133.139	133.072	133.589	133.619
D.....	M	208.503	209.139	209.567	209.192	209.984	210.098	206.341	207.120	207.739	207.417	208.297	208.368
<b>Selected local areas<sup>6</sup></b>													
Chicago—Gary—Kenosha, IL—IN—WI.....	M	211.345	211.708	212.206	211.185	212.104	212.456	204.278	204.511	205.136	204.196	205.529	205.627
Los Angeles—Riverside—Orange County, CA.....	M	225.226	225.264	224.317	223.643	224.610	224.620	217.302	217.474	216.618	216.233	217.290	217.090
New York, NY—Northern NJ—Long Island, NY—NJ—CT—PA.....	M	238.568	238.380	238.777	238.427	238.970	238.862	233.502	233.084	233.893	233.448	234.067	234.153
Boston—Brockton—Nashua, MA—NH—ME—CT.....	1	236.596	—	236.589	—	237.266	—	235.744	—	236.859	—	237.999	—
Cleveland—Akron, OH.....	1	201.836	—	201.471	—	203.037	—	192.800	—	192.871	—	194.529	—
Dallas—Ft. Worth, TX.....	1	201.802	—	201.958	—	202.106	—	204.298	—	205.297	—	205.456	—
Washington—Baltimore, DC—MD—VA—WV <sup>7</sup> .....	1	140.945	—	140.718	—	141.124	—	140.701	—	140.608	—	141.155	—
Atlanta, GA.....	2	—	201.068	—	200.456	—	202.646	—	199.736	—	199.331	—	201.407
Detroit—Ann Arbor—Flint, MI.....	2	—	205.079	—	203.880	—	203.380	—	200.324	—	199.614	—	198.913
Houston—Galveston—Brazoria, TX.....	2	—	191.608	—	190.932	—	192.412	—	189.304	—	188.842	—	190.351
Miami—Ft. Lauderdale, FL.....	2	—	222.416	—	222.943	—	222.505	—	220.358	—	221.067	—	221.074
Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD.....	2	—	224.787	—	224.800	—	226.529	—	224.573	—	224.732	—	226.539
San Francisco—Oakland—San Jose, CA.....	2	—	226.051	—	224.239	—	226.145	—	221.708	—	220.121	—	222.049
Seattle—Tacoma—Bremerton, WA.....	2	—	226.277	—	225.596	—	226.085	—	221.339	—	220.905	—	221.215

<sup>1</sup> Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated.

M—Every month.

1—January, March, May, July, September, and November.

2—February, April, June, August, October, and December.

<sup>2</sup> Regions defined as the four Census regions.

<sup>3</sup> Indexes on a December 1996 = 100 base.

<sup>4</sup> The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

<sup>5</sup> Indexes on a December 1986 = 100 base.

<sup>6</sup> In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed*

Report: Anchorage, AK; Cincinnati, OH—KY—IN; Kansas City, MO—KS; Milwaukee—Racine, WI; Minneapolis—St. Paul, MN—WI; Pittsburgh, PA; Portland—Salem, OR—WA; St. Louis, MO—IL; San Diego, CA; Tampa—St. Petersburg—Clearwater, FL.

<sup>7</sup> Indexes on a November 1996 = 100 base.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date. Dash indicates data not available.



**40. Annual data: Consumer Price Index, U.S. city average, all items and major groups**

[1982-84 = 100]

Series	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consumer Price Index for All Urban Consumers:											
All items:											
Index.....	166.6	172.2	177.1	179.9	184.0	188.9	195.3	201.6	207.342	215.303	214.537
Percent change.....	2.2	3.4	2.8	1.6	2.3	2.7	3.4	3.2	2.8	3.8	-0.4
Food and beverages:											
Index.....	164.6	168.4	173.6	176.8	180.5	186.6	191.2	195.7	203.300	214.225	218.249
Percent change.....	2.2	2.3	3.1	1.8	2.1	3.3	2.5	2.4	3.9	5.4	1.9
Housing:											
Index.....	163.9	169.6	176.4	180.3	184.8	189.5	195.7	203.2	209.586	216.264	217.057
Percent change.....	2.2	3.5	4.0	2.2	2.5	2.5	3.3	3.8	3.1	3.2	0.4
Apparel:											
Index.....	131.3	129.6	127.3	124.0	120.9	120.4	119.5	119.5	118.998	118.907	120.078
Percent change.....	-1.3	-1.3	-1.8	-2.6	-2.5	-4	-7	.0	-0.4	-0.1	1.0
Transportation:											
Index.....	144.4	153.3	154.3	152.9	157.6	163.1	173.9	180.9	184.682	195.549	179.252
Percent change.....	2.0	6.2	0.7	-9	3.1	3.5	6.6	4.0	2.1	5.9	-8.3
Medical care:											
Index.....	250.6	260.8	272.8	285.6	297.1	310.1	323.2	336.2	351.054	364.065	375.613
Percent change.....	3.5	4.1	4.6	4.7	4.0	4.4	4.2	4.0	4.4	3.7	3.2
Other goods and services:											
Index.....	258.3	271.1	282.6	293.2	298.7	304.7	313.4	321.7	333.328	345.381	368.586
Percent change.....	8.7	5.0	4.2	3.8	1.9	2.0	2.9	2.6	3.6	3.6	6.7
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index.....	163.2	168.9	173.5	175.9	179.8	184.5	191.0	197.1	202.767	211.053	209.630
Percent change.....	2.2	3.5	2.7	1.4	2.2	5.1	1.1	3.2	2.9	4.1	-0.7

#### 41. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2009										2010		
	2008	2009	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. <sup>P</sup>	Dec. <sup>P</sup>	Jan. <sup>P</sup>	Feb. <sup>P</sup>
<b>Finished goods.....</b>	177.1	172.6	169.9	169.1	170.3	171.1	174.3	172.4	174.2	173.2	173.8	176.2	176.2	178.3	177.3
Finished consumer goods.....	186.3	179.2	175.2	174.2	176.0	177.3	181.7	179.2	181.6	180.4	180.8	183.9	184.1	187.0	185.6
Finished consumer foods.....	178.3	175.5	175.0	173.8	175.9	174.0	176.1	173.5	173.9	173.9	175.6	176.8	179.7	180.4	181.0
Finished consumer goods excluding foods.....	189.1	179.6	174.5	173.5	175.2	177.5	182.7	180.2	183.3	181.6	181.6	185.3	184.6	188.2	186.1
Nondurable goods less food.....	210.5	194.3	186.6	185.2	187.7	191.2	198.7	195.7	200.1	198.1	197.1	202.2	201.4	206.6	203.6
Durable goods.....	141.2	144.3	144.3	144.1	144.4	144.2	144.7	143.3	143.8	142.9	144.8	145.6	144.9	145.4	145.4
Capital equipment.....	153.8	156.8	157.2	156.9	156.8	156.3	156.6	155.9	156.4	155.9	157.0	157.6	157.2	157.6	157.4
<b>Intermediate materials, supplies, and components.....</b>	188.3	172.6	169.7	168.0	168.6	170.2	172.7	172.3	174.8	174.7	174.5	176.3	176.7	179.3	179.2
Materials and components for manufacturing.....	177.2	162.8	161.0	159.5	158.9	160.1	160.9	161.6	163.8	164.9	165.2	166.4	167.4	169.1	170.8
Materials for food manufacturing.....	180.4	165.1	164.3	163.2	164.2	166.2	166.0	163.7	164.1	164.3	164.0	165.5	168.1	168.7	169.8
Materials for nondurable manufacturing...	214.3	191.9	185.6	182.3	182.6	187.4	190.1	192.0	196.6	197.1	196.7	200.8	202.7	206.6	211.0
Materials for durable manufacturing.....	203.3	169.0	168.2	165.8	163.2	162.1	162.7	164.5	168.9	173.2	174.6	175.0	176.4	178.8	180.4
Components for manufacturing.....	140.3	141.0	141.5	141.3	140.8	140.8	140.7	140.7	140.8	140.9	141.1	141.0	141.0	141.2	141.4
Materials and components for construction.....	205.4	202.9	204.8	204.2	203.2	202.8	202.0	201.9	201.5	202.0	201.9	201.4	202.2	202.0	203.5
Processed fuels and lubricants.....	206.2	162.3	150.7	146.5	151.4	156.5	167.0	164.1	172.2	169.0	167.9	173.8	172.1	180.8	175.1
Containers.....	191.8	195.8	199.5	198.4	197.6	196.1	195.4	194.3	193.5	193.7	193.3	193.1	192.0	193.4	197.3
Supplies.....	173.8	172.2	172.3	171.9	172.0	172.3	172.8	172.2	171.9	172.0	171.7	171.8	172.5	172.9	173.0
<b>Crude materials for further processing.....</b>	251.8	175.0	160.7	160.1	163.9	171.5	179.8	172.9	178.4	173.5	184.0	192.0	193.8	213.1	206.6
Foodstuffs and feedstuffs.....	163.4	134.4	133.3	131.0	136.5	140.5	141.0	133.2	130.2	127.6	132.0	133.7	138.6	142.9	142.3
Crude nonfood materials.....	313.9	197.1	171.5	172.6	174.6	184.7	199.8	194.5	207.5	201.0	216.2	229.6	228.3	260.2	248.7
<b>Special groupings:</b>															
Finished goods, excluding foods.....	176.6	171.2	168.0	167.2	168.3	169.7	173.1	171.3	173.4	172.2	172.6	175.2	174.6	177.0	175.6
Finished energy goods.....	178.7	147.2	136.3	133.2	137.2	142.9	154.4	149.6	156.1	152.8	151.2	158.4	156.8	163.9	158.9
Finished goods less energy.....	169.8	172.3	172.1	171.9	172.4	171.7	172.4	171.4	171.8	171.5	172.8	173.5	174.0	174.6	174.8
Finished consumer goods less energy.....	176.9	179.2	178.6	178.5	179.2	178.5	179.4	178.2	178.6	178.4	179.7	180.6	181.6	182.3	182.7
Finished goods less food and energy.....	167.2	171.5	171.3	171.4	171.4	171.1	171.4	170.8	171.2	170.8	172.0	172.6	172.4	173.0	173.0
Finished consumer goods less food and energy.....	176.4	181.6	181.0	181.4	181.5	181.3	181.7	181.1	181.5	181.2	182.3	183.1	183.0	183.7	184.0
Consumer nondurable goods less food and energy.....	206.8	214.3	212.9	214.0	213.8	213.7	213.9	214.4	214.5	214.9	215.1	215.9	216.4	217.4	218.0
Intermediate materials less foods and feeds.....	188.7	173.1	170.1	168.4	168.9	170.4	172.9	172.7	175.5	175.4	175.3	177.2	177.3	180.1	180.0
Intermediate foods and feeds.....	181.6	165.9	164.6	163.5	164.5	167.3	169.3	166.5	166.1	165.8	164.5	165.5	167.8	168.5	168.4
Intermediate energy goods.....	208.1	162.8	149.3	144.1	149.5	157.2	167.8	165.3	174.5	171.0	169.8	176.4	174.5	183.7	177.6
Intermediate goods less energy.....	180.9	172.8	172.7	171.9	171.2	171.3	171.8	171.9	172.7	173.5	173.6	174.1	175.0	175.9	177.4
Intermediate materials less foods and energy.....	180.9	173.4	173.4	172.6	171.8	171.6	171.9	172.3	173.3	174.2	174.4	174.9	175.7	176.6	178.2
Crude energy materials.....	309.4	176.3	152.1	153.3	155.0	164.2	181.2	173.0	184.1	173.5	193.1	211.4	205.2	241.1	226.1
Crude materials less energy.....	205.4	164.8	158.8	156.4	161.2	166.9	168.9	163.4	164.5	163.3	167.6	168.9	175.9	183.8	183.1
Crude nonfood materials less energy.....	324.4	248.6	224.9	222.9	224.4	234.9	242.6	247.1	263.6	267.9	270.9	270.4	284.2	304.4	303.4

p = preliminary.



### 43. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

Index	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Finished goods</b>											
Total.....	133.0	138.0	140.7	138.9	143.3	148.5	155.7	160.4	166.6	177.1	172.6
Foods.....	135.1	137.2	141.3	140.1	145.9	152.7	155.7	156.7	167.0	178.3	175.5
Energy.....	78.8	94.1	96.7	88.8	102.0	113.0	132.6	145.9	156.3	178.7	147.2
Other.....	146.1	148.0	150.0	150.2	150.5	152.7	156.4	158.7	161.7	167.2	171.5
<b>Intermediate materials, supplies, and components</b>											
Total.....	123.2	129.2	129.7	127.8	133.7	142.6	154.0	164.0	170.7	188.3	172.6
Foods.....	120.8	119.2	124.3	123.2	134.4	145.0	146.0	146.2	161.4	180.4	165.1
Energy.....	84.3	101.7	104.1	95.9	111.9	123.2	149.2	162.8	174.6	208.1	162.8
Other.....	133.1	136.6	136.4	135.8	138.5	146.5	154.6	163.8	168.4	180.9	173.4
<b>Crude materials for further processing</b>											
Total.....	98.2	120.6	121.0	108.1	135.3	159.0	182.2	184.8	207.1	251.8	175.0
Foods.....	98.7	100.2	106.1	99.5	113.5	127.0	122.7	119.3	146.7	163.4	134.4
Energy.....	78.5	122.1	122.3	102.0	147.2	174.6	234.0	226.9	232.8	309.4	176.3
Other.....	91.1	118.0	101.5	101.0	116.9	149.2	176.7	210.0	238.7	308.5	211.0

### 44. U.S. export price indexes by end-use category

[2000 = 100]

Category	2009											2010	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>ALL COMMODITIES.....</b>	116.3	115.5	116.1	116.6	117.8	117.4	118.1	117.9	117.9	118.9	119.7	120.5	120.0
Foods, feeds, and beverages.....	162.1	156.7	162.8	167.3	174.8	164.9	164.5	158.2	156.5	162.0	165.1	167.6	161.2
Agricultural foods, feeds, and beverages.....	164.1	158.3	165.0	170.3	178.6	167.6	167.3	160.7	159.0	164.6	167.9	170.6	163.3
Nonagricultural (fish, beverages) food products.....	145.7	144.4	145.3	141.4	141.5	142.2	140.8	137.3	135.0	139.9	140.9	141.0	144.8
Industrial supplies and materials.....	137.9	136.5	136.9	137.7	140.4	140.6	143.6	143.9	144.9	147.5	150.1	152.6	152.0
Agricultural industrial supplies and materials.....	126.2	122.9	123.6	130.2	131.0	134.9	138.0	142.2	143.9	151.8	152.5	152.6	151.4
Fuels and lubricants.....	156.2	146.9	156.9	160.2	175.2	166.0	181.6	171.9	175.5	184.6	189.6	200.0	190.6
Nonagricultural supplies and materials, excluding fuel and building materials.....	138.2	138.2	137.1	137.3	138.5	139.8	141.1	142.7	143.3	144.8	147.3	148.6	149.6
Selected building materials.....	115.3	114.0	113.5	112.5	113.0	112.8	113.7	114.0	112.5	113.0	113.5	114.9	116.1
Capital goods.....	102.3	102.3	102.8	103.0	103.1	103.2	103.4	103.5	103.2	103.3	103.3	103.4	103.2
Electric and electrical generating equipment.....	106.7	106.8	106.8	107.0	107.2	107.0	107.3	107.4	107.9	108.9	109.3	109.6	109.8
Nonelectrical machinery.....	94.0	93.8	94.3	94.4	94.4	94.5	94.7	94.9	94.4	94.6	94.5	94.3	94.0
Automotive vehicles, parts, and engines.....	108.1	108.2	108.1	108.1	108.0	107.9	107.9	108.0	108.1	108.2	108.2	108.5	108.7
Consumer goods, excluding automotive.....	109.3	108.5	107.5	107.9	108.4	108.9	109.1	109.2	109.3	109.4	109.4	109.4	109.8
Nondurables, manufactured.....	109.0	107.1	107.2	107.8	108.5	108.7	109.0	109.4	109.3	109.8	110.0	110.9	111.8
Durables, manufactured.....	109.8	109.9	107.6	107.9	108.1	109.5	109.6	109.5	109.6	109.4	109.2	107.7	107.4
Agricultural commodities.....	157.0	151.6	157.2	162.8	169.7	161.3	161.6	156.9	155.8	161.8	164.7	166.9	160.6
Nonagricultural commodities.....	113.3	112.9	113.1	113.4	114.1	114.2	115.0	115.1	115.2	115.8	116.5	117.2	117.0

**45. U.S. import price indexes by end-use category**

[2000 = 100]

Category	2009											2010	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
<b>ALL COMMODITIES</b> .....	113.0	113.6	114.8	116.8	120.0	119.3	121.1	121.3	122.3	124.1	124.4	125.9	125.7
Foods, feeds, and beverages.....	137.8	137.0	138.9	139.2	139.8	138.2	140.0	140.6	141.2	142.6	143.7	145.6	144.9
Agricultural foods, feeds, and beverages.....	153.0	151.3	154.3	155.0	155.5	153.2	155.7	156.8	157.3	159.5	160.8	163.9	162.7
Nonagricultural (fish, beverages) food products.....	103.4	104.8	104.1	103.6	104.4	104.2	104.5	104.1	104.9	104.5	104.9	104.2	104.7
Industrial supplies and materials.....	144.9	149.3	154.3	163.0	177.3	174.4	182.4	183.0	187.2	195.0	196.2	202.7	202.1
Fuels and lubricants.....	150.5	162.3	174.4	191.5	222.1	216.3	231.4	228.5	235.3	250.1	249.7	260.6	257.6
Petroleum and petroleum products.....	151.6	168.5	185.5	206.1	241.5	235.8	253.7	252.2	258.3	272.2	269.3	279.6	275.8
Paper and paper base stocks.....	108.8	106.6	104.6	103.3	101.8	99.1	98.4	99.1	100.5	102.4	103.1	104.3	106.4
Materials associated with nondurable supplies and materials.....	137.1	136.7	135.3	139.2	137.5	132.3	133.3	134.8	137.7	139.4	140.6	142.6	142.6
Selected building materials.....	116.5	116.2	115.2	114.5	116.0	118.0	119.2	118.9	118.6	118.5	120.9	122.6	124.8
Unfinished metals associated with durable goods...	175.9	171.6	171.1	172.8	178.3	184.8	190.6	204.0	208.0	212.9	221.5	227.7	233.4
Nonmetals associated with durable goods.....	106.2	105.2	104.3	103.4	103.0	102.8	103.5	104.3	104.8	105.2	105.4	105.9	106.5
Capital goods.....	92.3	91.8	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.8
Electric and electrical generating equipment.....	110.3	109.4	109.1	109.8	110.0	110.2	110.3	110.3	110.8	111.0	111.3	111.9	111.8
Nonelectrical machinery.....	87.2	86.6	86.8	86.7	86.5	86.5	86.5	86.5	86.4	86.4	86.4	86.2	86.2
Automotive vehicles, parts, and engines.....	107.9	107.7	107.7	107.9	108.0	108.2	108.4	108.6	108.8	108.9	108.8	108.5	108.4
Consumer goods, excluding automotive.....	104.4	103.9	104.1	104.2	104.3	104.1	104.1	104.1	104.3	104.3	104.3	104.5	104.4
Nondurables, manufactured.....	108.9	108.4	108.3	108.1	108.1	107.8	107.8	107.8	107.8	107.9	107.9	108.7	108.6
Durables, manufactured.....	100.0	99.8	100.0	100.5	100.6	100.6	100.6	100.7	100.9	100.9	100.8	100.4	100.4
Nonmanufactured consumer goods.....	104.4	101.2	102.7	101.3	101.4	101.3	100.8	101.2	101.6	101.1	102.1	102.1	102.4

**46. U.S. international price indexes for selected categories of services**

[2000 = 100, unless indicated otherwise]

Category	2007	2008			2009				
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
Import air freight.....	141.8	144.4	158.7	157.1	138.5	132.9	132.8	134.8	163.9
Export air freight.....	127.1	132.0	140.8	144.3	135.0	124.1	117.4	121.6	122.7
Import air passenger fares (Dec. 2006 = 100).....	135.3	131.3	171.6	161.3	157.3	134.9	147.3	137.9	152.3
Export air passenger fares (Dec. 2006 = 100).....	155.7	156.4	171.4	171.9	164.6	141.7	138.2	141.3	156.1

**47. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted**

[1992 = 100]

Item	2006	2007				2008				2009			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>Business</b>													
Output per hour of all persons.....	138.7	139.0	140.2	142.1	142.6	142.7	143.8	143.9	144.2	144.3	146.7	149.3	151.7
Compensation per hour.....	173.3	175.2	176.5	177.8	179.6	180.3	181.0	183.0	184.2	182.0	184.9	187.6	188.3
Real compensation per hour.....	122.5	122.7	122.4	122.6	122.1	121.2	120.4	119.9	123.3	122.6	124.1	124.8	124.2
Unit labor costs.....	124.9	126.0	125.9	125.1	125.9	126.3	125.9	127.2	127.7	126.1	126.1	125.6	124.2
Unit nonlabor payments.....	135.1	136.7	139.4	141.9	141.9	141.7	143.8	145.4	143.6	148.1	147.9	148.8	151.8
Implicit price deflator.....	128.7	130.0	130.9	131.4	131.9	132.1	132.5	134.0	133.6	134.3	134.2	134.3	134.4
<b>Nonfarm business</b>													
Output per hour of all persons.....	137.8	138.2	139.2	141.1	141.8	141.7	142.8	142.8	143.1	143.2	145.6	148.2	150.4
Compensation per hour.....	172.3	174.2	175.1	176.3	178.5	179.2	179.8	181.8	183.1	180.9	183.9	186.4	187.1
Real compensation per hour.....	121.8	122.1	121.4	121.5	121.3	120.5	119.6	119.1	122.6	121.9	123.5	124.1	123.5
Unit labor costs.....	125.0	126.0	125.8	125.0	125.9	126.4	125.9	127.3	128.0	126.3	126.3	125.8	124.4
Unit nonlabor payments.....	136.9	138.2	140.9	143.3	143.0	142.5	144.9	146.6	145.3	150.5	150.2	151.4	153.8
Implicit price deflator.....	129.3	130.5	131.4	131.7	132.2	132.3	132.9	134.4	134.3	135.2	135.1	135.2	135.2
<b>Nonfinancial corporations</b>													
Output per hour of all employees.....	143.6	143.5	144.5	144.1	145.9	145.0	147.4	148.6	148.0	145.3	148.2	150.5	—
Compensation per hour.....	162.5	164.2	165.2	166.2	168.3	168.6	169.7	171.8	173.7	171.6	173.5	175.8	—
Real compensation per hour.....	114.9	115.0	114.6	114.5	114.4	113.4	112.9	112.5	116.3	115.6	116.5	117.0	—
Total unit costs.....	115.3	116.8	117.2	118.6	118.7	119.8	118.9	119.4	121.8	123.8	122.7	121.6	—
Unit labor costs.....	113.2	114.4	114.4	115.3	115.3	116.3	115.1	115.6	117.3	118.1	117.1	116.8	—
Unit nonlabor costs.....	120.9	123.1	124.9	127.4	127.9	129.1	129.2	129.8	134.1	139.1	138.0	134.6	—
Unit profits.....	175.8	171.2	171.8	155.6	149.9	133.0	134.7	145.3	129.5	127.5	133.8	138.9	—
Unit nonlabor payments.....	135.9	136.2	137.7	135.1	133.9	130.2	130.7	134.0	132.8	135.9	136.8	135.8	—
Implicit price deflator.....	120.8	121.8	122.2	122.0	121.6	121.0	120.4	121.8	122.5	124.1	123.7	123.2	—
<b>Manufacturing</b>													
Output per hour of all persons.....	175.3	176.9	178.2	180.1	181.6	182.8	181.6	180.3	178.1	177.0	179.9	186.1	189.6
Compensation per hour.....	169.5	172.9	172.9	172.9	175.6	175.7	176.9	178.8	183.9	183.7	186.6	189.5	189.5
Real compensation per hour.....	119.9	121.1	119.9	119.2	119.4	118.1	117.6	117.1	123.1	123.7	125.3	126.1	125.0
Unit labor costs.....	96.7	97.7	97.0	96.0	96.7	96.1	97.4	99.2	103.2	103.8	103.7	101.9	99.9

NOTE: Dash indicates data not available.

**48. Annual indexes of multifactor productivity and related measures, selected years**

[2000 = 100, unless otherwise indicated]

Item	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Private business</b>													
Productivity:													
Output per hour of all persons.....	90.0	91.7	94.3	97.2	100.0	102.8	107.1	111.2	114.5	116.6	117.6	119.5	122.7
Output per unit of capital services.....	105.3	105.3	103.8	102.3	100.0	96.0	94.7	95.5	97.2	98.1	98.4	97.7	95.6
Multifactor productivity.....	95.3	96.2	97.4	98.8	100.0	100.4	102.5	105.4	108.2	109.7	110.3	110.7	112.0
Output.....	82.8	87.2	91.5	96.2	100.0	100.5	102.0	105.2	109.7	113.6	117.1	119.5	120.4
Inputs:													
Labor input.....	90.8	94.4	96.5	98.8	100.0	98.2	96.2	95.8	96.9	98.8	101.2	102.3	100.3
Capital services.....	78.7	82.9	88.2	94.1	100.0	104.6	107.7	110.2	112.9	115.8	119.1	122.3	125.9
Combined units of labor and capital input.....	86.9	90.7	93.9	97.4	100.0	100.0	99.5	99.9	101.4	103.6	106.2	108.0	107.6
Capital per hour of all persons.....	85.5	87.1	90.9	95.0	100.0	107.0	113.1	116.5	117.8	118.9	119.6	122.3	128.3
<b>Private nonfarm business</b>													
Productivity:													
Output per hour of all persons.....	90.5	92.0	94.5	97.3	100.0	102.7	107.1	111.1	114.2	116.1	117.2	118.9	122.3
Output per unit of capital services.....	106.1	105.8	104.2	102.6	100.0	96.0	94.5	95.2	96.9	97.7	97.9	97.0	95.1
Multifactor productivity.....	95.8	96.5	97.7	99.0	100.0	100.4	102.5	105.2	108.0	109.3	109.9	110.1	111.4
Output.....	82.8	87.2	91.5	96.3	100.0	100.5	102.1	105.2	109.6	113.5	117.1	119.4	120.4
Inputs:													
Labor input.....	90.4	94.0	96.3	98.8	100.0	98.4	96.4	96.0	97.1	99.1	101.6	102.8	100.9
Capital services.....	78.1	82.4	87.8	93.9	100.0	104.7	107.9	110.5	113.1	116.1	119.6	123.1	126.7
Combined units of labor and capital input.....	86.5	90.4	93.7	97.3	100.0	100.2	99.6	100.0	101.5	103.8	106.6	108.4	108.1
Capital per hour of all persons.....	85.3	86.9	90.7	94.8	100.0	107.0	113.2	116.7	117.8	118.9	119.7	122.6	128.8
<b>Manufacturing [1996 = 100]</b>													
Productivity:													
Output per hour of all persons.....	82.7	87.3	92.0	96.1	100.0	101.6	108.6	115.3	117.9	123.5	125.0	—	—
Output per unit of capital services.....	98.0	100.6	100.7	100.4	100.0	93.5	92.3	93.2	95.4	98.9	100.2	—	—
Multifactor productivity.....	91.2	93.8	95.9	96.7	100.0	98.7	102.4	105.2	108.0	108.4	110.1	—	—
Output.....	83.1	89.2	93.8	97.4	100.0	94.9	94.3	95.2	96.9	100.4	102.3	—	—
Inputs:													
Hours of all persons.....	100.4	102.2	101.9	101.3	100.0	93.5	86.8	82.6	82.2	81.3	81.8	—	—
Capital services.....	84.8	88.7	93.2	97.0	100.0	101.5	102.1	102.1	101.6	101.5	102.0	—	—
Energy.....	110.4	108.2	105.4	105.5	100.0	90.6	89.3	84.4	84.0	91.6	86.6	—	—
Nonenergy materials.....	86.0	92.9	97.7	102.6	100.0	93.3	88.4	87.7	87.3	92.4	91.5	—	—
Purchased business services.....	88.5	92.1	95.0	100.0	100.0	100.7	98.2	99.1	97.0	104.5	106.6	—	—
Combined units of all factor inputs.....	91.1	95.1	97.8	100.7	100.0	96.2	92.1	90.5	89.7	92.7	92.9	—	—

NOTE: Dash indicates data not available.

**49. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years**

[1992 = 100]

Item	1964	1974	1984	1994	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Business</b>													
Output per hour of all persons.....	57.0	72.5	85.5	101.4	120.7	126.2	131.0	134.9	137.1	138.5	141.0	143.6	147.9
Compensation per hour.....	16.2	31.8	68.9	103.8	140.9	145.3	152.3	157.6	163.8	170.1	177.3	182.1	185.7
Real compensation per hour.....	68.4	84.1	90.5	99.2	114.0	115.6	118.6	119.5	120.2	120.8	122.4	121.1	123.9
Unit labor costs.....	28.5	43.8	80.6	102.3	116.7	115.1	116.2	116.9	119.5	122.8	125.7	126.8	125.5
Unit nonlabor payments.....	27.2	39.7	80.4	106.1	111.0	116.1	118.7	125.8	131.9	135.9	140.0	143.6	149.2
Implicit price deflator.....	28.0	42.3	80.5	103.7	114.6	115.5	117.1	120.2	124.1	127.7	131.0	133.0	134.3
<b>Nonfarm business</b>													
Output per hour of all persons.....	59.8	74.5	86.4	101.6	120.2	125.7	130.3	134.0	136.2	137.5	140.1	142.6	146.8
Compensation per hour.....	16.6	31.9	69.2	103.8	140.1	144.5	151.4	156.6	162.8	169.0	176.0	181.0	184.6
Real compensation per hour.....	70.0	84.6	90.9	99.2	113.3	115.0	117.9	118.7	119.4	120.0	121.6	120.4	123.2
Unit labor costs.....	27.8	42.9	80.1	102.2	116.5	115.0	116.2	116.8	119.5	122.9	125.7	126.9	125.7
Unit nonlabor payments.....	27.1	37.9	79.5	106.6	112.6	118.1	120.1	126.7	133.6	138.0	141.4	144.8	151.5
Implicit price deflator.....	27.5	41.0	79.9	103.8	115.1	116.1	117.6	120.4	124.7	128.5	131.5	133.5	135.2
<b>Nonfinancial corporations</b>													
Output per hour of all employees.....	62.6	73.0	87.4	102.3	123.5	127.9	133.0	137.5	141.0	143.0	144.5	147.2	–
Compensation per hour.....	18.2	34.0	71.6	103.6	137.3	140.9	147.3	150.9	155.7	160.2	166.0	170.9	–
Real compensation per hour.....	76.9	90.0	94.0	99.0	111.0	112.2	114.7	114.4	114.2	113.8	114.6	113.7	–
Total unit costs.....	27.7	45.1	81.8	100.9	111.5	110.9	111.3	110.1	111.8	113.8	117.8	120.0	–
Unit labor costs.....	29.2	46.5	82.0	101.3	111.2	110.2	110.8	109.7	110.4	112.0	114.9	116.1	–
Unit nonlabor costs.....	23.9	41.3	81.4	99.6	112.3	112.9	112.7	111.3	115.4	118.9	125.8	130.5	–
Unit profits.....	58.6	47.5	106.4	134.0	84.0	96.6	107.3	142.7	161.1	179.9	162.1	135.7	–
Unit nonlabor payments.....	33.3	42.9	88.2	109.0	104.6	108.5	111.2	119.8	127.8	135.5	135.7	131.9	–
Implicit price deflator.....	30.6	45.3	84.1	103.9	109.0	109.6	110.9	113.1	116.3	119.9	121.9	121.4	–
<b>Manufacturing</b>													
Output per hour of all persons.....	–	–	–	106.2	141.2	151.0	160.4	164.0	171.9	173.7	179.2	180.7	183.1
Compensation per hour.....	–	–	–	104.8	137.5	145.1	156.7	157.9	163.2	166.4	173.6	178.7	187.3
Real compensation per hour.....	–	–	–	100.1	111.2	115.5	122.0	119.7	119.7	118.2	119.9	118.9	125.0
Unit labor costs.....	–	–	–	98.7	97.4	96.1	97.7	96.3	94.9	95.8	96.9	98.9	102.3
Unit nonlabor payments.....	–	–	–	102.8	102.1	101.2	103.3	111.3	122.5	128.0	–	–	–
Implicit price deflator.....	–	–	–	101.4	100.6	99.5	101.5	106.4	113.5	117.4	–	–	–

Dash indicates data not available.





50. Continued - Annual indexes of output per hour for selected NAICS industries

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
3272	Glass and glass products.....	75.6	77.6	91.1	100.2	94.1	100.0	106.7	105.7	111.8	119.2	118.6	-
3273	Cement and concrete products.....	90.5	93.3	97.0	99.3	95.5	100.0	106.3	101.0	104.6	101.6	105.4	-
3274	Lime and gypsum products.....	89.3	90.3	101.2	99.8	103.1	100.0	109.3	107.2	121.9	119.3	113.9	-
3279	Other nonmetallic mineral products.....	79.4	85.6	94.9	90.3	95.2	100.0	105.7	106.8	118.5	112.8	109.7	-
331	Primary metals.....	70.4	76.7	86.9	88.0	87.6	100.0	103.4	116.7	119.8	119.7	129.3	-
3311	Iron and steel mills and ferroalloy production.....	51.9	59.9	80.1	84.6	83.6	100.0	106.1	136.5	134.2	138.1	142.3	-
3312	Steel products from purchased steel.....	81.9	92.5	102.9	99.1	101.3	100.0	91.8	82.6	77.7	70.0	68.6	-
3313	Alumina and aluminum production.....	72.7	76.9	80.3	77.5	77.2	100.0	101.8	110.4	125.3	123.1	132.0	-
3314	Other nonferrous metal production.....	90.8	93.3	93.7	96.2	93.4	100.0	109.6	110.3	106.1	95.2	115.7	-
3315	Foundries.....	69.4	73.7	85.5	88.7	91.2	100.0	100.4	106.8	111.4	114.1	115.3	-
332	Fabricated metal products.....	78.3	82.3	90.1	94.7	94.5	100.0	103.4	102.9	106.5	109.2	111.1	-
3321	Forging and stamping.....	68.8	74.2	80.4	97.8	97.3	100.0	107.3	113.8	118.5	121.4	128.4	-
3322	Cutlery and handtools.....	76.1	76.8	88.1	93.4	97.3	100.0	99.2	90.9	95.4	97.2	109.1	-
3323	Architectural and structural metals.....	83.5	87.3	94.0	95.6	95.5	100.0	103.7	99.2	104.3	107.6	107.2	-
3324	Boilers, tanks, and shipping containers.....	86.7	96.2	100.6	95.2	95.0	100.0	103.7	96.0	99.4	101.1	104.4	-
3325	Hardware.....	77.0	75.8	86.8	99.4	98.4	100.0	105.7	104.5	106.8	107.2	91.6	-
3326	Spring and wire products.....	65.4	72.2	79.6	89.7	89.0	100.0	106.0	104.3	110.9	110.5	108.4	-
3327	Machine shops and threaded products.....	65.2	73.4	87.2	94.9	95.3	100.0	100.5	101.7	101.0	102.1	104.5	-
3328	Coating, engraving, and heat treating metals.....	64.1	73.8	85.7	89.4	92.5	100.0	100.3	106.1	118.0	115.6	118.6	-
3329	Other fabricated metal products.....	85.5	84.9	93.9	93.9	90.6	100.0	104.5	104.8	106.6	111.1	111.8	-
333	Machinery.....	70.0	74.0	85.8	95.7	93.7	100.0	108.1	109.4	115.9	119.5	119.7	-
3331	Agriculture, construction, and mining machinery.....	69.1	74.7	96.1	96.1	95.3	100.0	112.3	120.8	124.0	125.1	120.9	-
3332	Industrial machinery.....	63.4	67.3	84.8	109.9	89.6	100.0	98.9	107.3	105.3	116.3	119.0	-
3333	Commercial and service industry machinery.....	88.9	102.5	102.1	102.9	97.1	100.0	107.5	109.6	118.4	127.4	114.6	-
3334	HVAC and commercial refrigeration equipment.....	70.6	76.8	84.1	90.8	93.3	100.0	109.6	112.1	116.1	113.0	108.8	-
3335	Metalworking machinery.....	75.8	79.8	89.6	96.2	94.2	100.0	103.9	102.9	110.9	111.7	117.3	-
3336	Turbine and power transmission equipment.....	61.5	61.9	76.6	88.1	97.3	100.0	110.3	96.4	100.6	96.4	96.1	-
3339	Other general purpose machinery.....	70.5	72.0	84.7	96.1	93.5	100.0	108.1	107.4	117.4	121.8	124.4	-
334	Computer and electronic products.....	15.1	23.0	53.0	96.2	96.3	100.0	114.2	127.9	134.9	146.2	157.9	-
3341	Computer and peripheral equipment.....	3.7	7.2	33.5	78.4	84.4	100.0	121.5	133.9	172.7	233.1	285.0	-
3342	Communications equipment.....	31.2	47.5	78.2	128.4	120.1	100.0	113.4	122.0	118.5	146.3	139.5	-
3343	Audio and video equipment.....	41.6	63.1	67.0	84.9	86.7	100.0	112.6	155.8	149.2	147.1	106.9	-
3344	Semiconductors and electronic components.....	6.4	11.3	37.8	87.5	87.1	100.0	121.0	133.8	140.7	137.7	159.2	-
3345	Electronic instruments.....	59.3	72.7	84.4	98.4	100.4	100.0	106.1	122.4	124.4	128.8	138.2	-
3346	Magnetic media manufacturing and reproduction.....	77.0	81.3	89.7	93.3	88.7	100.0	114.5	128.8	129.7	124.9	128.2	-
335	Electrical equipment and appliances.....	66.0	72.5	88.1	98.3	98.2	100.0	103.5	109.2	114.3	114.7	117.6	-
3351	Electric lighting equipment.....	80.6	83.4	88.6	90.2	94.3	100.0	98.5	108.1	112.7	121.6	122.7	-
3352	Household appliances.....	53.5	62.4	76.0	89.3	94.9	100.0	111.6	121.2	124.6	129.7	125.9	-
3353	Electrical equipment.....	67.3	77.5	98.1	97.5	98.9	100.0	102.1	110.7	117.9	119.7	126.3	-
3359	Other electrical equipment and components.....	68.7	71.8	87.3	104.7	99.0	100.0	102.0	101.8	106.3	101.5	105.9	-
336	Transportation equipment.....	65.5	70.5	78.7	85.7	89.2	100.0	109.0	108.3	113.8	114.8	122.1	-
3361	Motor vehicles.....	60.4	72.4	79.5	87.1	87.3	100.0	112.0	113.2	118.5	130.6	136.8	-
3362	Motor vehicle bodies and trailers.....	81.0	83.0	95.2	93.7	84.2	100.0	103.8	104.8	107.8	103.3	110.5	-
3363	Motor vehicle parts.....	60.3	63.1	76.9	86.1	88.1	100.0	104.8	105.5	109.8	108.4	111.9	-
3364	Aerospace products and parts.....	73.5	81.3	84.2	86.9	97.4	100.0	99.2	93.9	102.6	97.3	109.0	-
3365	Railroad rolling stock.....	38.0	55.9	68.5	81.1	86.3	100.0	94.1	87.2	88.4	95.2	94.4	-
3366	Ship and boat building.....	73.3	76.1	76.6	94.4	93.3	100.0	103.7	106.8	102.4	97.8	99.5	-
3369	Other transportation equipment.....	48.7	59.3	65.5	83.3	83.4	100.0	110.0	110.4	112.8	122.9	148.8	-
337	Furniture and related products.....	75.9	78.4	88.7	91.3	92.0	100.0	102.0	103.3	107.5	109.2	106.2	-
3371	Household and institutional furniture.....	77.3	81.4	89.3	92.7	94.7	100.0	101.1	100.8	105.9	109.7	105.7	-
3372	Office furniture and fixtures.....	74.0	74.0	86.3	86.9	84.7	100.0	106.3	110.4	112.4	107.2	104.3	-
3379	Other furniture related products.....	77.4	78.0	89.6	90.2	94.8	100.0	99.4	109.4	115.5	120.5	119.5	-
339	Miscellaneous manufacturing.....	64.5	71.1	79.3	92.6	94.0	100.0	106.9	106.4	114.8	118.4	114.4	-
3391	Medical equipment and supplies.....	57.7	68.5	76.6	90.3	93.8	100.0	107.6	108.6	116.2	117.8	113.7	-
3399	Other miscellaneous manufacturing.....	71.8	74.5	83.1	96.0	94.7	100.0	105.8	104.6	113.0	117.8	113.5	-
	<b>Wholesale trade</b>												
42	Wholesale trade.....	59.5	70.3	81.2	94.5	95.5	100.0	103.5	109.0	109.4	110.9	110.8	110.5
423	Durable goods.....	44.5	53.9	71.5	89.2	92.0	100.0	104.6	115.1	118.9	122.9	121.9	122.3
4231	Motor vehicles and parts.....	55.9	63.1	75.0	87.5	90.0	100.0	103.2	107.6	110.0	119.5	114.1	105.3
4232	Furniture and furnishings.....	69.5	82.4	86.3	97.0	95.5	100.0	106.9	112.2	109.6	113.0	105.2	88.4
4233	Lumber and construction supplies.....	88.0	89.1	80.7	86.9	94.1	100.0	107.4	112.4	113.0	108.9	103.4	102.2
4234	Commercial equipment.....	10.6	17.8	37.8	68.7	82.3	100.0	112.9	133.2	151.1	167.1	180.4	197.0
4235	Metals and minerals.....	105.6	112.3	103.9	97.5	98.0	100.0	101.2	110.4	107.5	103.0	95.1	87.1
4236	Electric goods.....	26.8	35.1	62.7	95.8	92.5	100.0	103.9	121.7	127.3	137.3	144.2	148.0
4237	Hardware and plumbing.....	80.2	91.9	97.6	101.1	98.0	100.0	101.3	104.5	101.0	101.4	96.5	89.5
4238	Machinery and supplies.....	74.0	80.5	99.8	105.2	102.6	100.0	103.1	112.0	117.0	119.8	115.5	123.0

## 50. Continued - Annual indexes of output per hour for selected NAICS industries

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
4239	Miscellaneous durable goods.....	72.0	87.0	80.2	91.7	93.8	100.0	96.0	107.7	107.0	96.7	93.8	96.5
424	Nondurable goods.....	86.1	96.3	94.6	99.4	99.3	100.0	104.4	107.4	107.7	105.8	105.0	104.5
4241	Paper and paper products.....	73.5	82.8	85.9	86.6	89.7	100.0	102.7	112.2	121.5	117.2	124.4	113.8
4242	Druggists' goods.....	78.8	98.7	111.5	95.7	94.6	100.0	111.6	117.9	124.8	121.7	113.3	121.2
4243	Apparel and piece goods.....	70.3	78.3	81.5	88.7	93.9	100.0	102.6	106.7	114.8	115.0	113.5	118.8
4244	Grocery and related products.....	89.3	106.1	101.5	103.9	103.3	100.0	106.4	105.6	104.7	104.5	107.3	103.5
4245	Farm product raw materials.....	83.1	84.8	101.8	107.2	104.1	100.0	100.1	111.3	113.4	120.4	119.9	122.0
4246	Chemicals.....	101.5	118.1	112.3	98.7	95.8	100.0	103.5	102.4	97.5	93.0	92.6	93.4
4247	Petroleum.....	54.9	73.9	65.1	89.9	91.5	100.0	98.4	106.2	98.6	95.8	92.0	93.5
4248	Alcoholic beverages.....	92.9	97.5	93.6	101.5	99.6	100.0	101.1	96.6	97.4	100.7	100.8	96.6
4249	Miscellaneous nondurable goods.....	104.9	92.5	94.3	108.1	105.3	100.0	103.5	113.5	116.4	113.4	109.0	101.5
425	Electronic markets and agents and brokers.....	58.6	77.0	91.1	109.4	100.9	100.0	95.3	89.4	79.6	84.2	91.4	89.0
4251	Electronic markets and agents and brokers.....	58.6	77.0	91.1	109.4	100.9	100.0	95.3	89.4	79.6	84.2	91.4	89.0
<b>Retail trade</b>													
44-45	Retail trade.....	63.1	67.9	79.6	92.5	95.6	100.0	104.8	109.8	112.5	116.8	120.0	117.9
441	Motor vehicle and parts dealers.....	65.4	73.4	83.4	95.3	96.7	100.0	103.6	106.2	105.6	107.5	109.0	99.3
4411	Automobile dealers.....	67.6	76.4	85.3	97.0	98.5	100.0	101.9	106.4	105.4	106.9	109.2	99.1
4412	Other motor vehicle dealers.....	55.4	63.5	74.8	86.2	93.2	100.0	100.1	107.2	100.8	106.9	108.3	110.1
4413	Auto parts, accessories, and tire stores.....	66.7	76.9	92.9	100.7	94.1	100.0	106.9	102.3	107.3	108.2	105.6	101.4
442	Furniture and home furnishings stores.....	58.1	66.8	77.4	89.7	94.7	100.0	104.1	113.5	116.4	121.1	128.1	128.5
4421	Furniture stores.....	61.8	72.8	79.9	89.5	95.6	100.0	102.9	111.2	113.7	119.8	123.2	121.6
4422	Home furnishings stores.....	53.0	59.0	74.1	89.7	93.5	100.0	105.7	116.3	119.5	123.0	133.9	136.5
443	Electronics and appliance stores.....	16.3	24.1	42.8	74.4	84.2	100.0	125.3	143.1	158.1	177.3	201.1	232.9
4431	Electronics and appliance stores.....	16.3	24.1	42.8	74.4	84.2	100.0	125.3	143.1	158.1	177.3	201.1	232.9
444	Building material and garden supply stores.....	62.8	67.5	82.8	93.7	96.7	100.0	105.2	111.3	111.4	113.9	116.8	117.8
4441	Building material and supplies dealers.....	64.0	68.3	82.5	94.9	96.2	100.0	105.0	110.4	111.3	113.5	114.5	112.1
4442	Lawn and garden equipment and supplies stores.....	56.5	63.5	84.6	87.2	100.1	100.0	106.3	118.4	111.8	116.7	136.1	164.4
445	Food and beverage stores.....	105.9	101.8	95.5	96.5	99.1	100.0	102.3	107.8	112.6	115.2	118.2	116.0
4451	Grocery stores.....	106.1	102.1	95.5	96.5	98.6	100.0	101.9	107.1	111.5	112.9	115.1	113.5
4452	Specialty food stores.....	131.5	106.1	95.0	93.6	102.8	100.0	106.5	114.3	118.8	131.2	140.1	128.7
4453	Beer, wine, and liquor stores.....	85.0	85.8	90.8	96.0	97.2	100.0	106.3	116.0	127.0	132.5	141.1	134.1
446	Health and personal care stores.....	68.4	73.1	81.3	91.3	94.5	100.0	105.3	109.2	108.8	113.0	112.1	112.5
4461	Health and personal care stores.....	68.4	73.1	81.3	91.3	94.5	100.0	105.3	109.2	108.8	113.0	112.1	112.5
447	Gasoline stations.....	67.1	70.2	79.9	86.1	90.2	100.0	95.8	97.7	99.4	98.9	101.4	100.8
4471	Gasoline stations.....	67.1	70.2	79.9	86.1	90.2	100.0	95.8	97.7	99.4	98.9	101.4	100.8
448	Clothing and clothing accessories stores.....	50.5	57.6	76.2	94.1	96.3	100.0	105.8	106.0	112.4	122.8	132.4	136.7
4481	Clothing stores.....	49.4	58.0	73.6	91.9	95.8	100.0	104.3	103.6	112.4	123.4	135.0	144.3
4482	Shoe stores.....	52.2	59.9	79.9	87.9	89.0	100.0	105.8	99.7	105.5	116.2	113.7	112.3
4483	Jewelry, luggage, and leather goods stores.....	54.4	53.2	84.3	110.0	104.4	100.0	111.9	121.6	117.0	124.2	134.2	122.0
451	Sporting goods, hobby, book, and music stores.....	58.7	67.7	78.4	94.9	99.6	100.0	103.1	118.4	128.2	133.3	131.2	135.4
4511	Sporting goods and musical instrument stores.....	53.8	63.4	73.5	95.1	98.9	100.0	103.7	122.0	132.0	140.1	137.0	141.7
4512	Book, periodical, and music stores.....	70.7	77.5	89.6	94.7	101.2	100.0	101.8	110.7	120.1	118.5	118.7	121.7
452	General merchandise stores.....	56.9	64.3	77.5	93.1	96.7	100.0	106.0	109.0	112.4	116.1	116.7	115.8
4521	Department stores.....	85.7	89.6	97.9	103.8	101.5	100.0	104.3	107.5	108.9	111.3	104.2	97.3
4529	Other general merchandise stores.....	30.5	38.9	55.8	82.4	92.2	100.0	105.8	107.1	110.7	113.9	120.3	123.2
453	Miscellaneous store retailers.....	54.7	61.9	84.0	95.8	94.6	100.0	105.9	109.8	116.7	128.4	133.8	136.8
4531	Florists.....	68.2	73.6	87.9	101.3	90.3	100.0	95.7	90.9	108.5	125.5	118.2	140.6
4532	Office supplies, stationery and gift stores.....	43.4	52.6	70.7	89.9	93.5	100.0	108.8	122.1	128.9	143.1	151.8	147.4
4533	Used merchandise stores.....	45.4	57.6	70.4	82.0	85.8	100.0	105.4	107.4	110.4	117.6	131.9	148.6
4539	Other miscellaneous store retailers.....	72.4	75.5	106.0	110.6	102.7	100.0	105.8	102.7	107.4	119.0	123.1	121.3
454	Nonstore retailers.....	27.9	33.5	54.9	83.6	89.9	100.0	107.4	118.4	121.3	140.4	152.4	154.8
4541	Electronic shopping and mail-order houses.....	18.5	23.6	47.0	75.3	84.4	100.0	114.5	128.3	136.4	160.6	176.6	170.5
4542	Vending machine operators.....	104.6	101.6	109.6	121.7	104.9	100.0	112.1	121.1	125.7	139.7	142.3	160.9
4543	Direct selling establishments.....	52.4	58.4	74.0	90.7	94.7	100.0	94.1	96.5	88.9	95.8	99.9	99.4
<b>Transportation and warehousing</b>													
481	Air transportation.....	76.7	80.0	98.3	96.0	91.0	100.0	110.2	124.2	133.6	140.5	143.0	-
482111	Line-haul railroads.....	44.7	62.3	75.8	86.6	92.4	100.0	105.0	107.2	103.3	109.3	104.4	-
48412	General freight trucking, long-distance.....	80.1	91.4	93.5	95.3	96.4	100.0	103.5	103.4	105.9	105.9	107.8	-
48421	Used household and office goods moving.....	130.9	137.9	122.6	116.2	102.9	100.0	105.7	108.6	108.5	109.0	114.3	-
491	U.S. Postal service.....	85.4	89.4	93.9	99.1	99.8	100.0	101.3	103.4	104.5	104.5	105.3	-
4911	U.S. Postal service.....	85.4	89.4	93.9	99.1	99.8	100.0	101.3	103.4	104.5	104.5	105.3	-
492	Couriers and messengers.....	103.6	108.8	69.8	90.0	92.6	100.0	102.2	96.7	95.3	98.0	92.5	-
493	Warehousing and storage.....	-	62.4	81.9	89.5	94.4	100.0	102.2	100.3	101.1	97.8	94.5	-
4931	Warehousing and storage.....	-	62.4	81.9	89.5	94.4	100.0	102.2	100.3	101.1	97.8	94.5	-
49311	General warehousing and storage.....	-	44.9	73.5	85.1	92.8	100.0	102.1	96.2	97.0	95.6	91.3	-
49312	Refrigerated warehousing and storage.....	-	106.7	114.7	109.4	98.0	100.0	105.8	114.0	101.8	92.2	97.7	-

50. Continued - Annual indexes of output per hour for selected NAICS industries

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Information</b>													
511	Publishing industries, except internet.....	54.7	62.5	85.3	99.9	99.5	100.0	107.8	111.6	116.6	123.1	128.1	-
5111	Newspaper, book, and directory publishers.....	100.3	91.7	95.6	102.9	101.0	100.0	104.7	101.9	103.1	107.2	109.1	-
5112	Software publishers.....	8.3	35.3	81.9	97.7	96.2	100.0	113.1	131.5	142.1	146.3	151.2	-
51213	Motion picture and video exhibition.....	90.9	104.2	100.2	106.7	101.8	100.0	100.6	103.8	102.5	107.5	110.8	-
515	Broadcasting, except internet.....	95.7	99.0	96.2	99.6	95.5	100.0	103.8	108.2	111.7	118.4	127.7	-
5151	Radio and television broadcasting.....	103.2	109.7	105.2	96.9	94.2	100.0	99.5	101.6	104.1	112.4	116.6	-
5152	Cable and other subscription programming.....	81.3	74.2	77.0	108.7	98.7	100.0	112.5	122.3	126.1	129.5	148.3	-
5171*	Wired telecommunications carriers.....	45.8	58.1	80.6	98.8	94.1	100.0	105.1	106.3	111.4	114.7	114.6	-
5172	Wireless telecommunications carriers.....	34.7	34.1	45.9	70.1	88.0	100.0	111.3	134.2	175.2	198.0	209.5	-
<b>Finance and insurance</b>													
52211	Commercial banking.....	68.8	78.5	93.6	98.0	95.8	100.0	104.5	110.2	111.6	114.8	115.8	-
<b>Real estate and rental and leasing</b>													
532111	Passenger car rental.....	80.9	91.4	87.3	98.0	97.0	100.0	105.7	103.2	95.8	97.2	113.6	-
53212	Truck, trailer, and RV rental and leasing.....	52.9	58.7	87.7	106.8	99.6	100.0	102.0	120.8	129.0	148.2	152.4	-
53223	Video tape and disc rental.....	59.1	78.5	76.7	103.5	102.3	100.0	113.9	118.5	110.6	135.2	171.1	-
<b>Professional and technical services</b>													
541213	Tax preparation services.....	74.4	78.5	89.8	90.6	84.8	100.0	98.7	89.7	93.1	92.7	105.4	-
54131	Architectural services.....	83.7	93.5	92.9	100.0	103.2	100.0	104.6	109.9	111.3	110.5	115.7	-
54133	Engineering services.....	89.8	96.8	99.5	101.5	99.6	100.0	100.0	107.3	111.8	112.5	109.5	-
54181	Advertising agencies.....	84.8	99.7	88.5	95.1	94.5	100.0	107.1	118.0	117.6	118.6	123.0	-
541921	Photography studios, portrait.....	100.5	98.7	102.4	111.6	104.7	100.0	106.7	95.4	95.9	101.2	107.0	-
<b>Administrative and waste services</b>													
561311	Employment placement agencies.....	-	-	85.6	76.9	85.2	100.0	98.7	102.5	99.3	106.0	113.7	-
56151	Travel agencies.....	70.0	72.4	78.4	93.6	90.3	100.0	115.4	131.0	140.5	143.8	149.4	-
56172	Janitorial services.....	71.1	87.2	94.7	95.7	96.7	100.0	112.5	110.4	114.3	110.0	115.9	-
<b>Health care and social assistance</b>													
6215	Medical and diagnostic laboratories.....	-	-	72.7	95.9	98.3	100.0	102.3	102.3	100.1	101.5	98.9	-
621511	Medical laboratories.....	-	-	81.2	103.5	103.7	100.0	104.5	106.2	102.2	103.4	105.6	-
621512	Diagnostic imaging centers.....	-	-	61.2	85.7	90.8	100.0	98.0	94.0	94.4	96.0	85.1	-
<b>Arts, entertainment, and recreation</b>													
71311	Amusement and theme parks.....	105.1	89.9	93.9	99.5	87.3	100.0	106.3	95.2	103.2	91.7	96.9	-
71395	Bowling centers.....	110.0	108.5	103.8	96.9	97.9	100.0	106.3	112.0	110.5	106.4	127.4	-
<b>Accommodation and food services</b>													
72	Accommodation and food services.....	88.1	93.2	94.6	100.1	99.1	100.0	101.5	103.2	102.8	102.9	102.1	-
721	Accommodation.....	76.7	81.0	89.3	98.5	96.4	100.0	101.0	106.4	102.1	99.0	97.3	-
7211	Traveler accommodation.....	75.6	80.4	89.2	99.2	96.6	100.0	100.9	106.5	102.5	98.9	97.1	-
722	Food services and drinking places.....	91.9	96.9	95.8	99.1	99.4	100.0	101.8	102.5	103.3	104.5	104.1	103.3
7221	Full-service restaurants.....	88.3	93.5	95.8	98.7	99.2	100.0	99.9	100.4	100.8	101.1	99.7	100.2
7222	Limited-service eating places.....	94.0	100.2	97.4	99.4	99.8	100.0	102.6	104.1	104.6	106.3	106.4	103.1
7223	Special food services.....	78.2	87.7	87.0	100.1	100.3	100.0	102.3	102.7	103.7	102.6	104.0	106.0
7224	Drinking places, alcoholic beverages.....	132.8	115.8	97.2	97.8	94.8	100.0	115.3	109.1	117.2	130.4	133.7	139.2
<b>Other services</b>													
8111	Automotive repair and maintenance.....	82.8	86.9	96.4	105.5	105.0	100.0	100.4	107.9	108.1	107.4	106.4	-
81142	Reupholstery and furniture repair.....	103.3	105.3	98.0	103.4	102.9	100.0	95.3	97.8	99.4	98.0	103.7	-
81211	Hair, nail, and skin care services.....	75.7	78.4	90.6	98.0	103.8	100.0	108.4	113.3	117.7	117.6	121.9	-
81221	Funeral homes and funeral services.....	109.7	112.2	105.8	100.3	97.1	100.0	101.2	98.3	98.4	105.2	102.6	-
8123	Drycleaning and laundry services.....	86.3	85.1	88.9	95.7	98.6	100.0	92.3	98.4	107.6	106.5	101.9	-
81292	Photofinishing.....	95.3	111.2	99.5	73.4	80.8	100.0	99.9	101.5	111.8	110.7	109.6	-

NOTE: Indexes for Wired telecommunications carriers are on a NAICS 2002 basis. Dash indicates data are not available.

51. Unemployment rates adjusted to U.S. concepts, 10 countries, seasonally adjusted

[Percent]

Country	2007	2008	2007				2008				2009	
			I	II	III	IV	I	II	III	IV	I	II
United States.....	4.6	5.8	4.5	4.5	4.7	4.8	4.9	5.4	6.0	6.9	8.1	9.2
Canada.....	5.3	5.3	5.4	5.2	5.2	5.2	5.2	5.3	5.3	5.6	6.7	7.5
Australia.....	4.4	4.2	4.5	4.3	4.3	4.4	4.0	4.2	4.2	4.5	5.3	5.7
Japan.....	3.9	4.0	4.0	3.8	3.8	3.9	3.9	4.1	4.1	4.1	4.5	5.3
France.....	8.1	7.5	8.6	8.2	8.1	7.7	7.2	7.4	7.5	8.0	8.7	9.3
Germany.....	8.7	7.5	9.2	8.8	8.6	8.2	7.8	7.6	7.4	7.4	7.7	8.0
Italy.....	6.2	6.8	6.2	6.1	6.3	6.4	6.6	6.8	6.9	7.1	7.3	7.4
Netherlands.....	3.2	2.8	3.6	3.2	3.0	3.0	2.9	2.8	2.6	2.8	3.1	3.3
Sweden.....	6.2	6.2	6.3	6.1	5.8	5.8	5.7	5.8	5.9	6.5	7.4	8.2
United Kingdom.....	5.4	5.7	5.5	5.4	5.3	5.2	5.3	5.4	5.9	6.3	7.0	7.8

Quarterly figures for France, Germany, Italy, and the Netherlands are calculated by applying annual adjustment factors to current published data and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. For further qualifications and historical annual data, see the BLS report *International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts, 10 Countries* (on the internet at <http://www.bls.gov/ilc/flscompare.htm>).

For monthly unemployment rates, as well as the quarterly and annual rates published in this table, see the BLS report *International Unemployment Rates and Employment Indexes, Seasonally Adjusted* (on the internet at [http://www.bls.gov/ilc/intl\\_unemployment\\_rates\\_monthly.htm](http://www.bls.gov/ilc/intl_unemployment_rates_monthly.htm)). Unemployment rates may differ between the two reports mentioned, because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.

**52. Annual data: employment status of the working-age population, adjusted to U.S. concepts, 10 countries**

[Numbers in thousands]

Employment status and country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Civilian labor force</b>											
United States.....	137,673	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428	153,124	154,287
Canada.....	15,135	15,403	15,637	15,891	16,366	16,733	16,955	17,108	17,351	17,696	17,987
Australia.....	9,339	9,414	9,590	9,746	9,901	10,085	10,213	10,529	10,771	11,021	11,254
Japan.....	67,240	67,090	66,990	66,860	66,240	66,010	65,770	65,850	65,960	66,080	65,900
France.....	25,277	25,705	25,951	26,217	26,448	26,624	26,758	26,926	27,169	27,305	27,541
Germany.....	39,752	39,375	39,302	39,459	39,413	39,276	39,711	40,760	41,250	41,416	41,623
Italy.....	23,004	23,176	23,361	23,524	23,728	24,020	24,084	24,179	24,395	24,459	24,829
Netherlands.....	7,744	7,881	8,052	8,199	8,345	8,379	8,439	8,459	8,541	8,686	8,780
Sweden.....	4,403	4,429	4,490	4,530	4,545	4,565	4,579	4,700	4,752	4,827	4,887
United Kingdom.....	28,474	28,786	28,962	29,092	29,343	29,565	29,802	30,137	30,598	30,778	31,125
<b>Participation rate<sup>1</sup></b>											
United States.....	67.1	67.1	67.1	66.8	66.6	66.2	66.0	66.0	66.2	66.0	66.0
Canada.....	65.4	65.9	66.0	66.1	67.1	67.7	67.7	67.4	67.4	67.7	67.9
Australia.....	64.3	64.0	64.4	64.4	64.3	64.6	64.6	65.4	65.8	66.2	66.6
Japan.....	62.8	62.4	62.0	61.6	60.8	60.3	60.0	60.0	60.0	60.0	59.8
France.....	55.6	56.2	56.3	56.4	56.4	56.3	56.2	56.1	56.3	56.2	56.3
Germany.....	57.7	56.9	56.7	56.7	56.4	56.0	56.4	57.6	58.2	58.4	58.6
Italy.....	47.7	47.9	48.1	48.3	48.5	49.1	49.1	48.7	48.9	48.6	49.0
Netherlands.....	61.8	62.5	63.4	64.0	64.7	64.6	64.8	64.7	65.1	65.9	66.3
Sweden.....	62.8	62.7	63.7	63.7	63.9	63.9	63.6	64.9	65.0	65.4	65.2
United Kingdom.....	62.4	62.8	62.8	62.7	62.9	62.9	63.0	63.1	63.5	63.4	63.6
<b>Employed</b>											
United States.....	131,463	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427	146,047	145,362
Canada.....	13,973	14,331	14,681	14,866	15,223	15,586	15,861	16,080	16,393	16,767	17,025
Australia.....	8,618	8,762	8,989	9,088	9,271	9,485	9,662	9,998	10,255	10,539	10,777
Japan.....	64,450	63,920	63,790	63,460	62,650	62,510	62,640	62,910	63,210	63,510	63,250
France.....	22,597	23,080	23,689	24,146	24,316	24,325	24,346	24,497	24,737	25,088	25,474
Germany.....	36,059	36,042	36,236	36,350	36,018	35,615	35,604	36,185	36,978	37,815	38,480
Italy.....	20,370	20,617	20,973	21,359	21,666	21,972	22,124	22,290	22,721	22,953	23,137
Netherlands.....	7,408	7,605	7,813	8,014	8,114	8,069	8,052	8,056	8,205	8,408	8,537
Sweden.....	4,036	4,116	4,230	4,303	4,311	4,301	4,279	4,334	4,416	4,530	4,582
United Kingdom.....	26,684	27,058	27,375	27,604	27,815	28,077	28,380	28,674	28,928	29,127	29,343
<b>Employment-population ratio<sup>2</sup></b>											
United States.....	64.1	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1	63.0	62.2
Canada.....	60.4	61.3	62.0	61.9	62.4	63.1	63.3	63.4	63.6	64.2	64.2
Australia.....	59.3	59.6	60.3	60.0	60.2	60.8	61.1	62.1	62.6	63.3	63.8
Japan.....	60.2	59.4	59.0	58.4	57.5	57.1	57.1	57.3	57.5	57.6	57.4
France.....	49.7	50.4	51.4	51.9	51.8	51.5	51.1	51.1	51.2	51.6	52.1
Germany.....	52.3	52.1	52.2	52.2	51.5	50.8	50.6	51.2	52.2	53.3	54.2
Italy.....	42.2	42.6	43.2	43.8	44.3	44.9	45.1	44.9	45.5	45.6	45.6
Netherlands.....	59.1	60.3	61.5	62.6	62.9	62.2	61.8	61.6	62.5	63.7	64.5
Sweden.....	57.6	58.3	60.1	60.5	60.6	60.2	59.5	59.9	60.4	61.3	61.1
United Kingdom.....	58.5	59.0	59.4	59.5	59.6	59.8	60.0	60.0	60.1	60.0	59.9
<b>Unemployed</b>											
United States.....	6,210	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001	7,078	8,924
Canada.....	1,162	1,072	956	1,026	1,143	1,147	1,093	1,028	958	929	962
Australia.....	721	652	602	658	630	599	551	531	516	482	477
Japan.....	2,790	3,170	3,200	3,400	3,590	3,500	3,130	2,940	2,750	2,570	2,650
France.....	2,680	2,625	2,262	2,071	2,132	2,299	2,412	2,429	2,432	2,217	2,067
Germany.....	3,693	3,333	3,065	3,110	3,396	3,661	4,107	4,575	4,272	3,601	3,140
Italy.....	2,634	2,559	2,388	2,164	2,062	2,048	1,960	1,889	1,673	1,506	1,692
Netherlands.....	337	277	239	186	231	310	387	402	336	278	243
Sweden.....	368	313	260	227	234	264	300	367	336	298	305
United Kingdom.....	1,791	1,728	1,587	1,489	1,528	1,488	1,423	1,463	1,670	1,652	1,783
<b>Unemployment rate<sup>3</sup></b>											
United States.....	4.5	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8
Canada.....	7.7	7.0	6.1	6.5	7.0	6.9	6.4	6.0	5.5	5.3	5.3
Australia.....	7.7	6.9	6.3	6.8	6.4	5.9	5.4	5.0	4.8	4.4	4.2
Japan.....	4.1	4.7	4.8	5.1	5.4	5.3	4.8	4.5	4.2	3.9	4.0
France.....	10.6	10.2	8.7	7.9	8.1	8.6	9.0	9.0	9.0	8.1	7.5
Germany.....	9.3	8.5	7.8	7.9	8.6	9.3	10.3	11.2	10.4	8.7	7.5
Italy.....	11.5	11.0	10.2	9.2	8.7	8.5	8.1	7.8	6.9	6.2	6.8
Netherlands.....	4.4	3.5	3.0	2.3	2.8	3.7	4.6	4.8	3.9	3.2	2.8
Sweden.....	8.4	7.1	5.8	5.0	5.1	5.8	6.6	7.8	7.1	6.2	6.2
United Kingdom.....	6.3	6.0	5.5	5.1	5.2	5.0	4.8	4.9	5.5	5.4	5.7

<sup>1</sup> Labor force as a percent of the working-age population.

<sup>2</sup> Employment as a percent of the working-age population.

<sup>3</sup> Unemployment as a percent of the labor force.

NOTE: There are breaks in series for the United States (1999, 2000, 2003, 2004), Australia (2001), France (2003), Germany (1999, 2005), the Netherlands (2000, 2003), and Sweden (2005). For further qualifications and historical annual data, see the BLS

report *International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts*, 10 Countries (on the internet at <http://www.bls.gov/flic/flscompare.htm>). Unemployment rates may differ from those in the BLS report *International Unemployment Rates and Employment Indexes, Seasonally Adjusted* (on the internet at [http://www.bls.gov/flic/intl\\_unemployment\\_rates\\_monthly.htm](http://www.bls.gov/flic/intl_unemployment_rates_monthly.htm)), because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.



**53. Continued— Annual indexes of manufacturing productivity and related measures, 17 economies**

Measure and economy	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2003	2004	2005	2006	2007	2008
<b>Unit labor costs</b>																
(national currency basis)																
United States.....	92.0	109.3	109.8	107.5	105.2	103.4	102.6	102.0	102.1	104.8	101.5	96.4	97.7	95.1	94.8	96.4
Canada.....	65.8	96.7	96.8	98.0	100.0	97.9	98.3	96.2	93.7	98.4	103.6	106.1	107.0	108.0	108.9	114.1
Australia.....	—	83.2	87.2	93.7	95.3	96.0	95.3	97.6	96.2	99.8	102.1	106.0	112.1	118.5	122.3	126.7
Japan.....	105.4	109.2	114.3	110.8	106.9	106.8	108.3	105.4	99.5	102.9	91.6	86.4	81.8	80.1	77.3	78.8
Korea, Rep. of.....	37.0	68.5	94.1	104.0	110.0	106.1	103.6	93.7	94.1	98.8	98.8	102.3	106.8	104.8	103.7	104.5
Singapore.....	—	110.3	115.9	113.6	116.5	117.9	115.7	96.0	92.3	106.0	97.1	88.9	86.5	82.8	85.5	91.9
Taiwan.....	69.5	109.3	121.6	122.7	121.6	120.4	119.1	114.2	110.5	112.4	98.5	95.3	92.0	88.9	84.2	85.7
Belgium.....	80.6	93.3	98.2	96.7	97.1	94.8	95.0	97.0	95.1	98.9	100.5	98.2	98.6	98.5	99.3	101.7
Denmark.....	49.4	86.4	85.6	87.3	94.0	90.0	92.9	93.7	92.3	96.5	102.5	100.6	103.0	103.3	105.6	114.4
France.....	65.6	101.0	107.1	106.1	107.8	104.8	100.4	99.3	97.6	98.3	97.9	98.3	97.4	98.9	100.4	104.3
Germany.....	65.7	85.5	97.2	100.8	102.7	98.9	99.9	99.7	98.1	98.6	98.7	95.7	91.7	88.0	85.3	87.5
Italy.....	34.5	78.6	86.8	87.7	92.0	94.4	94.0	95.6	93.2	96.1	106.0	108.1	110.0	110.2	112.1	119.0
Netherlands.....	85.6	90.5	95.0	93.8	93.5	95.7	96.9	96.2	94.1	97.7	101.8	99.5	96.6	95.7	96.2	100.7
Norway.....	35.3	66.6	74.2	78.5	79.4	82.7	89.9	91.8	94.1	97.0	95.8	93.4	94.5	102.4	107.5	112.8
Spain.....	35.7	73.7	92.8	93.6	97.0	98.4	97.4	95.6	96.0	97.6	102.5	104.1	107.0	109.5	112.3	118.8
Sweden.....	61.6	117.7	108.4	107.6	112.3	108.4	106.3	100.4	97.6	105.3	96.7	89.7	87.3	82.2	85.6	91.6
United Kingdom.....	52.9	83.3	84.9	87.9	88.3	90.5	96.4	97.3	96.7	97.6	100.7	98.9	100.4	101.6	101.5	103.7
<b>Unit labor costs</b>																
(U.S. dollar basis)																
United States.....	92.0	109.3	109.8	107.5	105.2	103.4	102.6	102.0	102.1	104.8	101.5	96.4	97.7	95.1	94.8	96.4
Canada.....	88.4	130.1	111.3	112.1	115.1	111.1	104.0	101.7	99.1	99.8	116.1	128.0	138.7	149.5	159.3	168.1
Australia.....	—	119.5	117.3	127.7	137.2	131.3	110.2	115.9	102.9	94.9	122.5	143.6	157.2	164.2	188.8	199.0
Japan.....	58.2	94.3	140.1	147.7	123.0	110.4	103.6	116.1	115.6	106.0	98.9	100.1	93.0	86.3	82.2	95.5
Korea, Rep. of.....	76.2	120.5	145.7	168.2	170.9	139.9	92.5	98.4	104.0	95.6	103.6	111.7	130.4	137.3	139.6	119.0
Singapore.....	—	109.0	135.9	143.5	147.9	142.1	123.9	101.5	95.9	105.9	99.7	94.2	93.1	93.4	101.6	116.4
Taiwan.....	66.6	140.3	158.7	159.9	152.9	144.5	122.6	122.1	122.1	114.8	98.9	98.6	98.9	94.4	88.5	93.9
Belgium.....	117.6	119.2	125.4	140.1	133.8	112.9	111.6	109.3	92.8	93.7	120.3	129.2	129.8	130.8	144.0	158.4
Denmark.....	69.1	110.1	106.2	123.0	127.8	107.4	109.3	105.8	89.9	91.4	122.9	132.5	135.5	137.1	153.1	177.3
France.....	107.8	128.7	134.1	147.7	146.2	124.5	118.0	111.9	95.3	93.1	117.2	129.4	128.3	131.5	145.6	162.4
Germany.....	74.7	109.4	124.0	145.6	141.2	117.9	117.4	112.4	95.8	93.3	118.2	125.9	120.8	117.0	123.7	136.3
Italy.....	82.6	134.3	110.4	110.2	122.1	113.5	110.8	107.7	91.0	91.0	126.9	142.2	144.8	146.5	162.5	185.4
Netherlands.....	100.4	115.9	121.7	136.3	129.3	114.2	113.8	108.4	91.9	92.5	121.9	130.8	127.2	127.2	139.5	156.8
Norway.....	57.0	85.0	83.9	98.9	98.1	93.2	95.0	93.9	85.2	86.1	108.0	110.6	117.2	127.6	146.6	159.8
Spain.....	87.6	127.3	122.1	132.2	134.8	118.1	114.8	107.7	93.8	92.4	122.7	136.9	140.9	145.6	162.9	185.1
Sweden.....	141.5	193.1	136.7	146.5	162.8	137.9	130.0	117.9	103.5	99.0	116.3	118.7	113.7	108.4	123.3	135.2
United Kingdom.....	81.9	98.9	86.5	92.3	91.8	98.6	106.4	104.7	97.6	93.5	109.5	120.6	121.6	124.6	135.2	128.0

NOTE: Data for Germany for years before 1993 are for the former West Germany. Data for 1993 onward are for unified Germany. Dash indicates data not available.

54. Occupational injury and illness rates by industry,<sup>1</sup> United States

Industry and type of case <sup>2</sup>	Incidence rates per 100 full-time workers <sup>3</sup>												
	1989 <sup>1</sup>	1990	1991	1992	1993 <sup>4</sup>	1994 <sup>4</sup>	1995 <sup>4</sup>	1996 <sup>4</sup>	1997 <sup>4</sup>	1998 <sup>4</sup>	1999 <sup>4</sup>	2000 <sup>4</sup>	2001 <sup>4</sup>
<b>PRIVATE SECTOR<sup>5</sup></b>													
Total cases .....	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7	6.3	6.1	5.7
Lost workday cases.....	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1	3.0	3.0	2.8
Lost workdays.....	78.7	84.0	86.5	93.8	-	-	-	-	-	-	-	-	-
<b>Agriculture, forestry, and fishing<sup>5</sup></b>													
Total cases .....	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9	7.3	7.1	7.3
Lost workday cases.....	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9	3.4	3.6	3.6
Lost workdays.....	100.9	112.2	108.3	126.9	-	-	-	-	-	-	-	-	-
<b>Mining</b>													
Total cases .....	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9	4.4	4.7	4.0
Lost workday cases.....	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9	2.7	3.0	2.4
Lost workdays.....	137.2	119.5	129.6	204.7	-	-	-	-	-	-	-	-	-
<b>Construction</b>													
Total cases .....	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8	8.6	8.3	7.9
Lost workday cases.....	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0	4.2	4.1	4.0
Lost workdays.....	143.3	147.9	148.1	161.9	-	-	-	-	-	-	-	-	-
<b>General building contractors:</b>													
Total cases .....	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4	8.0	7.8	6.9
Lost workday cases.....	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9	3.7	3.9	3.5
Lost workdays.....	137.3	137.6	132.0	142.7	-	-	-	-	-	-	-	-	-
<b>Heavy construction, except building:</b>													
Total cases .....	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2	7.8	7.6	7.8
Lost workday cases.....	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1	3.8	3.7	4.0
Lost workdays.....	147.1	144.6	160.1	165.8	-	-	-	-	-	-	-	-	-
<b>Special trades contractors:</b>													
Total cases .....	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1	8.9	8.6	8.2
Lost workday cases.....	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1	4.4	4.3	4.1
Lost workdays.....	144.9	153.1	151.3	168.3	-	-	-	-	-	-	-	-	-
<b>Manufacturing</b>													
Total cases .....	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7	9.2	9.0	8.1
Lost workday cases.....	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7	4.6	4.5	4.1
Lost workdays.....	113.0	120.7	121.5	124.6	-	-	-	-	-	-	-	-	-
<b>Durable goods:</b>													
Total cases .....	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7	10.1	-	8.8
Lost workday cases.....	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0	4.8	-	4.3
Lost workdays.....	116.5	123.3	122.9	126.7	-	-	-	-	-	-	-	-	-
<b>Lumber and wood products:</b>													
Total cases .....	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2	13.0	12.1	10.6
Lost workday cases.....	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8	6.7	6.1	5.5
Lost workdays.....	177.5	172.5	172.0	165.8	-	-	-	-	-	-	-	-	-
<b>Furniture and fixtures:</b>													
Total cases .....	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2	11.0
Lost workday cases.....	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9	5.7
Lost workdays.....	-	-	-	128.4	-	-	-	-	-	-	-	-	-
<b>Stone, clay, and glass products:</b>													
Total cases .....	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8	10.7	10.4	10.1
Lost workday cases.....	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0	5.4	5.5	5.1
Lost workdays.....	149.8	160.5	156.0	152.2	-	-	-	-	-	-	-	-	-
<b>Primary metal industries:</b>													
Total cases .....	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0	12.9	12.6	10.7
Lost workday cases.....	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0	6.3	6.3	5.3
Lost workdays.....	168.3	180.2	169.1	175.5	-	-	-	-	-	-	-	-	11.1
<b>Fabricated metal products:</b>													
Total cases .....	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9	12.6	11.9	11.1
Lost workday cases.....	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5	6.0	5.5	5.3
Lost workdays.....	147.6	155.7	146.6	144.0	-	-	-	-	-	-	-	-	-
<b>Industrial machinery and equipment:</b>													
Total cases .....	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5	8.5	8.2	11.0
Lost workday cases.....	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0	3.7	3.6	6.0
Lost workdays.....	86.8	88.9	86.6	87.7	-	-	-	-	-	-	-	-	-
<b>Electronic and other electrical equipment:</b>													
Total cases .....	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9	5.7	5.7	5.0
Lost workday cases.....	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8	2.8	2.9	2.5
Lost workdays.....	77.5	79.4	83.0	81.2	-	-	-	-	-	-	-	-	-
<b>Transportation equipment:</b>													
Total cases .....	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6	13.7	13.7	12.6
Lost workday cases.....	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6	6.4	6.3	6.0
Lost workdays.....	138.6	153.7	166.1	186.6	-	-	-	-	-	-	-	-	-
<b>Instruments and related products:</b>													
Total cases .....	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5	4.0
Lost workday cases.....	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2	2.0
Lost workdays.....	55.4	57.8	64.4	65.3	-	-	-	-	-	-	-	-	-
<b>Miscellaneous manufacturing industries:</b>													
Total cases .....	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1	8.4	7.2	6.4
Lost workday cases.....	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9	4.0	3.6	3.2
Lost workdays.....	97.6	113.1	104.0	108.2	-	-	-	-	-	-	-	-	-

See footnotes at end of table.



54. Continued—Occupational injury and illness rates by industry,<sup>1</sup> United States

Industry and type of case <sup>2</sup>	Incidence rates per 100 workers <sup>3</sup>												
	1989 <sup>1</sup>	1990	1991	1992	1993 <sup>4</sup>	1994 <sup>4</sup>	1995 <sup>4</sup>	1996 <sup>4</sup>	1997 <sup>4</sup>	1998 <sup>4</sup>	1999 <sup>4</sup>	2000 <sup>4</sup>	2001 <sup>4</sup>
<b>Nondurable goods:</b>													
Total cases .....	11.6	11.7	11.5	11.3	10.7	10.5	9.9	9.2	8.8	8.2	7.8	7.8	6.8
Lost workday cases.....	5.5	5.6	5.5	5.3	5.0	5.1	4.9	4.6	4.4	4.3	4.2	4.2	3.8
Lost workdays.....	107.8	116.9	119.7	121.8	-	-	-	-	-	-	-	-	-
<b>Food and kindred products:</b>													
Total cases .....	18.5	20.0	19.5	18.8	17.6	17.1	16.3	15.0	14.5	13.6	12.7	12.4	10.9
Lost workday cases.....	9.3	9.9	9.9	9.5	8.9	9.2	8.7	8.0	8.0	7.5	7.3	7.3	6.3
Lost workdays.....	174.7	202.6	207.2	211.9	-	-	-	-	-	-	-	-	-
<b>Tobacco products:</b>													
Total cases .....	8.7	7.7	6.4	6.0	5.8	5.3	5.6	6.7	5.9	6.4	5.5	6.2	6.7
Lost workday cases.....	3.4	3.2	2.8	2.4	2.3	2.4	2.6	2.8	2.7	3.4	2.2	3.1	4.2
Lost workdays.....	64.2	62.3	52.0	42.9	-	-	-	-	-	-	-	-	-
<b>Textile mill products:</b>													
Total cases .....	10.3	9.6	10.1	9.9	9.7	8.7	8.2	7.8	6.7	7.4	6.4	6.0	5.2
Lost workday cases.....	4.2	4.0	4.4	4.2	4.1	4.0	4.1	3.6	3.1	3.4	3.2	3.2	2.7
Lost workdays.....	81.4	85.1	88.3	87.1	-	-	-	-	-	-	-	-	-
<b>Apparel and other textile products:</b>													
Total cases .....	8.6	8.8	9.2	9.5	9.0	8.9	8.2	7.4	7.0	6.2	5.8	6.1	5.0
Lost workday cases.....	3.8	3.9	4.2	4.0	3.8	3.9	3.6	3.3	3.1	2.6	2.8	3.0	2.4
Lost workdays.....	80.5	92.1	99.9	104.6	-	-	-	-	-	-	-	-	-
<b>Paper and allied products:</b>													
Total cases .....	12.7	12.1	11.2	11.0	9.9	9.6	8.5	7.9	7.3	7.1	7.0	6.5	6.0
Lost workday cases.....	5.8	5.5	5.0	5.0	4.6	4.5	4.2	3.8	3.7	3.7	3.7	3.4	3.2
Lost workdays.....	132.9	124.8	122.7	125.9	-	-	-	-	-	-	-	-	-
<b>Printing and publishing:</b>													
Total cases .....	6.9	6.9	6.7	7.3	6.9	6.7	6.4	6.0	5.7	5.4	5.0	5.1	4.6
Lost workday cases.....	3.3	3.3	3.2	3.2	3.1	3.0	3.0	2.8	2.7	2.8	2.6	2.6	2.4
Lost workdays.....	63.8	69.8	74.5	74.8	-	-	-	-	-	-	-	-	-
<b>Chemicals and allied products:</b>													
Total cases .....	7.0	6.5	6.4	6.0	5.9	5.7	5.5	4.8	4.8	4.2	4.4	4.2	4.0
Lost workday cases.....	3.2	3.1	3.1	2.8	2.7	2.8	2.7	2.4	2.3	2.1	2.3	2.2	2.1
Lost workdays.....	63.4	61.6	62.4	64.2	-	-	-	-	-	-	-	-	-
<b>Petroleum and coal products:</b>													
Total cases .....	6.6	6.6	6.2	5.9	5.2	4.7	4.8	4.6	4.3	3.9	4.1	3.7	2.9
Lost workday cases.....	3.3	3.1	2.9	2.8	2.5	2.3	2.4	2.5	2.2	1.8	1.8	1.9	1.4
Lost workdays.....	68.1	77.3	68.2	71.2	-	-	-	-	-	-	-	-	-
<b>Rubber and miscellaneous plastics products:</b>													
Total cases .....	16.2	16.2	15.1	14.5	13.9	14.0	12.9	12.3	11.9	11.2	10.1	10.7	8.7
Lost workday cases.....	8.0	7.8	7.2	6.8	6.5	6.7	6.5	6.3	5.8	5.8	5.5	5.8	4.8
Lost workdays.....	147.2	151.3	150.9	153.3	-	-	-	-	-	-	-	-	-
<b>Leather and leather products:</b>													
Total cases .....	13.6	12.1	12.5	12.1	12.1	12.0	11.4	10.7	10.6	9.8	10.3	9.0	8.7
Lost workday cases.....	6.5	5.9	5.9	5.4	5.5	5.3	4.8	4.5	4.3	4.5	5.0	4.3	4.4
Lost workdays.....	130.4	152.3	140.8	128.5	-	-	-	-	-	-	-	-	-
<b>Transportation and public utilities</b>													
Total cases .....	9.2	9.6	9.3	9.1	9.5	9.3	9.1	8.7	8.2	7.3	7.3	6.9	6.9
Lost workday cases.....	5.3	5.5	5.4	5.1	5.4	5.5	5.2	5.1	4.8	4.3	4.4	4.3	4.3
Lost workdays.....	121.5	134.1	140.0	144.0	-	-	-	-	-	-	-	-	-
<b>Wholesale and retail trade</b>													
Total cases .....	8.0	7.9	7.6	8.4	8.1	7.9	7.5	6.8	6.7	6.5	6.1	5.9	6.6
Lost workday cases.....	3.6	3.5	3.4	3.5	3.4	3.4	3.2	2.9	3.0	2.8	2.7	2.7	2.5
Lost workdays.....	63.5	65.6	72.0	80.1	-	-	-	-	-	-	-	-	-
<b>Wholesale trade:</b>													
Total cases .....	7.7	7.4	7.2	7.6	7.8	7.7	7.5	6.6	6.5	6.5	6.3	5.8	5.3
Lost workday cases.....	4.0	3.7	3.7	3.6	3.7	3.8	3.6	3.4	3.2	3.3	3.3	3.1	2.8
Lost workdays.....	71.9	71.5	79.2	82.4	-	-	-	-	-	-	-	-	-
<b>Retail trade:</b>													
Total cases .....	8.1	8.1	7.7	8.7	8.2	7.9	7.5	6.9	6.8	6.5	6.1	5.9	5.7
Lost workday cases.....	3.4	3.4	3.3	3.4	3.3	3.3	3.0	2.8	2.9	2.7	2.5	2.5	2.4
Lost workdays.....	60.0	63.2	69.1	79.2	-	-	-	-	-	-	-	-	-
<b>Finance, insurance, and real estate</b>													
Total cases .....	2.0	2.4	2.4	2.9	2.9	2.7	2.6	2.4	2.2	.7	1.8	1.9	1.8
Lost workday cases.....	.9	1.1	1.1	1.2	1.2	1.1	1.0	.9	.9	.5	.8	.8	.7
Lost workdays.....	17.6	27.3	24.1	32.9	-	-	-	-	-	-	-	-	-
<b>Services</b>													
Total cases .....	5.5	6.0	6.2	7.1	6.7	6.5	6.4	6.0	5.6	5.2	4.9	4.9	4.6
Lost workday cases.....	2.7	2.8	2.8	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.2	2.2	2.2
Lost workdays.....	51.2	56.4	60.0	68.6	-	-	-	-	-	-	-	-	-

<sup>1</sup> Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985-88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

<sup>2</sup> Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

<sup>3</sup> The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:

N = number of injuries and illnesses or lost workdays;  
EH = total hours worked by all employees during the calendar year; and  
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

<sup>4</sup> Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

<sup>5</sup> Excludes farms with fewer than 11 employees since 1976.

NOTE: Dash indicates data not available.

### 55. Fatal occupational injuries by event or exposure, 1996-2005

Event or exposure <sup>1</sup>	1996-2000 (average)	2001-2005 (average) <sup>2</sup>	2005 <sup>3</sup>	
			Number	Percent
All events .....	6,094	5,704	5,734	100
<b>Transportation incidents</b> .....	2,608	2,451	2,493	43
Highway .....	1,408	1,394	1,437	25
Collision between vehicles, mobile equipment .....	685	686	718	13
Moving in same direction .....	117	151	175	3
Moving in opposite directions, oncoming .....	247	254	265	5
Moving in intersection .....	151	137	134	2
Vehicle struck stationary object or equipment on side of road .....	264	310	345	6
Noncollision .....	372	335	318	6
Jack-knifed or overturned--no collision .....	298	274	273	5
Nonhighway (farm, industrial premises) .....	378	335	340	6
Noncollision accident .....	321	277	281	5
Overturned .....	212	175	182	3
Worker struck by vehicle, mobile equipment .....	376	369	391	7
Worker struck by vehicle, mobile equipment in roadway .....	129	136	140	2
Worker struck by vehicle, mobile equipment in parking lot or non-road area .....	171	166	176	3
Water vehicle .....	105	82	88	2
Aircraft .....	263	206	149	3
<b>Assaults and violent acts</b> .....	1,015	850	792	14
Homicides .....	766	602	567	10
Shooting .....	617	465	441	8
Suicide, self-inflicted injury .....	216	207	180	3
<b>Contact with objects and equipment</b> .....	1,005	952	1,005	18
Struck by object .....	567	560	607	11
Struck by falling object .....	364	345	385	7
Struck by rolling, sliding objects on floor or ground level .....	77	89	94	2
Caught in or compressed by equipment or objects .....	293	256	278	5
Caught in running equipment or machinery .....	157	128	121	2
Caught in or crushed in collapsing materials .....	128	118	109	2
<b>Falls</b> .....	714	763	770	13
Fall to lower level .....	636	669	664	12
Fall from ladder .....	106	125	129	2
Fall from roof .....	153	154	160	3
Fall to lower level, n.e.c. ....	117	123	117	2
<b>Exposure to harmful substances or environments</b> .....	535	498	501	9
Contact with electric current .....	290	265	251	4
Contact with overhead power lines .....	132	118	112	2
Exposure to caustic, noxious, or allergenic substances	112	114	136	2
Oxygen deficiency .....	92	74	59	1
<b>Fires and explosions</b> .....	196	174	159	3
Fires--unintended or uncontrolled .....	103	95	93	2
Explosion .....	92	78	65	1

<sup>1</sup> Based on the 1992 BLS Occupational Injury and Illness Classification Manual.

<sup>2</sup> Excludes fatalities from the Sept. 11, 2001, terrorist attacks.

<sup>3</sup> The BLS news release of August 10, 2006, reported a total of 5,702 fatal work injuries for calendar year 2005. Since then, an additional 32 job-related fatalities were identified, bringing the total job-related fatality count for 2005 to 5,734.

NOTE: Totals for all years are revised and final. Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. N.e.c. means "not elsewhere classified."

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries.

# Earnings of Healthcare Workers by Level of Duties and Responsibilities, 2008

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*This article presents estimates of earnings for full-time civilian healthcare practitioner and technical and healthcare support occupations, and for specific occupations within these groups, by work level. The data show significant differences between average hourly earnings of the lowest and highest work levels within most healthcare occupations.*

## Introduction

The rising cost of healthcare is a major issue affecting the lives of Americans and has led to legislative action on insurance coverage and delivery of healthcare in the United States. Whether one has an employer-provided health plan,<sup>1</sup> is covered by a government program, pays independently for health insurance coverage, or has no health insurance coverage, the use of healthcare services remains strong.<sup>2</sup> In the private sector, employment in the healthcare industry as a percentage of total employment has been rising for decades.<sup>3</sup> Even during economic downturns, as thousands of jobs are lost, healthcare workers—who provide the indispensable services that people need in emergencies as well as for maintaining health—typically remain at high employment levels.<sup>4</sup> Furthermore, with the ageing of the U.S. population and technological improvements in medicine, healthcare occupations are expected to experience employment growth over the next several years.<sup>5</sup>

Considering the growth in demand for healthcare services and recent Federal Government policy changes affecting the healthcare industry, a review of wages currently earned by workers in healthcare occupations is timely. This article presents an analysis of healthcare workers wages using 2008 [National Compensation Survey \(NCS\)](#) data.<sup>6</sup> The NCS provides estimates of average hourly earnings for hundreds of occupations.<sup>7</sup> The survey is unique in that it collects data and publishes earnings estimates not only by occupation but also by work level within an occupation. Work-level earnings data are especially useful because they provide a measure of earnings based on the workers actual duties and responsibilities on the job.<sup>8</sup> These data can be of particular interest to policy experts and healthcare providers; for example, as healthcare providers strive to cut costs, wage data by work level give a more complete picture of the wage structure. Also, the data are useful for job seekers and employed healthcare workers to assess a range of earnings rates that are associated with a specific occupation.

This analysis focuses primarily on hourly earnings of full-time<sup>9</sup> workers in healthcare practitioner and technical occupations and healthcare support occupations, by work level, in the U.S. civilian sector. Healthcare workers are employed in establishments such as hospitals, clinics, private practices of physicians and dentists, pharmacies, nursing homes, outpatient surgical centers, diagnostic imaging centers, ambulance and Medevac services, and educational institutions, large businesses, and government agencies that run an employee or student health unit. The NCS defines civilian workers as those in private industry and in State and local government. The NCS excludes the military, Federal Government workers, household workers, and the self-employed from its surveys. Sampled occupations are defined by the [Standard Occupational Classification \(SOC\)](#) system.<sup>10</sup> The analysis shows that for certain healthcare occupations, there are significant differences in hourly earnings by work level. This study does not include an analysis of work-level wage differences between full-time and part-time workers, nor between State and local government and private industry workers. Both of these factors may affect earnings estimates by work level.

## Occupational Earnings Estimates

Table 1 lists the average earnings for selected occupations and occupational groups. The 2008 NCS published national, civilian sector, full-time earnings estimates for 48 occupations and minor occupational groups under the major group healthcare practitioner and technical occupations and for 18 occupations and minor occupational groups under the major group healthcare support occupations.

**Table 1. Mean hourly earnings of healthcare occupations, full-time civilian workers, National Compensation Survey, 2008**

Occupation	All work levels
<b>Healthcare practitioner and technical occupations*</b>	\$ 30.23
<b>Dentists</b>	63.24
Dentists, general	61.81
<b>Dietitians and nutritionists*</b>	23.48
<b>Optometrists</b>	54.01
<b>Pharmacists*</b>	51.54
<b>Physicians and surgeons*</b>	76.46
Anesthesiologists	108.49
Family and general practitioners*	77.95
Internists, general	74.16
Pediatricians, general	53.51
Psychiatrists	74.83
Surgeons	86.23
<b>Physician assistants*</b>	42.58
<b>Registered nurses*</b>	31.54
<b>Therapists*</b>	31.11
Audiologists	33.19
Occupational therapists*	34.26
Physical therapists*	33.74
Radiation therapists	39.99
Recreational therapists	18.76
Respiratory therapists*	24.96
Speech-language pathologists*	35.01
<b>Veterinarians</b>	43.30
<b>Clinical laboratory technologists and technicians*</b>	20.43
Medical and clinical laboratory technologists*	24.55
Medical and clinical laboratory technicians*	17.50
<b>Dental hygienists*</b>	31.32
<b>Diagnostic related technologists and technicians*</b>	27.39
Cardiovascular technologists and technicians*	26.50
Diagnostic medical sonographers*	32.17
Nuclear medicine technologists	36.32
Radiologic technologists and technicians*	26.01
<b>Emergency medical technicians and paramedics*</b>	15.74
<b>Health diagnosing and treating practitioner support technicians*</b>	16.67
Dietetic technicians	11.05
Pharmacy technicians*	14.89
Psychiatric technicians*	16.89

Note: An asterisk (\*) denotes two or more work-level estimates published for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 3, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm>.

Occupation	All work levels
Respiratory therapy technicians*	22.53
Surgical technologists*	19.32
Veterinary technologists and technicians	14.32
Licensed practical and licensed vocational nurses*	19.04
Medical records and health information technicians*	16.48
Opticians, dispensing	18.14
Miscellaneous health technologists and technicians*	18.50
Occupational health and safety specialists and technicians*	26.99
Occupational health and safety specialists*	26.75
Miscellaneous healthcare practitioner and technical workers	20.27
Athletic trainers	18.43
Healthcare support occupations*	12.90
Nursing, psychiatric, and home health aides*	11.53
Home health aides*	10.24
Nursing aides, orderlies, and attendants*	11.71
Psychiatric aides*	12.55
Occupational therapist assistants and aides*	18.73
Occupational therapist assistants	22.05
Occupational therapist aides	12.65
Physical therapist assistants and aides*	18.49
Physical therapist assistants*	24.21
Physical therapist aides*	11.88
Massage therapists	20.03
Miscellaneous healthcare support occupations*	14.45
Dental assistants*	17.24
Medical assistants*	13.70
Medical equipment preparers*	14.80
Medical transcriptionists*	15.04
Pharmacy aides*	11.99
Veterinary assistants and laboratory animal caretakers	12.56

Note: An asterisk (\*) denotes two or more work-level estimates published for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 3, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm>.

As shown in table 1, nationally, civilian full-time healthcare practitioner and technical occupations as a whole earned an occupational mean of \$30.23 per hour in 2008. Full-time workers in healthcare support occupations as a whole earned an occupational mean of \$12.90 per hour. The mean hourly earnings of specific occupations under healthcare support ranged from \$10.24 per hour for home health aides to \$24.21 per hour for physical therapist assistants. The mean hourly earnings of occupations under healthcare practitioner and technical ranged from \$11.05 per hour for dietetic technicians to \$108.49 per hour for anesthesiologists.

### Estimating Average Earnings By Work Level

The Federal Government conducts several surveys that publish wage data.<sup>11</sup> The NCS is unique in that it provides estimates by work level within the occupation. When the NCS samples a job in an establishment, the field economist who collects the

data matches the job to an occupation defined by the SOC and the employers classification of the job; then he or she determines work level within that matched occupation using a point-factor system for job evaluation. There are four factors in the system used by the NCS: (1) knowledge, (2) job controls and complexity, (3) contacts, and (4) physical environment. Points are assigned for each of the factors; the greater the duties and responsibilities within each factor, the higher are the number of points. For example, a sampled job of fire fighter might receive 100 points for the physical environment factor because the job requires strenuous, high risk activities, whereas a typical secretarial occupation might receive only 10 points because the job is not strenuous and is performed in a relatively low-risk environment.<sup>12</sup>

All surveyed jobs are measured against the same point-factor standards for job controls and complexity, contacts, and physical environment factors. Knowledge is the only factor that assigns points differently for different occupational groups.<sup>13</sup> For healthcare practitioners and technical occupations, such as registered nurses, surgeons, pharmacists, dentists, physical therapists, and psychiatrists, the field economist uses the *Knowledge Guide for Professional Medical Jobs* to level this factor and determine the knowledge points for the surveyed job.<sup>14</sup> For healthcare support occupations, such as nursing aides, orderlies, and attendants, the field economist uses the *Knowledge Guide for Medical, Hospital, Dental, Public Health, and Veterinary Technician Jobs* to level the knowledge factor and determine the knowledge points for the surveyed job.<sup>15</sup> Once the field economist determines the points assigned to each of the four factors, he or she sums the points, and this total indicates the work level of the surveyed occupation. (A work level covers a range of total points.<sup>16</sup>) The NCS then collects earnings data for all of the establishments employees in that unique, matched occupation.

As the NCS processes the collected data, the work level associated with each surveyed job is used to create estimates of average hourly wages for each work level within each occupation. NCS publishes wage estimates for 15 work levels; however, no individual occupation matches at all 15 work levels. For example, entry-level physicians might receive 1,250 points for the knowledge factor, which, when combined with the other three factors, typically results in a work level no lower than level 9. By contrast, the greatest number of knowledge points home health aides would likely be evaluated with is 950. Even factoring the highest number of points for physical environment (100) it follows that home health aides are rarely matched at work levels higher than level 5.

For the 2008 survey year, the NCS published occupational wage estimates by work level for almost all of the published full-time civilian occupations under the category healthcare support; however, the NCS published no wage estimates by work level for several occupations under the category healthcare practitioner and technicians. For example, civilian full-time anesthesiologists earn a mean of \$108.49 per hour, but no work level data for this occupation were published. Another example is the occupation dentists. Dentists perform a wide range of procedures. At lower work levels, dentists work would typically involve detecting cavities and restoring teeth; extracting decayed or impacted teeth; and preparing teeth for and fitting veneers, crowns, and bridges. In the middle range of work levels, dentists typically perform demanding dental procedures and oral surgery, including bone grafts, root canal therapy, and tooth implants. At the highest work levels, dentists might lead a team of medical experts engaged in maxillofacial surgery, which is performed to repair birth defects or damage from traumatic injuries.

Despite the various levels of work conducted by those sharing the occupational title of *dentists*, the 2008 NCS survey did not publish work-level estimates for this occupation. Wage estimates are not published if the sample does not yield enough observations to meet respondent confidentiality requirements established by the Bureau of Labor Statistics or if the relative error of the sampled data was too great to provide statistically reliable estimates. Therefore, this study continues the analysis only on those healthcare occupations for which wage estimates were published for two or more work levels.

### Hourly Wages By Work Level

Table 2 shows mean hourly wages by occupation and by work level within occupations for full-time civilian workers in the categories healthcare practitioner and technical occupations and healthcare support occupations.

**Table 2. Mean hourly earnings by work level of selected healthcare occupations, full-time civilian workers, National Compensation Survey, 2008**

Occupation	Work level													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Healthcare practitioner and technical occupations</b>	(-)	\$11.20	\$12.35	\$15.06	\$18.34	\$21.12	\$25.07	\$29.26	\$32.14	\$39.41	\$45.68	\$86.51	\$86.95	\$106.50
<b>Dietitians and nutritionists</b>	(-)	(-)	(-)	(-)	(-)	(-)	20.69	21.57	25.69	(-)	(-)	(-)	(-)	(-)
<b>Pharmacists</b>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	51.69	50.46	52.24	54.08	(-)	(-)
<b>Physicians and surgeons</b>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	21.57	19.65	37.71	94.38	89.06	107.08
<b>Family and general practitioners</b>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	43.96	87.76	(-)	(-)
<b>Physician assistants</b>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	38.77	(-)	43.57	(-)	(-)	(-)
<b>Registered nurses</b>	(-)	(-)	(-)	(-)	18.79	22.94	25.79	29.34	31.05	41.56	42.09	59.53	(-)	(-)
<b>Therapists</b>	(-)	(-)	(-)	(-)	20.13	22.63	23.96	30.55	33.86	38.74	43.69	(-)	(-)	(-)
<b>Occupational therapists</b>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	32.06	33.32	41.04	(-)	(-)	(-)	(-)
<b>Physical therapists</b>	(-)	(-)	(-)	(-)	(-)	(-)	26.42	34.75	34.62	37.05	(-)	(-)	(-)	(-)
<b>Respiratory therapists</b>	(-)	(-)	(-)	(-)	(-)	21.48	24.38	26.71	29.45	(-)	(-)	(-)	(-)	(-)
<b>Speech-language pathologists</b>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	34.10	40.60	41.92	(-)	(-)	(-)
<b>Clinical laboratory technologists and technicians</b>	(-)	(-)	12.63	15.33	18.37	22.23	24.90	24.02	29.26	(-)	(-)	(-)	(-)	(-)
<b>Medical and clinical laboratory technologists</b>	(-)	(-)	(-)	(-)	17.69	25.04	25.23	23.88	29.26	(-)	(-)	(-)	(-)	(-)
<b>Medical and clinical laboratory technicians</b>	(-)	(-)	12.63	15.38	18.67	21.75	19.61	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Dental hygienists</b>	(-)	(-)	(-)	(-)	21.58	31.69	32.04	35.11	40.15	(-)	(-)	(-)	(-)	(-)
<b>Diagnostic related technologists and technicians</b>	(-)	(-)	(-)	16.50	21.34	23.88	29.41	31.75	37.74	(-)	(-)	(-)	(-)	(-)
<b>Cardiovascular technologists and technicians</b>	(-)	(-)	(-)	13.77	23.83	23.15	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Diagnostic medical sonographers</b>	(-)	(-)	(-)	(-)	(-)	(-)	32.76	31.11	33.86	(-)	(-)	(-)	(-)	(-)
<b>Radiologic technologists and technicians</b>	(-)	(-)	(-)	(-)	20.54	23.47	27.65	31.68	34.54	(-)	(-)	(-)	(-)	(-)
<b>Emergency medical technicians and paramedics</b>	(-)	(-)	(-)	11.26	14.86	17.23	18.87	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Health diagnosing and treating practitioner support technicians</b>	(-)	(-)	12.24	13.97	18.45	19.57	20.78	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Pharmacy technicians</b>	(-)	(-)	11.11	13.85	17.64	18.15	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Psychiatric technicians</b>	(-)	(-)	(-)	12.34	18.38	21.12	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Respiratory therapy technicians</b>	(-)	(-)	(-)	(-)	(-)	22.33	21.95	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Surgical technologists</b>	(-)	(-)	(-)	17.19	18.91	20.76	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
<b>Licensed practical and licensed vocational nurses</b>	(-)	(-)	(-)	16.45	18.31	20.24	20.88	(-)	(-)	(-)	(-)	(-)	(-)	(-)

Note: A dash (-) indicates that no statistically reliable or otherwise publishable estimate is available for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm>.

Occupation	Work level													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Medical records and health information technicians	(-)	(-)	12.34	14.69	16.06	19.77	25.20	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Miscellaneous health technologists and technicians	(-)	(-)	(-)	15.96	17.32	22.69	23.72	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Occupational health and safety specialists and technicians	(-)	(-)	(-)	(-)	(-)	16.46	26.39	29.55	28.79	(-)	(-)	(-)	(-)	(-)
Occupational health and safety specialists	(-)	(-)	(-)	(-)	(-)	15.70	23.33	29.55	28.79	(-)	(-)	(-)	(-)	(-)
Healthcare support occupations	\$ 9.27	10.61	11.66	13.72	16.66	19.99	22.96	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Nursing, psychiatric, and home health aides	9.85	10.44	11.35	12.85	14.90	14.55	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Home health aides	(-)	9.95	9.88	11.71	12.29	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Nursing aides, orderlies, and attendants	9.85	10.64	11.64	12.94	14.57	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Psychiatric aides	(-)	10.31	11.57	13.32	16.08	16.12	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Occupational therapist assistants and aides	(-)	(-)	(-)	12.40	(-)	24.04	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Physical therapist assistants and aides	(-)	14.07	11.15	11.66	18.76	(-)	22.94	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Physical therapist assistants	(-)	(-)	(-)	(-)	18.76	(-)	22.94	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Physical therapist aides	(-)	14.07	11.15	11.07	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Miscellaneous healthcare support occupations	8.57	11.15	12.87	14.40	16.93	18.95	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Dental assistants	(-)	(-)	16.25	16.93	19.13	19.05	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Medical assistants	(-)	11.55	11.64	13.72	16.26	17.44	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Medical equipment preparers	(-)	13.33	13.24	15.43	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Medical transcriptionists	(-)	(-)	13.85	13.69	16.17	21.70	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
Pharmacy aides	(-)	11.12	11.80	12.67	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)

Note: A dash (-) indicates that no statistically reliable or otherwise publishable estimate is available for the occupation.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm>.

Clearly, earnings estimates by occupational wage levels give more information on the pay structure of healthcare workers than earnings estimates by occupation alone. Healthcare support occupations as a whole earned from \$9.27 per hour at work level 1 to \$22.96 at work level 7. Healthcare practitioner and technical occupations as a whole earned from \$11.20 per hour at work level 2 to \$106.50 at work level 14. Much of the difference in work levels between these two major occupational groups can be explained by the fact that, in general terms, healthcare support occupations involve duties that are less complex in nature and require less specialized knowledge and need for judgment than do healthcare practitioner and technical occupations.

Mean earnings of specific occupations within the category healthcare practitioner and technical ranged from \$107.08 per hour for physicians and surgeons at level 14 to \$11.11 per hour for pharmacy technicians at level 3. Mean earnings for specific occupations within healthcare support ranged from \$8.57 per hour for workers in miscellaneous healthcare support occupations at work level 1 to physical therapist assistants at \$22.94 per hour at work level 7.



Registered nurses (RNs) comprise the largest number of workers among all healthcare occupations.<sup>17</sup> Full-time civilian RNs earn an average of \$31.54 per hour, ranging from an average of \$18.79 per hour at level 5 to \$59.53 per hour at level 12. This range of earnings reflects the wide range of duties performed by RNs—from administering basic procedures and recording patient data such as temperature, blood pressure, and weight—to assisting in surgery and helping to stabilize patients in emergency care. For the NCS, RNs include those workers with a 2-, 3-, or 4-year college degree in nursing and who have passed a State nursing registration exam,<sup>18</sup> as well as nurse practitioners, who have completed a post-graduate nursing degree. The wide range of formal education encompassed by the title *registered nurse* seems to be, in turn, reflected in the types of duties they are qualified for and actually perform.

### Significantly Different Wage Rates Between Work Levels

A cursory look at table 2 shows that higher work levels are generally associated with higher pay. Although the NCS does not use pay as a factor in determining work level, earnings estimates tend to increase as work levels increase. Note that for some occupations, earnings levels appear to decrease with the step to the next higher work level. For example, pharmacists at work level 9 earn an average of \$51.69 per hour and \$50.46 at work level 10; although the mean wage appears to decline from level 9 to level 10, the difference in pay between the two levels is not statistically significant.<sup>19</sup> When a higher level wage estimate appears to be lower than a lower level wage estimate within the same occupation, it is called *pay inversion*. Pay inversion can occur when there are different employment patterns among sampled establishments or geographic areas. For example, if large establishments are paying higher wages for level 9 pharmacists than are small establishments, but large establishments employ fewer level 10 pharmacists than do small establishments, the survey result may be a higher wage estimate or a wage estimate that statistically is not different for work level 9 than work level 10.

Because NCS data come from a sample rather than a census of workers, a test is needed to determine whether sample estimates are statistically different from one another. A test at the 90-percent confidence level shows that many sampled occupations have significantly higher wage rates at the highest work level than at the lowest. Table 3 lists several full-time healthcare occupations for which earnings in the lowest and highest published work levels differed significantly.

**Table 3. Mean hourly wages by work level for selected occupations, full-time civilian workers, National Compensation Survey, 2008**

Occupation	Earnings at the lowest published work level	Work level	Earnings at the highest published work level	Work level
<b>Healthcare practitioner and technical occupations</b>	\$11.20	2	\$106.50	14
<b>Dietitians and nutritionists</b>	20.69	7	25.69	9
<b>Physicians and surgeons(1)</b>	21.57	9	107.08	14
<b>Registered nurses</b>	18.79	5	59.53	12
<b>Therapists</b>	20.13	5	43.69	11
<b>Occupational therapists</b>	32.06	8	41.04	10
<b>Physical therapists</b>	26.42	7	37.05	10
<b>Respiratory therapists</b>	21.48	6	29.45	9
<b>Speech-language pathologists</b>	34.10	9	41.92	11

Footnotes:

- (1) Physicians and surgeons earned \$19.65 per hour at level 10, which is significantly less than they earned at level 14.
- (2) Medical and clinical laboratory technicians earned \$21.75 at level 6, which is significantly more than they earned at level 3.
- (3) Cardiovascular technologists and technicians earned \$23.83 per hour at level 5, which is significantly more than they earned at level 4.
- (4) Home health aides earned \$9.88 at level 3, which is significantly less than they earned at level 5.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm>.

Occupation	Earnings at the lowest published work level	Work level	Earnings at the highest published work level	Work level
<b>Clinical laboratory technologists and technicians</b>	12.63	3	29.26	9
<b>Medical and clinical laboratory technologists</b>	17.69	5	29.26	9
<b>Medical and clinical laboratory technicians(2)</b>	12.63	3	19.61	7
<b>Dental hygienists</b>	21.58	5	40.15	9
<b>Diagnostic related technologists and technicians</b>	16.50	4	37.74	9
<b>Cardiovascular technologists and technicians(3)</b>	13.77	4	23.15	6
<b>Radiologic technologists and technicians</b>	20.54	5	34.54	9
<b>Emergency medical technicians and paramedics</b>	11.26	4	18.87	7
<b>Health diagnosing and treating practitioner support technicians</b>	12.24	3	20.78	7
<b>Pharmacy technicians</b>	11.11	3	18.15	6
<b>Psychiatric technicians</b>	12.34	4	21.12	6
<b>Surgical technologists</b>	17.19	4	20.76	6
<b>Licensed practical and licensed vocational nurses</b>	16.45	4	20.88	7
<b>Medical records and health information technicians</b>	12.34	3	25.20	7
<b>Healthcare support occupations</b>	9.27	1	22.96	7
<b>Home health aides(4)</b>	9.95	2	12.29	5
<b>Nursing aides, orderlies, and attendants</b>	9.85	1	14.57	5
<b>Psychiatric aides</b>	10.31	2	16.12	6
<b>Occupational therapist assistants and aides</b>	12.40	4	24.04	6
<b>Miscellaneous healthcare support occupations</b>	8.57	1	18.95	6
<b>Dental assistants</b>	16.25	3	19.05	6
<b>Medical assistants</b>	11.55	2	17.44	6

Footnotes:

- (1) Physicians and surgeons earned \$19.65 per hour at level 10, which is significantly less than they earned at level 14.
- (2) Medical and clinical laboratory technicians earned \$21.75 at level 6, which is significantly more than they earned at level 3.
- (3) Cardiovascular technologists and technicians earned \$23.83 per hour at level 5, which is significantly more than they earned at level 4.
- (4) Home health aides earned \$9.88 at level 3, which is significantly less than they earned at level 5.

Source: National Compensation Survey: Occupational Earnings in the United States, 2008, table 8, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm>.

As noted previously, mean hourly earnings for registered nurses at the highest publishable work level (level 12) were \$59.53, which is significantly higher than the rate of \$18.79 per hour that registered nurses earned at level 5. Licensed practical and licensed vocational nurses also work in a range of work levels.<sup>20</sup> At the lowest work levels, nurses in this occupation typically provide nursing support by taking and recording temperature, blood pressure, and pulse rate; administer commonly

prescribed oral medication; and change sterile dressings. Licensed practical and licensed vocational nurses in the middle range of work levels may administer prescribed medications and observe patients for contraindications; respond to emergency situations such as cardiopulmonary arrest; monitor vital signs of donors during blood donation; and care for, monitor, and report on critically ill patients. At the highest work levels, these nurses may perform more complex procedures, such as procedures to control and maintain artificial airways and other devices used to support critically ill patients. Licensed practical and licensed vocational nurses earned a mean of \$20.88 per hour at the highest work level (level 7), which is significantly higher than the mean of \$16.45 per hour they earned at the lowest work level (level 4).

Therapists as a whole had significantly higher hourly earnings at level 11 than at level 5 (\$43.69 and \$20.13, respectively). Occupational therapists, physical therapists, respiratory therapists, and speech-language pathologists, each of which falls under the category therapists, had mean hourly earnings at the highest publishable work level that were significantly different than the mean hourly earnings at the occupations lowest publishable work level.

While physicians and surgeons earn an average of \$76.46 per hour, their pay by work level varies widely—from \$19.65 per hour at level 10<sup>21</sup> to \$107.08 at level 14. At work levels 9 and 10, physicians and surgeons are likely to be general practice interns, or residents, in their first year of residency, in which they gain clinical experience. At levels 10 through 12, physicians and surgeons are likely to include family and general practitioners, and specialists and surgeons in residency in fields such as oncology or orthopedics. Family and general practitioners earned significantly more at level 12 (\$87.76 per hour) than they earned at level 11 (43.96 per hour). At level 13, the category physicians and surgeons includes many Board Certified Physicians, who are have additional training and credentials in a specific area of medicine. Level 13 also includes physicians that diagnose and treat patients with highly complex medical problems. At the highest work levels, physicians and surgeons include those who advise on or perform the most advanced, specialized diagnostic and treatment procedures; this may include those who develop medical theories and techniques in emerging fields of medicine.

### **Factors Influencing Pay Other Than Work Level**

While the difference in duties and responsibilities from one work level to the next appears to be a strong determining factor in the hourly pay of physicians and surgeons, there are also other factors that influence earnings. One possible factor is the area of medicine or type of medical specialty physicians and surgeons practice. The NCS data show no statistically significant difference in hourly earnings among psychiatrists at level 12, who earn an average of \$75.25 per hour; family and general practitioners at level 12, who earn \$87.76; and general internists at level 12, who earn \$99.47; however, this does not rule out the possibility that area of medicine or medical specialty is a factor in determining earnings.<sup>22</sup>

The difference in the number of full-time hours worked per day or week is also an important determinant of mean hourly earnings for this occupation. As mentioned previously, physicians and surgeons at levels 9 and 10 are typically those in residency. Interns and residents work a large number of hours per week, which results in a relatively low hourly rate of pay.<sup>23</sup>

Another factor influencing earnings estimates of full-time civilian worker is the scope of the NCS. The NCS excludes the self-employed; therefore, dentists and physicians in private practice are not included in these estimates. A recent study of 2007 NCS wage data by David M. Pongrace and Alan P. Zilberman found that several healthcare occupations were among the relatively few that received higher average hourly wages for part-time work than for full-time work.<sup>24</sup> The difference in mean hourly earnings of part-time workers by work level is not part of the present analysis; however, it may be a topic for further research. Furthermore, the earnings and work levels of healthcare workers in the civilian sector are determined to some extent by the type of employer, such as State and local government or private industry. A recent study by Amy Butler using NCS data from the 2007 survey year shows significant differences in occupational wages of physicians and surgeons between State and local government, private for-profit, and private not-for-profit employers.<sup>25</sup>

### **Conclusion**

This article presented NCS estimates on hourly earnings by work level for full-time, civilian healthcare practitioner and technical and health support occupations, and for specific occupations within these groups. The data show significant differences between average hourly earnings of the lowest and highest work levels within most healthcare occupations. While

earnings estimates by occupational work level do not imply opportunity for advancement or a predictable pattern of earnings growth within an occupation, they do show a distinction in hourly earnings based on the actual work responsibilities and duties of workers. Therefore, occupational wage estimates by work level give more information on the pay structure of healthcare workers than occupational estimates alone.

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## Notes

1 In 2007, almost 60 percent of Americans received health insurance through an employer. See Carmen DeNavas-Walt, Bernadette D. Proctor, and Jessica C. Smith, *Income, Poverty, and Health Insurance Coverage in the United States: 2007*, Current Population Reports, P60-235, (U.S. Census Bureau, August 2008), p. 19; on the Internet at <http://www.census.gov/prod/2008pubs/p60-235.pdf> (accessed March 1, 2010).

2 Nonprofit hospitals are required to provide “community benefits” as a condition of their tax-exempt status. Hospitals that receive government program funding from the Department of Health and Human Services, such as Medicare, and Medicaid, must treat for emergency care or active labor regardless of the patients’ ability to pay, citizenship, or other characteristic, and they must treat them like they would any other patient. See Michael W. Peregrine, “An Overview of the Community Benefit Standard of Federal Tax Exempt Status,” on the Internet at <http://www.healthlawyers.org/Resources/PI/Documents/2%20Overview%20of%20Community%20Benefit%20by%20Michael%20W%20Peregrine.pdf> (accessed March 1, 2010).

3 See *BLS Spotlight on Statistics*, November 2009, table entitled “[Rising Health Care Employment: Percentage of total nonfarm employment in private-sector health care industries, 1958-2008](#)”; on the Internet at [http://www.bls.gov/spotlight/2009/health\\_care/data.htm#chart\\_ces](http://www.bls.gov/spotlight/2009/health_care/data.htm#chart_ces) (accessed March 1, 2010).

4 For example, in 2008, the unemployment rate for all workers was 5.8 percent, while healthcare practitioner and technical occupations and healthcare support occupations experienced unemployment rates of 1.5 percent and 4.5 percent, respectively. Persons are classified as unemployed if they do not have a job, have actively looked for work in the prior 4 weeks, and are currently available for work. Persons who were not working and were waiting to be recalled to a job from which they had been temporarily laid off are also included as unemployed. The unemployment rate represents the number unemployed as a percent of the labor force. See Current Population Survey, Household Data: Annual Averages, “[Unemployed persons by occupation and sex](#),” table 25, p. 237, on the Internet at <http://www.bls.gov/cps/cpsaat25.pdf> (accessed March 1, 2010).

5 See *Employment Projections--2008-18*, USDL-09-1503 (U.S. Department of Labor), Dec. 10, 2009, on the Internet at <http://www.bls.gov/news.release/ecopro.nr0.htm>. Also, *Occupational Outlook Quarterly*, Winter 2009-10 (Bureau of Labor Statistics), p. 11; on the Internet at <http://www.bls.gov/opub/ooq/2009/winter/art02.pdf> (accessed March 1, 2010).

6 For more information, see *National Compensation Survey: Occupational Earnings in the United States, 2008*, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm> (accessed March 1, 2010).

7 The [National Compensation Survey \(NCS\)](#) provides comprehensive measures of occupational earnings, such as mean hourly and median hourly wage estimates; and mean and median weekly and annual hours and earnings. The NCS also publishes comprehensive measures of compensation cost trends, the incidence of benefits, and detailed benefit provisions of workers in the civilian sector. By NCS definition, civilian workers are those who work in private industry or in State or local government. Federal workers, the self-employed, the military, and agricultural workers are excluded from the survey.

8 The NCS does not collect data on personal characteristics of the worker, such as years of experience on the job, formal education, gender, race or ethnicity, and age.

9 The NCS defines the worker as full-time or part-time based on how the employer defines the worker, not on the number of hours worked.

10 Information on the [Standard Occupational Classification](#) system is available on the BLS Web site, on the Internet at <http://www.bls.gov/soc/> (accessed March 1, 2010).

11 The terms *wages*, *earnings*, and *pay* are used interchangeably in this article. For an overview of the differences among several wage surveys, see Joseph R. Meisenheimer II, “[Real compensation, 1979 to 2003: analysis from several data sources](#),” *Monthly Labor Review*, May 2005, pp.3-22, on the Internet at <http://www.bls.gov/opub/mlr/2005/05/art1full.pdf> (accessed March 1, 2010).

12 *National Compensation Survey: Guide for Evaluating Your Firms Jobs and Pay*, p. 63, on the Internet at <http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf> (accessed March 1, 2010).

13 Ibid, pp 5-7.

14 Ibid, pp. 36-37.

15 Ibid, pp. 38-39.

16 Ibid, pp. 2-4 and pp. 65-71.

17 According to the Occupational Employment Statistics program, 2,542,760 workers were employed as registered nurses in May 2008. See *Occupational Employment and Wages, 2008*, USDL-09-0457 (U.S. Department of Labor), May 1, on the Internet at <http://www.bls.gov/news.release/pdf/ocwage.pdf> (accessed March 1, 2010).

18 To achieve the RN title, an individual must graduate from a State-approved school of nursing—either a 4-year university program, a 2-year associate degree program, or a 3-year diploma program—and pass a State RN licensing examination called the National Council Licensure Examination for Registered Nurses (NCLEX-RN). See *Nursing World*, “Nursing Education” (American Nursing Association), on the Internet at <http://www.nursingworld.org/EspeciallyForYou/StudentNurses/Education.aspx>. For information on nurse practitioners and other advanced practice registered nurses, see the Web site at <http://www.nursingworld.org/EspeciallyForYou/StudentNurses/RNsAPNs.aspx> (accessed March 1, 2010).

19 At the 90-percent confidence level, the two wage rates are not significantly different.

20 Licensed practical and licensed vocational nurses are listed under healthcare practitioner and technical occupations for the NCS; however they are included in the *Evaluating Your Firms Jobs and Pay*, Knowledge Guide for Medical, Hospital, Dental, Public Health, and Veterinary Technician Jobs, which includes many NCS occupations under *healthcare support*. See: *Evaluating Your Firms Jobs and Pay*, pp. 38-39, at <http://www.bls.gov/ncs/ocs/sp/ncbr0004.pdf> (accessed March 1, 2010).

21 Physicians and surgeons earned \$21.57 at level 9, an example of a pay inversion. At level 9 and level 10, physicians and surgeons earned significantly less than they did at level 14.

22 See table 8 in *National Compensation Survey: Occupational Earnings in the United States, 2008*, on the Internet at <http://www.bls.gov/ncs/ncswage2008.htm> (accessed March 1, 2010).

23 Interns and residents are almost exclusively full-time workers; NCS published no data on part-time physicians and surgeons at level 9.

24 David M. Pongrace and Alan P. Zilberman, “A Comparison of Hourly Wage Rates for Full- and Part-Time Workers by Occupation, 2007,” *Compensation and Working Conditions Online*, July 23, 2009, on the Internet at <http://www.bls.gov/opub/cwc/cm20090720ar01p1.htm> (accessed March 1, 2010).

25 See Amy Butler, “Wages in the Nonprofit Sector: Healthcare, Personal Care, and Social Service Occupations,” *Compensation and Working Conditions Online*, April 15, 2009, on the Internet at <http://www.bls.gov/opub/cwc/cm20090123ar01p1.htm> (accessed March 1, 2010).

## Supplemental Pay in the Finance and Insurance Industry

by John L. Bishow  
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*Originally Posted: April 21, 2010*

*This article examines the use of supplemental pay in the finance and insurance industry. Pay practices in this sector are currently of particular interest.*

### Introduction

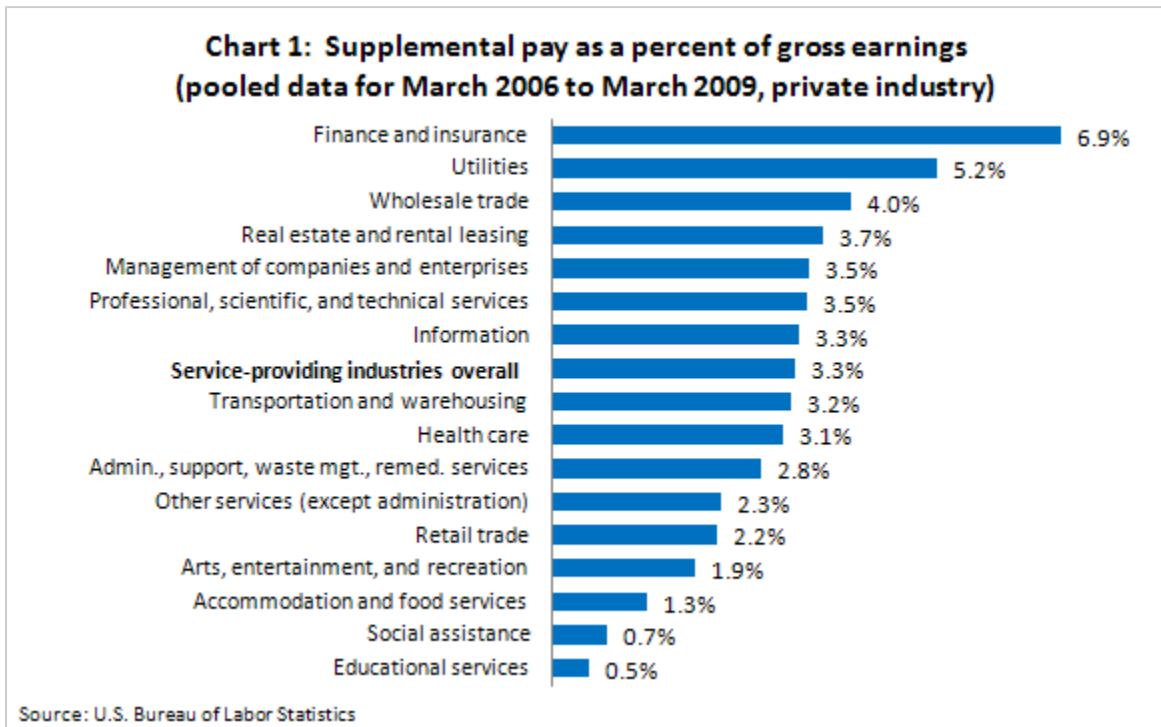
Pay practices in the finance and insurance sector<sup>1</sup> have garnered considerable attention recently, especially in relation to the current recession and steps taken by the U.S. Treasury to stabilize the financial sector.<sup>2</sup> This article examines the use of supplemental pay--overtime, nonproduction bonuses,<sup>3</sup> and shift differentials--in the finance and insurance sector. Supplemental pay<sup>4</sup> differs from benefits such as health or life insurance in that the employee receives it as a cash payment. To emphasize this difference, the article focuses on supplemental pay as a percent of gross earnings.<sup>5</sup> It uses a dataset that pools four quarters of NCS private industry data, spanning 2006 to 2009, using the first quarter of each year. On average, supplemental pay represents a small percentage of cash earnings for the U.S. labor force overall, but supplemental pay can be an important source of income for certain occupations.<sup>6</sup>

The finance and insurance sector is made up of companies that specialize in various forms of financial transactions. These include activities such as the creation, liquidation, or transfer of financial assets, as well as the facilitation of financial transactions. The major activities in this sector include raising funds by taking deposits or issuing securities, pooling risk by underwriting insurance and annuities, and providing specialized services related to financial intermediation, insurance, and employee benefit programs.<sup>7</sup>

The study begins by looking at how the use of supplemental pay in finance and insurance compares with other service-providing industries.<sup>8</sup> Next, the use of components of supplemental pay--overtime, bonuses, and shift differentials--in the finance and insurance industry are compared with the average across all other service-sector industries. Finally, the use of supplemental pay in selected detailed industries that make up the finance and insurance industry are examined. However, confidentiality and reliability concerns do not allow an analysis at a finer level of detail, such as investment banking and securities dealings.

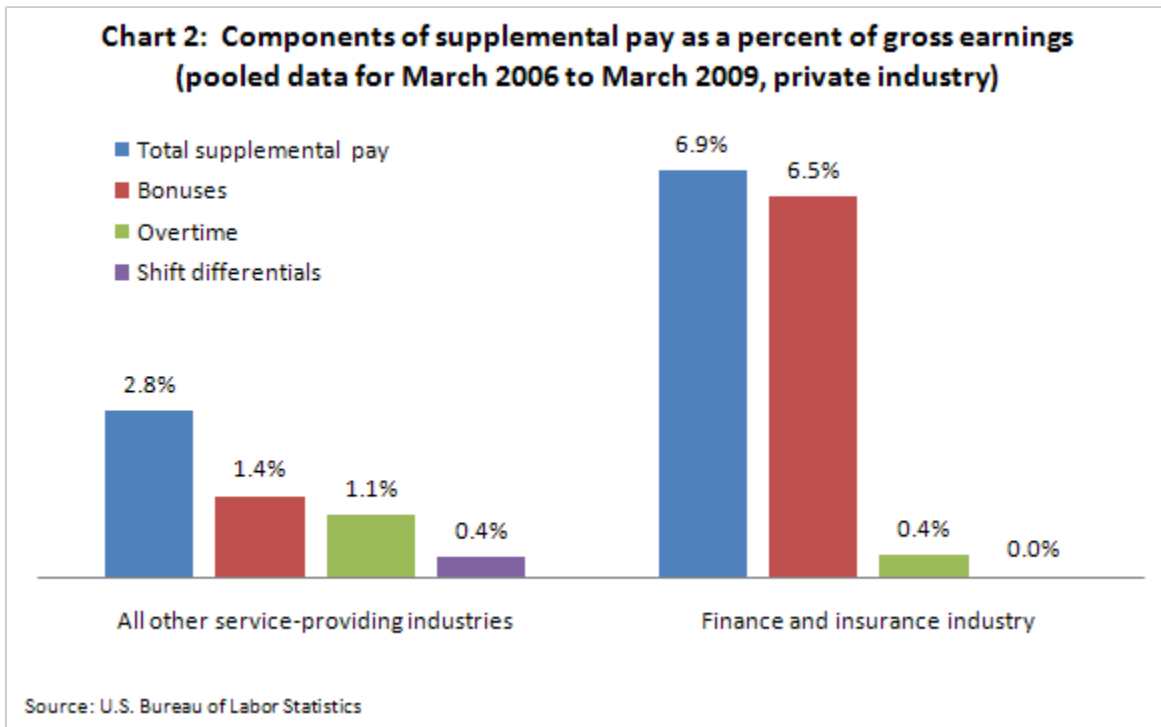
### Supplemental Pay In The Service-providing Sector

Chart 1 shows how the percent of gross earnings received as supplemental pay in the finance and insurance industry compares with that of other service-providing industries.



Supplemental pay (overtime, bonuses, and shift differentials combined) accounts for 6.9 percent of gross earnings in finance and insurance, compared with about 3.3 percent for the service-providing sector overall. Relative to other industries, finance and insurance is among the industries that pay the highest percentages of gross earnings in the form of supplemental pay--on a par with utilities and wholesale trade, and clearly greater than industries such as educational services, accommodation and food services, and retail trade.<sup>9</sup>

Chart 2 compares the use of overtime, bonuses, and shift differentials in finance and insurance with all other service-providing industries.<sup>10</sup>



With regard to the components of supplemental pay, the percent of gross earnings received as overtime is lower for finance and insurance than for other service-providing industries. The same holds true for shift differentials. The most striking difference is in the use of bonuses, which represent about 6 percent of gross earnings for finance and insurance, compared with about 1 percent for all other service-providing industries.

Charts 3 and 4 offer analogous comparisons of finance and insurance and all other service-providing industries across two broad groups: (1) sales and office occupations and (2) management, professional, and related occupations.<sup>11</sup> These groups account for the bulk of the employment in the finance and insurance industry.<sup>12</sup>

In chart 3, it can be seen that, within sales and office occupations, the percent of gross earnings received as supplemental pay is higher for the finance and insurance industry than for all other service-providing industries. The higher percent of gross earnings received as bonuses clearly accounts for this difference.



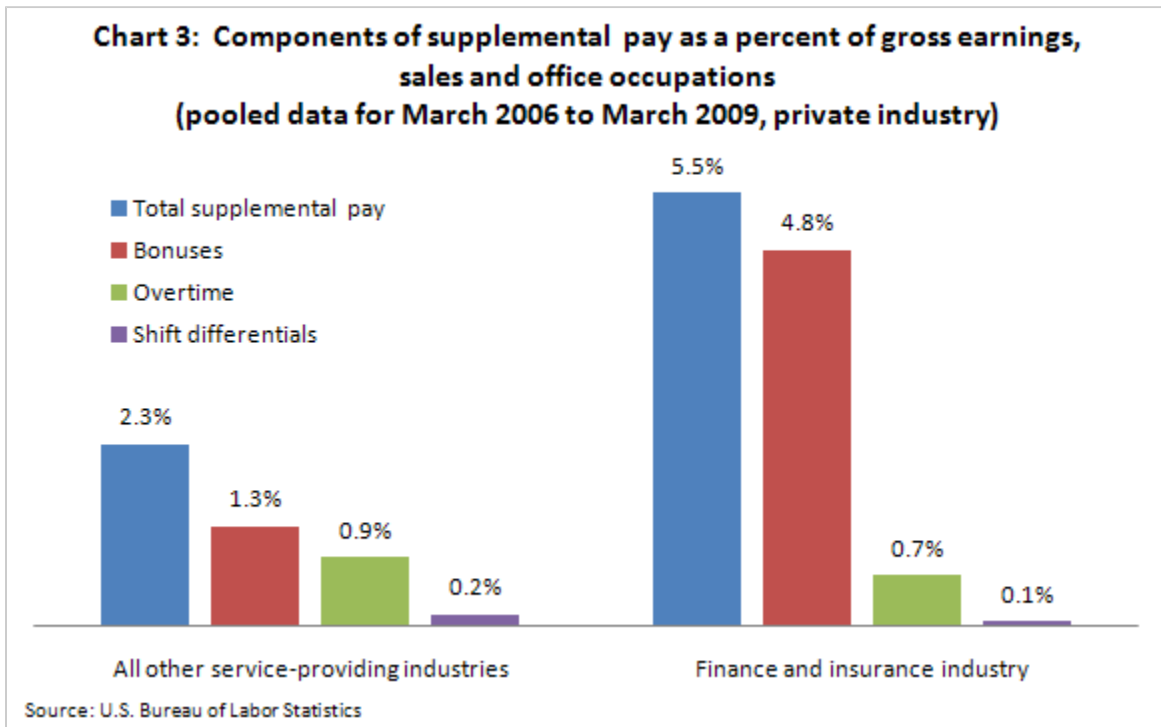
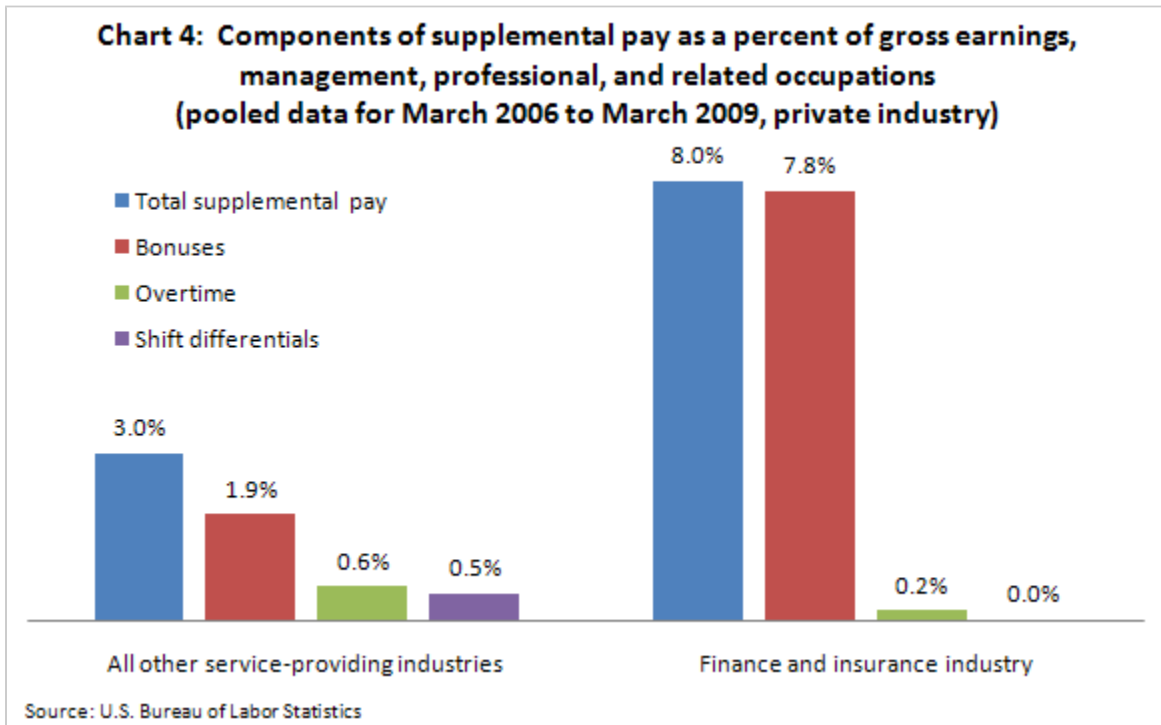


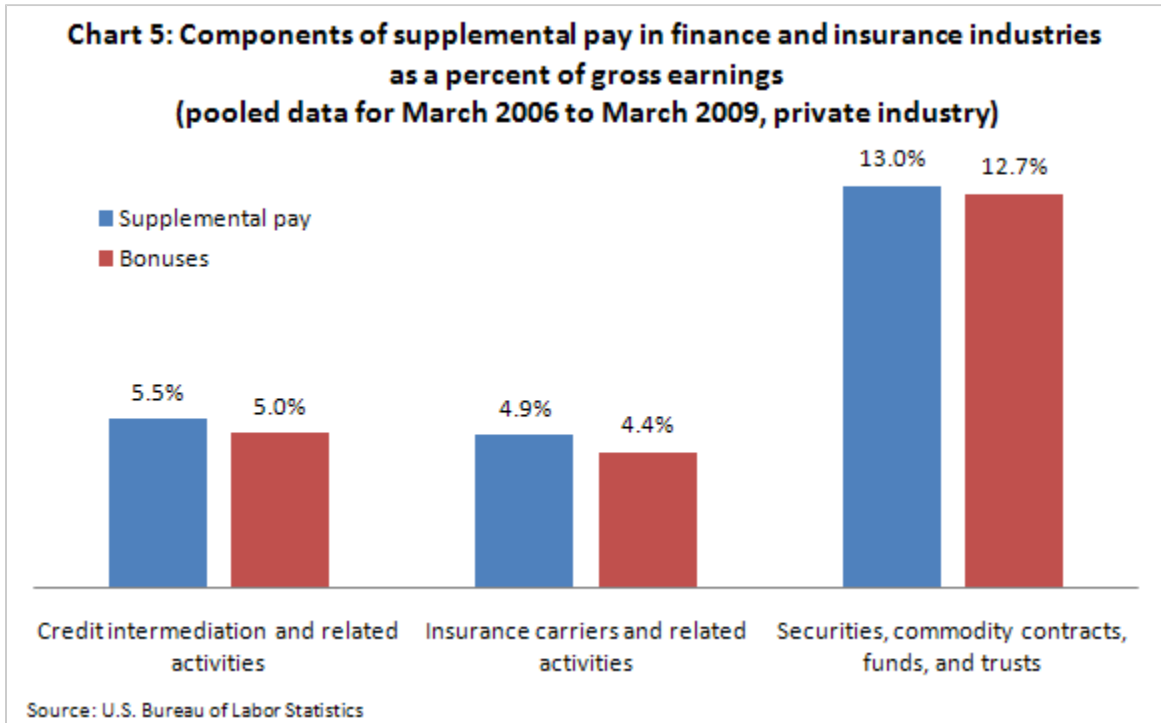
Chart 4 shows that, for management, professional, and related occupations, the difference between the finance and insurance industry and all other service-providing industries appears to be more dramatic and is again driven by the higher percentage of gross earnings received as bonuses.



**Supplemental Pay In The Detailed Finance And Insurance Industries**

For each of the detailed industries shown in chart 5, overtime and shift differentials represent less than 1 percent of gross earnings and thus have been excluded for convenience of exposition. Chart 5 shows that, among the detailed industries

which make up finance and insurance, the percent of gross earnings received as bonuses is 5 percent for credit intermediation and related activities (NAICS 52-2000), and 4.4 percent for insurance carriers and related activities (NAICS 52-4000). For securities, commodity contracts, funds, and trusts,<sup>13</sup> 12.7 percent of gross earnings is received as bonus pay. Recall from chart 2 that bonus payments, on average, accounted for about 6.5 percent of gross earnings in finance and insurance overall.

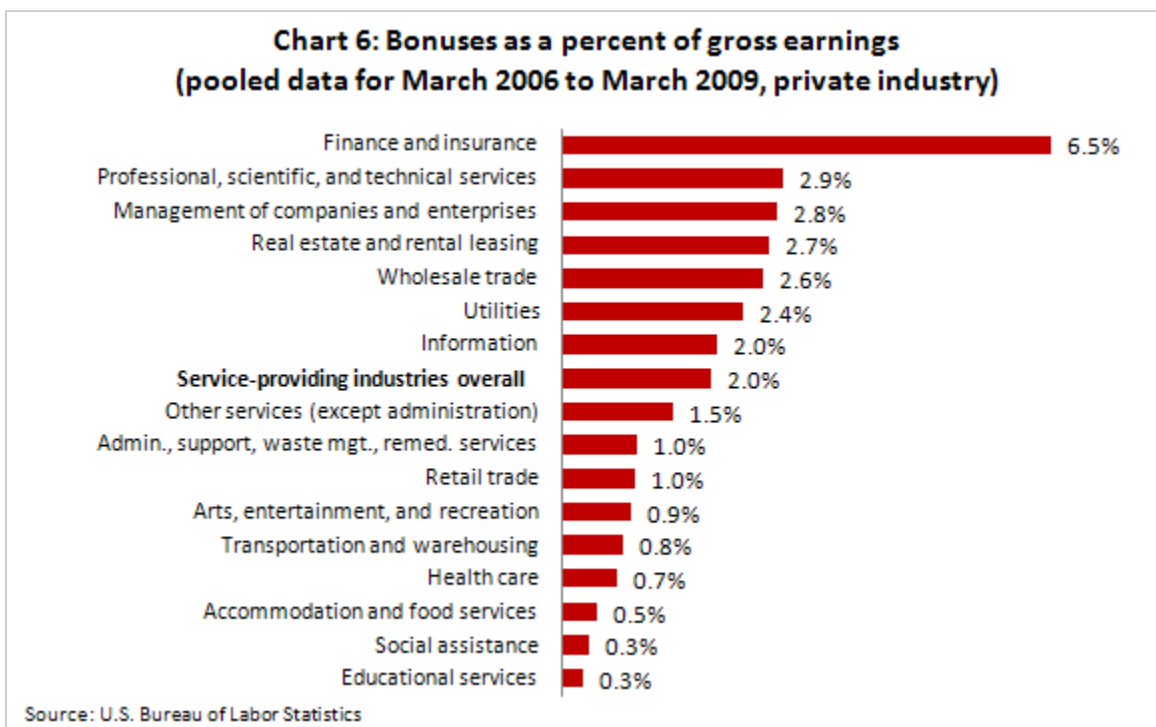


**Summary**

This article examined the use of supplemental pay in the finance and insurance industry. Pay practices in this sector are currently of particular interest.

Unlike other benefits, such as retirement and health insurance, supplemental pay is received by the employee essentially as cash earnings. For this reason, the article focused on supplemental pay as a percent of gross earnings rather than as a percent of total compensation.

The percent of compensation received as supplemental pay in the finance and insurance industry ranked among the highest of all industries in the service-providing sector. This is driven by the use of bonus pay; the use of overtime and shift differentials was found to be negligible in this industry. Chart 6 illustrates the importance of bonuses in the finance and insurance industry relative to other service-providing industries.



The use of bonuses in the finance and insurance industry is clearly higher than the average across all other service-providing industries. Bonuses were found to play a particularly important role for management, professional, and related occupations within the finance and insurance industry. Among the detailed industries that make up the finance and insurance industry, the percent of gross earnings received as bonuses was higher for securities, commodity contracts, funds, and trusts than for the two other detailed industries.

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**Notes**

1 This sector is composed of industries as defined by [North American Industry Classification System \(NAICS\)](#) code 52-0000. For more information on NAICS definitions, see the following Web site: <http://www.bls.gov/bls/naics.htm> (accessed March 1, 2010).

2 The Troubled Asset Relief Program (TARP), Capital Asset Program (CAP) and other measures by the U.S. Treasury taken to stabilize the economy are described at the following Web site: <http://www.financialstability.gov/roadtostability/programs.htm> (accessed March 1, 2010).

3 Nonproduction bonuses are cash payments given by the employer to the employee, usually annually. The payment is not directly related to the productivity of the individual employee. They differ from production bonuses, which are directly tied to the productivity of the individual employee and are included in wages. In this study, bonuses refers only to nonproduction bonuses.

4 There are a number of reasons for treating the components of supplemental pay as benefits. Overtime is a premium payment (over and above the average hourly rate) for extra hours of work. Similarly, shift differential pay can be thought of as a premium paid for working during hours that are less convenient than those of the typical workday. Non-production bonus payments are treated as benefits because they are generally discretionary in terms of frequency and amount, and may vary significantly from employee to employee.

5 Gross earnings refer to the sum of wages, overtime, bonuses, shift differentials and paid leave.

6 See "A Look at Supplemental Pay: Overtime Pay, Bonuses and Shift Differentials." *Compensation and Working Conditions Online*, March 25, 2009, on the Internet at <http://www.bls.gov/opub/cwc/cm20090317ar01p1.htm> (accessed March 1, 2010).

7 From the BLS online publication [Industries at a Glance, Finance and Insurance](#), NAICS code 52-0000, on the Internet at <http://www.bls.gov/iag/tgs/iag52.htm> (accessed March 1, 2010).

8 Service-providing industries as defined by [NAICS](#), on the Internet at <http://www.bls.gov/bls/naics.htm> (accessed March 1, 2010).

9 The industries are defined under the following NAICS codes: utilities, 22-0000; wholesale trade, 42-0000; educational services, 61-0000; accommodation and food services, 72-0000; and retail trade, 44-0000 through 45-0000.

10 "All other service-providing industries" refers to the average across all jobs in the service-providing industries *except* for those in finance and insurance.

11 The occupational groups are defined under the following [Standard Occupational Classification \(SOC\)](#) codes: management, professional, and related, 11-0000 through 27-0000; sales and office, 41-0000 and 43-0000. More information on the Standard Occupational Classification system is available on the BLS Web site at <http://www.bls.gov/soc/> (accessed March 1, 2010).

12 [Occupational Employment Statistics \(OES\)](#) for May of 2008 indicate that sales and office occupations accounted for about 60 percent of employment in the finance and insurance industry, and management, professional, and related occupations accounted for over 35 percent of employment in this industry. For more information, see *May 2008 National Occupational Employment and Wage Estimates*, on the Internet at [http://www.bls.gov/oes/2008/may/naics2\\_52.htm#\(3\)](http://www.bls.gov/oes/2008/may/naics2_52.htm#(3)) (accessed March 1, 2010).

13 This category is a combination of securities, commodity contracts, and other financial investments and related activities (NAICS 52-3000), and funds, trusts, and other financial vehicles (NAICS 52-5000).

**Data for Chart 1: Supplemental pay as a percent of gross earnings  
(pooled data for March 2006 to March 2009, private industry)**

Industry	Supplemental pay
Finance and insurance	6.9%
Utilities	5.2%
Wholesale trade	4.0%
Real estate and rental leasing	3.7%
Management of companies and enterprises	3.5%
Professional, scientific, and technical services	3.5%
Information	3.3%
Service-providing industries overall	3.3%
Transportations and warehousing	3.2%
Health care	3.1%
Administrative and support and waste management and remediation services	2.8%
Other services (except administration)	2.3%
Retail trade	2.2%
Arts, entertainment and recreation	1.9%
Accommodation and food services	1.3%
Social assistance	0.7%
Educational services	0.5%

**Data for Chart 2. Components of supplemental pay as a percent of gross earnings  
(pooled data for March 2006 to March 2009, private industry)**

Industry	Total supplemental pay	Bonuses	Overtime	Shift differentials
All other service-providing industries	2.8%	1.4%	1.1%	0.4%
Finance and insurance industry	6.9%	6.5%	0.4%	0.0%

**Data for Chart 3. Components of supplemental pay as a percent of gross earnings, sales and office occupations  
(pooled data for March 2006 to March 2009, private industry)**

Industry	Total supplemental pay	Bonuses	Overtime	Shift differentials
All other service-providing industries	2.3%	1.3%	0.9%	0.2%
Finance and insurance industry	5.5%	4.8%	0.7%	0.1%

**Data for Chart 4. Components of supplemental pay as a percent of gross earnings, management, professional, and related occupations  
(pooled data for March 2006 to March 2009, private industry)**

Industry	Total supplemental pay	Bonuses	Overtime	Shift differentials
All other service-providing industries	3.0%	1.9%	0.6%	0.5%
Finance and insurance industry	8.0%	7.8%	0.2%	0.0%

**Data for Chart 5. Components of supplemental pay in finance and insurance industries as a percent of gross earnings  
(pooled data for March 2006 to March 2009, private industry)**

Industry	Supplemental pay	Bonuses	Overtime	Shift differentials
Credit intermediation and related activities	5.5%	5.0%	0.4%	0.1%
Insurance carriers and related activities	4.9%	4.4%	0.5%	0.0%
Securities, commodity contracts, funds and trusts	13.0%	12.7%	0.2%	0.0%

**Data for Chart 6: Bonuses as a percent of gross earnings  
(pooled data for March 2006 to March 2009, private industry)**

Industry	Bonuses
Finance and insurance	6.5%
Professional, scientific, and technical services	2.9%
Management of companies and enterprises	2.8%
Real estate and rental leasing	2.7%
Wholesale trade	2.6%
Utilities	2.4%
Information	2.0%
Service-providing industries overall	2.0%
Other services (except administration)	1.5%
Administrative and support and waste management and remediation services	1.0%
Retail trade	1.0%
Arts, entertainment and recreation	0.9%
Transportation and warehousing	0.8%
Health care	0.7%
Accommodation and food services	0.5%
Social assistance	0.3%
Educational services	0.3%

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