

April 2011



M O N T H L Y L A B O R

REVIEW

U.S. Department of Labor

U.S. Bureau of Labor Statistics

A large, stylized gear graphic in the background. The word "JOBS" is embossed in the center of the gear's inner circle. The gear is rendered in a 3D style with a metallic sheen, set against a green gradient background.

JOBS

The 2007–09 Recession and Employment



U.S. Department of Labor
Hilda L. Solis, Secretary

U.S. Bureau of Labor Statistics
Keith Hall, Commissioner

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| Date | Time | Release |
|----------------------------|----------|--|
| Tuesday, May 03, 2011 | 10:00 AM | Quarterly Data Series on Business Employment Dynamics for Third Quarter 2010 |
| Thursday, May 05, 2011 | 8:30 AM | Productivity and Costs for First Quarter 2011 |
| Friday, May 06, 2011 | 8:30 AM | Employment Situation for April 2011 |
| Tuesday, May 10, 2011 | 8:30 AM | U.S. Import and Export Price Indexes for April 2011 |
| Wednesday, May 11, 2011 | 10:00 AM | Extended Mass Layoffs for First Quarter 2011 |
| Wednesday, May 11, 2011 | 10:00 AM | Job Openings and Labor Turnover Survey for March 2011 |
| Thursday, May 12, 2011 | 8:30 AM | Producer Price Index for April 2011 |
| Friday, May 13, 2011 | 8:30 AM | Consumer Price Index for April 2011 |
| Friday, May 13, 2011 | 8:30 AM | Real Earnings for April 2011 |
| Tuesday, May 17, 2011 | 10:00 AM | Occupational Employment and Wages for Annual 2010 |
| Friday, May 20, 2011 | 10:00 AM | Mass Layoffs for April 2011 |
| Friday, May 20, 2011 | 10:00 AM | Regional and State Employment and Unemployment for April 2011 |
| Friday, May 27, 2011 | 10:00 AM | Labor Force Characteristics of Foreign-born Workers for 2010 |

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The Labor Month in Review section of this issue of the *Monthly Labor Review* will be posted to the BLS website soon.

April 29, 2011

Employment loss and the 2007–09 recession: an overview

The downturn in employment accompanying the 2007–09 recession was notable for its prolonged length, for affecting an especially wide range of industries, and for being deeper than any other downturn since World War II

Christopher J. Goodman
and
Steven M. Mance

The U.S. economy is recovering from one of the longest and deepest recessions since the end of World War II (WWII). Virtually no area of the economy remained unscathed from the December 2007–June 2009 recession,¹ particularly the labor market. Nonfarm payroll employment, measured by the Current Employment Statistics (CES) program, peaked in January 2008, 1 month after the peak in the business cycle.² After relatively modest job losses in early 2008, the losses increased sharply in the latter half of the year, and declines spread beyond traditionally cyclical industries.

The already-weak economy was jolted by financial market turmoil in fall 2008. The impact on employment was immediate and severe, with monthly job losses spiking to among the highest on record.³ At its lowest point, February 2010, U.S. employment had declined by 8.8 million from its prerecession peak. (See chart 1.) The breadth and depth of the recession, particularly in comparison with recent recessions, has led some to label it “The Great Recession.”⁴ In 2010, the labor market stabilized as employment grew modestly. Despite recent improvements, the labor market continues to struggle from the aftermath of a historic employment downturn that is notable for its breadth, depth, and length.

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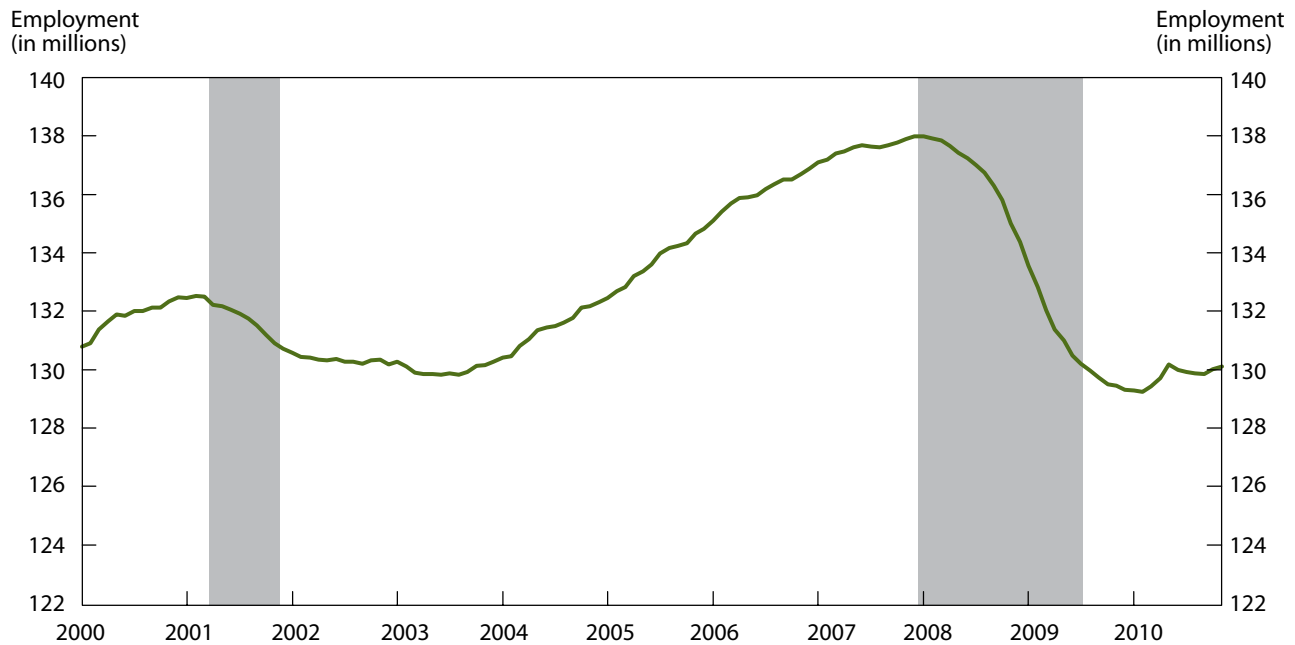
Prelude to the recession

The 2007–09 recession was preceded by a period of steady economic growth. Although initially slow to recover from a mild recession earlier in the decade, the labor market was healthy overall by 2006. The unemployment rate was low by historical standards, and payroll employment was steadily expanding.⁵ There remained a few areas of weakness; for example, employment in manufacturing and information never returned to prerecession levels. Nonetheless, most industries were adding jobs.

Employment growth before the most recent recession was centered in three areas of the economy: education, healthcare, and various industries related to the housing market.⁶ Education and health care have long been growing industries in terms of both economic output and employment.⁷ Industries related to housing market activity have historically been more cyclical.⁸ The housing market boomed throughout the first half of the 2000s as home prices soared and construction activity rose to record levels.⁹

The rapid growth in housing drove economic growth in two ways. First, housing construction led to job growth in construction as well as in complementary industries such as mortgage finance, real estate, construction-related manufacturing, and retail

Chart 1. Total nonfarm employment, monthly data, seasonally adjusted, 2000–10



NOTE: Shaded areas denote recessions as determined by the National Bureau of Economic Research.
 SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

furniture stores. Second, the housing boom also contributed to economic growth in a broader sense through a positive “wealth effect” that boosted spending across the economy.¹⁰ According to the Federal Reserve, U.S. households’ aggregate real estate assets rose by over a third between 2003 and 2006.¹¹ Homeowners extracted part of this increased mortgage equity to fund consumption in other areas, such as automobiles and other consumer goods. It is estimated that income extraction from housing more than doubled between 2001 and 2005, with over \$1.4 trillion extracted in 2005 alone.¹² By one estimate, this housing-fueled spending accounted for at least one-quarter of the growth in consumer expenditures.¹³

Despite the economy’s overall strength, certain segments of it were showing signs of trouble by 2006. The housing market, after serving as one of the key drivers of growth throughout much of the decade, was cooling off. New home sales peaked in July 2005, and by January 2006 housing starts had begun declining.¹⁴ Over the course of 2007, the housing credit market deteriorated as delinquency rates rose and home foreclosures reached levels unseen since recordkeeping began in the late 1970s.¹⁵ The decline in credit quality was most pronounced among

nontraditional loans such as subprime loans. These non-traditional loans, aimed at borrowers unable to qualify for more traditional loans, grew in market share as home prices rose and homeownership expanded.¹⁶

Initially, the negative impact of housing on the broader economy appeared to be relatively contained. Areas outside of housing continued to grow as GDP expanded and employment grew steadily throughout 2006. However, over the course of 2007, the deepening trouble in housing began showing signs of spreading as most major economic indicators leveled off or declined outright. The unemployment rate, which had edged downward for several years, leveled off in late 2006 and by late 2007 began trending up. Nonfarm employment continued to expand throughout 2007, though at a reduced rate. Over the course of the year, longstanding job losses in manufacturing were joined by deepening job losses in housing-related industries, such as construction and finance.

Overview of the recession

Weighed down by widespread economic troubles, the economy officially entered a recession in December 2007.

Nonfarm employment peaked in January 2008 and then entered a period of steady decline. Losses were heaviest in traditionally cyclical industries such as manufacturing and construction. However, weakness was not confined to these industries: a growing number of traditionally more resilient industries such as retail trade and leisure and hospitality reported employment declines.

Rising oil prices, which are often a contributing factor to recessions, further strained the economy in 2008. Global crude oil production failed to keep up with demand, causing prices to double from June 2007 to June 2008.¹⁷ For homeowners already feeling the effects of a decline in the value of their homes, rising energy costs came as an unwelcome development. Personal consumption expenditures began to shrink in the first quarter of 2008, particularly expenditures on durable goods such as autos and appliances—which tend to be highly cyclical.¹⁸

The surge in oil and other commodity prices adversely affected businesses as well. From July 2007 to July 2008, the Producer Price Index (PPI) for all commodities increased by 17.4 percent. This was the highest over-the-year percent change in this index since 1974, when oil prices surged following a supply reduction by the Organization of Arab Petroleum Exporting Countries (OAPEC). This oil shock contributed to the 1973–75 recession.¹⁹ One industry that was helped by the boom in commodities prices was mining, which continued to add jobs through the first half of the recession because high prices drove businesses to extract resources that had been unprofitable when price levels were lower.²⁰ Commodity prices starting dropping sharply, however, when the recession turned global and world demand fell. From July 2008 to July 2009, 1 month after the recession ended, the PPI for all commodities fell by 16.1 percent—the steepest 12-month percent decline since 1931.

Depth

The 2007–09 recession did not progress evenly. During the first 9 months of the recession, nonfarm employment decreased by 1.2 percent, a change that fell in line with the relatively modest losses of the 1990–91 and 2001 recessions.²¹ In addition, the distribution of job losses by industry during the early stages of the most recent recession was similar to that during the two previous recessions. During the first half of the 2007–09 recession and the entirety of each of the previous two recessions, a little more than half of job losses occurred in manufacturing and construction (which both tend to be sensitive to the business cycle).

The shallow employment declines did not last, however.

The economic downturn intensified in September 2008 when the economy was jolted by trouble in the Nation's financial system. In the aftermath of the turmoil, credit markets constricted and banks tightened lending standards.²² The recession rapidly deepened, and job losses spiked.

Monthly job losses averaged 712,000 from October 2008 through March 2009—the most severe 6-month period of job losses since 1945, when WWII was ending. During the final 3 months of the recession, April through June 2009, job losses remained severe but moderated somewhat to an average monthly employment decline of 516,000. Despite the official end of the recession, nonfarm employment declined by another 1.2 million until reaching a trough in February 2010.

Breadth

The downturn in employment was notable for the breadth of industries that were affected. (See table 1.) Many industries that added jobs during the first 9 months of the recession began shedding them, and industries that were losing jobs began losing them more rapidly. The CES 1-month diffusion index, a measure of the breadth of employment losses across industries, fell to 17.0 in March 2009, its lowest level since the series began in 1991.²³

Traditionally, goods-producing industries have experienced the largest declines in employment during recessions. The 2007–09 recession was no different, with construction and manufacturing both experiencing their largest percentage declines of the post-WWII era. Service-providing industries also experienced large employment declines. Although the percentage declines in private services were not as large as those in the good-producing industries, they were the largest on record for private services.

Construction was among the hardest hit industries during the recession.²⁴ Deep employment losses began in residential construction and spread to nonresidential construction as commercial and industrial projects dwindled.²⁵ Since peaking in April 2006, employment in construction has fallen by 2.2 million, or 28.8 percent, as of December 2010. Large job losses are not unprecedented in construction, which is known as a highly cyclical industry. However, even considering the volatile history of the construction industry, the 2007–09 downturn stands out. Declines from the prerecession peak in construction employment easily exceeded those of the earlier housing busts in the 1980s and 1990s, and are the steepest since the labor dislocations during WWII.

Manufacturing, which had been losing jobs for 10 years before the 2007–09 recession, also experienced sig-

| Industry | Feb. 1945– Oct. 1945 (8 months) | Nov. 1948– Oct. 1949 (11 months) | July 1953– May 1954 (10 months) | Aug. 1957– Apr. 1958 (8 months) | Apr. 1960– Feb. 1961 (10 months) | Dec. 1969– Nov. 1970 (11 months) |
|--|---|--|---|--|--|---|
| | Total nonfarm | -7.9 | -5.0 | -3.1 | -4.0 | -2.3 |
| Total private..... | -8.2 | -6.0 | -3.8 | -4.9 | -2.8 | -2.0 |
| Goods producing | -17.8 | -10.6 | -7.2 | -8.2 | -5.3 | -6.7 |
| Service providing | -.6 | -1.4 | -.4 | -1.5 | -.6 | 1.5 |
| Mining and logging..... | -10.9 | -38.7 | -8.7 | -9.6 | -7.5 | -2.0 |
| Construction | 3.4 | -2.7 | .9 | -5.5 | -3.9 | -1.7 |
| Manufacturing..... | -19.9 | -9.8 | -8.4 | -8.6 | -5.4 | -7.9 |
| Durable goods..... | -30.2 | -15.4 | -11.2 | -12.2 | -7.7 | -11.0 |
| Nondurable goods..... | -1.2 | -2.6 | -4.3 | -3.0 | -2.2 | -3.0 |
| Wholesale trade | 6.9 | -1.8 | .1 | -1.9 | -.8 | .5 |
| Retail trade..... | 3.2 | -1.1 | -.7 | -2.6 | -2.4 | .6 |
| Transportation and warehousing..... | — | — | — | — | — | — |
| Utilities | — | — | — | — | — | 2.1 |
| Information..... | -8.3 | -7.9 | -6.0 | -6.8 | -3.7 | -2.5 |
| Financial activities..... | 4.1 | 1.5 | 3.2 | 1.0 | 1.9 | 2.8 |
| Professional and business services | -3.0 | -2.7 | -1.4 | -2.6 | .1 | .7 |
| Education and health services..... | 4.0 | .9 | 1.4 | -.4 | 2.3 | 2.3 |
| Leisure and hospitality | 2.9 | -.7 | -.3 | -1.8 | -1.9 | 1.2 |
| Other services..... | 3.7 | 1.0 | 1.5 | -.4 | 2.2 | 2.2 |
| Government..... | -6.2 | 1.7 | 1.6 | 1.4 | .6 | 2.8 |
| | Nov. 1973– Mar. 1975 (16 months) | Jan. 1980– July 1980 (6 months) | July 1981– Nov. 1982 (16 months) | July 1990– Mar. 1991 (8 months) | Mar. 2001– Nov. 2001 (8 months) | Dec. 2007– June 2009 (18 months) |
| Total nonfarm | -1.6 | -1.1 | -3.1 | -1.1 | -1.2 | -5.4 |
| Total private..... | -3.1 | -1.6 | -3.5 | -1.3 | -1.8 | -6.6 |
| Goods producing | -10.3 | -5.0 | -10.6 | -4.1 | -4.9 | -16.2 |
| Service providing | 2.2 | .4 | -.4 | -.3 | -.4 | -3.4 |
| Mining and logging..... | 11.1 | 2.8 | -12.4 | -1.3 | -1.5 | -7.3 |
| Construction | -14.3 | -5.9 | -8.2 | -7.5 | -1.1 | -19.8 |
| Manufacturing..... | -10.2 | -5.2 | -11.0 | -3.2 | -6.6 | -14.6 |
| Durable goods..... | -10.7 | -6.5 | -14.1 | -4.3 | -7.5 | -17.5 |
| Nondurable goods..... | -9.4 | -3.1 | -5.8 | -1.4 | -5.0 | -9.8 |
| Wholesale trade | 1.4 | -.3 | -2.8 | -1.4 | -1.9 | -7.6 |
| Retail trade..... | 0.5 | -.7 | -.4 | -1.7 | -1.3 | -6.7 |
| Transportation and warehousing..... | -3.6 | -3.0 | -6.1 | -.3 | -4.2 | -7.3 |
| Utilities | -.2 | 1.7 | 3.4 | -.6 | .0 | .6 |
| Information..... | -4.7 | -2.2 | -4.7 | -.3 | -4.9 | -7.6 |
| Financial activities..... | 1.5 | 1.4 | 1.0 | -.4 | .6 | -5.8 |
| Professional and business services | 1.8 | .8 | .6 | -1.9 | -3.8 | -8.9 |
| Education and health services..... | 4.7 | 1.9 | 2.6 | 3.5 | 2.6 | 3.3 |
| Leisure and hospitality | 1.3 | -.3 | .4 | -.3 | -.1 | -3.4 |
| Other services..... | 4.5 | 1.9 | 2.5 | -.1 | 2.2 | -2.5 |
| Government..... | 5.1 | 1.3 | -1.2 | -.4 | 1.8 | .8 |

NOTE: Dashes indicate data not available.
SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

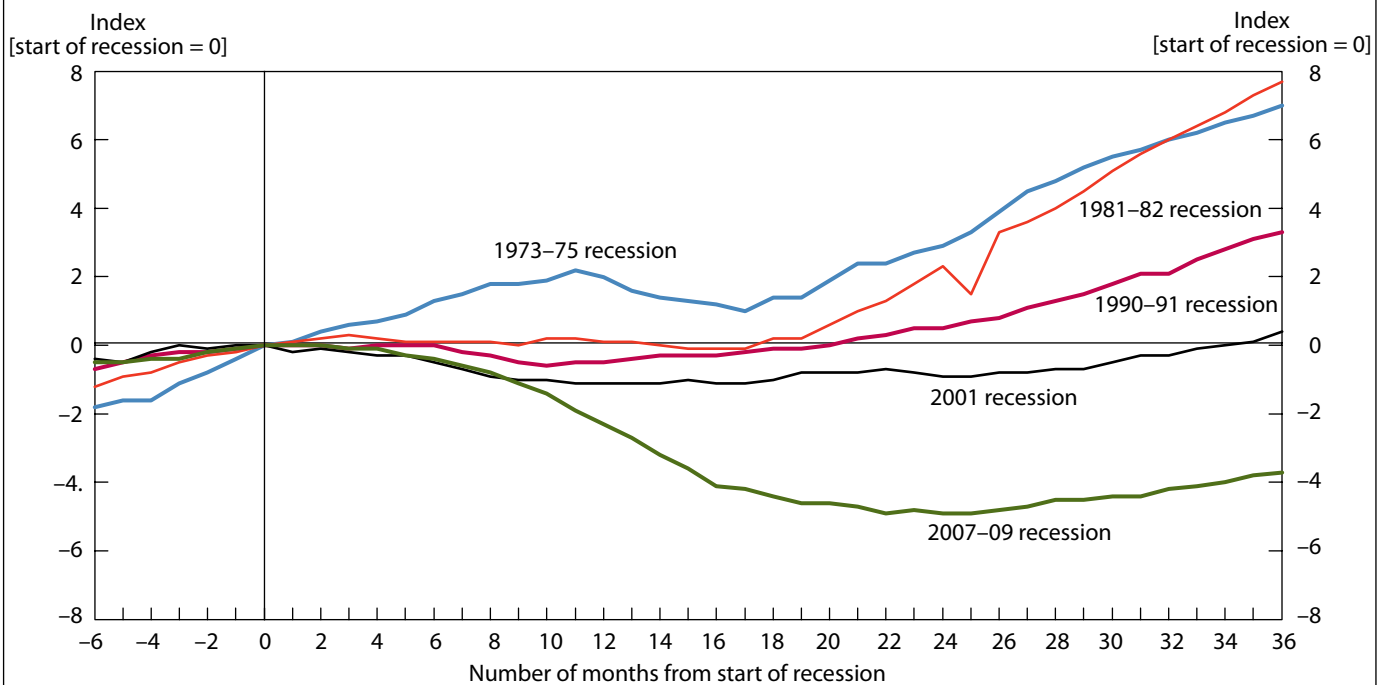
nificant job losses during it.²⁶ The industry's declines in employment accelerated sharply during the latest recession. However, some areas of manufacturing did add jobs through the first 9 months of the recession. Machinery and aerospace products and parts manufacturing, both with a large share of employment dependent on exports, added jobs over that period. Growth in these two industries, however, did not withstand the deepening of the economic downturn. Nearly all manufacturing industries lost jobs over the course of the recession. Manufacturing employment fell 2.0 million, or 14.6 percent, from December 2007 through June 2009. Some of the most severe job losses were in motor vehicles and parts manufacturing, in which employment fell 35 percent during the recession.

The most recent recession was unique with regard to the breadth and depth of the employment decline in private service-providing industries. (See chart 2.) Collectively, private service-providing industries have accounted for the majority of job growth over the past 20 years and had previously avoided large job losses during recessions. As the downturn began in late 2007, employment losses spread beyond the housing-related and goods-producing industries to affect the private service-providing industries

on the whole. After peaking in January 2008, employment in private services declined for the next 21 months. Virtually all private service-providing industries were affected, particularly those related to housing and autos. Financial activities, retail and wholesale trade, transportation and warehousing, information, temporary help, and leisure and hospitality all experienced their largest sustained job losses on record.²⁷

Few industries attracted as much attention during the recent downturn as financial activities. Before the downturn, the financial industry expanded rapidly for several years as credit and other financial markets grew.²⁸ As the housing market weakened in 2006, however, job growth in financial activities faltered. Employment in that industry peaked in December—1 year before the official start of the recession. The industry shed 126,000 jobs in 2007. Initially, employment losses were relatively modest and contained in those industries within finance that are most closely connected to housing. However, by September 2008, losses had spread throughout the industry; virtually every component of finance was affected by the financial crisis. Job losses in finance continued after the recession ended. Before 2007, the only recession (since 1939) to see job losses

Chart 2. Employment in private service-providing industries, seasonally adjusted



NOTE: Business cycle peaks are determined by the National Bureau of Economic Research.
SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

in financial activities was that of 1990–91, when the industry was struggling with the savings and loan crisis.

Outside of finance, retail trade and leisure and hospitality—consumer-oriented industries—experienced record employment declines.²⁹ During the recession, these industries lost 1.0 million and 454,000 jobs, respectively. As incomes and wealth declined during this period, consumers increased their savings rates and reduced spending on discretionary purchases such as consumer electronics, travel, and restaurant meals.³⁰

Employment in professional and business services, a broad industry which includes a variety of services—from administrative and waste services to accounting and bookkeeping—declined by over 1.6 million during the most recent recession. In absolute terms, this decline was second only to that in manufacturing, and represented a sharp reversal from the robust growth in employment during the preceding 5 years. Roughly half of the losses occurred within the temporary help services industry, which is widely viewed as an indicator of coming trends in overall nonfarm employment. Temporary help employment peaked in August 2006, 17 months before the peak in total nonfarm employment, and started adding jobs 6 months before overall employment reached its trough.

Education and health services was by far the largest private industry, as measured by employment, to add jobs during the recession. Employment in education and health services has grown regardless of the business cycle phase for more than 30 years. This industry provides critical services to an ever-growing population. Despite the gains, the industry was not completely immune to the recession; its rate of employment growth slowed from its rate of growth in the 3 years preceding the recession.

At its lowest point in October 2009, employment in private service-providing industries had fallen by 4.6 million from its previous high in January 2008, the steepest decline in the history of the series. Employment losses in private service-providing industries were also unprecedented with regard to their share of total nonfarm employment losses. In previous downturns, private services typically have accounted for around one-quarter of total nonfarm employment losses. In the recent downturn, however, they accounted for nearly half of the total decline, well above the previous record.

Overall, government employment grew during the 2007–09 recession. Federal Government employment (excluding temporary Census workers) grew by 48,000 from December 2007 through June 2009. State and local governments added jobs during the first several months of the recession, but after employment reached a high point in

August 2008, they shed 68,000 jobs through the end of the recession—a decline of about 0.3 percent. (See chart 3.) Employment in State and local government tends not to fall during recessions, and job growth in these areas actually accelerated during the 1990–91 and 2001 recessions.³¹

State and local governments have less flexibility than the Federal Government to run deficits; nearly all State governments have some form of a balanced-budget requirement.³² State tax revenues—received primarily from income, sales, and gross receipts taxes—are sensitive to the business cycle, and they began to fall on an annual basis after September 2008.³³ Falling revenues put pressure on States to cut employment, which they began to do after August 2008. In order to shore up State budgets, nearly 60 billion dollars of fiscal relief was given by the Federal Government to the States in 2009 as part of the American Recovery and Reinvestment Act. This stimulus package was also intended to help local governments stave off job cuts.³⁴

Local governments, unlike State governments, did not see a drop in tax revenue. Local government tax revenues come mostly from property taxes, which continued to grow throughout the recession despite declining home values.³⁵ But, according to the National League of Cities, revenue growth was outpaced by spending growth in 2008 and 2009, and local governments began reducing employment after September 2008 in order to cover budget shortfalls.³⁶

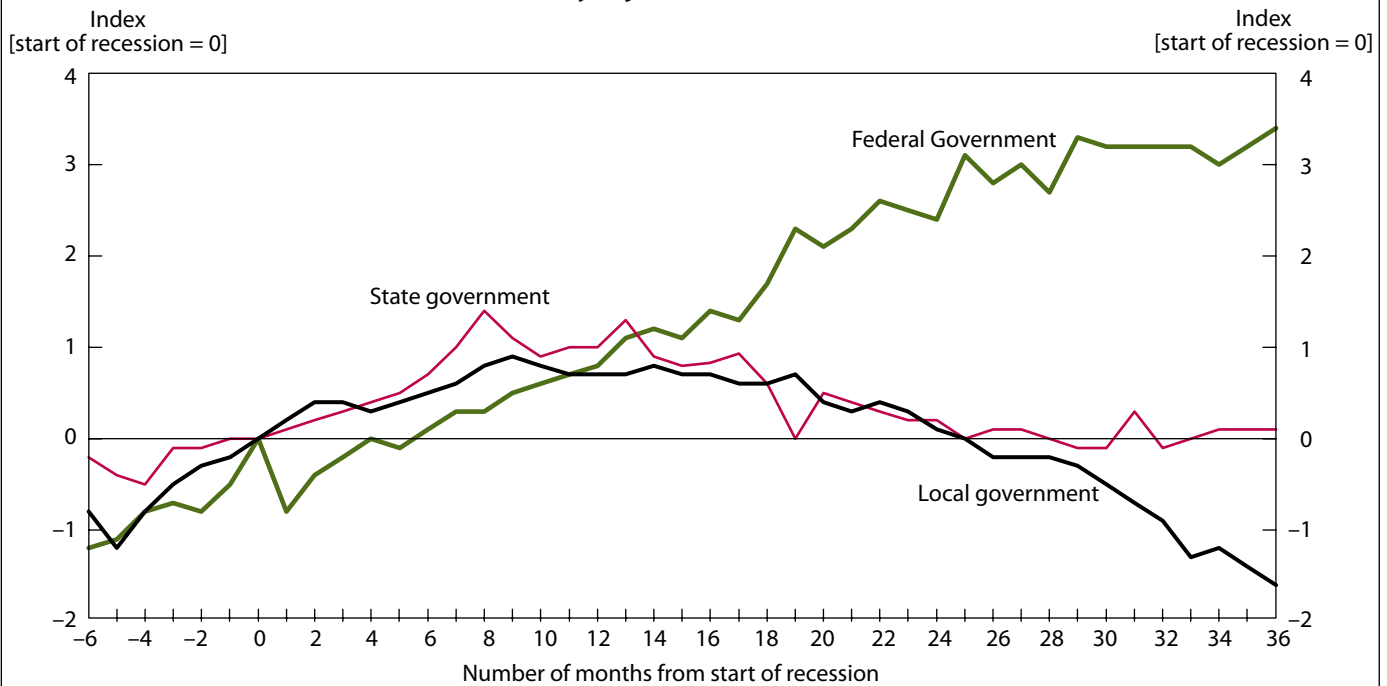
The recession led not only to employment losses, but also to cuts in workers' hours.³⁷ In June 2009, average weekly hours of all employees had fallen by 1 hour to 33.7 hours from the peak in June 2007. Aggregate hours, the product of employment and average weekly hours, fell by 9.8 percent between June 2007 and October 2009. As 2010 came to a close, aggregate hours were still 7.6 percentage points below their prerecession peak.

Length

The United States has experienced 11 periods of sustained employment declines since the inception of the CES survey in 1939. Large declines in employment tend to be associated with recessions. (See charts 4 and 5.) However, peaks and troughs in employment generally do not directly align with the official starting points and endpoints of recessions. Between January 2008 and February 2010, employment fell by 8.8 million—the largest absolute decline in the series' history. The previous record was 4.3 million net jobs lost from November 1944 to September 1945.

It is hard to generalize given the differences in depth and duration among employment downturns, but the

Chart 3. Federal, State, and local government employment, excluding temporary Census employment, June 2007–December 2010, seasonally adjusted



NOTE: Business cycle peaks are determined by the National Bureau of Economic Research.
 SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

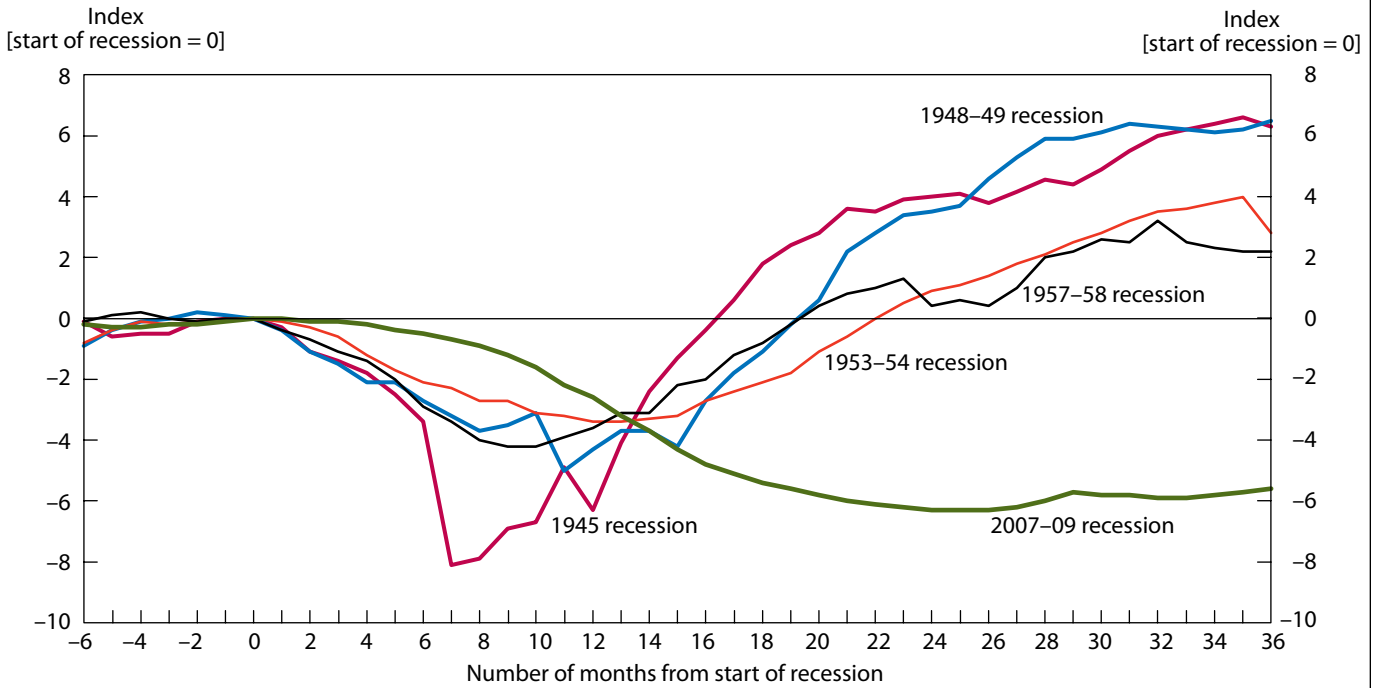
average employment decline before the most recent recession resulted in a drop in employment of 3.6 percent and lasted 15 months. (See table 2). The most recent employment decline, from 2008 to 2010, was a 6.3-percent decrease and lasted 25 months. In percentage terms, the recent decline is exceeded in depth only by that which occurred as WWII was ending. Measured by duration, only the 30-month employment downturn from February 2001 to August 2003 was longer than the most recent downturn.

In addition to its depth and length, the recent downturn is unique in that it is the first on record to have erased all of the jobs gained in the previous economic expansion. This situation resulted not only from the sharp decline in employment, but also from relatively tepid job growth in the preceding expansion. From August 2003 to January 2008, employment grew by 6.3 percent, its weakest expansion since WWII. From the end of WWII to the expansion that ended in February 2001, the average employment expansion had been a gain of 17.8 percent. In February 2010, employment was 576,000 below its previous cycle low, August 2003. Before the most recent recession, at the end of boom-and-bust cycles the overall employment lev-

el had always remained well above where it started, even after the worst declines.

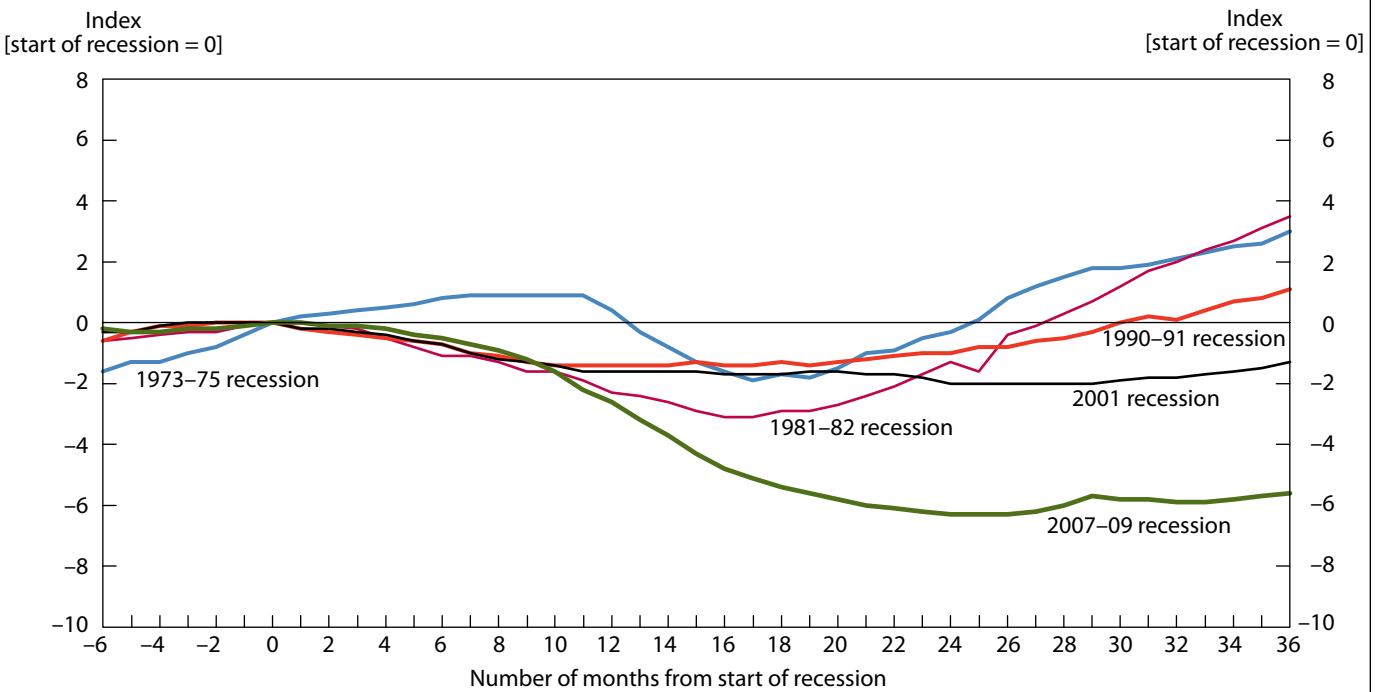
THE U.S. LABOR MARKET IS CURRENTLY RECOVERING from the deepest employment downturn since the end of World War II. Not only were there heavy losses in employment; the downturn was notable for its length and for the breadth of industries affected. The downturn started in the housing-related and good-producing industries in 2006. Over the course of 2008, the pace of declines accelerated as employment losses spread to private service-providing industries. Economic output resumed in late 2009, and employment reached a trough in February 2010. In addition to the positive signs in overall employment, there are two other measures that suggest firming in the labor market. Average weekly hours and employment in temporary help services, both traditionally viewed as precursors of nonfarm employment trends, both have increased since their lows in June 2009 and August 2009, respectively. Despite the improvements in 2010, employment remains 7.7 million jobs below its prerecession peak as of December 2010, while the economy continues to struggle with the largest employment decline since WWII. □

Chart 4. Total nonfarm employment, seasonally adjusted, selected recessions, 1945–58, and the 2007–09 recession



NOTE: Business cycle peak as determined by the National Bureau of Economic Research.
 SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

Chart 5. Total nonfarm employment, seasonally adjusted, selected recessions, 1973–2009



NOTE: Business cycle peak as determined by the National Bureau of Economic Research.
 SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

Table 2. Nonfarm expansions and contractions in employment, seasonally adjusted, 1945–2010

| Expansions | | | | | Contractions | | | | | Employment contraction as percent of expansion |
|-------------------|-------------------------------------|----------------|--------------------|------------------------|-------------------|-------------------------------------|----------------|--------------------|------------------------|--|
| Trough to peak | Change in employment (in thousands) | Percent change | Length (in months) | Annualized growth rate | Peak to trough | Change in employment (in thousands) | Percent change | Length (in months) | Annualized growth rate | |
| Sep 1945–Sep 1948 | 6,794 | 17.6 | 36 | 5.6 | Nov 1943–Sep 1945 | -4,319 | -10.1 | 22 | -9.2 | ... |
| Oct 1949–Jul 1953 | 7,586 | 17.7 | 45 | 4.4 | Sep 1948–Oct 1949 | -2,344 | -5.2 | 13 | -4.8 | 34.5 |
| Aug 1954–Apr 1957 | 4,413 | 9.0 | 32 | 3.3 | Jul 1953–Aug 1954 | -1,711 | -3.4 | 13 | -3.1 | 22.6 |
| Jun 1958–Apr 1960 | 3,900 | 7.7 | 22 | 4.1 | Apr 1957–Jun 1958 | -2,326 | -4.4 | 14 | -3.8 | 52.7 |
| Feb 1961–Mar 1970 | 17,897 | 33.4 | 109 | 3.2 | Apr 1960–Feb 1961 | -1,256 | -2.3 | 10 | -2.7 | 32.2 |
| Nov 1970–Jul 1974 | 8,225 | 11.7 | 44 | 3.1 | Mar 1970–Nov 1970 | -1,044 | -1.5 | 8 | -2.2 | 5.8 |
| Apr 1975–Jul 1981 | 15,131 | 19.8 | 75 | 2.9 | Jul 1974–Apr 1975 | -2,171 | -2.8 | 9 | -3.7 | 26.4 |
| Dec 1982–Jun 1990 | 21,061 | 23.7 | 90 | 2.9 | Jul 1981–Dec 1982 | -2,838 | -3.1 | 17 | -2.2 | 18.8 |
| May 1991–Feb 2001 | 24,334 | 22.5 | 117 | 2.1 | Jun 1990–May 1991 | -1,621 | -1.5 | 11 | -1.6 | 7.7 |
| Aug 2003–Jan 2008 | 8,174 | 6.3 | 53 | 1.4 | Feb 2001–Aug 2003 | -2,708 | -2.0 | 30 | -0.8 | 11.1 |
| | | | | | Jan 2008–Feb 2010 | -8,750 | -6.3 | 25 | -3.1 | 107.0 |

SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

Notes

¹ Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, consult the NBER webpage at <http://www.nber.org/cycles/cyclesmain.html> (visited Nov. 2, 2010).

² The data on employment used in this article are from the CES survey, which is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the CES program's methods, see "Technical Notes to Establishment Survey Data Published in Employment and Earnings" at <http://www.bls.gov/web/cestn2.htm> (visited Mar. 31, 2011). CES data are available at <http://www.bls.gov/ces> (visited Mar. 31, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

³ The current CES monthly total nonfarm payroll employment series goes back to January 1939.

⁴ The term "Great Recession" has been used in numerous publications and is now considered an accepted term by the Associated Press.

⁵ The data on unemployment rates used in the article are from the Current Population Survey (CPS). CPS data are available at <http://www.bls.gov/cps> (visited Mar. 31, 2011). The CPS data used in the article are seasonally adjusted unless otherwise noted.

⁶ Housing is not a defined industry. Activity related to the housing market cuts across a variety of industries and includes activities such as residential construction, financial activities, manufacturing, and retail sales.

⁷ For a complete overview of health care employment trends, see

Catherine A. Wood, "Employment in health care: a crutch for the ailing economy during the 2007–09 economy," *Monthly Labor Review*, this issue, pp. 13–18.

⁸ Richard K. Green, "Follow the Leader: How Changes in Residential and Non-residential Investment Predict Changes in GDP," *Real Estate Economics*, June 1997, pp. 253–70. This article looks at the relationship between GDP and residential investment and non-residential investment. Green finds that residential investment tends to begin rising before the trough of the business cycle begin falling before the peak. Nonresidential investment lags the overall business cycle and appears to be more a symptom than a cause of economic downturns.

⁹ Data on new housing starts, permits, and home sales are produced by the U.S. Census Bureau. For more information on starts and permits, see <http://www.census.gov/const/www/newresconstindex.html> (visited Dec. 22, 2010). For more information on new home sales levels and prices, see <http://www.census.gov/const/www/newressalesindex.html> (visited Dec. 22, 2010).

¹⁰ Eric Belsky and Joel Prakken, *Housing Wealth Effects: Housing's Impact on Wealth Accumulation, Wealth Distribution and Consumer Spending* (Cambridge, Mass., Harvard University, Joint Center for Housing Studies, 2004), <http://www.jchs.harvard.edu/publications/finance/w04-13.pdf> (visited Mar. 31, 2011). BusinessDictionary.com defines the wealth effect as "changes in aggregate demand caused by change in the value of assets such as stocks, bonds, gold, property" and explains, "Increase in the market value of these assets induces a feeling of being 'richer' in their owners (even if no additional cash is realized) and often tends to encourage spending and to dampen savings." See <http://www.businessdictionary.com/definition/wealth-effect.html> (visited Dec. 22, 2010).

¹¹ Data on U.S. household real estate assets are from the Federal

Reserve’s Flow of Funds release. See <http://www.federalreserve.gov/RELEASES/z1/Current/z1r-5.pdf> (visited Dec. 19, 2010). The net worth of households and nonprofit organizations rose by 39.9 percent between 2003 and 2006.

¹² Alan Greenspan and James Kennedy, *Sources and Uses of Equity Extracted from Homes* (Washington, DC, Board of Governors of the Federal Reserve System, March 2007), <http://www.federalreserve.gov/pubs/FEDS/2007/200720/200720pap.pdf> (visited Dec. 15, 2010); see table 2 on pp. 16–25.

¹³ Belsky and Prakken, *Housing Wealth Effects*.

¹⁴ <http://www.census.gov/const/www/newresconstindex.html>.

¹⁵ Data on delinquency are from the Mortgage Bankers Association’s National Delinquency Survey. See <http://www.mbaa.org/ResearchandForecasts/ProductsandSurveys/NationalDelinquencySurvey.htm> (visited Mar. 31, 2011).

¹⁶ Danielle DiMartino and John V. Duca, “The Rise and Fall of Subprime Mortgages,” *Economic Letter—Insights from the Federal Reserve Bank of Dallas*, November 2007, <http://www.dallasfed.org/research/ecllett/2007/el0711.html> (visited Jan. 7, 2011).

¹⁷ James D. Hamilton, *Causes and Consequences of the Oil Shock of 2007–08* (Washington, DC, Brookings Institution, February 2009, revised March 2009), http://www.brookings.edu/economics/bpea/~media/Files/Programs/ES/BPEA/2009_spring_bpea_papers/2009_spring_bpea_hamilton.pdf (visited Mar. 31, 2011). Crude oil prices are from the Bureau of Labor Statistics Producer Price Index program, series WPU056, and were extracted on Dec. 23, 2010.

¹⁸ Table 2.3.1, “Percent Change From Preceding Period in Real Personal Consumption Expenditures by Major Type of Product” (Bureau of Economic Analysis, National Income and Product Accounts), www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=61&Freq=Qtr&FirstYear=2008&LastYear=2010 (visited Dec. 23, 2010).

¹⁹ Hamilton, *Causes and Consequences of the Oil Shock of 2007–08*.

²⁰ For an overview of mining employment trends, see Brian Davidson, “Mining employment trends of 2007–09: a question of prices,” *Monthly Labor Review*, this issue, pp. 19–23.

²¹ Both the 1990–91 and 2001 recessions lasted 8 months, but employment continued to decline after the end of both recessions.

²² Data on lending standards are available from the Federal Reserve Board’s Senior Loan Officer Opinion Survey on Bank Lending Practices. See <http://www.federalreserve.gov/boarddocs/snloansurvey/> (visited Mar. 31, 2011).

²³ The CES 1-month diffusion index measures the dispersion of employment change across industries over the month. The overall index is calculated from 267 seasonally adjusted employment series (primarily 4-digit NAICS industries) covering all nonfarm payroll employment in the private sector. To derive the index, each component industry is assigned a value of 0 percent, 50 percent, or 100 percent, depending on whether its employment showed a decrease, no change, or an increase, respectively, over the month. The average value (mean) is then calculated, and this percent is the diffusion index number.

²⁴ For an overview of trends in construction employment, see Adam Hadi, “Construction employment peaks before the recession and falls sharply throughout it,” *Monthly Labor Review*, this issue, pp. 24–27.

²⁵ Nonresidential construction spending is based upon the Bureau of Economic Analysis’s nonresidential structures investment compo-

nent of GDP. See Table 1.1.6, “Real Gross Domestic Product, Chained Dollars” (Bureau of Economic Analysis), line 8, <http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=6&FirstYear=2009&LastYear=2010&Freq=Qtr> (visited Jan. 8, 2011).

²⁶ For a complete overview of manufacturing employment trends, see Megan M. Barker, “Manufacturing employment hard hit during the 2007–09 recession,” *Monthly Labor Review*, this issue, pp. 28–33.

²⁷ For an overview of temporary help employment trends, see Frank Conlon, “Professional and business services: employment trends in the 2007–09 recession,” *Monthly Labor Review*, this issue, pp. 34–39.

²⁸ For an overview of trends in financial activities employment, see George Prassas, “Employment in financial activities: double billed by housing and financial crises,” *Monthly Labor Review*, this issue, pp. 40–44.

²⁹ For an overview of retail trends, see Michael D. McCall, “Deep drop in retail trade employment during the 2007–09 recession,” *Monthly Labor Review*, this issue, pp. 45–48. For an overview of trends in leisure and hospitality employment, see Eliot Davila, “Employment in leisure and hospitality departs from historical trends during 2007–09 recession,” *Monthly Labor Review*, this issue, pp. 49–52.

³⁰ “Off their trolleys,” *The Economist*, May 7, 2009, http://www.economist.com/finance/displaystory.cfm?story_id=13611284 (visited Dec. 22, 2010).

³¹ Julie Hatch, “Employment in the public sector: two recessions’ impact on jobs,” *Monthly Labor Review*, October 2004, pp. 38–47, <http://www.bls.gov/opub/mlr/2004/10/art3full.pdf> (visited Apr. 4, 2011).

³² See “NCSL Fiscal Brief: State Balanced Budget Provisions” (Washington, DC, National Conference of State Legislatures, October 2010), <http://www.ncsl.org/documents/fiscal/StateBalancedBudgetProvisions2010.pdf> (visited Jan. 12, 2010).

³³ “Quarterly Summary of State and Local Tax Revenue” (U.S. Census Bureau), <http://www.census.gov/govs/qtax/> (visited Jan. 12, 2011).

³⁴ *The Economic Impact of the American Recovery and Reinvestment Act of 2009, Second Quarterly Report* (Washington, DC, Council of Economic Advisors, Jan. 13, 2010), p. 10, <http://www.recovery.gov/About/Documents/100113-economic-impact-arra-second-quarterly-report.pdf> (visited Dec. 23, 2010); Christopher W. Hoene and Michael A. Pagano, “City Fiscal Conditions in 2009” and “City Fiscal Conditions in 2010” (Washington, DC, National League of Cities) [http://www.nlc.org/ASSETS/E0A769A03B464963A81410F40A0529BF/CityFiscalConditions_09%20\(2\).pdf](http://www.nlc.org/ASSETS/E0A769A03B464963A81410F40A0529BF/CityFiscalConditions_09%20(2).pdf) and http://www.nlc.org/ASSETS/AE26793318A645C795C9CD11DAB3B39B/RB_CityFiscalConditions2010.pdf (visited Jan. 12, 2011). Municipalities rely on State funding for about 12 percent of their budgets.

³⁵ “Quarterly Summary of State and Local Tax Revenue.” Local tax revenues were calculated as the difference between the national total of State and local government tax revenue and the national total of State tax revenue.

³⁶ “City Fiscal Conditions in 2009” and “City Fiscal Conditions in 2010.” The years referred to are the 2008 and 2009 fiscal years, as defined by individual municipal corporations.

³⁷ For an overview of trends in average weekly hours, see Steven Kroll, “The decline in work hours during the 2007–09 recession,” *Monthly Labor Review*, this issue, pp. 53–59.

Employment in health care: a crutch for the ailing economy during the 2007–09 recession

During the last recession, employment in the health care industry grew while total nonfarm employment was down by more than 7.5 million; although growth in health care was not as robust as in the previous two recessions, the industry still gained 428,000 jobs

Catherine A. Wood

The health care industry added 428,000 jobs throughout the 18-month recession from December 2007 until June 2009 and has continued to grow at a steady rate since the end of the recession.¹ Historically, health care employment has been immune from fluctuations in the business cycle, as shown by the industry's continued growth throughout previous recessions. Indeed, the industry has been among the leading contributors to overall job growth during recessions. In an economy hit with more than 7.5 million job losses, a national unemployment rate that rose to 10 percent in October 2009, and large declines in gross domestic product (GDP), all since the start of the most recent recession, the health care industry stood out as one of a few areas that continued adding jobs, thereby serving as a crutch for the ailing economy.

Industry trends during downturns

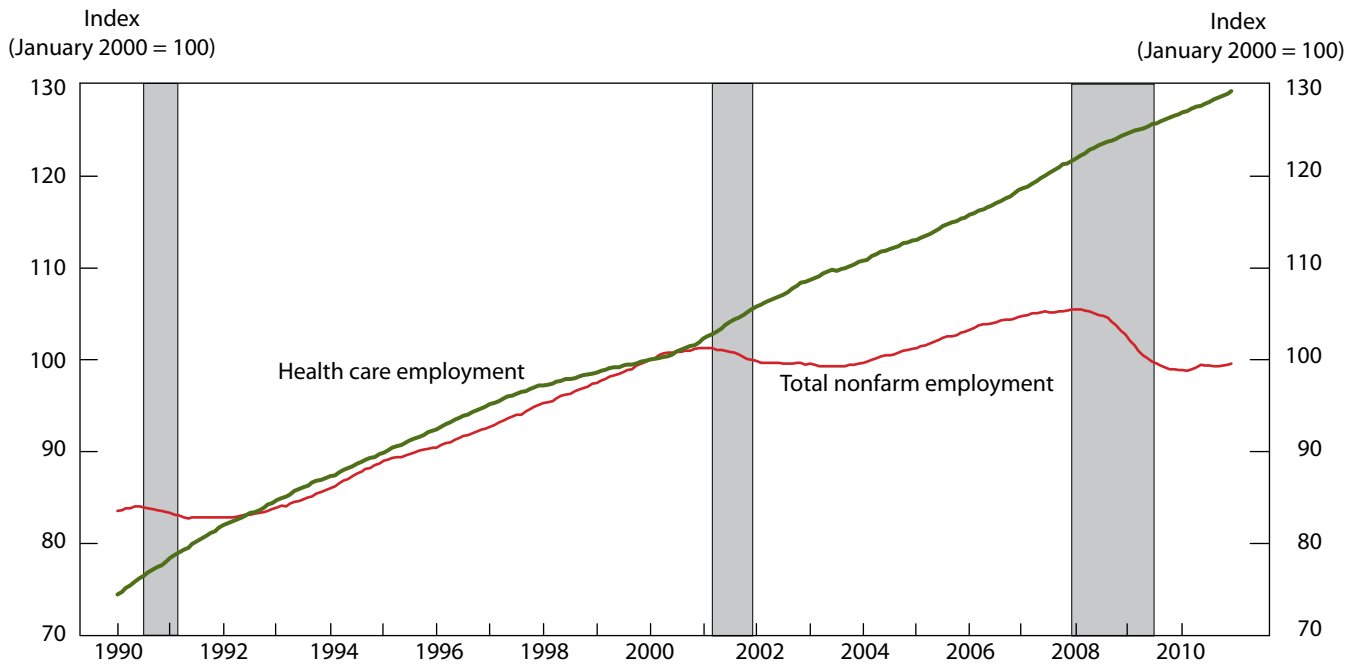
As in past recessions, the health care industry served as a beacon of job opportunities while total nonfarm employment plummeted in the 2007–09 recession. (See chart 1.) Fiscal stimulus packages funded hospitals through additional Medicaid subsidies and increased health-related spending during the recession, a common accompaniment of

economic downturns. These federally funded programs effectively made health coverage more affordable for, and available to, the unemployed. In the 2007–09 recession, one such program allowed the unemployed to finance and maintain their employer-sponsored private health coverage: the temporarily extended Consolidated Omnibus Budget Reconciliation Act (COBRA) guaranteed those out of work temporary coverage through subsidies that enabled them to pay their premiums. Fiscal stimuli also enabled hospitals to increase hiring, improve information technologies, and increase emergency care services to the unemployed, with Medicaid funding typically covering these services, thus offering a more economical substitution for primary care providers.²

One important opposing factor was the heightened cost of care, which weakened the demand for health services and resulted in a slower rate of job growth than in previous downturns. (See chart 2.) In the longest recession since World War II, government subsidies were insufficient to meet health care costs throughout the 18-month downturn. Consequently, coverage became more limited and unaffordable as (1) hospitals overspent Medicaid expenditures that were driven by the addition of 3.5 million new enrollees, (2) programs expired, and (3) health

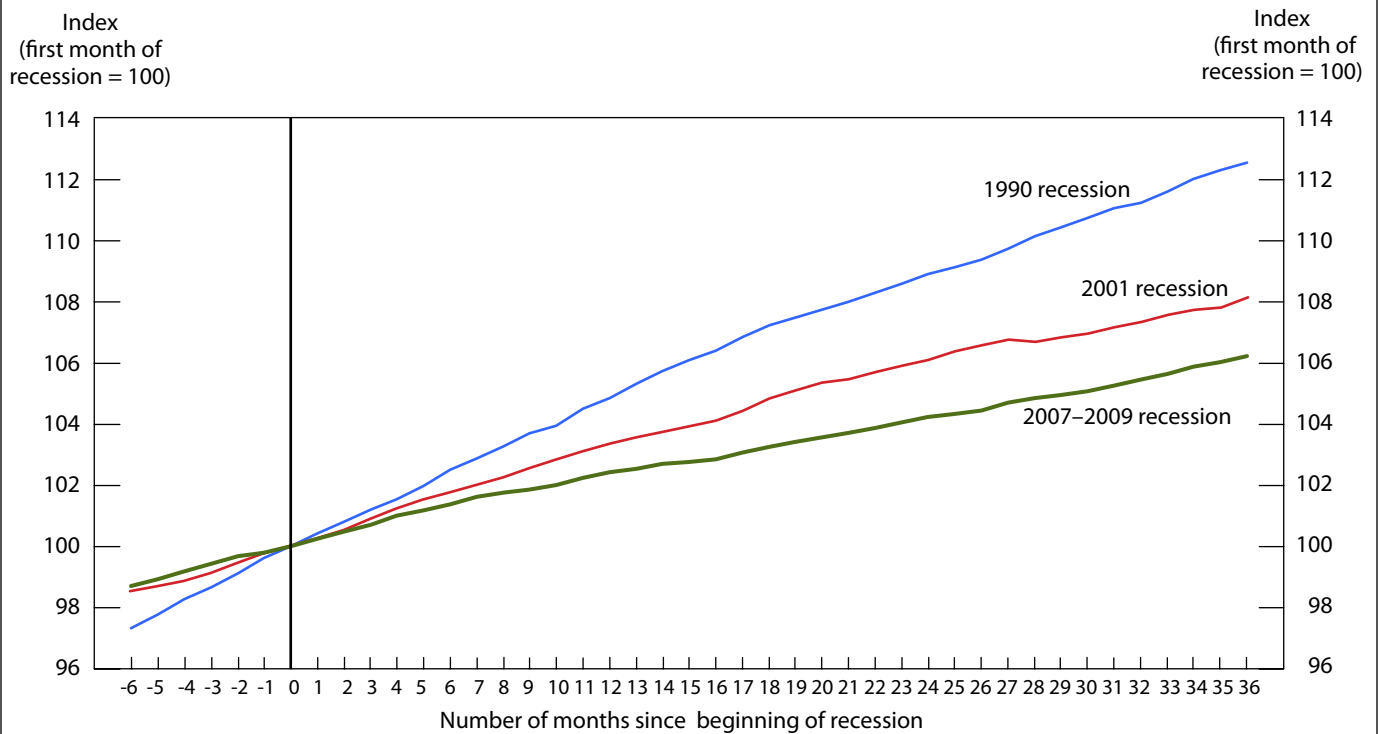
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Chart 1. Total nonfarm and health care indexes of employment, seasonally adjusted, 1990–2010



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).
SOURCE: U.S. Bureau of Labor Statistics.

Chart 2. Health care index of employment, seasonally adjusted



NOTE: Beginning and ending months of recessions are determined by the National Bureau of Economic Research (NBER).
SOURCE: U.S. Bureau of Labor Statistics.

care providers were forced to make budget cuts and hire at a slower rate. As the number of medically uninsured increased by 3.8 million (from 42.7 million in 2008 to 46.5 million in 2009) and Medicaid enrollments escalated, limited resources shrank and the cost to the patient increased significantly.³

The low growth rate of national health spending throughout the 2007–09 recession explains why job growth progressed at a slower pace than during previous recessions. In 2009, national health spending grew by 4.0 percent, the lowest annual rate of increase in the 50-year history of the National Health Expenditure Accounts. This rate was preceded in 2008 by 4.7-percent growth, the second-lowest historical rate. Both rates of growth of health care spending in the most recent recession are significantly lower than the 8.5-percent and 11.0-percent rates posted in the recessions of 1990 and 2001, respectively.⁴ As one source put it, “The recession contributed to slower growth in private health insurance spending and out-of-pocket spending by consumers, as well as a reduction in capital investments by health care providers.”⁵ The increased burden the recession placed on households, businesses, and governments limited the financial resources that were available to pay for health care. As they lost their jobs and, consequently, their employer-sponsored private health care coverage, individuals could not afford health care and were forced to discontinue maintenance care and elective procedures, thus weakening the demand for health services.⁶

Despite the weakened demand for care, job growth was widespread and robust across health care throughout the 2007–09 recession, as all of the industry’s components—ambulatory health care services, hospitals, and nursing and residential care facilities—boosted employment.⁷ (See table 1 and chart 3.) Employment in these industries grew, at least in part, as a result of the increasing U.S. population and the continued, albeit slower, growth in demand for health care. From 2000 to 2009, the population increased by 26 million, or 9 percent, and from 1990 to 2009 by 58 million, or 23 percent.⁸ The growing and aging population, with its consequent increased demand for health care services, resulted in a net gain in job growth throughout the industry during the past three recessions.

Ambulatory health care services

Employment in ambulatory health care services,⁹ such as doctors’ offices and home health care services, had the largest positive contribution to job growth in the health care industry during the last three recessions. Ambulatory care

added 231,000 jobs, or an average of 13,000 per month, in the 2007 recession, compared with 13,000 per month during the 2001 recession and 15,000 per month in the 1990 recession. Within ambulatory services, home health care services had the greatest impact on job growth in the most recent recession, boosting employment by 95,000 as more affordable alternative care options increased. An infant industry in the 1990s, home health care grew dramatically as an economical option to traditional nursing homes. As medical technologies such as electromyography allowed the disabled to become more independent and use hands-free devices controlled by small muscle movements (for example, the blink of an eye), as pacemakers enabled cardiologists to control irregular heart rates, and as companion services spurred the growth in employment of home health care aides,¹⁰ preferences for in-home care increased among the elderly and disabled population.

Hospitals

Although health care employment tends to expand throughout changing business cycles, hospital employment has moved countercyclically to both real GDP and total nonfarm employment throughout the last three recessions.¹¹ (See chart 4.) Consequently, when unemployment rises, so does the jobs growth rate in hospitals. According to one economist, “While the trend of employment in all hospitals combined is consistently upward, the rate of growth may be described as countercyclical: when general business conditions are weak, hospital employment exhibits greater growth.”¹² Hospital employment saw its most significant gains at the onset of the most recent three recessions, when GDP declines were at their highest.¹³ In the 2007–09 recession, employment in hospitals added an average of 10,000 jobs per month between December 2007 and July 2008, whereas health care employment gained an average of 3,000 per month from August 2008 through the end of the recession in June 2009.

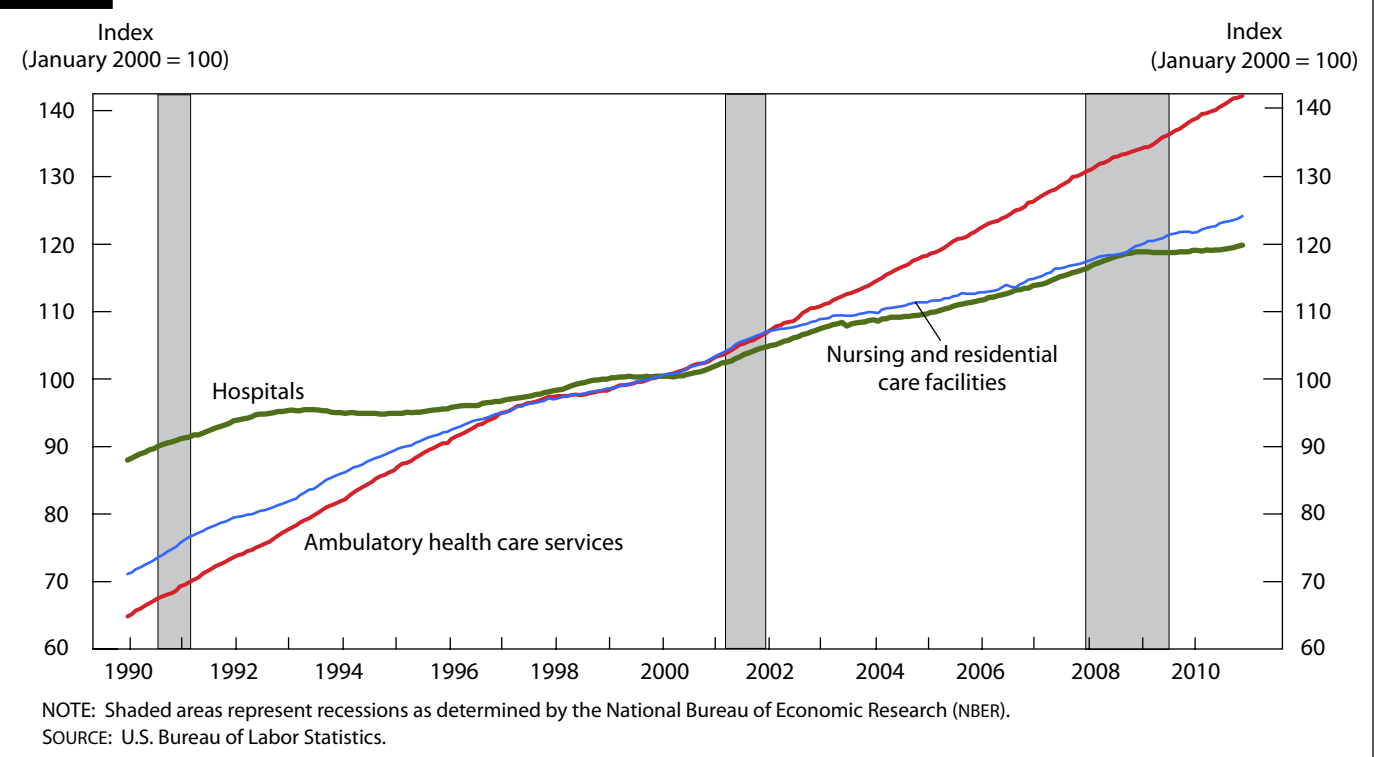
Real government hospital expenditures fluctuated opposite real GDP and help explain the countercyclical movement of hospital employment. As unemployment levels rose, discretionary funding to hospitals and social services through Medicare and Medicaid increased.¹⁴ Although hospital work is generally less attractive than other health care jobs, more workers were motivated to resort to hospital jobs as other health care employment options declined and jobs became more limited and unstable. Growth in hospital employment slowed during the last 10 months of the recent recession as Federal subsidies ran out and financial pressures resulted in budget cuts and reductions in staff.

Table 1. Employment in selected components of the health care industry and in total nonfarm establishments, in thousands, seasonally adjusted, previous three recessions

| Industry | December 2007– June 2009 | | March 2001– November 2001 | | July 1990– March 1991 | |
|--|-----------------------------|------------------------|------------------------------|------------------------|--------------------------|------------------------|
| | Net change in jobs | Average monthly change | Net change in jobs | Average monthly change | Net change in jobs | Average monthly change |
| Total nonfarm..... | -7,490 | -416 | -1,599 | -200 | -1,240 | -155 |
| Health care..... | 428 | 24 | 250 | 31 | 270 | 34 |
| Ambulatory health care services..... | 231 | 13 | 105 | 13 | 116 | 15 |
| Offices of physicians..... | 46 | 3 | 45 | 6 | 41 | 5 |
| Outpatient care centers..... | 33 | 2 | 10 | 1 | 5 | 1 |
| Home health care services..... | 95 | 5 | 21 | 3 | 38 | 5 |
| Hospitals..... | 102 | 6 | 78 | 10 | 67 | 8 |
| Nursing and residential care facilities..... | 95 | 5 | 67 | 8 | 87 | 11 |
| Nursing care facilities..... | 34 | 2 | 24 | 3 | 56 | 7 |

NOTE: Beginning and ending months of recessions are determined by the National Bureau of Economic Research (NBER).
SOURCE: U.S. Bureau of Labor Statistics.

Chart 3. Employment index for selected components of health care industry, seasonally adjusted, 1990–2010



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).
SOURCE: U.S. Bureau of Labor Statistics.

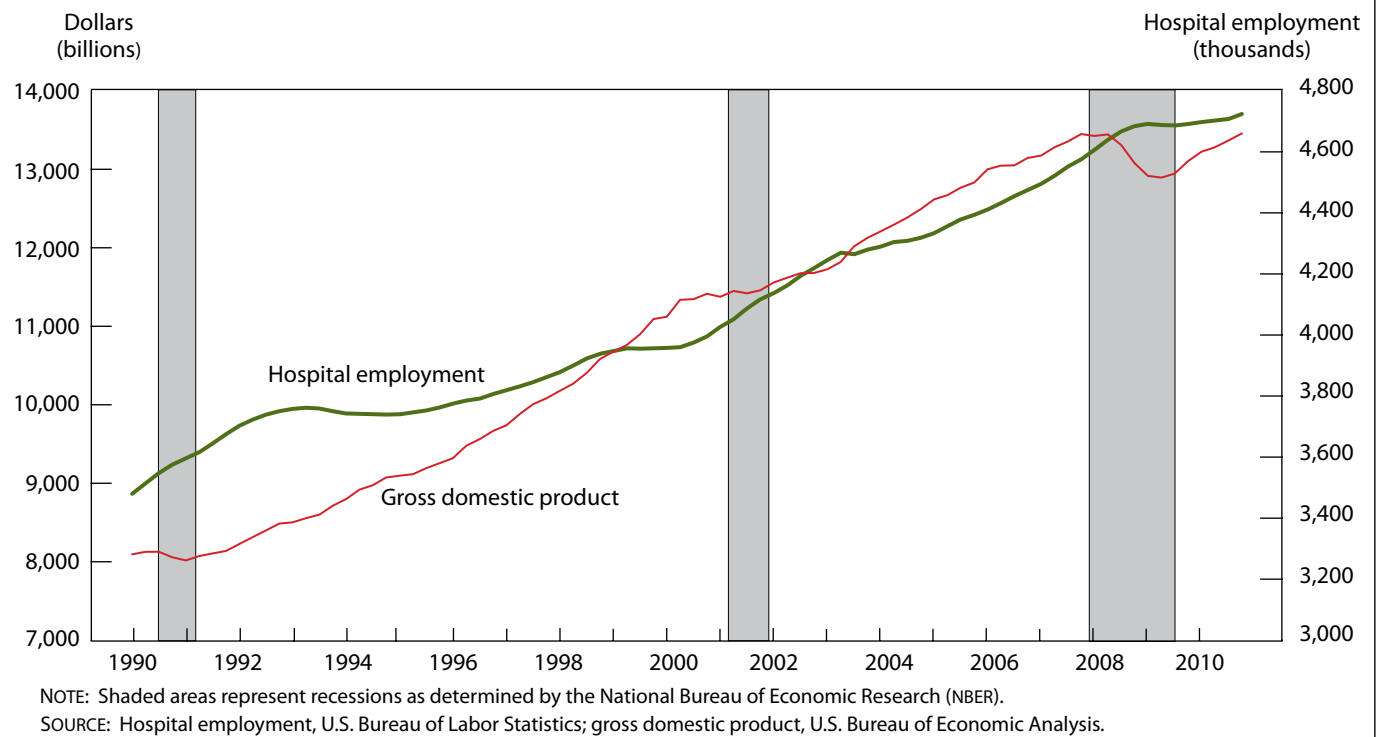
Nursing and residential care facilities

Despite having grown, employment in nursing and residential care facilities did not account for as large a share of health care employment gains in the 2007–09 recession as it did in both the 1990 and 2001 recessions. This falloff in share is due primarily to the creation of the home health care industry and alternative care options that offset rising demand from the aging population. Employment in nurs-

ing and residential care facilities grew by 95,000 during the most recent recession, accounting for 22 percent of the total jobs added in the health care industry. In the 1990 and 2001 recessions, nursing and residential care facilities had accounted for 32 percent and 27 percent, respectively, of the total jobs added in health care. This shift indicates the preference for alternative options over nursing and residential care facilities.

Nursing and residential care facilities expanded con-

Chart 4. Hospital employment, quarterly averages, seasonally adjusted, and real gross domestic product, chain-weighted 2005 dollars, 1990–2010



comitantly with the Nation's population growth and increased life expectancy. As of 2000, "35.0 million people 65 years of age and over were counted in the United States,"¹⁵ a figure that represented a 12.0-percent increase since 1990. Although the 65-years-and-older age bracket was a smaller proportion of the total population in 2000 than in 1990, this tendency is expected to reverse as baby boomers begin to reach age 65, starting in 2011. In addition, total life expectancy at birth increased from 75.4 years in 1990, to 76.8 years in 2000, and to an estimated 78.3 years in 2010. Life expectancy is projected to rise to approximately 79.5 years in 2020.¹⁶

EMPLOYMENT IN THE HEALTH CARE INDUSTRY continued to grow steadily throughout the last three recessions as total nonfarm employment lost millions of jobs. During the longest recession since World War II, health care gained 428,000 jobs while the economy as a whole lost more than 7.5 million jobs. Although health care employment exhibited consistent monthly gains throughout the last three recessions, it grew less rapidly in the 2007–09 recession than during the 1990 and 2001 downturns. The slowdown was due to a number of factors, including the length and breadth of the most recent recession; cuts

in government funding that were not so pronounced during other economic downturns; the long-term impact of the loss of employer-sponsored private health coverage, thus decreasing the demand and affordability of health care; and the weakest rate of growth in national health spending in more than five decades. Factors such as a growing population, increasing life expectancy, and the aging of the population increased demand for health care, thus leading to a consistent expansion in the industry's employment levels. It is safe to say that throughout the last three recessions the health care industry has served as a crutch for an ailing economy, and although its effect was not as pronounced in the most recent recession, that it boosted employment at all during such a severe and prolonged economic downturn is remarkable. □

NOTES

¹ The data on employment used in this article are from the Current Employment Statistics (CES) survey, a monthly survey of approximately 140,000 nonfarm business and government agencies representing approximately 440,000 individual worksites. For more information on the survey's concepts and methodology, see "Technical Notes to Establishment Survey Data Published in *Employment and Earnings*" (Bureau of Labor Statistics, Feb. 4, 2011), <http://www.bls.gov/web/cestn2.htm> (visited Oct. 7, 2010). To access CES data, see "Current Employment

Statistics - CES (National)" (Bureau of Labor Statistics, Mar. 4, 2011), <http://www.bls.gov/ces> (visited Apr. 21, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

Recessions are identified by the National Bureau of Economic Research (NBER), according to which the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from July 1990 to March 1991 and from March 2001 to November 2001, respectively. For a complete list of business cycle dates, see "U.S. Business Cycle Expansions and Contractions" (Cambridge, MA, National Bureau of Economic Research, Mar. 31, 2011), <http://www.nber.org/cycles/cyclesmain.html> (visited Apr. 21, 2011).

² Anne Martin, David Lassman, Lekha Whittle, Aaron Catlin, and the National Health Expenditure Accounts Team, "Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades," *Health Affairs*, January 2011, pp. 11–22.

³ *Ibid.*

⁴ See "Table 2. National Health Expenditures Aggregate Amounts and Average Annual Percent Change, by type of Expenditure: Selected Calendar Years 1960–2009" (Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, January 2011), <http://www.cms.gov/NationalHealthExpendData/downloads/tables.pdf> (visited Jan. 13, 2011).

⁵ Martin, Lassman, Whittle, Catlin, and the National Health Expenditure Accounts Team, "Recession Contributes," p. 11.

⁶ Annamaria Lusardi, Daniel Schneider, and Peter Tufano, "The Economic Crisis and Medical Care Coverage," Working Paper No. 15483 (Cambridge, MA, National Bureau of Economic Research, March 2010).

⁷ According to the North American Industry Classification System (NAICS), the code for the health care and social assistance sector is 62. The sector comprises the three health-related subsectors of ambulatory health care services (code 621), hospitals (622), and nursing and residential care facilities (623) (hereafter, collectively, the health care industry), and the social assistance subsector (624). (For a full account and listing of industry codes, see "North American Industry Classification System" (U.S. Census Bureau, Mar. 16, 2011), <http://www.census.gov/epcd/www/naics.html> (visited Apr. 21, 2011).)

⁸ Population changes and percent changes are calculated from population estimates from the U.S. Census Bureau. (See "Population

Finder" (U.S. Census Bureau, no date), http://factfinder.census.gov/servlet/SAFFPopulation?_submenuId=population_0&_sse=on (visited Feb. 11, 2011).)

⁹ According to NAICS, "Industries in the Ambulatory Health Care Services subsector provide health care services directly or indirectly to ambulatory patients and do not usually provide inpatient services. Health practitioners in this subsector provide outpatient services, with the facilities and equipment not usually being the most significant part of the production process." (See "2007 NAICS definitions: 621 Ambulatory Health Care Services" (U.S. Census Bureau, no date), <http://www.census.gov/naics/2007/def/NDEF621.HTM#N621> (visited Jan. 11, 2011).) Components of the ambulatory health care services subsector include offices of physicians (NAICS 6211), offices of dentists (6212), offices of other health practitioners (6213), outpatient care centers (6214), medical and diagnostic laboratories (6215), home health care services (6216), and other ambulatory health care services (6219). (For industry definitions and codes, see "2007 NAICS definitions.")

¹⁰ William C. Goodman, "Employment in hospitals: unconventional patterns over time," *Monthly Labor Review*, June 2006, pp. 3–14 especially p. 5), <http://www.bls.gov/opub/mlr/2006/06/art1full.pdf>.

¹¹ See "Table 1.1.6. Real Gross Domestic Product, Chained Dollars [Billions of chained (2005) dollars], seasonally adjusted at annual rates, 1947 Quarter I to 2010 Quarter II" (Bureau of Economic Analysis, September 2010), <http://www.bea.gov/national/index.htm#gdpC> (visited Mar. 8, 2011).

¹² Goodman, "Employment in hospitals," p. 7.

¹³ "Table 1.1.6. Real Gross Domestic Product."

¹⁴ Goodman, "Employment in hospitals," pp 8–9.5

¹⁵ See Lisa Hetzel and Annetta Smith, *The 65 Years and Over Population: 2000*, Census 2000 Brief (U.S. Census Bureau, October 2001), <http://www.census.gov/prod/2001pubs/c2kbr01-10.pdf> (visited Dec. 12, 2010).

¹⁶ See "Table 102. Expectation of Life at Birth, 1970 to 2006, and Projections, 2010 to 2020" (U.S. National Center for Health Statistics, Centers for Disease Control and Prevention, no date), <http://www.census.gov/compendia/statab/2010/tables/10s0102.pdf> (visited Dec. 12, 2010).

Mining employment trends of 2007–09: a question of prices

Employment trends in mining during the 2007–09 recession can be better understood through analysis of commodity indices and other major economic indicators

Brian Davidson

Employment within the mining industry¹ followed a different pattern than that of most other industries during the 2007–09 recession.² (See table 1.) Indicators such as commodity prices, global demand for mining output, and industrial production help tell the story of how job growth within mining continued through the first 10 months of the recession while total nonfarm employment was falling.

Increasing energy and commodity prices and industrial production fueled job growth in mining, leading to an employment peak of 728,000 in the sector in September 2008, the highest level since June 1986. Employment then fell over the next 13 months before reaching a trough in October 2009, 4 months after the recession had ended. In the decade or so leading up to the recession, employment among the subsectors within mining followed similar long-term growth trends, while support activities for mining was the primary source of employment gains in the sector.

At the most recent peak of mining employment, in September 2008, 69 percent of the employment was in oil and gas extraction and in support activities for mining. Both of these subsectors are associated primarily with oil. Support activities involve the maintenance and drilling of wells, whereas oil and gas extraction, as its name implies, focuses on the extraction of petroleum resources.

Similarly to oil and gas extraction and to support activities, coal mining saw substantial job growth before the peak in the business cycle in December 2007. Coal mining represented 11 percent of mining sector employment in September 2008. Employment in metal ore mining rose during the first few months of the recession and then dropped, whereas employment in nonmetallic mineral mining began falling before the recession along with construction activity and continued to do so throughout the recession.

Effects of global energy demand

Global energy production and global energy demand increased together before the recession and during the first few months of it. During 2007, China and India, two of the world's largest economies, saw their petroleum consumption increase by 3.7 percent and 4.1 percent, respectively, while worldwide consumption increased by only 0.7 percent.³ Given the difficulty of increasing crude oil supplies on a timely basis and the low absolute value of the price elasticity of demand for oil, the price of oil rose sharply. The spot price for West Texas Intermediate crude oil reached a high of \$133.93 per barrel in June of 2008. As prices rose, businesses and consumers were spending a disproportionate share of their earnings on oil products. Because of the worldwide decline in industrial production, demand for crude

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oil dropped near the end of summer 2008.⁴ From 2007 to 2009, global consumption of petroleum declined by over 1.6 million barrels of petroleum per day.⁵

Before the peak in oil prices, as demand for energy increased, more exploratory and development wells were drilled.⁶ In 2008, 355 million feet were drilled, nearly twice as many feet as were drilled during 2001 and 46 million more feet than in 2007.⁷ Drilling activity led to increased demand for support activities. An employment peak in support activities for mining occurred 10 months into the recession. Employment in support activities for mining accounted for 67 percent of job gains in mining from the start of the recession to the September 2008 peak in total mining employment and in production in the industry of drilling of oil and gas wells.⁸ Oil and gas extraction contributed 23 percent of job gains in mining during this period. Employment in oil and gas extraction reached a high 3 months later than employment in support

activities. As nonenergy industrial production lessened, demand for energy resources, and thus employment in mining, fell with it.

From September 2008 through June 2009, mining employment fell by 92,000. Support activities for mining accounted for 74 percent of total employment losses in mining. Oil and gas extraction accounted for 4 percent of employment losses in the sector during the same period.

Oil and gas employment by State

Four States—Texas, Louisiana, Alaska, and California—accounted for more than three-fourths of oil production in the United States in 2008, a peak year for production. Furthermore, these States accounted for over half of all jobs related to oil and gas extraction and support activities for mining at that time. (See table 2.) Of the States that produce natural gas, Louisiana and Texas produced about

Table 1. Employment in mining during the 2007–09 recession, seasonally adjusted

[in thousands]

| Industry | Dec. 2007 | Sept. 2008 | June 2009 | Change, Dec. 2007–Sept. 2008 | Change, Sept. 2008–June 2009 | Change, Dec. 2007–June 2009 |
|---|-----------|------------|-----------|------------------------------|------------------------------|-----------------------------|
| Total nonfarm..... | 137,983 | 136,313 | 130,493 | -1670 | -5820 | -7490 |
| Mining..... | 681 | 728 | 637 | 48 | -92 | -44 |
| Oil and gas extraction..... | 154 | 164 | 160 | 11 | -4 | 7 |
| Mining, except oil and gas..... | 223 | 228 | 208 | 5 | -20 | -15 |
| Coal mining..... | 77 | 84 | 81 | 7 | -2 | 4 |
| Metal ore mining..... | 39 | 41 | 34 | 2 | -6 | -4 |
| Nonmetallic mineral mining..... | 107 | 103 | 92 | -4 | -11 | -15 |
| Support activities for mining..... | 305 | 336 | 269 | 32 | -68 | -36 |
| Support activities for oil and gas..... | 202 | 227 | 193 | 25 | -34 | -9 |

SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

Table 2. Production of natural gas and oil, and employment in oil and gas extraction and support activities for mining, for selected States and the U.S. as a whole, 2008

| State | Natural gas, annual production | | Oil, annual production | | Employment, Sept. 2008 (not seasonally adjusted) | |
|--------------------|--------------------------------|-----------------------|------------------------|-----------------------|--|-----------------------|
| | Cubic feet, in millions | Percent of U.S. total | Barrels, in thousands | Percent of U.S. total | Thousands of jobs | Percent of U.S. total |
| Alaska..... | 398,442 | 1.9 | 249,874 | 13.8 | 13 | 3 |
| Texas..... | 7,403,720 | 34.9 | 447,076 | 24.7 | 220 | 44 |
| California..... | 296,469 | 1.4 | 238,691 | 13.2 | 21 | 4 |
| Louisiana..... | 3,082,492 | 14.5 | 445,606 | 24.6 | 51 | 10 |
| Colorado..... | 1,389,399 | 6.5 | 24,054 | 1.3 | 12 | 5 |
| New Mexico..... | 1,446,204 | 6.8 | 59,403 | 3.3 | 17 | 3 |
| Oklahoma..... | 1,913,029 | 9.0 | 64,065 | 3.5 | 15 | 10 |
| Wyoming..... | 2,274,850 | 10.7 | 52,943 | 2.9 | 20 | 4 |
| United States..... | 21,239,516 | 100.0 | 1,811,819 | 100.0 | 503 | 100 |

¹ Datum is from the BLS Quarterly Census of Employment and Wages.

SOURCE: Unless otherwise noted, employment data are from the BLS CES survey. Production data are from the U.S. Energy Information Administration.

half of all output in 2008, and only four other States produced more than one trillion cubic feet of natural gas—Colorado, New Mexico, Oklahoma, and Wyoming.

Louisiana held only a 10.1-percent share of oil-and-gas-related employment but produced nearly as much oil as Texas, which employed nearly half of all workers in these industries. This paradox stems from the fact that a substantial share of offshore oil production takes place in Louisiana waters but that a majority of the workers in those waters are employed by firms located in Texas.

After September 2008, the boom in oil and gas employment ended. Nearly half of the 84,000 jobs lost during the remainder of the recession were in Texas; most of the rest of these losses occurred in the other major oil-and-gas-producing States. (See table 3.)

Other mining resources

Coal mining saw substantial job growth before the peak in energy prices. The energy market played a role in bolstering coal mining employment because high oil prices created a substitution effect⁹ in some markets by which coal was purchased in lieu of oil. For instance, China started to demand more coal over oil in order to increase the production of electricity.¹⁰ The number of U.S. carloads of coal—that is, the amount of coal traveling on domestic rail—spiked one month after the 2008 peak of West Texas Intermediate oil prices.¹¹ From January 2008 until well after the recession ended, employment in coal mining declined; however, the number of carloads of coal began to rise in June 2009 as the recession ended.

Metal ore mining has a relatively small workforce, but it did see employment rise with a boom in commodity prices that started in 2003 and lasted until around June 2008. After that point, both nonferrous metals prices and metal

ore mining employment began to decline. (See chart 1.) This employment trend was similar to the trends that occurred during and after the recessions of the 1960s, 1970s, and 1980s. During all of those periods, the employment peak in metal ore mining lagged the onset of the recession, and the industry group continued to shed jobs for some time after the end of each economic contraction.¹² Price change proves to be the dominant force in determining employment trends within metal ore mining.

Nonmetallic mineral mining relies mostly on the construction industry to utilize its products, which include sand, stone, and clay. During the 2007–09 recession, employment in nonmetallic mineral mining declined by 14 percent. In fact, employment had begun to decline before the start of the recession, reflecting a reduction in public infrastructure spending and the sharp decline in residential construction in the United States.¹³ From 2007 to 2008, production of sand and gravel for construction and that of crushed stone, both for consumption, each fell by roughly 200 million metric tons,¹⁴ bringing the production of each of the commodities to its lowest level since 1997.

Stepping back

The rise and fall of oil prices in 2008 is similar to the price shock that occurred during the early-to-mid 1970s. The difference is that oil prices in the early-to-mid 1970s rose sharply as a result of an OPEC embargo that constrained the world supply of oil, whereas in 2008, worldwide demand for oil outpaced the growth in supply. Both shocks resulted in rapid increases of employment in the mining industry. However, employment in mining continued to grow through the 1973–75 recession until peaking in October 1981. (See chart 2.)

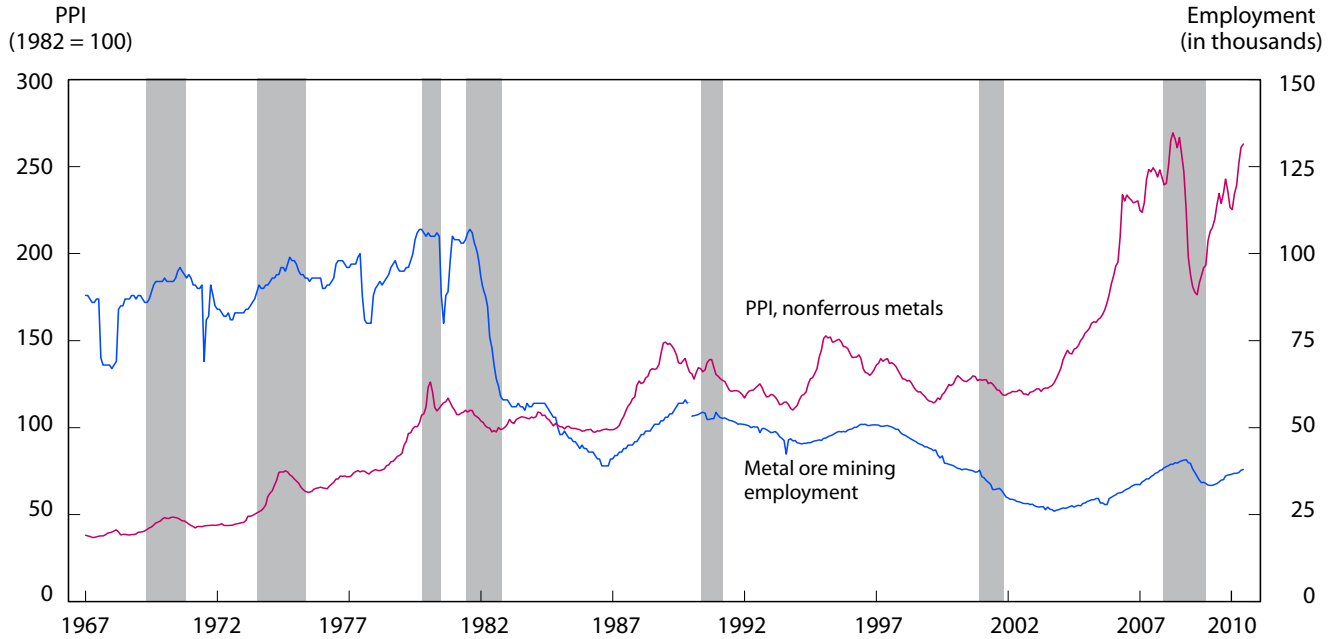
Table 3. Employment in mining and logging in selected States during the 2007–09 recession, seasonally adjusted

[in thousands]

| State | Dec. 2007 | Sept. 2008 | June 2009 | Change, Dec. 2007–Sept. 2008 | Change, Sept. 2008–June 2009 | Change, Dec. 2007–June 2009 |
|-----------------|-----------|------------|-----------|------------------------------|------------------------------|-----------------------------|
| Alaska..... | 15 | 16 | 15 | 1 | 0 | 1 |
| California..... | 28 | 29 | 26 | 1 | -3 | -2 |
| Colorado..... | 26 | 29 | 24 | 3 | -6 | -3 |
| Louisiana..... | 53 | 55 | 51 | 2 | -4 | -2 |
| New Mexico..... | 20 | 22 | 17 | 2 | -5 | -2 |
| Oklahoma..... | 49 | 53 | 43 | 4 | -11 | -6 |
| Texas..... | 216 | 236 | 198 | 20 | -38 | -18 |
| Wyoming..... | 28 | 30 | 25 | 3 | -5 | -3 |

SOURCE: Bureau of Labor Statistics, Current Employment Statistics survey.

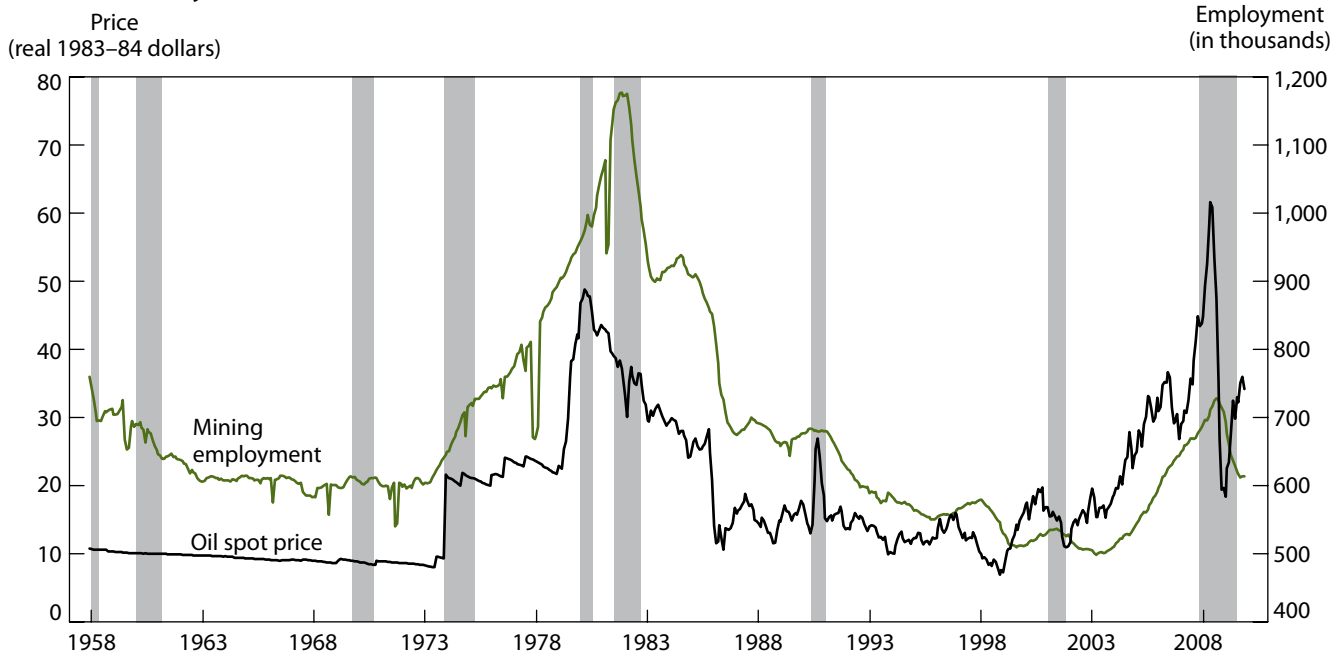
Chart 1. Metal ore mining employment and the PPI of nonferrous metals, monthly data, seasonally adjusted, January 1967–December 2010



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research. The PPI is seasonally adjusted except for the 1990–2003 period, when seasonal adjustment was not applicable. There is a break in the metal ore mining employment series because of the transition from the Standard Industrial Classification system to the North American Industry Classification System.

SOURCE: Bureau of Labor Statistics.

Chart 2. Mining employment (seasonally adjusted) and the real spot price for West Texas Intermediate crude oil, January 1958–December 2009



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research.

SOURCES: Bureau of Labor Statistics and Dow Jones & Company.

During the 1990–91, 2001, and 2007–09 recessions, the trend in mining employment lagged that of total nonfarm employment. Although there was a moderate oil shock in the 1990–91 recession, the oil price peak in October 1990 did not coincide with the beginning of the decrease in mining employment as the oil price peak in 2008 did.

The timing of swings in oil prices during the 1990–91 recession was similar to that during the 2007–09 recession, although the swings differed in amplitude. The decline in mining employment during the 1990s was not solely a result of a decrease in mining activity, but also of a shift towards greater

productivity. Following the most recent recession, mining companies have made efforts to increase productivity.¹⁵

Historically, the mining industry has faced diminishing returns to production as the least costly sources of output are exhausted. Consequently, mining producers increasingly have relied upon sustained and significant price increases as signals for justifying increased investment through added employment. As this article has shown, mining employment grew even during the first half of the 2007–09 recession in response to notably higher prices and then fell when energy prices decreased substantially. □

Notes

¹ In this article, the term “mining industry” is used to denote the industry known as the “mining division” under the Standard Industrial Classification (SIC) system or the “mining, quarrying, and oil and gas extraction sector” in the North American Industry Classification System (NAICS).

² Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, consult the NBER webpage at <http://www.nber.org/cycles/cyclesmain.html> (visited Nov. 2, 2010). The data on employment used in this article are from the Current Employment Statistics (CES) survey, which is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the CES program’s methods, see “Technical Notes to Establishment Survey Data Published in Employment and Earnings” at <http://www.bls.gov/web/cestn2.htm> (visited Apr. 13, 2011). CES data are available at <http://www.bls.gov/ces> (visited Apr. 13, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

³ *International Energy Statistics* (U.S. Energy Information Administration), <http://tonto.eia.doe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=5&aid=2&cid=ww,CH,IN,&syid=2006&eyid=2007&unit=TBPD> (visited Apr. 13, 2011).

⁴ James D. Hamilton, *Causes and Consequences of the Oil Shock of 2007–08*, (Cambridge, Mass., National Bureau of Economic Research, NBER working paper series, no. 15002, May 2009); and Yanan He, Shouyang Wang, and Kin Keung Lai, “Global economic activity and crude oil prices: A cointegration analysis,” *Energy Economics*, July 2010, pp. 868–76.

⁵ *International Energy Statistics*.

⁶ Guro Bornes Ringuld, Knut Einar Rosendahl, and Terje Skjerpen, “Does oilrig activity react to oil price changes? An empirical investigation,” *Energy Economics*, March 2008, pp. 371–96.

⁷ Table 4.5, “Crude Oil and Natural Gas Exploratory and Development Wells, Selected Years, 1949–2009,” *Annual Energy Review*, 2009

(U.S. Energy Information Administration), http://www.eia.doe.gov/aer/pdf/pages/sec4_11.pdf (visited Apr. 14, 2011).

⁸ See *G. 17, Industrial Production and Capacity Utilization* (Federal Reserve Board, Federal Reserve Statistical Release), <http://www.federalreserve.gov/datadownload/Download.aspx?rel=G17&series=b194d5644bbe8dec772666612041a553&filetype=spreadsheet&label=include&layout=seriescolumn&from=01/01/2000&to=11/30/2010> (visited Apr. 14, 2011).

⁹ Robert Halvorsen, “Energy Substitution in U.S. Manufacturing,” *The Review of Economics and Statistics*, November 1977, pp. 381–88.

¹⁰ Andy Xie, “Asian Oil Demand Declining,” *Global Economic Forum*, July 14, 2005, <http://www.morganstanley.com/views/gef/archive/2005/20050714-Thu.html#anchor2> (visited Apr. 15, 2011).

¹¹ The relevant data come from the data extract titled “Rail Time Indicators 2006–2010” from the *Weekly Railroad Traffic Report* of the Association of American Railroads (Washington, DC, 2010).

¹² Historical data for metal ore mining are based on two industry classification structures. Employment data from before 1990 are based on the Standard Industrial Classification (SIC) system, and later data are based on the North American Industry Classification System (NAICS). As of the first quarter 2001, employment in the SIC-based series accounted for 93.1 percent of employment in the NAICS-based series. Given this high level of overlap, a comparison can be made.

¹³ Adam Hadi, “Construction employment peaks before the recession and falls sharply during it,” *Monthly Labor Review*, this issue, pp. 24–27.

¹⁴ Thomas D. Kelly and Grecia R. Matos, “Historical Statistics for Mineral and Material Commodities in the United States” (U.S. Geological Survey, data series 140, 2010), <http://minerals.usgs.gov/ds/2005/140/> (visited Apr. 15, 2011); see the documents for “stone (crushed)” and “sand and gravel (construction).”

¹⁵ Russell Andersson, Sudhir Chawla, and Zafar Khan, “Effects of Cutbacks in the United States Oil and Gas Industry on Employee Attitudes: An Empirical Study,” *International Journal of Management*, December 2009, pp. 400–10.

Construction employment peaks before the recession and falls sharply throughout it

Job losses in residential construction began well before the 2007–09 recession, and employment in both residential and nonresidential construction declined rapidly during the recession

Adam Hadi

Construction employment fell by 1.5 million¹ during the December 2007–June 2009 recession,² bringing employment in the industry to the lowest level since March 1998. The losses during the recession represented a 19.8-percent decline in construction employment, the largest percent decline of any nonfarm industry supersector. The majority of the losses came during the last 9 months of the recession, when employment declined by 1 million. (See chart 1.) Job losses averaged 49,000 per month between December 2007 and September 2008 and then accelerated to an average of 115,000 per month through June 2009. Those construction firms which engaged primarily in residential construction activities started losing jobs more than a year before the recession started, and those firms which conducted primarily nonresidential and heavy construction projects did not start losing jobs until the onset of recession.

Losses in residential construction

In 2005, demand for residential construction peaked and the U.S. housing market started experiencing the beginnings of an unprecedented downturn. Deep employment losses in residential building construction and among residential specialty trade

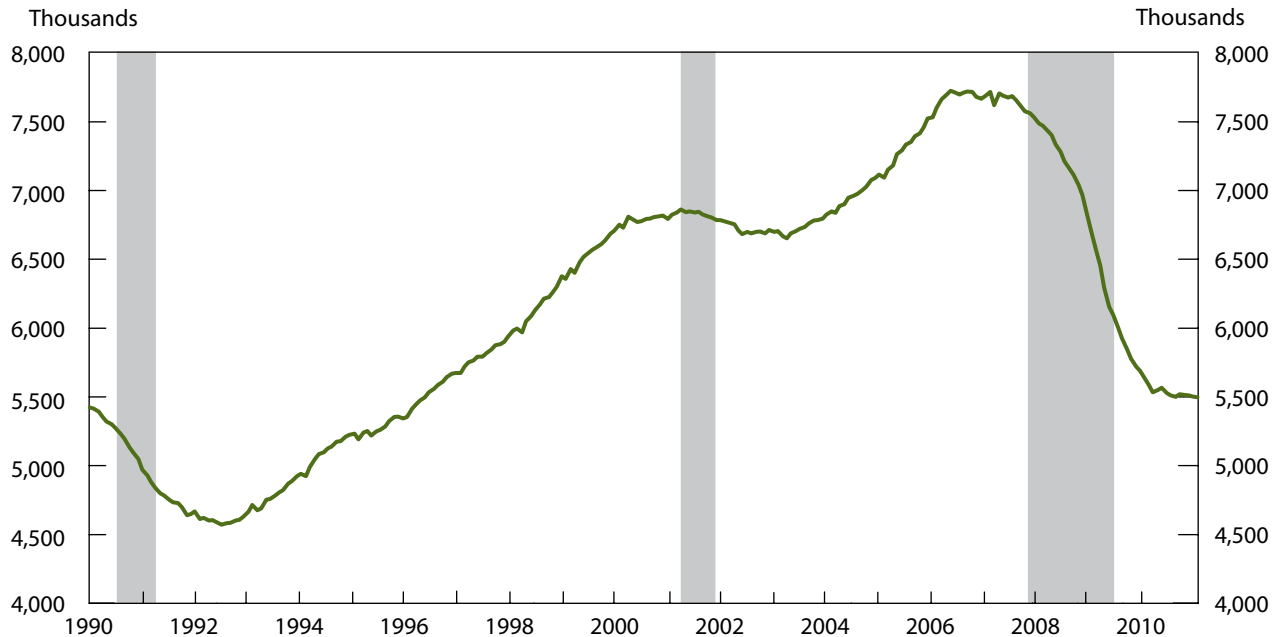
contractors started in 2006, worsened during the recession, and continued at a slower pace after the recession ended in June 2009. (Residential building construction and residential specialty trade contractors are analyzed together as “residential construction” in this article.)

Residential construction employment peaked in April 2006 at 3.5 million jobs, following approximately 5 years of rapid growth. This expansionary period roughly coincided with a housing bubble in the United States during which home prices rose greatly, peaking in April 2006 as employment in residential construction did.³ New home sales,⁴ housing starts,⁵ and the Housing Market Index⁶ all peaked between mid-2005 and early 2006. (See chart 2.) Employment in residential construction dropped rapidly during the second half of 2006 as the housing market worsened. Delinquencies in mortgage payments began to rise, particularly for nontraditional loans, and by the beginning of the recession in December 2007, residential construction employment had fallen by 390,000, or 11 percent. Other housing indicators also plummeted from their prerecession peaks.

After the recession began, job losses in residential construction accelerated, and employment fell by 830,000, or 27 percent,

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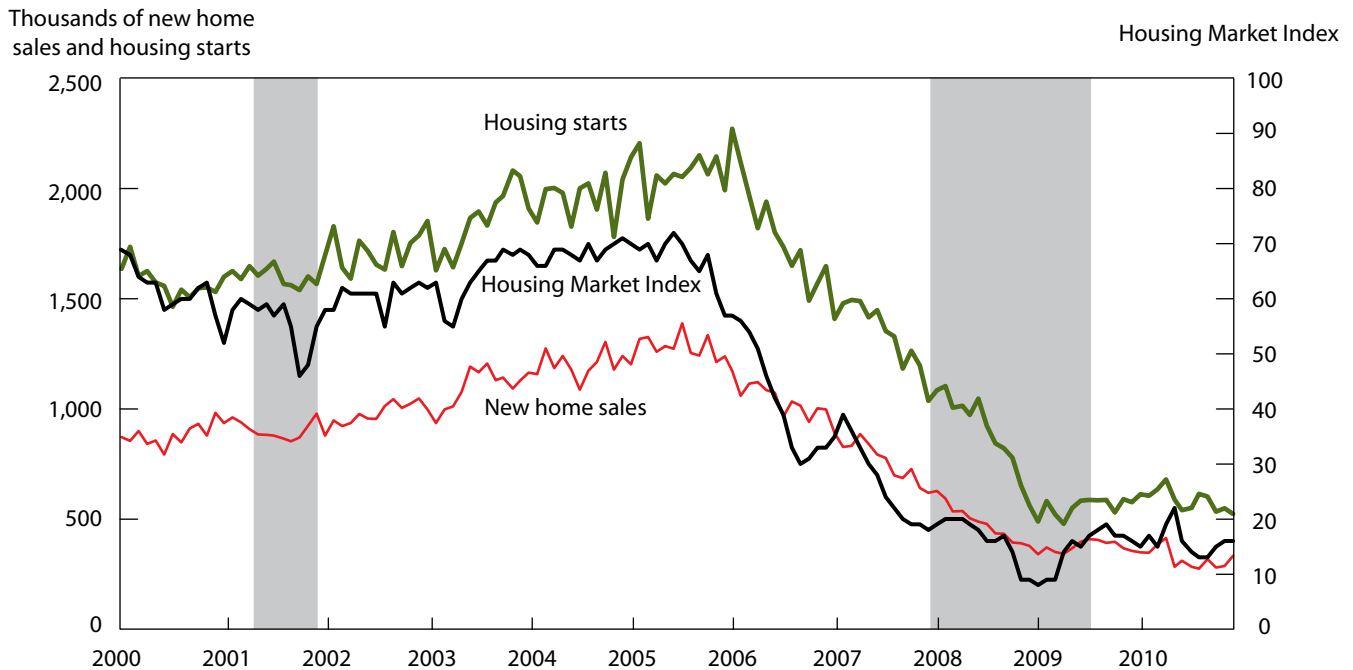
Chart 1. Construction employment, 1990–2010, monthly data, seasonally adjusted



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research.

SOURCE: U.S. Bureau of Labor Statistics.

Chart 2. New home sales, housing starts, and the Housing Market Index, 2000–10, monthly data, seasonally adjusted



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research.

SOURCES: New home sales and housing starts data are from the U.S. Census Bureau, and Housing Market Index data are from the National Association of Home Builders.

from the start of the recession through June 2009. New home sales, housing starts, and the Housing Market Index also fell further, to record lows. Job losses eventually spread beyond new home construction to other areas of housing as spending on remodeling and home improvement projects fell. As home values declined, homeowners were less willing to invest in home renovation projects because the perceived return on investment and the ability to tap home equity both declined while the value of new loans and leases in bank credit from commercial banks decreased substantially. During the recession, residential construction accounted for over half of the losses in construction as a whole. Residential specialty trade contractors, with losses of 567,000, was the primary driver of job losses within residential construction.

Sensitive to housing’s role in the economy, Federal policymakers enacted a series of policy initiatives to stabilize the housing market, including tax credits and expanded support for the housing mortgage market. The Housing and Economic Recovery Act of 2008 provided for a tax credit of up to \$7,500 for first-time homebuyers. In 2009, the credit was expanded and the deadline was extended for new home purchases.⁷ It appears that these acts helped

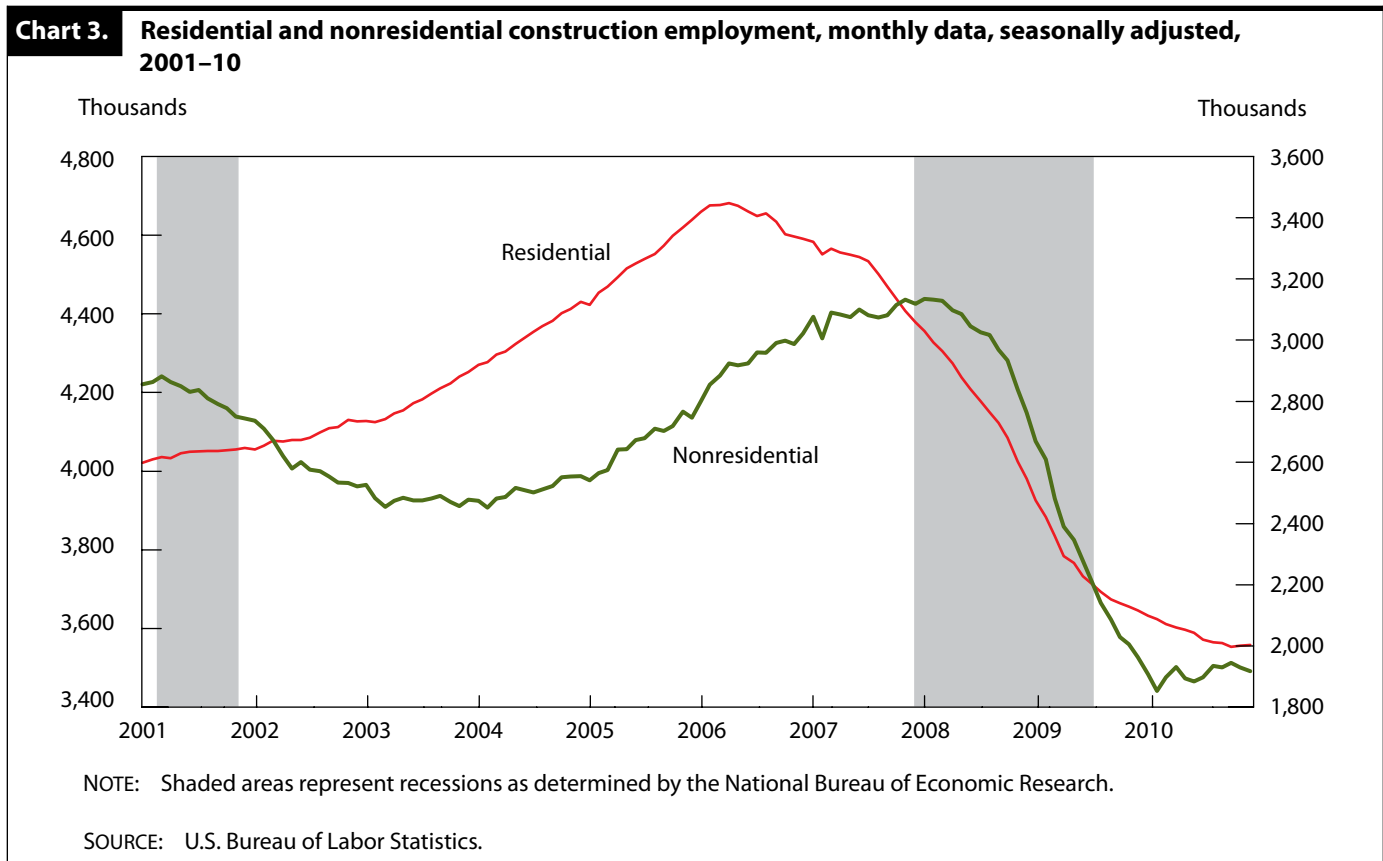
slow residential construction job losses substantially.

As of December 2010, residential construction had yet to recover the jobs lost during the downturn. Losses slowed significantly in the second half of 2009 (by an average of 19,000 jobs per month), and employment edged down in 2010 (by an average of 9,000 jobs per month). A number of other construction indicators also remained at historically low levels in 2010.

Losses in nonresidential construction

Soon after the recession started, employment losses began in the nonresidential components of construction as well. (See chart 3.) Since an employment trough in November 2003, nonresidential construction—which consists of nonresidential building construction, heavy and civil engineering construction, and nonresidential specialty trade contractors—had added jobs at a rapid pace until the employment level flattened just prior to the recession.

Significant job losses began in the second quarter of 2008 and accelerated rapidly; overall, there was a 14.8-percent decrease in employment during the recession. Nonresi-



dential specialty trade contractors was the primary driver of losses within nonresidential construction during the recession, accounting for 377,000 of the 654,000 jobs lost.

Nonresidential construction is highly dependent on the broader economy and government spending. As the economy contracted, there was less demand for offices, factories, and retail facilities; troubles in financial markets also resulted in less funding for new projects. Furthermore, the Federal Government, State governments, and local governments experienced declining tax revenues, which led to reductions in government spending on civil works projects and affected employment in heavy and civil engineering construction.

In early 2009, the America Recovery and Reinvestment Act of 2009 provided increased spending for infrastructure projects, such as highways and bridges, but even after the recession ended in June 2009, heavy job losses continued in nonresidential construction. The industry lost an additional 330,000 jobs in the 8 months following the

end of the recession. Employment has since stabilized and grew by 50,000 between February 2010 and December 2010.

Construction employment during recessions

Construction is a cyclical industry that tends to go through periodic robust expansions and pronounced contractions. However, even in the volatile history of the construction industry, the 2007–09 recession stands out. Employment losses easily exceeded the declines observed during past recessions. Before 2007–09, the worst employment losses in construction during a recession occurred during the November 1973–March 1975 recession, when employment fell by 604,000. This represented a 14.3-percent drop in construction employment, compared with a 19.8-percent decrease during the 2007–09 recession. The job losses in construction during the latest recession represented 19.8 percent of total nonfarm employment losses. □

Notes

¹ The data on employment used in this article are from the Current Employment Statistics (CES) survey, which is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the CES program's methods, see "Technical Notes to Establishment Survey Data Published in Employment and Earnings," <http://www.bls.gov/web/cestn2.htm> (visited Apr. 5, 2011). CES data are available at <http://www.bls.gov/ces> (visited Apr. 5, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

² Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, consult the NBER webpage at <http://www.nber.org/cycles/cyclesmain.html> (visited Nov. 2, 2010).

³ S&P/Case-Shiller Home Price index data are courtesy of Standard

& Poor's and can be found at <http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff--p-us----> (visited Apr. 6, 2011).

⁴ Data on new home sales are published by the U.S. Census Bureau and are available at <http://www.census.gov/const/www/newresalesindex.html> (visited Apr. 6, 2011).

⁵ Data on new residential construction (housing starts) are published by the U.S. Census Bureau and are available at <http://www.census.gov/const/www/newresconstindex.html> (visited Apr. 6, 2011).

⁶ Data on the Housing Market Index are published by the National Association of Home Builders and are available at http://www.nahb.org/reference_list.aspx?sectionID=134 (visited Apr. 6, 2011).

⁷ Taxpayers had to have a binding contract to purchase a home before May 1, 2010, and must have closed on the home before July 1, 2010. For more information, see <http://www.irs.gov/newsroom/article/0,,id=204671,00.html> (visited Dec. 22, 2010).

Manufacturing employment hard hit during the 2007–09 recession

During the 2007–09 recession, employment in manufacturing declined sharply. When combined with other manufacturing indicators, the job loss shows that manufacturing was particularly hard-hit during the downturn

Megan M. Barker

Manufacturing employment has been on a downward trend since its all-time peak in 1979¹ with job losses accelerating during economic recessions.² (See chart 1.) In the years following the 2001 recession, employment fell at a faster pace than during other post-recession periods with both durable and nondurable goods experiencing widespread job losses. Manufacturing job losses then accelerated during the December 2007–June 2009 recession and totaled more than 2 million employees, or 15 percent of its workforce, during the 18-month period.

The manufacturing workweek typically serves as a leading indicator for identifying changes in business cycles.³ Employers often adjust hours before adjusting their workforce to meet changes in demand. Average weekly hours of production employees in manufacturing reached a high in March 2008, 3 months after the start of the recession; the manufacturing workweek had been about unchanged for nearly a year leading up to its peak. (See chart 2.) The workweek then decreased until March 2009, 3 months before the recession's conclusion. During this time, the factory workweek became 2 hours shorter. Contributing to this trend, overtime hours of production and nonsupervisory employees had begun to fall in February 2006, well before the recession began, and continued to decline until March 2009. Weekly manufacturing overtime fell by

2 hours during that period.

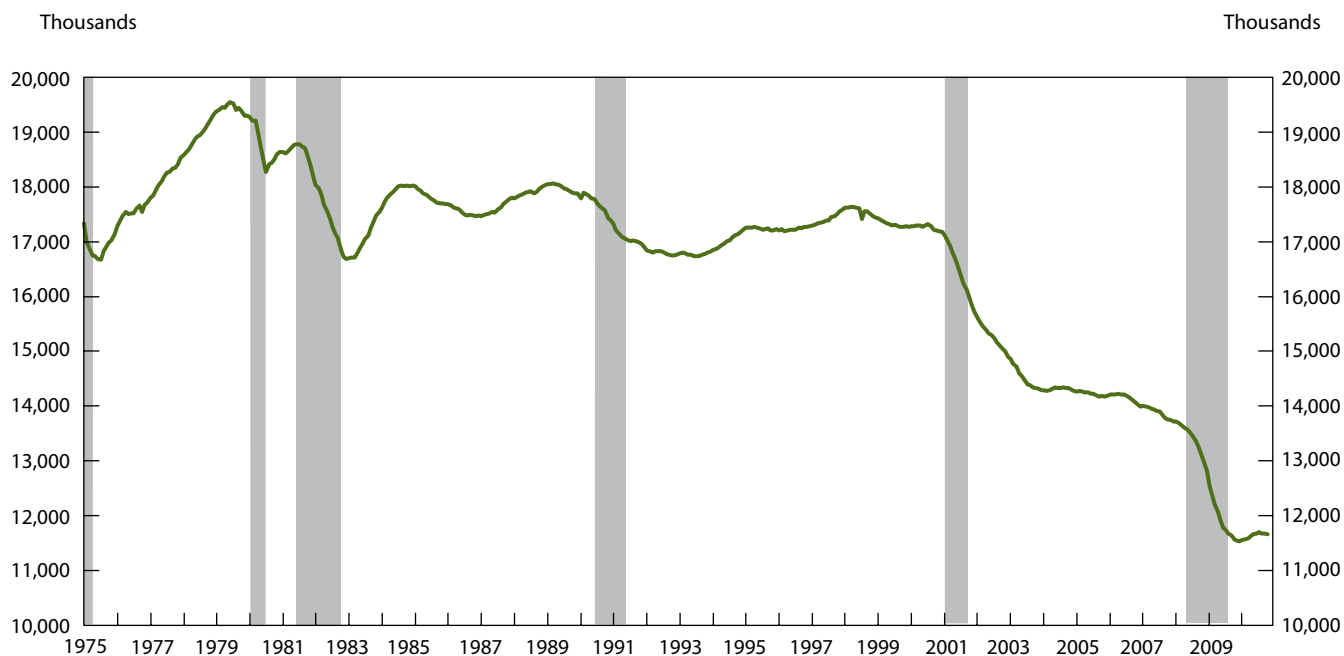
Manufacturing employment changes: the bigger picture

As might be expected, the 2007–09 recession had a negative impact on both manufacturing employment and total nonfarm employment. (See chart 3.) In the year leading up to the recession, however, manufacturers had experienced moderate job losses, while total nonfarm employment grew slowly. A month after the start of the recession, total employment began to fall and the rate of manufacturing job losses began to accelerate. In the latter half of 2008 and into early 2009, manufacturing saw historically large monthly job losses. Even after the 18-month-long recession ended, manufacturing continued to lose jobs, although at a slower rate.

Manufacturing job losses were widespread throughout the component industries during the 2007–09 recession. (See table 1.) The 1-month diffusion index for manufacturing employment remained well below 50 for nearly the duration of the recession. This index measures the dispersion of employment change; a value below 50 indicates that more manufacturing industries are reducing jobs than adding them over the month. The index measured just 6.8 in January 2009, the month with the largest manufacturing job loss in more than 30 years.

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Chart 1. Manufacturing employment, monthly data, seasonally adjusted, January 1975–December 2010



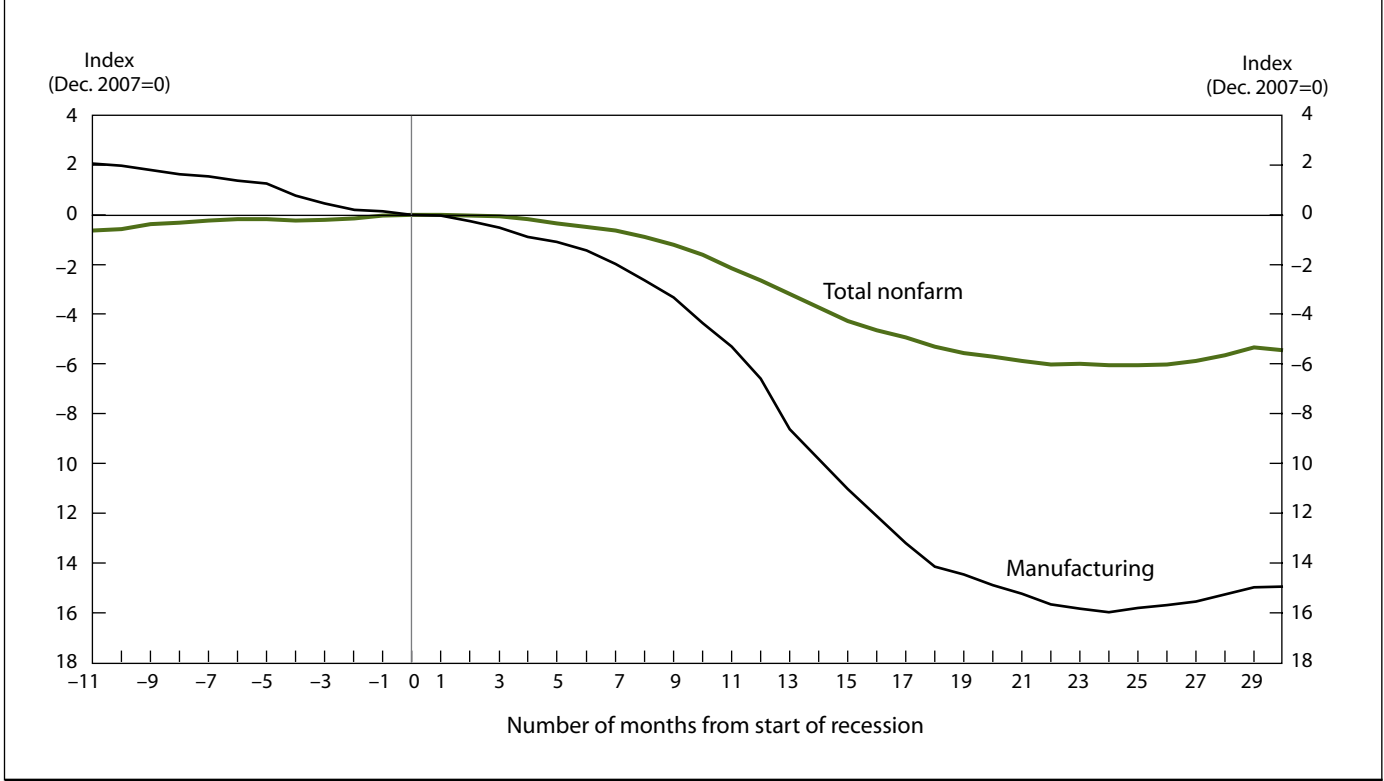
NOTE: Shaded areas denote recessions as determined by the National Bureau of Economic Research (NBER).

Chart 2. Average weekly hours of manufacturing production and nonsupervisory employees, monthly data, seasonally adjusted, January 1990–December 2010



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).

Chart 3. Total nonfarm and manufacturing indexes of employment, seasonally adjusted, January 2007–June 2010



Durable goods manufacturing. During the recession, the bulk of manufacturing employment declines occurred in durable goods industries, accounting for 75 percent of factory job losses; by contrast, durable goods jobs accounted for 63 percent of total manufacturing employment at the start of the recession. The average durable goods industry lost 11 percent of its workforce between December 2007 and June 2009. Job losses were concentrated in five main industries: transportation equipment, fabricated metal products, machinery, wood products, and furniture and related products.

The transportation equipment industry lost the greatest number of jobs in manufacturing and accounted for a disproportionate share of the jobs lost in durable goods. Transportation equipment accounted for 12 percent of total durable goods employment but 23 percent of the decline in durable goods employment. Job losses in the transportation equipment industry resulted primarily from a 35 percent decline in motor vehicles and parts manufacturing employment during the 2007–09 recession. Employment losses in the industry were reflective of the reduced demand for motor vehicles. During the

months of the recession, total vehicle sales fell 38 percent.⁴ Sluggish sales negatively impacted the jobs of both motor vehicle and parts dealers and motor vehicle and parts manufacturers.

Fabricated metal products was the second largest contributor to job loss in manufacturing. Over the course of the recession, 13 percent of manufacturing jobs lost were in fabricated metal products.

Wood products and furniture and related products together accounted for 14 percent of the total job losses in manufacturing. These industries provide inputs used in construction, an industry that experienced similarly sharp declines in employment. The job losses in construction were related to the collapse of the housing market. The collapse affected not only construction employment, but also jobs in related manufacturing component industries.

Machinery manufacturing supports the efforts of other industries—including construction and mining—and was affected by their recession-related declines. The machinery industry accounted for more than 8 percent of manufacturing job losses during the recession. Trends in machinery manufacturing employment were like those in construc-

Table 1. Employment change in manufacturing, by industry, seasonally adjusted, December 2007 to June 2009

| Industry | Number (in thousands) | Percent change | Distribution of decline in manufacturing (percent) |
|--|-----------------------|----------------|--|
| Manufacturing..... | -2,026 | -15 | 100 |
| Durable goods..... | -1,538 | -18 | 76 |
| Wood products..... | -146 | -29 | 7 |
| Nonmetallic mineral products..... | -102 | -21 | 5 |
| Primary metals | -99 | -22 | 5 |
| Fabricated metal products..... | -259 | -17 | 13 |
| Machinery | -168 | -14 | 8 |
| Computer and electronic products | -128 | -10 | 6 |
| Electrical equipment and appliances..... | -58 | -14 | 3 |
| Transportation equipment | -387 | -23 | 19 |
| Motor vehicle and parts..... | -340 | -35 | 17 |
| Furniture and related products..... | -139 | -27 | 7 |
| Miscellaneous manufacturing..... | -52 | -8 | 3 |
| Nondurable goods..... | -488 | -10 | 24 |
| Food manufacturing | -28 | -2 | 1 |
| Beverages and tobacco products..... | -12 | -6 | 1 |
| Textile mills | -41 | -25 | 2 |
| Textile product mills..... | -31 | -20 | 2 |
| Apparel..... | -46 | -22 | 2 |
| Leather and allied products | -5 | -14 | 0 |
| Paper and paper products | -47 | -10 | 2 |
| Printing and related support activities..... | -96 | -16 | 5 |
| Petroleum and coal products | 1 | 1 | 0 |
| Chemicals..... | -53 | -6 | 3 |
| Plastics and rubber products..... | -131 | -18 | 6 |

Manufacturing indicators reflect industry weakness

Weakness in the manufacturing labor market also was reflected in other manufacturing indicators. (See table 2.) Declines in durable goods new orders, unfilled orders, motor vehicle production, and motor vehicle sales suggested the same weakness depicted by the employment numbers.

When the recession began, the manufacturing inventories-to-shipments ratio began to increase sharply as manufacturers experienced a noticeable slowdown in new orders and shipments.⁵ This resulted in a buildup in inventories, which continued throughout the first 9 months of the recession. The sharp declines in shipments reduced the need for labor to produce manufactured goods. The manufacturing inventory-to-shipments ratio began to decline 4 months before the recession ended. The decline in the ratio was due to a pickup in shipments while inventories were shrinking. During these 4 months, manufacturing employment continued to decline as manufacturers adapted to greater demand by increasing hours before hiring.

tion, where the collapse of the housing market led to a loss of 20 percent of construction jobs during the recession. Construction machinery manufacturing lost 18 percent of its workforce during the same period.

Nondurable goods manufacturing. Nondurable goods lost nearly half a million jobs during the 2007–09 recession, accounting for about a quarter of the total decline in manufacturing employment. Job losses occurred throughout nearly all of the component industries. A substantial proportion of manufacturing job losses—6 percent—were in plastics and rubber products.

During the recession, petroleum and coal products was the only industry that did not show a decline in employment. Instead, employment remained little changed at the end of the recession.

Employment decline reminiscent of previous recession

While manufacturing employment has been trending down since 1979, job losses accelerated during recession years. The most recent recession started in December 2007 and lasted for 18 months. By contrast, the previous 2 recessions each lasted 8 months.

During the 1990–91 recession, manufacturing jobs were lost more rapidly than in pre-recession years. Once the recession ended in March 1991, manufacturers continued to reduce employment, but at a slower rate. (See chart 4.) About 2 years later, manufacturers began to hire; however, the industry never recovered all the jobs it had lost in the early 1990s. After adding nearly 900,000 jobs between July 1993 and March 1998, manufacturers began to slowly

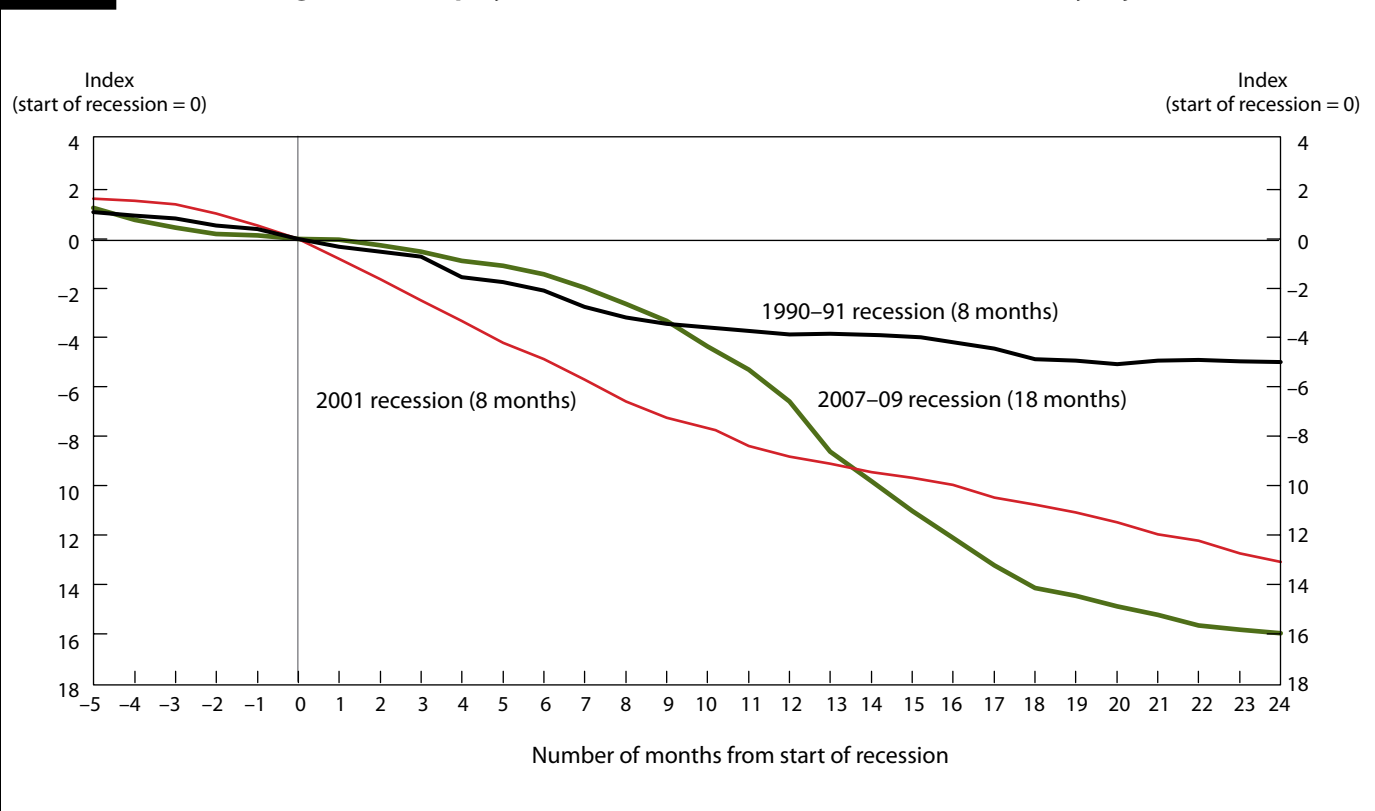
Table 2. Quarterly change in manufacturing indicators, seasonally adjusted, first quarter 2007–second quarter 2009

| Indicator | 2007 | 2008 | | | | 2009 | |
|--|------------|-----------|------------|-------------|------------|-----------|------------|
| | Quarter IV | Quarter I | Quarter II | Quarter III | Quarter IV | Quarter I | Quarter II |
| Manufacturing employment | | | | | | | |
| Total manufacturing, in thousands..... | -49 | -84 | -145 | -241 | -427 | -630 | -485 |
| Durable goods..... | -50 | -58 | -97 | -179 | -310 | -477 | -398 |
| Motor vehicle and parts..... | -31 | -34 | -21 | -63 | -56 | -78 | -80 |
| Motor vehicle production and sales | | | | | | | |
| Motor vehicle production, in thousands..... | 25 | -40 | 15 | -35 | -13 | -55 | -17 |
| Motor vehicle sales, in millions..... | -5 | -8 | -1.1 | -1.2 | -2.5 | -.4 | .1 |
| Durable goods orders, inventories and shipments | | | | | | | |
| New orders, durable goods, in millions of dollars . | 14,592 | -18,483 | -2,174 | -15,041 | -35,130 | -16,428 | 3,843 |
| Unfilled orders, durable goods, in millions of dollars | 64,199 | 31,292 | 19,618 | 3,350 | -29,677 | -47,637 | -24,372 |
| Inventory-to-shipments ratio, durable goods..... | .02 | .03 | .00 | .06 | .14 | .06 | -.03 |

SOURCE: Manufacturing employment data are from the Current Employment Statistics (CES) program of the Bureau of Labor Statistics. Motor vehicle production and sales data are from the Bureau of Transportation Statistics, U.S. Department of Transportation, and are

seasonally adjusted by the Bureau of Economic Analysis. Durable goods orders, unfilled orders, and inventory-to-shipment ratio are from the Manufacturers' Shipments, Inventories, and Orders Survey of the U.S. Census Bureau.

Chart 4. Manufacturing index of employment for three most recent recessions, seasonally adjusted



cut jobs again as an economic crisis in Asia started to impact U.S. exports.⁶ By the start of the 2001 recession 3 years later, manufacturing employment already had fallen by 700,000. (See chart 1.)

Manufacturing employment leveled off in early 2000 and started to decline leading up to the 2001 recession. Job losses were larger and more rapid than those of the 1990–91 recession. Manufacturing continued to lose jobs at a relatively high rate for nearly 2 years after the recession ended in November 2001. During those 3 years, manufacturing cut 3 million jobs, accounting for 16 per-

cent of its workforce. In the years from 2005 until the 2007–09 recession, the industry cut payrolls at a slower rate and never recovered the lost jobs.

Manufacturing employment trends of the 2007–09 recession were similar to the 2001 recession. During both recessions, a large decline in industry employment occurred. From December 2007 until December 2009—when manufacturing employment reached a new low—the manufacturing industry lost 2 million jobs, or 17 percent of its workforce, and industry employment fell to its lowest level since March 1941. □

Notes

¹ The data on employment used in this article are from the Current Employment Statistics (CES) program, which is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the program's concepts and methodology, see "Technical Notes to Establishment Survey Data" at www.bls.gov/web/cestn2.htm. CES data are available at www.bls.gov/ces. The CES data used in this article are seasonally adjusted.

² Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began December 2007 and ended June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, please consult

the NBER webpage at www.nber.org/cycles/cyclesmain.html (visited Nov. 2, 2010).

³ The Conference Board, "Global Business Cycle Indicators," www.conference-board.org/data/bcicountry.cfm?cid=1 (visited Apr. 6, 2011).

⁴ Bureau of Economic Analysis, National Economic Accounts, Supplemental Estimates: Motor Vehicles, www.bea.gov/national/xls/gap_hist.xls (visited Feb. 7, 2011).

⁵ U.S. Census Bureau, www.census.gov (visited Apr. 4, 2011).

⁶ Julie Hatch and Angela Clinton, "Job growth in the 1990s: a retrospect," *Monthly Labor Review*, December 2000, pp. 3–18, www.bls.gov/opus/mlr/2000/12/art1full.pdf (visited Apr. 6, 2011).

Professional and business services: employment trends in the 2007–09 recession

Employment in professional and business services fell with the recent slump in the broader economy; the temporary help services industry, which regularly leads fluctuations in aggregate employment, accounted for a large portion of the cumulative job losses

Frank Conlon

During the most recent recession,¹ from December 2007 to June 2009, employment in the professional and business services industry² declined by more than 1.6 million, a figure that was second only to the approximately 2.0 million jobs lost in manufacturing. Compared with job losses in the previous 11 recessions, the 2007–09 contraction in professional and business services employment was the largest, in both percentage and absolute number, since the series began in 1939. (See chart 1.) This dramatic decrease in employment followed 5 years of steady growth: from 2003 to 2007, the industry had averaged an employment gain of roughly 3 percent per year, double the average annual growth rate of private sector employment as a whole.

Many of the same industries that flourished prior to the 2007–09 recession were the main contributors to the job losses experienced by professional and business services during the recession. This article analyzes recessionary employment trends among professional and business services industries, as well as the contemporaneous movements of related indicators.

Temporary help services

During the course of the 2007–09 recession, administrative and waste services accounted for more than 3 out of every 4 jobs lost in

professional and business services. Administrative and waste services' payrolls shrank by more than 1 million positions, a drop that, as a percentage, was roughly 3 times larger than the sector's losses in the 2001 recession and about 5 times larger than in the 1990–91 recession.

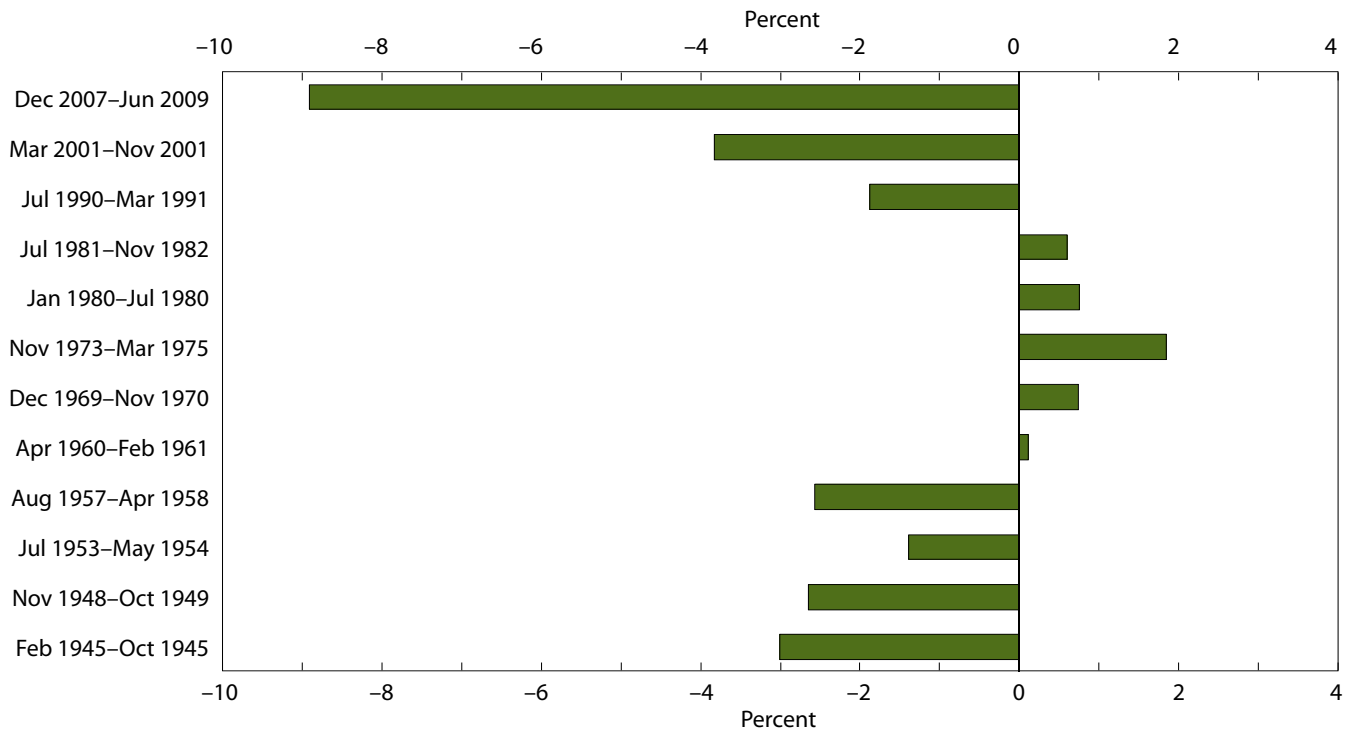
Temporary help services (NAICS 56132) accounted for the lion's share of the jobs lost in administrative and waste services, with employment in the industry falling by 800,000, or 31 percent, to levels not seen since 1996. In comparison, during the 1990–91 and 2001 recessions, temporary help services employment fell by 4 percent and 13 percent, respectively. (See chart 2.)

Employment trends in temporary help services garner special attention, because the industry is considered by many to be a leading indicator of change in aggregate employment. During the 16 months leading up to the 2007–09 recession, temporary help services lost 93,000 jobs. From its peak in August 2006 to its trough in August 2009, temporary help services employment fell by 912,000. Then, between bottoming out and the end of 2010, the industry recovered 462,000 jobs, or about half of the positions cut from peak to trough.

Since 1990, peaks and troughs in temporary help services employment generally have led those of total nonfarm employment. Temporary help services employ-

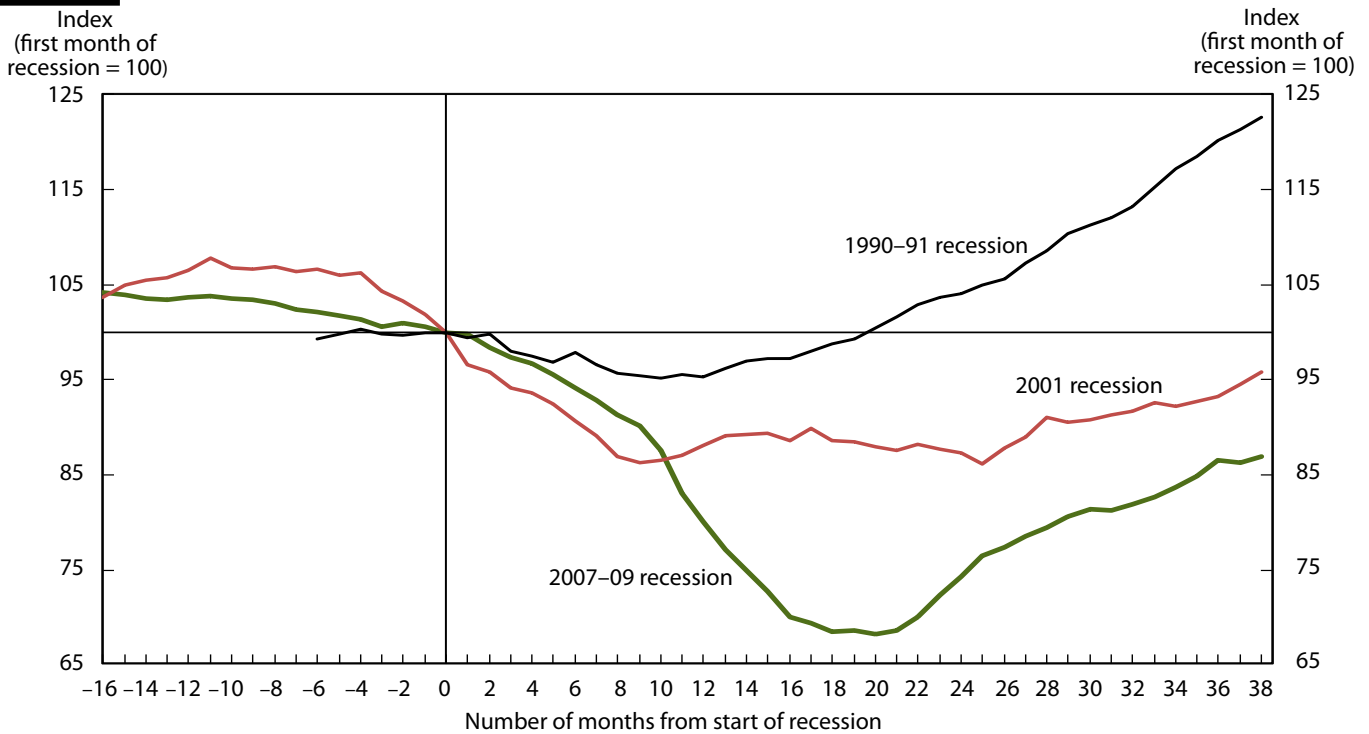
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Chart 1. Percent change in professional and business services employment during recessions, 1945–2009



SOURCE: U.S. Bureau of Labor Statistics.

Chart 2. Temporary help services indexes of employment, seasonally adjusted



NOTE: The temporary help services (NAICS 56132) employment series starts in 1990; therefore, data prior to the recession that began in July 1990 go back only 6 months.

SOURCE: U.S. Bureau of Labor Statistics.

ment reached a local high in March 1990, 3 months before nonfarm employment peaked; both series reached a trough in May 1991.³ Payroll employment in temporary help services peaked in April 2000, 10 months before total nonfarm; bottomed out in April 2003, 4 months before total nonfarm; peaked in August 2006, 17 months prior to total nonfarm; and again reached a trough in August 2009, 6 months before total nonfarm. (See chart 3.)

Between December 2007 and March 2008, temporary help services accounted for 48 percent of the employment losses in the nonfarm economy. This decline contrasts with what occurred during the first 3 months of the 1990–91 and 2001 recessions, when temporary help services contributed about 5 percent and 32 percent, respectively, of aggregate job losses. Over the course of those two recessions, job losses in temporary help services as a share of losses in total nonfarm employment narrowed, supporting the widely held notion that as payroll cuts become necessary during a downturn, most wary employers opt to purge their contract or temporary help employees before their permanent employees.⁴ During the latest recession, falling demand for labor was accompanied by a precipitous fall in temporary help employment; concomitantly, the job openings rate for professional and business serv-

ices fell 41 percent from December 2007 to June 2009. (See chart 4.)⁵

Professional jobs and the housing bust

By the end of the 2007–09 recession, professional and technical services, the other major sector of professional and business services,⁶ had shed 324,000 positions, or 4 percent of employment. The industry did not experience job cuts until two quarters after the beginning of the recession. Professional and technical services averaged a monthly job loss of approximately 6,000 during 2008 and an average job loss of about 25,000 in 2009. Three industry groups—legal services (NAICS 5411); accounting and bookkeeping services (accounting, tax preparation, bookkeeping, and payroll services, NAICS 5412); and architectural and engineering services (architectural, engineering, and related services, NAICS 5413)—accounted for about 72 percent of the job losses in professional and technical services during the most recent downturn. According to the Bureau of Economic Analysis, all three groups are dependent on the real estate sector (real estate and rental and leasing, NAICS 53), whose output accounts for about 5 percent of every dollar of final demand in legal services,

Chart 3. Total nonfarm employment and temporary help services employment, seasonally adjusted, 1990–2010

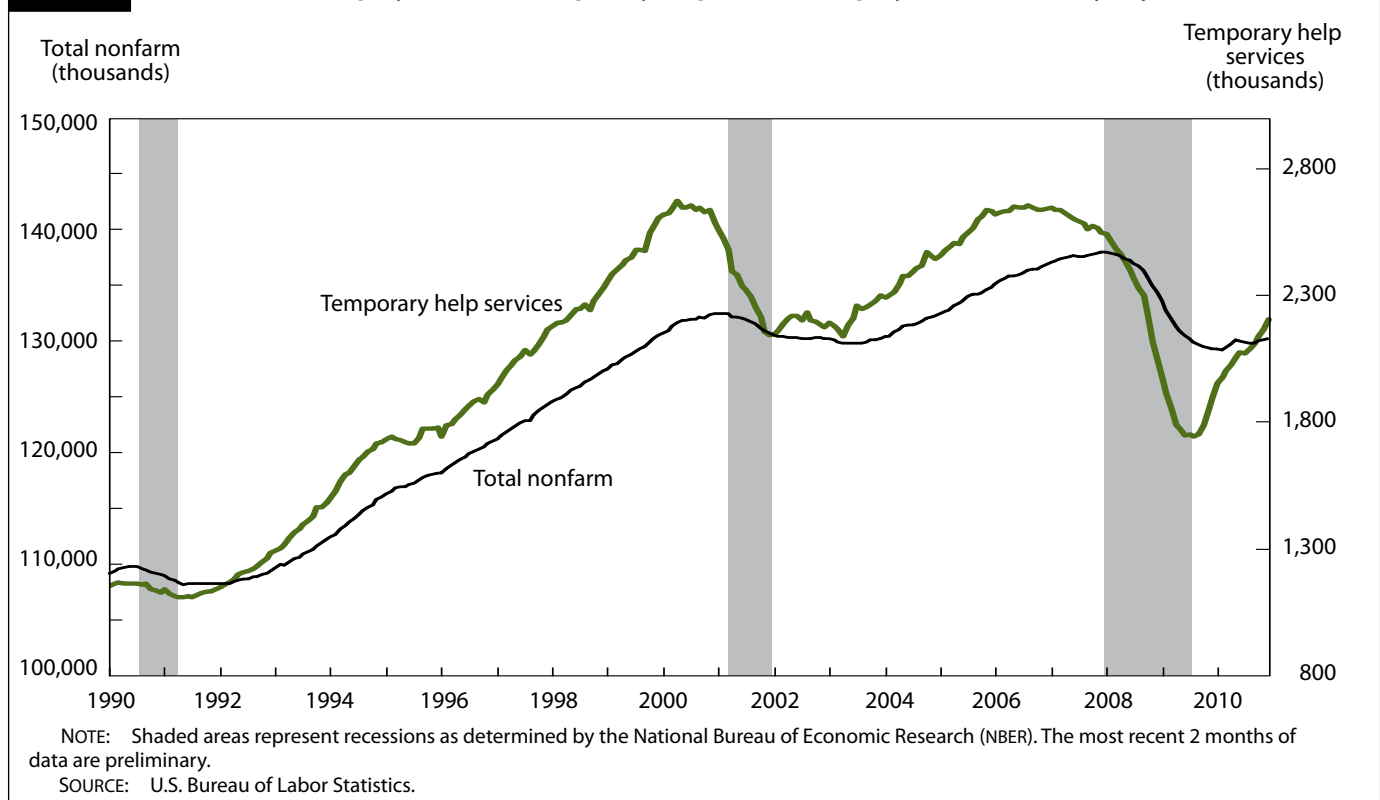
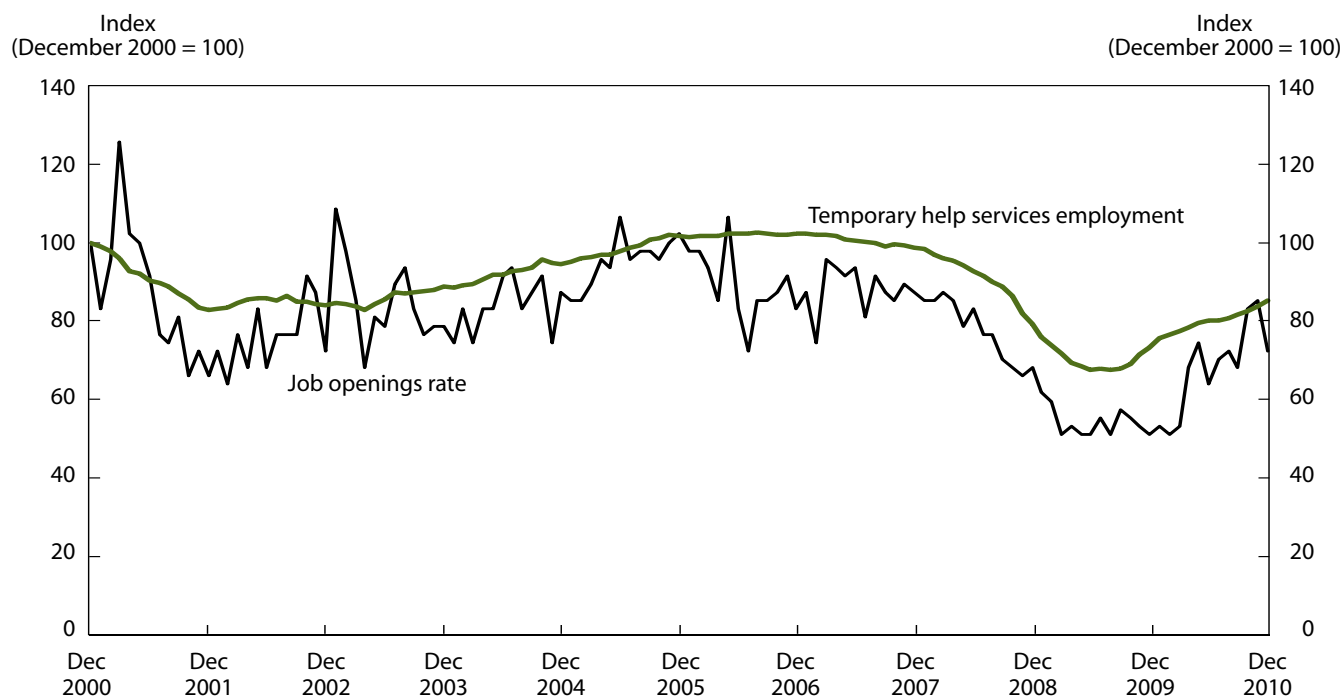


Chart 4. Indexes of job openings rate for professional and business services employment and temporary help services employment, seasonally adjusted, December 2000–December 2010



SOURCE: U.S. Bureau of Labor Statistics.

3 percent in accounting and bookkeeping services, and 2 percent in architectural and engineering services.⁷ The continued decline in both sales of existing homes and sales of new homes may have contributed to the overall employment decline in professional and technical services during the recent economic downturn.⁸

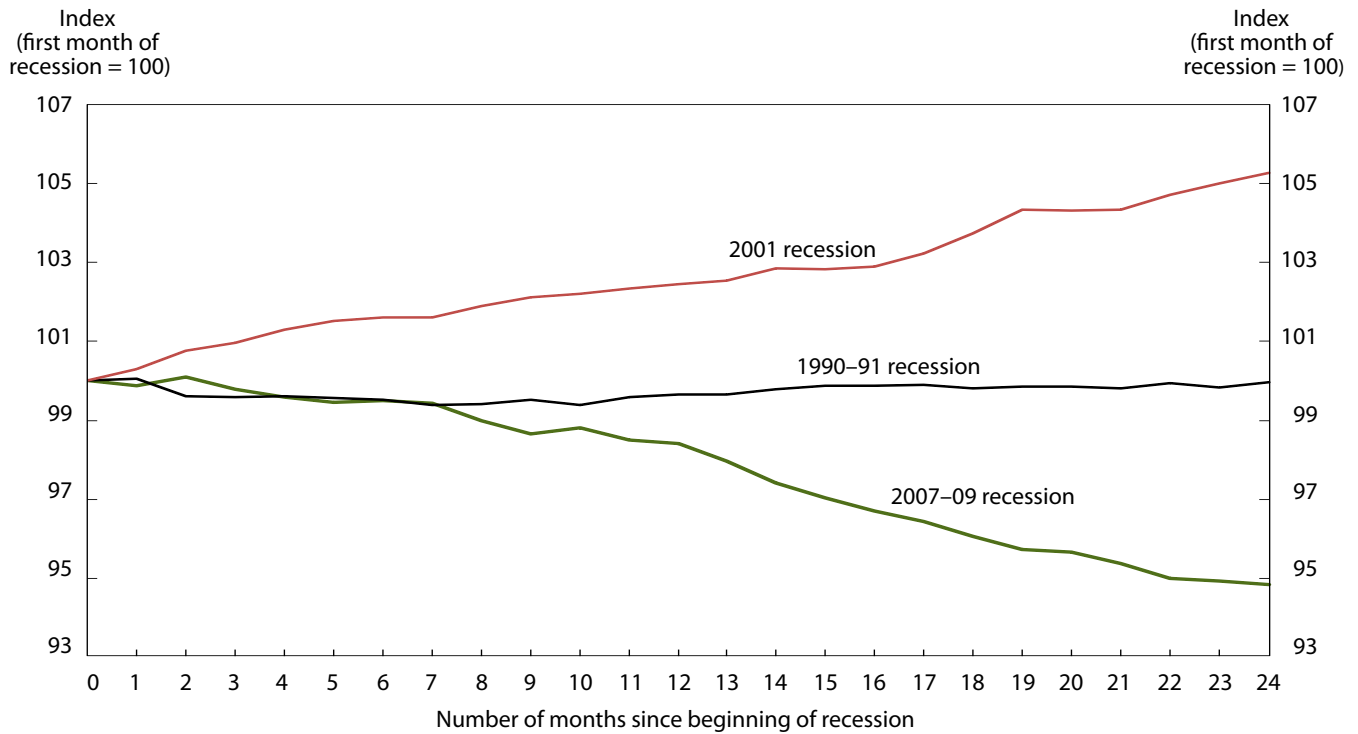
From December 2007 to June 2009, legal services employment fell by 46,000, or about 4 percent; this loss is in contrast to an employment gain of nearly 2 percent during the 2001 recession and a drop of 1 percent during the 1990–91 recession. (See chart 5.) Typically, legal services employment proves resilient relative to aggregate employment during recessions, perhaps partly because of the rise in demand for bankruptcy litigation: since 1981, bankruptcy filings have increased every year associated with a recession.⁹ The latest economic recession was no different: by the second quarter of 2009, demand for bankruptcy work was up 6 percent from a year earlier, the largest growth rate among all practice areas of the legal profession.¹⁰ Demand among real estate law practices, by contrast, declined considerably during that same period. Coincidentally, title abstract and settlement offices, which are highly involved in handling legal documents for the transfer, finance, and settlement of real estate, lost more than one-fifth of em-

ployment by the end of the 2007–09 recession.

Accounting and bookkeeping services also sustained notable payroll cuts during the most recent recession, losing 54,000 jobs from December 2007 to June 2009. This loss represented a 6-percent decline in employment, compared with the 2 percent lost during each of the 1990–91 and 2001 recessions. The greater part of the job losses were concentrated in payroll services, which contracted by 29,000, accounting for 1 out of every 2 positions lost in accounting and bookkeeping service during the 2007–09 recession.

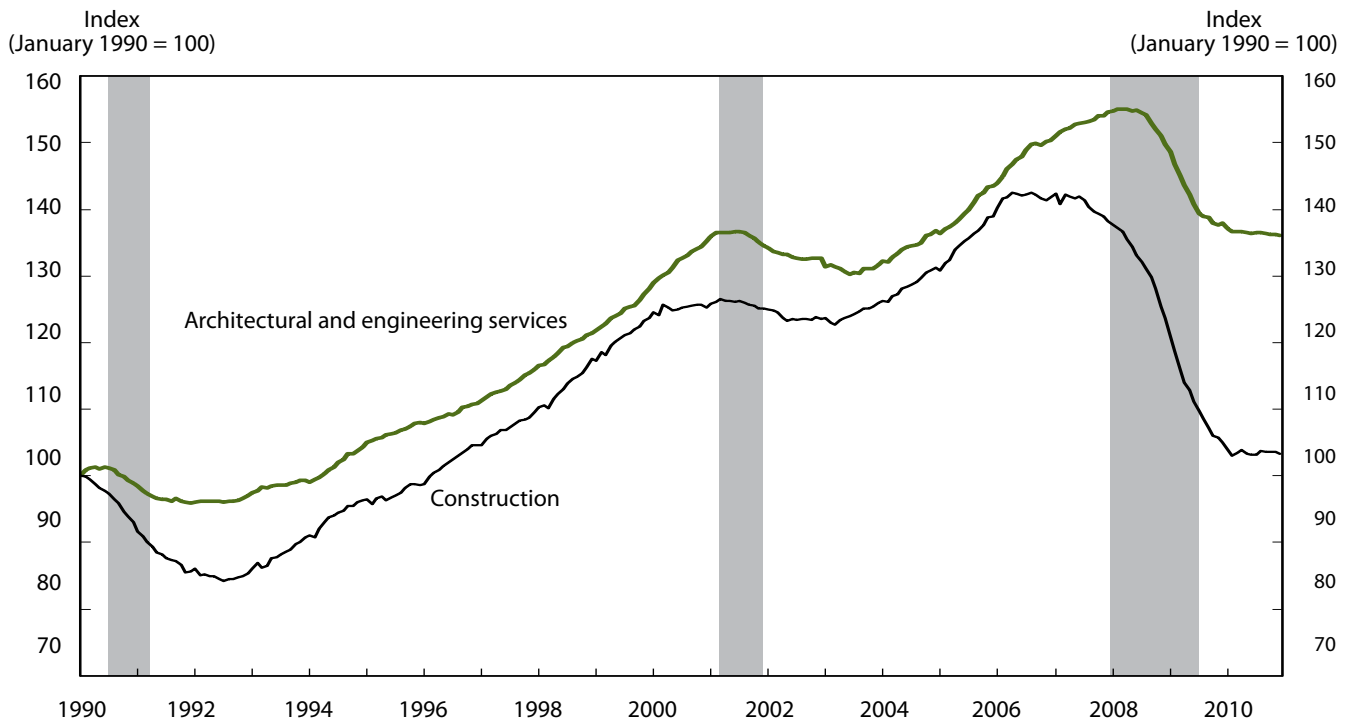
From December 2007 to June 2009, architectural and engineering services employment fell by 132,000, or 9 percent, a percentage that contrasts with losses of 1 percent and 4 percent in the 2001 and the 1990–91 recessions, respectively. During the most recent economic downturn, the construction sector, a sector that is commonly viewed as mutually dependent on the architectural and engineering services industry group, made significant payroll cuts.¹¹ Residential construction employment, which had been falling since early 2006, continued to plummet as residential construction projects petered out.¹² Employment in the two industries—construction and architectural and engineering services—has experienced similar historical trends. (See chart 6.) □

Chart 5. Legal services indexes of employment, seasonally adjusted



SOURCE: U.S. Bureau of Labor Statistics.

Chart 6. Construction index of employment and architectural and engineering services index of employment, seasonally adjusted



NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).

SOURCE: U.S. Bureau of Labor Statistics.

Notes

¹ Recessions are identified by the National Bureau of Economic Research (NBER), according to which the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from July 1990 to March 1991 and from March 2001 to November 2001, respectively. For a complete list of business cycle dates, see “U.S. Business Cycle Expansions and Contractions” (Cambridge, MA, National Bureau of Economic Research, Apr. 4, 2011), <http://www.nber.org/cycles/cyclesmain.html> (visited Apr. 5, 2011).

The data on employment used in this article are from the Current Employment Statistics (CES) survey, a monthly survey of about 140,000 nonfarm business and government agencies representing approximately 440,000 individual worksites. For more information on the survey’s concepts and methodology, see “Technical Notes to Establishment Survey Data Published in *Employment and Earnings*” (U.S. Bureau of Labor Statistics, Feb. 4, 2011), <http://www.bls.gov/web/cestn2.htm> (visited Apr. 21, 2011). To access CES data, see “Current Employment Statistics - CES (National)” (U.S. Bureau of Labor Statistics, no date), <http://www.bls.gov/ces> (visited Jan. 10, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

² The professional and business services industry encompasses North American Industry Classification System (NAICS) sector codes 54 (professional, scientific, and technical services—hereafter, simply, professional and technical services), 55 (management of companies and enterprises), and 56 (administrative and support and waste management and remediation services, or, for simplicity, administrative and waste services). (See *North American Industry Classification System: United States, 1997* (U.S. Census Bureau, 1997), and *North American Industry Classification System, 2002* (U.S. Census Bureau, 2002).)

³ The temporary help services employment series starts in 1990; therefore, the high point reached in 1990 may not have been a peak had earlier data been available.

⁴ A recent expression of this notion appears in “OOChart: Temporary Measures,” *Occupational Outlook Quarterly*, fall 2010, <http://www.bls.gov/pub/ooq/2010/fall/oochart.pdf> (visited Jan. 10, 2011).

⁵ Job openings rates used in this article are from the Job Openings and Labor Turnover Survey (JOLTS), conducted by the Bureau of Labor Statistics; JOLTS is a monthly survey that addresses the need for data on job openings, hires, and separations. For more information on this survey, see “Job Openings and Labor Turnover Survey” (U.S. Bureau of Labor Statistics, Jan. 12, 2011), <http://www.bls.gov/jlt/jltover.htm#purpose>. (visited Apr. 21, 2011).

⁶ The third sector, management of companies and enterprises, is considered a minor sector relative to the other two.

⁷ Data are from input-output tables published by the Bureau of Economic Analysis—specifically, the industry-by-industry total re-

quirements table after redefinition for 2002. (See “Interactive Access to Input-Output Accounts Data,” in *Industry Economic Accounts* (Bureau of Economic Analysis, Dec. 14, 2010), http://www.bea.gov/industry/iotables/options_list.cfm?aggregations_id=0&get_results=show&goto=&anon=760683&CFID=2157277&CFTOKEN=16910fa36c94132a-6F4D30E6-D4EF-5919-1250FF52D5214327&jsessionid=9230a8d613dace131e78711f6072716b4444 (visited Jan. 10, 2011).) The table shows the amount of output required, directly and indirectly, by each industry to deliver a dollar of final demand to final users.

⁸ Data on sales of new homes appear courtesy of the Census Bureau, in “Houses Sold by Region” (U.S. Census Bureau, no date), <http://www.census.gov/const/soldreg.pdf> (visited Apr. 21, 2011). Data on sales of existing homes appear courtesy of the National Association of Realtors, in “Existing-Home Sales” (Chicago, National Association of Realtors, Mar. 21, 2011), <http://www.realtor.org/research/research/ehsdata> (visited Apr. 21, 2011).

⁹ Bankruptcy data presented in this article are taken from the quarterly business filings by year in “Bankruptcy Filing Statistics—Business Filings” (Alexandria, VA, American Bankruptcy Institute, 2010), http://www.abiworld.org/AM/Template.cfm?Section=Business_Bankruptcy_Filings1&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=59&ContentID=36301 (visited Jan. 10, 2011).

¹⁰ Law firm performance was gauged by the Hildebrandt peer monitor index (PMI), a composite index that yields a score representing the quarter-over-quarter change in drivers of law firm profitability, including rates, demand, productivity, and expenses. (For more details on this index, see “PMI Rises in Fourth Quarter, Flat for 2010—Law Firm Market Demand and Productivity Rise” (Washington, DC, Thomson Reuters, Jan. 28, 2011), <https://peermonitor.thomsonreuters.com/ThomsonPeer> (visited Apr. 21, 2011).)

¹¹ According to NAICS, the architectural and engineering services industry group is composed of establishments engaged primarily in planning and designing residential, institutional, leisure, commercial, and industrial buildings and structures by applying knowledge of design, construction procedures, zoning regulations, building codes, and building materials. Furthermore, architectural and engineering services and the construction industry exhibit a positive correlation in employment, which means that their employment levels tend to move together over time.

¹² See “New Residential Construction (Building Permits, Housing Starts, and Housing Completions),” in *Manufacturing, Mining, and Construction Statistics* (U.S. Census Bureau, December 2010), <http://www.census.gov/const/www/newresconstindex.html> (visited Jan. 10, 2011). For an overview of construction employment trends during the December 2007–June 2009 recession, see Adam Hadi, “Construction employment peaks before the recession and falls sharply throughout it,” this issue, pp. 24–27.

Employment in financial activities: double billed by housing and financial crises

The housing market crash, followed by the financial crisis of the 2007–09 recession, helped depress financial activities employment; the industry recorded historic monthly job losses that persisted even after the recession ended

George Prassas

Historically, employment in financial activities¹ has been affected little by economic downturns and usually has grown during an entire recession or started to grow shortly after a recession began. (See chart 1.) In stark contrast, employment in financial activities grew more slowly in 2006 and eventually peaked in December 2006,² 1 year before the official start of the December 2007–June 2009 recession.³ Even after the recession ended, employment in financial activities continued to decline. (See chart 2.)

Leading into the 2007–09 recession, most employment losses in financial activities were concentrated in industries directly involved in buying and selling homes. However, after the stock market declined sharply in September 2008, all industries within the financial sector began to cut jobs at unprecedented rates. These employment losses were uncharacteristic compared with those sustained in previous downturns.

Prerecession housing crash

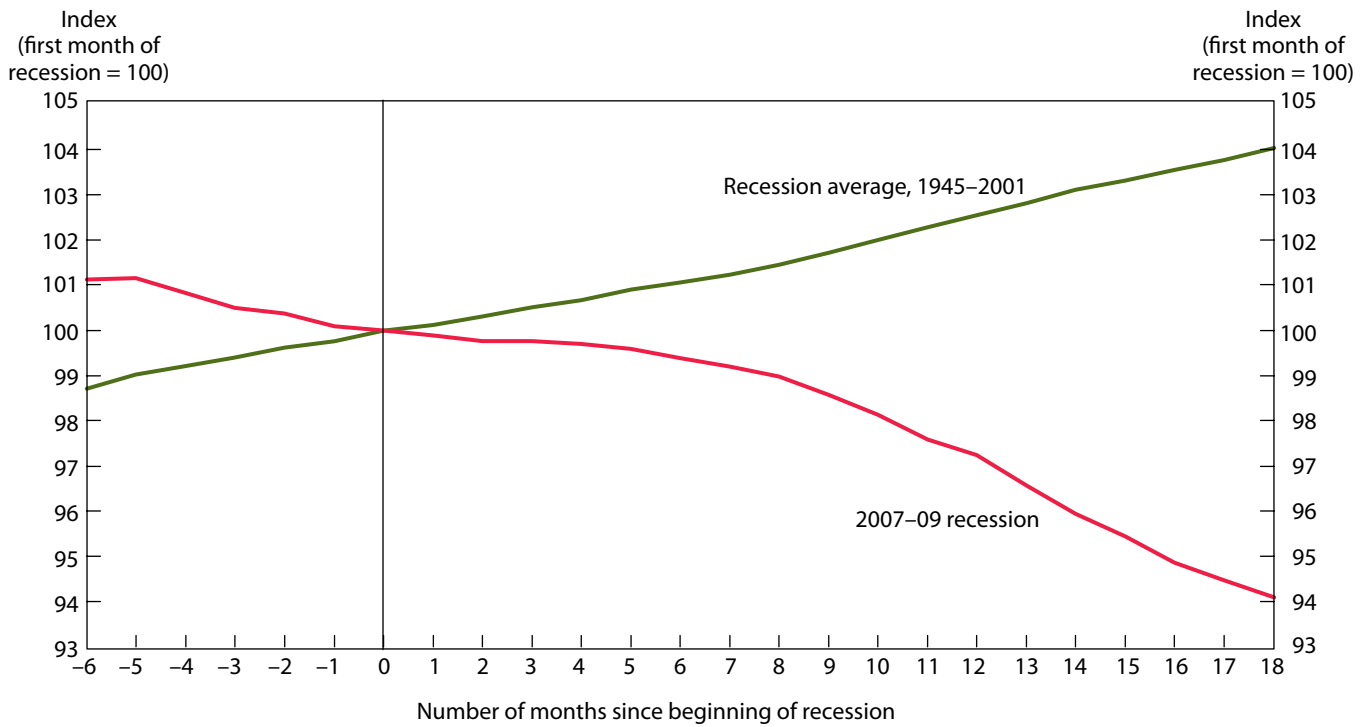
Over the past decade, employment changes in financial activities were tied closely to those in construction. (See chart 3.) Between 2000 and 2006, roughly 40 percent of the job growth in financial activities occurred in industries directly related to the selling and

buying of homes.⁴ During this period, construction employment grew by 976,000,⁵ sales of new and existing homes increased by 14 percent and 26 percent, respectively,⁶ home prices in the top 20 major metropolitan areas in the United States doubled,⁷ and mortgage rates reached historical lows.⁸ In order to continue to qualify consumers for the purchase of a home, and to help drive the housing market, lenders offered more creative financing options, such as 40-year mortgages, interest-only loans, and jumbo loans, in addition to the typical business practices of offering loans based on fixed- and adjustable-rate mortgages, refinancing, and lending on the basis of home equity. According to the Federal Reserve Bank of Dallas, “although low interest rates bolstered homebuying early in the decade, the expansion of nonprime mortgages clearly played a role in the surge of homeownership.”⁹

In 2005, sales of new and existing homes in the United States peaked, and employment in construction and in several housing-related financial industries followed. (See chart 4.) Combined, employment in real estate credit, mortgage and nonmortgage brokers, and real estate agents and brokers reached a prerecession employment high in April 2006, corresponding with an employment peak in the construction industry, and then declined by 184,000 through December 2007. Real estate credit and mortgage and nonmortgage brokers respectively lost 32 percent and 34 percent of their workforce during this period. Job losses continued through

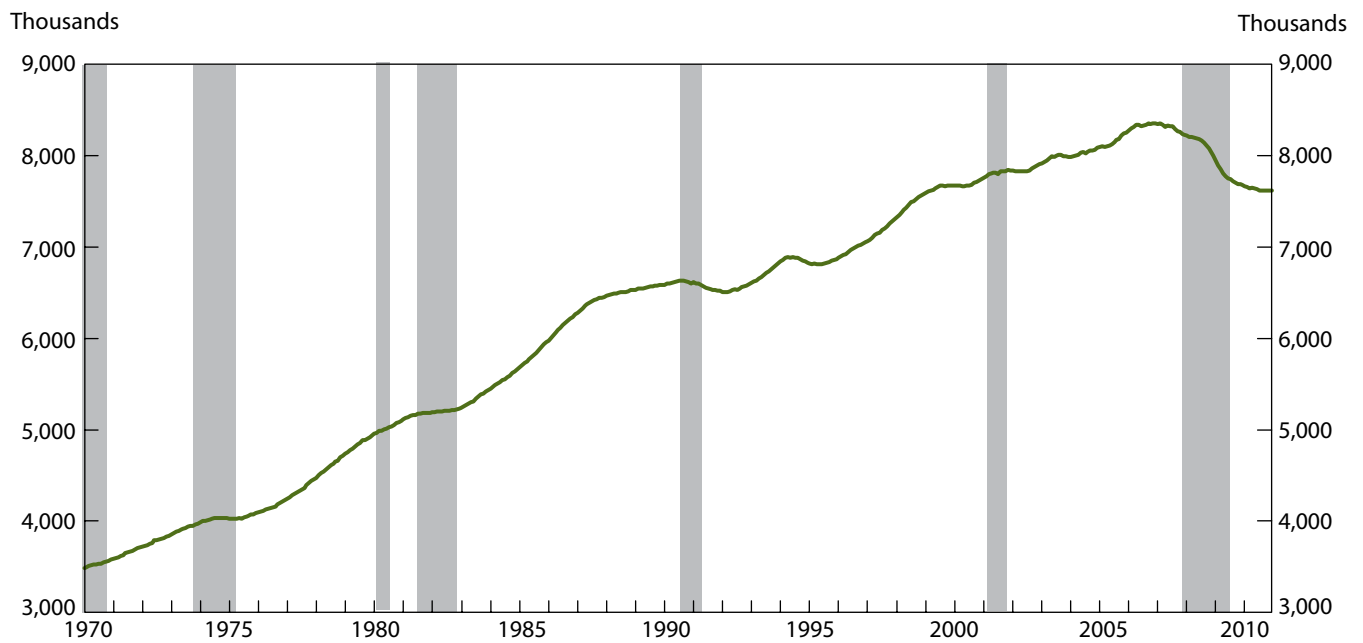
George Prassas is an economist in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. Email: prassas.george@bls.gov

Chart 1. Financial activities index of employment, seasonally adjusted



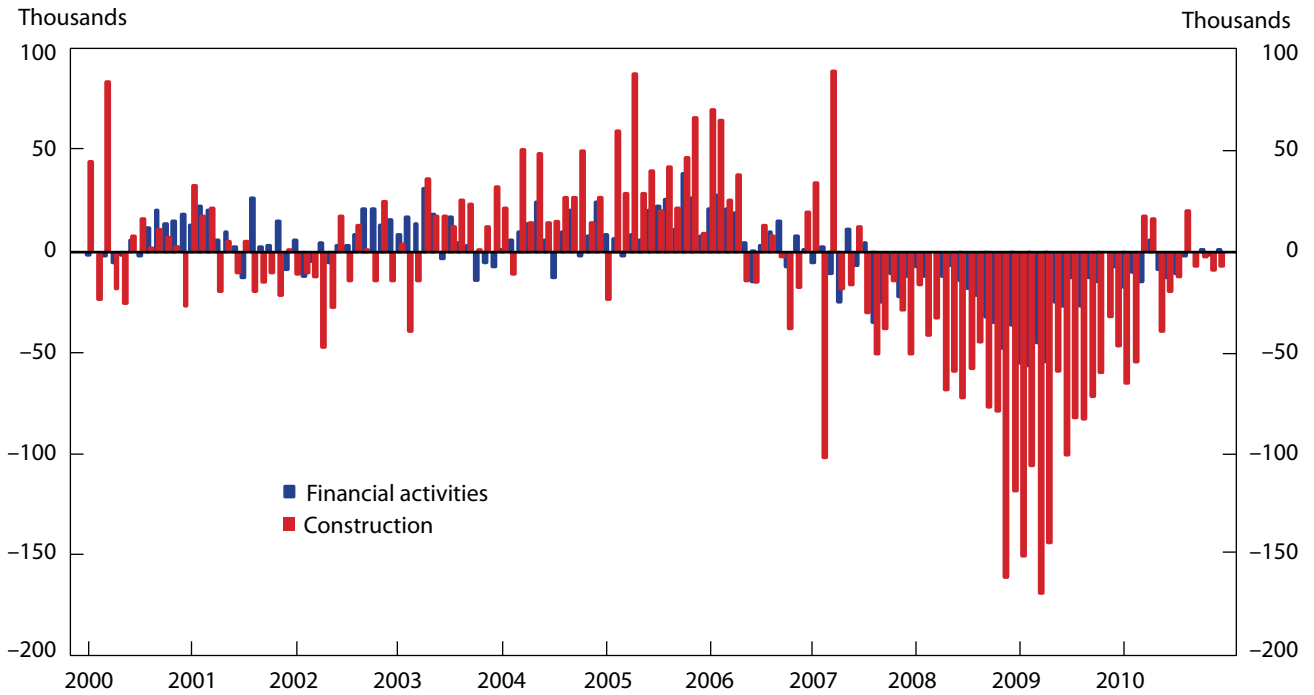
SOURCES: U.S. Bureau of Labor Statistics, National Bureau of Economic Research.

Chart 2. Financial activities employment, seasonally adjusted, January 1970-December 2010



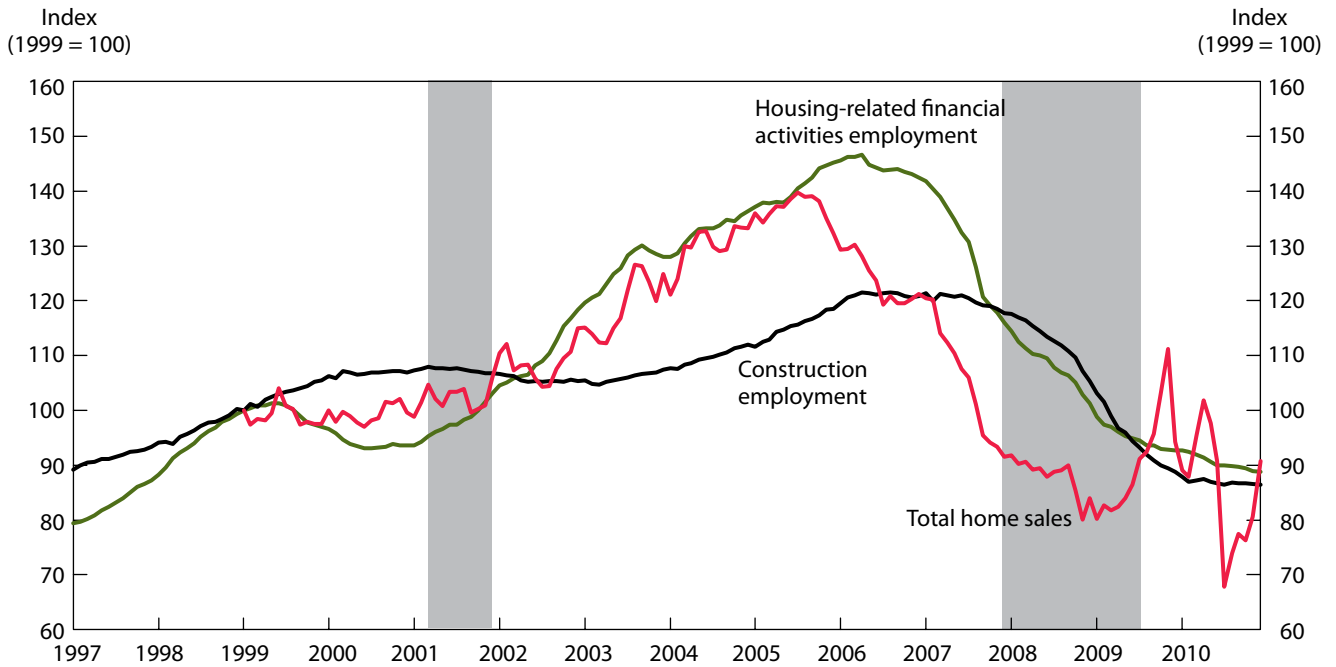
NOTE: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).
SOURCE: U.S. Bureau of Labor Statistics.

Chart 3. Over-the-month changes in employment in construction and financial activities, 2000–10, seasonally adjusted



SOURCE: U.S. Bureau of Labor Statistics.

Chart 4. Index of annual rate of total homes sales, construction employment, and housing-related financial activities employment, seasonally adjusted, 1997–2010



NOTE: Total home sales are the sum of seasonally adjusted annual rates of new and existing home sales. Housing-related financial industries are real estate credit (NAICS 522292), mortgage and nonmortgage brokers (NAICS 52231), and offices of real estate agents and brokers (NAICS 5312). Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).

SOURCES: U.S. Bureau of Labor Statistics, U.S. Census Bureau, National Association of Realtors.

the end of the recession, although at a slower pace. Between April 2006 and December 2010, housing-related financial industries lost 348,000 jobs and employment fell to its lowest level since January 1998.

By mid-2007, delinquencies in mortgage payments had begun to rise, particularly among consumers holding nontraditional loans.¹⁰ Depository institutions, such as commercial banks and savings institutions, started to announce job cuts, and many underwent internal restructuring and discontinued nontraditional loan lending. Employment in depository credit intermediation peaked in September 2007, leading the recession by 3 months. In October 2008, the financial markets experienced large losses, including a 17-percent decline in value according to the S&P 500 index.¹¹ Commercial banks substantially decreased new loans and leases in bank credit. Job losses in depository credit intermediation accelerated, and employment fell at a record pace until reaching a trough in April 2010.

In 2009, loans and leases by commercial banks fell by 10.3 percent.¹² Without credit, most firms were in unsustainable budgetary situations and cut payrolls. Employment losses throughout the economy were tied to the inability of firms to attain credit to continue their day-to-day business activities.

Financial crisis and job losses

With ongoing job losses occurring in financial activities industries related to the housing market crash,

a financial crisis that began after the start of the recession pushed losses into other industries within the sector. Employment in the CES series titled “securities, commodity contracts, investments” had been largely unaffected during the first 9 months of the recession, but after the deterioration of the financial markets, job cuts quickly followed: between September 2008 and June 2009, 55,000 jobs were lost. (See table 1.)

Employment in insurance carriers and related activities also was unaffected during the first 9 months of the recession. However, year-over-year real personal consumption expenditures in insurance began to decline in April 2008 and accelerated as the recession grew more severe.¹³ With large layoffs occurring in most segments of the economy, households continued to cut back on personal consumption expenditures; insurance expenditures decreased at an annualized rate of 4.7 percent during the fourth quarter of 2008. New individual life insurance premiums, the main revenue stream for life insurance companies, dropped 14 percent that quarter.¹⁴ The decline in personal consumption expenditures, followed by contracting credit markets, coincided with large layoffs in insurance carriers.

With both households and firms tightening their budgets and the loss of confidence in the market, establishments in rental and leasing services began to shed jobs. Employment in rental and leasing services generally follows the business cycle, because business in this industry is dependent on consumer spending. With personal consumption expenditures slashed and reduced access to credit, firms in automotive equipment rental and leasing and in consumer goods rental cut jobs.

Table 1. Financial activities employment, selected industries, seasonally adjusted, December 2007–June 2009

| [In thousands] | | | | | |
|---|--------------------------------|---------------------------------|----------------------------|---|---|
| Industry | December 2007 employment level | September 2008 employment level | June 2009 employment level | Net monthly change in employment between December 2007 and September 2008 | Net monthly change in employment between October 2008 and June 2009 |
| Financial activities..... | 8,227.0 | 8,110.0 | 7,742.0 | -13.0 | -40.9 |
| Credit intermediation and related activities..... | 2,790.0 | 2,716.6 | 2,592.0 | -8.2 | -13.8 |
| Depository credit intermediation | 1,825.4 | 1,809.0 | 1,758.0 | -1.8 | -5.7 |
| Commercial banking..... | 1,358.4 | 1,355.7 | 1,316.3 | -3 | -4.4 |
| Securities, commodity contracts, investments..... | 855.9 | 861.0 | 805.4 | .6 | -6.2 |
| Insurance carriers and related activities ... | 2,315.4 | 2,300.7 | 2,250.1 | -1.6 | -5.6 |
| Real estate..... | 1,493.0 | 1,478.9 | 1,406.2 | -1.6 | -8.1 |
| Rental and leasing services..... | 632.9 | 611.1 | 552.3 | -2.4 | -6.5 |

SOURCE: U.S. Bureau of Labor Statistics.

EMPLOYMENT IN FINANCIAL ACTIVITIES declined by 473,000, or 5.8 percent, during the historic 2007–09 recession. The job loss experienced during that time was the largest in both absolute and percentage terms during a recession in the history of financial activities employment.

First the housing market crash, and then the financial market crisis, hit financial activities employment. During 2010, however, employment losses moderated, but the industry continued to lose jobs and employment decreased to levels not seen since 1998. □

Notes

¹ This article uses the term “financial activities” to denote the North American Industry Classification System (NAICS; see *North American Industry Classification System: United States, 1997* (U.S. Census Bureau, 1997), and *North American Industry Classification System, 2002* (U.S. Census Bureau, 2002)) industry sectors 52, or “finance and insurance,” and 53, or “real estate and rental and leasing.”

² The data on employment used in this article are from the Current Employment Statistics (CES) survey, a monthly survey of approximately 140,000 nonfarm business and government agencies representing approximately 440,000 individual worksites. For more information on the survey’s concepts and methodology, see “Technical Notes to Establishment Survey Data Published in *Employment and Earnings*” (U.S. Bureau of Labor Statistics, Feb. 4, 2011), www.bls.gov/web/cestd1.htm (visited Apr. 12, 2011). To access CES data, see “Current Employment Statistics - CES (National)” (U.S. Bureau of Labor Statistics, no date), www.bls.gov/ces (visited Apr. 12, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

³ Recessions are identified by the National Bureau of Economic Research (NBER), according to which the most recent recession began in December 2007 and ended in July 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991, respectively. For a complete list of business cycle dates, see “U.S. Business Cycle Expansions and Contractions” (Cambridge, MA, National Bureau of Economic Research, Apr. 4, 2011), <http://www.nber.org/cycles/cyclesmain.html> (visited Nov. 2, 2010).

⁴ The housing-related financial industries are real estate credit, mortgage and nonmortgage brokers, and offices of real estate agents and brokers.

⁵ For an overview of construction employment trends during the December 2007–June 2009 recession, see Adam Hadi, “Construction employment peaks before the recession and falls sharply throughout it,” this issue, pp. 24–27.

⁶ The Census Bureau defines sales of new homes on the basis of the condition that “A sale of the new house occurs with the signing of a sales contract or the acceptance of a deposit” (see “Comparing New Home Sales and Existing Home Sales” (U.S. Census Bureau, no date), <http://www.census.gov/const/www/existingvsnewsales.html> (visited Apr. 12, 2011).) The house can be in any stage of construction. Data on sales of new homes are found in “Houses Sold by Region” (U.S. Census Bureau, no date), <http://www.census.gov/const/soldreg.pdf> (visited Apr. 12, 2011). Data on existing-home sales are found in “Existing-Home Sales” (Chicago, National Association of Realtors, Mar. 21, 2011), <http://www.realtor.org/research/research/ehsdata> (visited Apr. 12, 2011), and are provided by the National Association of Realtors®, which defines such sales on the basis of the condition that “the majority of transactions are reported when the sales contract

is closed.” (See “Comparing New Home Sales,” which also discusses definitional differences between the two series.)

⁷ Data on home prices appear courtesy of the Case-Shiller Home Price Index for the top 20 metropolitan regions, in “S&P/Case-Shiller Home Price Indices” (New York, Standard & Poor’s, no date), <http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff-p-us----> (visited Apr. 12, 2011).

⁸ Data on mortgage rates appear courtesy of HSH Associates, in “Mortgage Rates Trends and Analysis” (Pompton Plains, NJ, HSH, no date), http://www.hsh.com/mortgage_rate_trends/National/30-Year-FRM/2000-01_2011-01.html (visited Apr. 12, 2011).

⁹ See “Insights from the Federal Reserve Bank of Dallas,” in *Economic Letter* (Federal Reserve Bank of Dallas, November 2007), <http://www.dallasfed.org/research/ecllett/2007/el0711.html> (visited Apr. 12, 2011).

¹⁰ See various charts on residential mortgage foreclosure and delinquency rates from the Mortgage Bankers Association and Haver Analytics, http://www.richmondfed.org/banking/markets_trends_and_statistics/trends/pdf/delinquency_and_foreclosure_rates.pdf (visited Apr. 12, 2011).

¹¹ S&P 500 index data appear courtesy of Standard and Poor’s. (See “S&P 500” (New York, Standard & Poor’s, no date), <http://www.standardandpoors.com/indices/sp-500/en/us/?indexId=spusa-500-usdof-p-us-1--> (visited Apr. 12, 2011).)

¹² The Federal Reserve collects data on loans and leases by all commercial banks. To access the data, see “Assets and Liabilities of Commercial Banks in the United States (Weekly) – H.8” (Board of Governors of the Federal Reserve System, Apr. 1, 2011), <http://federalreserve.gov/releases/h8/current/default.htm> (visited Apr. 12, 2011).

¹³ In this article, data on real personal consumption expenditures for insurance are from the Bureau of Economic Analysis. (See “Table 2.4.6U. Real Personal Consumption Expenditures by Type of Product, Chained Dollars,” entry 264 (Bureau of Economic Analysis, Mar. 28, 2011), http://www.bea.gov/national/nipaweb/nipa_underlying/TableView.asp?SelectedTable=18&FirstYear=2009&LastYear=2010&Freq=Qtr&ViewSeries=Yes (visited Apr. 12, 2011).)

¹⁴ In this article, data on annualized life insurance premiums appear courtesy of the Life Insurance and Market Research Association. (See “LIMRA Reports Sharp Quarterly Drop in Individual Life Insurance Sales” (Windsor, CT, LIMRA International, Feb. 24, 2008), <http://www.limra.com/newscenter/newsarchive/archivedetails.aspx?prid=83> (visited Apr. 12, 2011).)

Deep drop in retail trade employment during the 2007–09 recession

The 2007–09 recession had a more negative impact on employment in retail trade than did previous recessions; job losses accelerated during the second half of the 18-month recession

Michael D. McCall

Retail trade lost 1 million jobs¹ during the recession which began December 2007 and ended June 2009.² The 6.7 percent decline in retail trade employment exceeded the rate of job loss for total nonfarm employment by 1.3 percentage points but was consistent with the 6.6 percent decline in private industry employment over the same period.

Employment in retail trade peaked in December 2007, coinciding with the start of the recession; the peak in total nonfarm employment took place a month later. Between the retail trade employment trough in July 2003 and its peak in December 2007, retail trade had added 697,000 jobs; thus, job losses during the recession more than offset job gains during the previous employment expansion.

Compared with the previous 11 recessions since 1945, retail trade job losses during the 2007–09 recession were the largest in magnitude and, on both actual and annualized bases, in percent change. (See table 1.) Among the earlier

periods, the most rapid decline, at 3.9 percent, occurred during the 1957–58 recession.

The initial periods of economic recovery following both the 1990–91 and 2001 recessions have both been termed “jobless” recoveries because total nonfarm employment did not begin to recover until many months after those recessions ended. The 1990–91 and 2001 recessions each lasted 8 months, while the 2007–09 recession extended out 18 months. During the latest recession, retail trade employment declined a bit faster in the initial 8-month

Table 1. Employment change in retail trade during recessions, seasonally adjusted, 1945 to 2009

| Start | End | Duration (in months) | Number (in thousands) | Percent | Annualized percent |
|----------|----------|----------------------|-----------------------|---------|--------------------|
| Feb 1945 | Oct 1945 | 8 | 114 | 3.2 | 4.8 |
| Nov 1948 | Oct 1949 | 11 | -49 | -1.1 | -1.2 |
| Jul 1953 | May 1954 | 10 | -34 | -.7 | -.8 |
| Aug 1957 | Apr 1958 | 8 | -141 | -2.6 | -3.9 |
| Apr 1960 | Feb 1961 | 10 | -135 | -2.4 | -2.9 |
| Dec 1969 | Nov 1970 | 11 | 42 | .6 | .6 |
| Nov 1973 | Mar 1975 | 16 | 42 | .5 | .4 |
| Jan 1980 | Jul 1980 | 6 | -75 | -.7 | -1.5 |
| Jul 1981 | Nov 1982 | 16 | -43 | -.4 | -.3 |
| Jul 1990 | Mar 1991 | 8 | -229 | -1.7 | -2.6 |
| Mar 2001 | Nov 2001 | 8 | -197 | -1.3 | -1.9 |
| Dec 2007 | Jun 2009 | 18 | -1,047 | -6.7 | -4.5 |

NOTE: The start and end of recessions are determined by the National Bureau of Economic Research (NBER).

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period and performed much worse over the entire 18 months than it did during both earlier downturns. The 10 months following the end of the previous two recessions posted retail trade job losses at about the same rate as during the 8 months of the recessions. By contrast, during the last 10 months of the 2007–09 recession, job losses accelerated. (See chart 1.)

Both real retail sales—which are sales deflated for changes in the Consumer Price Index³ (CPI)—and retail trade employment reached their most recent highs at approximately the same time. Real retail sales peaked in November 2007, 1 month prior to the peak in employment.⁴ However, real retail sales reached a low in March 2009, 9 months before retail employment reached a trough. This delay in recovery of retail employment relative to a rebound in sales is not unusual; retail employment also lagged real retail sales by about 1 year following the 2001 recession. (See chart 2.)

All retail trade industries lost jobs

During the initial 4 months of the 2007–09 recession, modest job losses occurred in five detailed industries

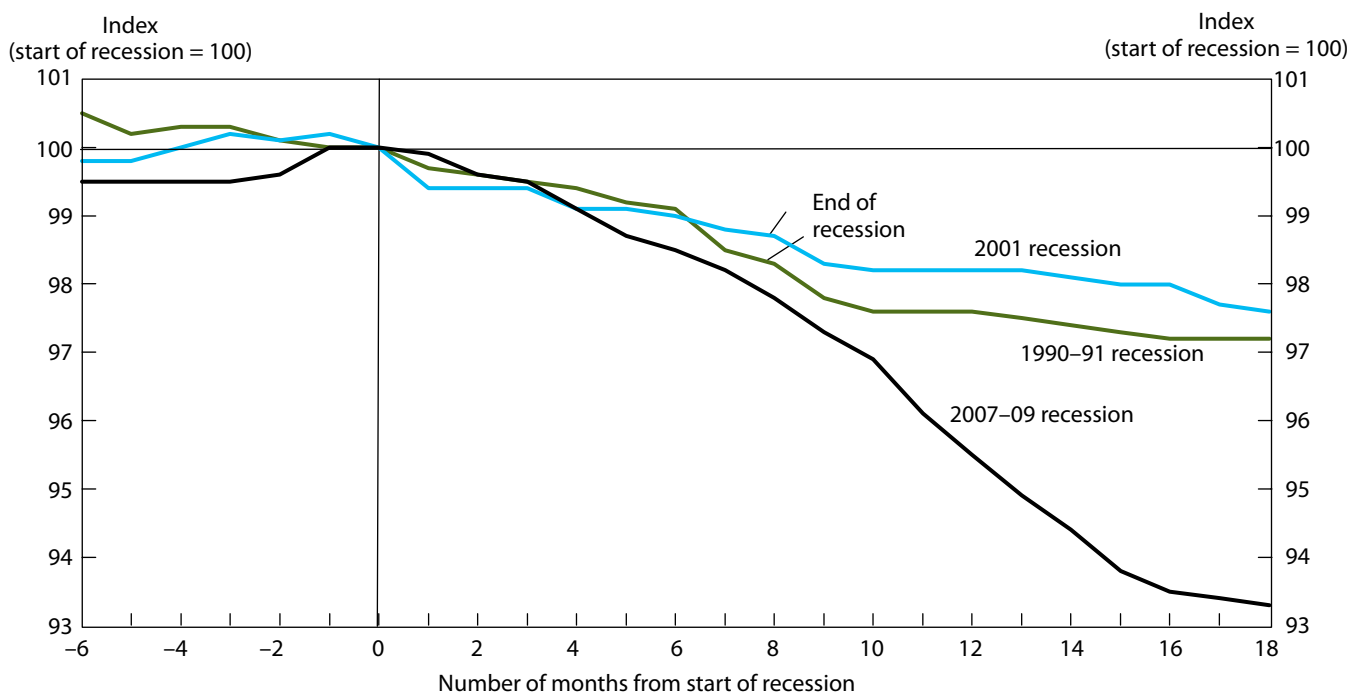
within retail trade—motor vehicle and parts dealers, furniture and home furnishings stores, building material and garden supply stores, clothing and clothing accessories stores, and general merchandise stores. By the end of the recession, however, every retail component industry had experienced employment losses. (See table 2.)

Motor vehicle and parts dealers lost the greatest number of jobs during the recession, 271,000. Of that loss, 85 percent occurred in automobile dealers. These job losses coincided with declines in auto unit sales, which fell from an annualized rate of 15.7 million units in December 2007 to 9.8 million units in June 2009.⁵

Furniture and home furnishings stores posted the largest loss as a percentage of its workforce, 21.6 percent. Employment declines in this industry and in building material and garden supply stores coincided with the collapse of the housing market. As with residential construction employment, both furniture and home furnishings stores and building material and garden supply stores reached employment peaks in 2006,⁶ well before total nonfarm employment peaked in January 2008.

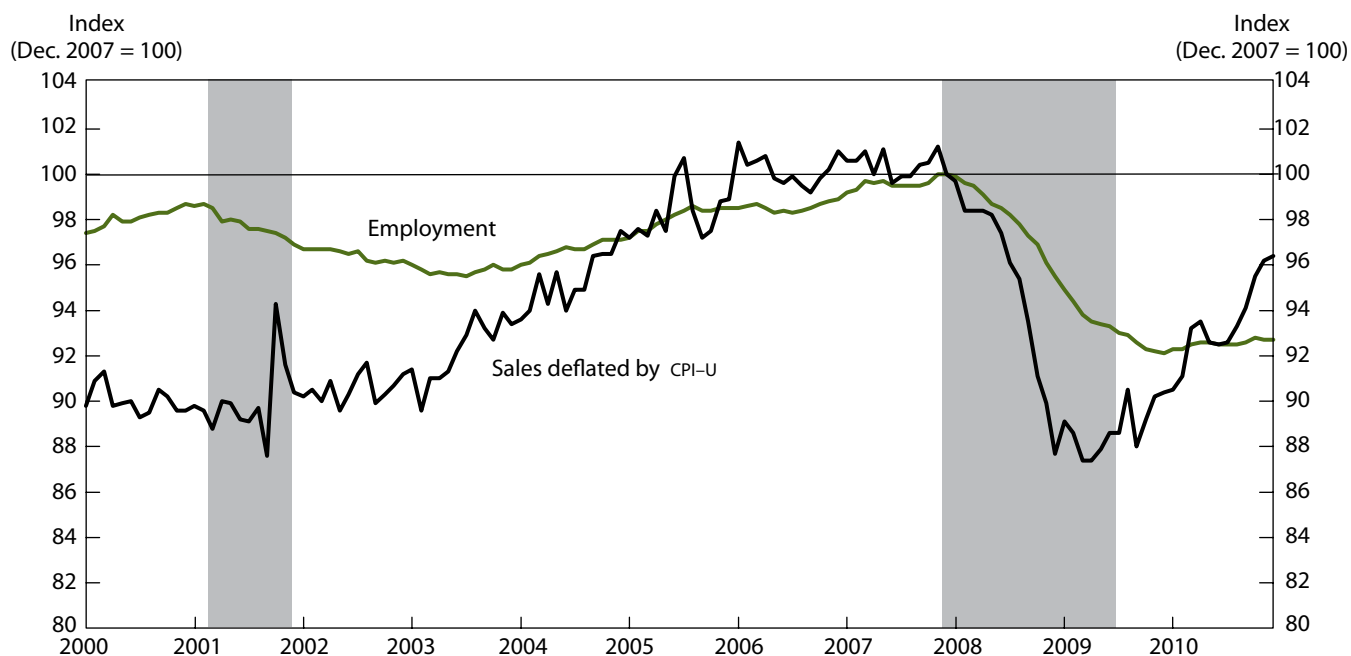
Clothing and clothing accessories stores lost 161,000 jobs—a 10.6 percent decline—during the 2007–2009 recession. Employment in this industry had peaked in November

Chart 1. Retail trade index of employment for three most recent recessions, seasonally adjusted



NOTE: The start and end of recessions are determined by the National Bureau of Economic Research (NBER).

Chart 2. Indexes of retail trade employment and real retail sales, seasonally adjusted, January 2000–December 2010



NOTE: CPI-U base period is 1982–84. Shaded areas represent recessions as defined by the National Bureau of Economic Research (NBER).
 SOURCES: Sales data are from the Census Bureau. Employment data are from the Bureau of Labor Statistics.

2007, 2 months prior to the peak in total nonfarm jobs, and reached a trough in October 2009, 4 months prior to the trough for total nonfarm employment.

Employment declines in general merchandise stores were primarily due to losses in department stores, where employment fell by 132,000 jobs. In contrast, warehouse clubs and supercenters actually posted a net job gain during the recession and did not begin showing consistent monthly job losses until June 2009, nearly a year and a half after total nonfarm employment started to fall.

Post-recession advances

Retail trade employment reached a trough in December 2009, 6 months following the end of the recession. The retail trade sector has added 99,000 jobs during the 12-month period ending December 2010. During the same 12 months, motor vehicle and parts dealers, general merchandise stores, and clothing and clothing accessories stores together accounted for job gains of 128,000. □

Table 2. Employment change in retail trade, seasonally adjusted, December 2007 to June 2009

| Industry | Number (in thousands) | Percent |
|---|-----------------------|---------|
| Retail trade..... | -1,047 | -6.7 |
| Motor vehicle and parts dealers | -271 | -14.3 |
| Furniture and home furnishings stores..... | -122 | -21.6 |
| Electronics and appliance stores..... | -64 | -11.5 |
| Building material and garden supply stores..... | -125 | -9.7 |
| Food and beverage stores..... | -22 | -8 |
| Health and personal care stores | -21 | -2.1 |
| Gasoline stations | -25 | -2.9 |
| Clothing and clothing accessories stores..... | -161 | -10.6 |
| Sporting goods, hobby, book, and music stores.. | -43 | -6.5 |
| General merchandise stores..... | -90 | -2.9 |
| Miscellaneous store retailers..... | -77 | -8.9 |
| Nonstore retailers..... | -28 | -6.2 |

Notes

¹ The data on employment used in this article are from the Current Employment Statistics (CES) program, which is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the program's concepts and methodology, see "Technical Notes to Establishment Survey Data Published in Employment and Earnings," www.bls.gov/web/cestn2.htm (visited Feb. 11, 2011). CES data are available at www.bls.gov/ces (visited Feb. 11, 2011). The CES data used in this article are seasonally adjusted.

² Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, please consult the NBER webpage at www.nber.org/cycles/cyclesmain.html (visited Nov. 2, 2010).

³ Consumer price data are from the Consumer Price Indexes (CPI) program of the Bureau of Labor Statistics, www.bls.gov/cpi/ (visited Jan. 14, 2011). CPI-U base period is 1982–84.

⁴ Retail sales data are from the U.S. Census Bureau, U.S. Department of Commerce, www.census.gov/retail/ (visited Jan. 14, 2011).

⁵ Auto unit sales data source: Bureau of Economic Analysis, U.S. Department of Commerce, www.bea.gov/national/xls/gap_hist.xls (visited Nov. 17, 2010).

⁶ For a complete overview of construction employment trends during the December 2007–June 2009 recession, see Adam Hadi, "Construction employment peaks before the recession and falls sharply throughout it," *Monthly Labor Review*, this issue, pp. 24–27, www.bls.gov/opub/mlr/2011/04/art4full.pdf.

Employment in leisure and hospitality departs from historical trends during 2007–09 recession

From the start of the second half of the 20th century till early 2008, employment growth in the leisure and hospitality industry had been interrupted only a few times by short and shallow declines. Industry job losses from the 2007–09 recession, however, were both severe and prolonged, continuing 6 months beyond the end of the recession

Eliot Davila

Employment in the leisure and hospitality industry¹ fell by 454,000 during the recession which began December 2007 and ended June 2009.² Like total U.S. employment, industry job losses did not coincide with those start and end dates. In fact, leisure and hospitality employment reached a cyclical peak in January 2008, 1 month after the start of the recession, and fell to a cyclical trough in January 2010, 7 months after the end of the recession.³ The industry employment peak coincided with the peak in total nonfarm employment, while the industry employment trough preceded the trough in total nonfarm employment by 1 month.

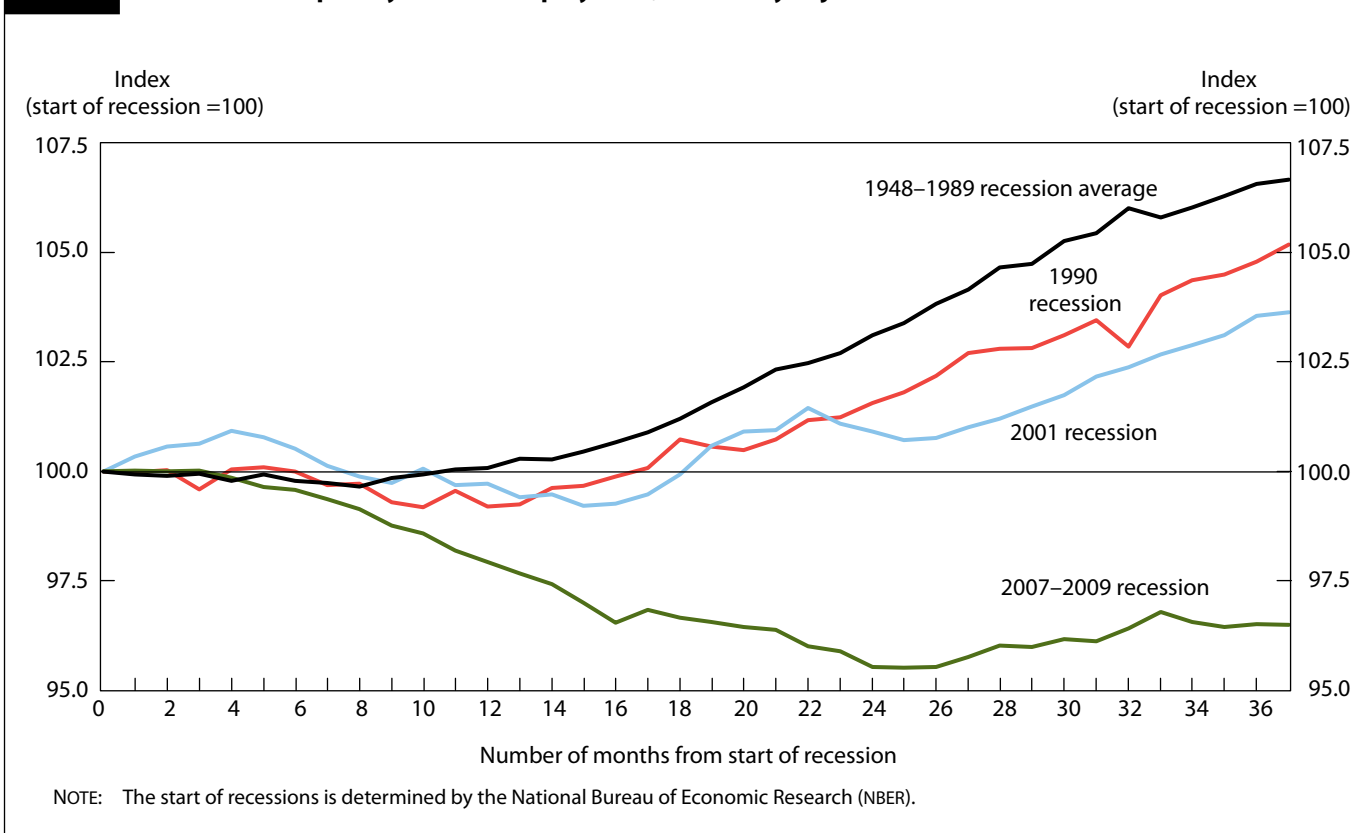
Compared with the previous 2 recessions, the 2007–09 recession had a sizeable impact on employment in the leisure and hospitality industry. The reduction in jobs during the 2007–09 recession, as a percentage of pre-recession employment, was significantly greater than during the 1990–91 and 2001 recessions. Employment in leisure and hospitality fell by more than 2.2 percent on an annualized

basis during the 2007–09 recession. By contrast, the annualized decline in employment during both the 1990–91 and 2001 recessions was roughly 0.4 percent.

Chart 1 shows the pace of job losses during post-World War II recessions. The eight recessions before 1989 had little discernable impact on employment in the leisure and hospitality industry. While the broader economy shed jobs during those economic downturns, employment in leisure and hospitality tended to hold steady. After 1989, however, employment in leisure and hospitality began to track cyclical changes in overall economic activity more closely. In both the 1990–91 and 2001 recessions, employment in leisure and hospitality fell and did not fully recover to pre-recession levels until about a year and a half after the start of the recessions. (Both recessions lasted 8 months and total nonfarm employment continued to decline after the end of both recessions.) By the end of the 2007–09 recession, leisure and hospitality employment was 3.5 percent below its pre-recession level. As of January 2011, a full 37 months after the start of the recession, employment in the industry was still 3.5 percent below its pre-recession level.

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Chart 1. Leisure and hospitality index of employment, seasonally adjusted



During the 2007–09 recession, a little more than half of the decline in leisure and hospitality employment was in the food services and drinking places subsector, where 230,000 jobs were lost. (See chart 2). Accommodation employment lost 129,000 jobs, or more than 28 percent of all jobs lost in leisure and hospitality, while arts, entertainment, and recreation shed 95,000 jobs, or nearly 21 percent of the industry total. The remainder of this article analyzes the employment changes that occurred during the 2007–09 recession in each of these industries.

Food services and drinking places

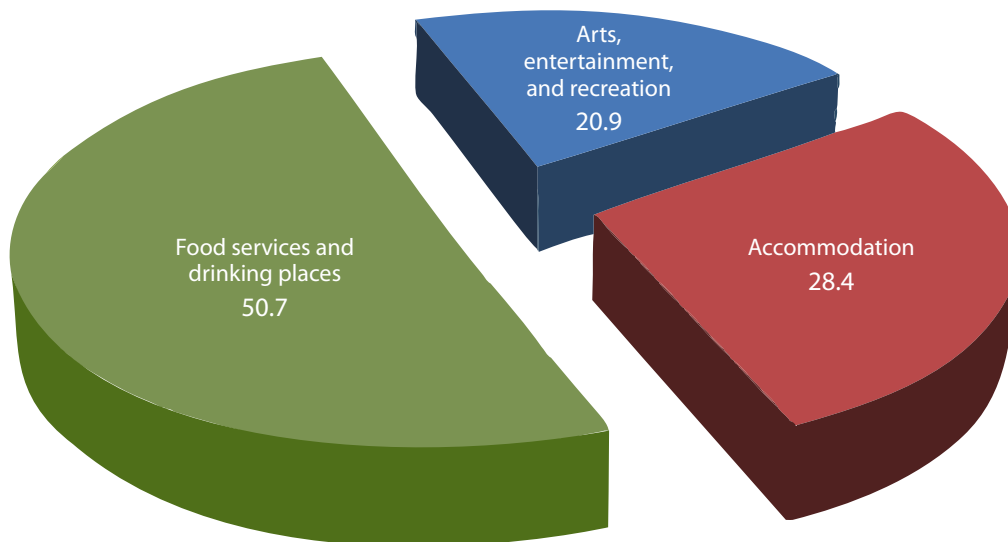
From January 1990 to December 2007, food services and drinking places generated nearly three out of every four jobs gained in leisure and hospitality. Employment in the food services and drinking places subsector fell for 3 or more consecutive months only once between 1990 and 2007. In contrast, during the 2007–09 recession, the subsector experienced 10 consecutive months

of job losses. From the onset of the recession in December 2007 until August 2008, food services and drinking places lost an average of 8,000 jobs per month. When the financial crisis deepened in September 2008, monthly job losses in the subsector accelerated.⁴ From September 2008 to December 2009, food services and drinking places lost an average of 18,000 jobs per month. Altogether, food services reduced its workforce 3.8 percent during the December 2007 to December 2009 period. Since January 2010, food services and drinking places had recovered 97,000 jobs⁵ but remained 2.7 percent below its peak employment level, which was posted in December 2007.

Employment declines in food services roughly coincided with declines in seasonally adjusted real personal consumption expenditures on food services, as measured by the Bureau of Economic Analysis. (See table 1.) Changes in subsector employment also roughly tracked with changes in retail sales at food services and drinking places, as measured by the U.S. Census Bureau and deflated by the BLS Consumer Price Index.⁶ The sales and employment data series reflect the close correlation between consumer spending on leisure and hospitality services and employment in the industry.

Chart 2. Distribution of leisure and hospitality employment decline during the 2007–09 recession

Percent



Accommodation

Accommodation lost 6.8 percent of its workforce during the 2007–09 recession, which was the largest percentage decline in employment of any subsector within the leisure and hospitality industry. Although employment in accommodation accounts for only about 14 percent of total industry employment, it contributed close to one third of the job losses during the 2007–09 recession.

The decline in accommodation employment coincided with a decrease in demand for the subsector's services during the recession. Real personal consumption expenditures on accommodations fell 6.5 percent from December 2007 to March 2009, reflecting wide-scale cutbacks in domestic business and leisure travel during the recession. In addition, international visitation to the United States declined sharply from the fourth quarter of 2008 to the third quarter of 2009.⁷

Arts, entertainment, and recreation

The arts, entertainment, and recreation sector⁸ lost 4.8 percent of its jobs during the 2007–09 recession. Em-

ployment in the sector reached a peak in March 2008, 3 months after the official start of the recession, and then declined until reaching a trough in January 2010. Over the course of the year, sector employment showed little net change. The sector's largest subsector—amusements, gambling and recreation—accounted for 80 percent of the decline. This subsector made up 72.5% of arts, entertainment, and recreation employment at the start of the recession and lost proportionately more jobs than the other two industry subsectors, performing arts and spectator sports, and museums, historical sites, zoos, and parks.

THE DEPTH AND DURATION OF JOB LOSSES in the leisure and hospitality industry during the 2007–09 recession was without precedent in the post-WWII era. Declines in food services and drinking places employment, a subsector which had contributed the majority of the job gains posted by leisure and hospitality between 1990 and 2007, accounted for half of the leisure and hospitality jobs lost during the recession. □

Table 1. Leisure and hospitality employment and real personal consumption expenditures, over-the-quarter changes, seasonally adjusted, fourth quarter 2007–second quarter 2009

| Industry subsector | 2007 | 2008 | | | | 2009 | |
|---|------------|-----------|------------|-------------|------------|-----------|------------|
| | Quarter IV | Quarter I | Quarter II | Quarter III | Quarter IV | Quarter I | Quarter II |
| Change in employment (in thousands) ¹ | | | | | | | |
| Arts, entertainment, and recreation | 21 | 6 | -14 | -36 | 4 | -15 | -40 |
| Accommodation | 19 | 7 | -15 | -23 | -31 | -48 | -18 |
| Food services and drinking places | 45 | -12 | -31 | -49 | -86 | -62 | 10 |
| Change in real personal consumption expenditures (in millions of dollars) ² | | | | | | | |
| Recreation services | 39 | -298 | -1,108 | -4,027 | -3,128 | 434 | -2,500 |
| Accommodations | 2,027 | 588 | 1,249 | -891 | -2,507 | -2,639 | -234 |
| Food services | 3,254 | -8,086 | 716 | -3,973 | -7,282 | -3,516 | -4,743 |

¹ Employment data are from the Current Employment Statistics (CES) program, a BLS monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites.

² Personal consumption expenditures data are from the Bureau of Economic Analysis. See National Income and Product Accounts Underlying

Detail Table 2.4.6U, “Real Personal Consumption Expenditures by Type of Product, Chained Dollars [Millions of chained (2005) dollars; quarters and months are seasonally adjusted at annual rates],” http://www.bea.gov/national/nipaweb/nipa_underlying/SelectTable.asp.

SOURCE: Bureau of Labor Statistics and Bureau of Economic Analysis.

Notes

¹ Consists of North American Industry Classification System (NAICS) sector 71 (arts, entertainment and recreation) and NAICS sector 72 (accommodation and food services); the leisure and hospitality supersector will be referred to as an “industry” throughout this article.

² The employment data used in this article are from the BLS Current Employment Statistics (CES) program, a monthly survey of about 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. For more information on the program’s concepts and methodology, see “Technical Notes to Establishment Survey Data Published in Employment and Earnings,” www.bls.gov/web/cestn2.htm (visited Feb. 17, 2011). CES data are available at www.bls.gov/ces (visited Feb. 17, 2011). The CES data used in this article are seasonally adjusted.

³ Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in July 2009. The previous two recessions were from March 2001 to November 2001 and from July 1990 to March 1991. For a complete list of business cycle dates, consult the NBER webpage at www.nber.org/cycles/cyclesmain.html (visited Nov. 2, 2010).

⁴ For a more complete overview of financial activities employment trends during the 2007–09 recession, see George Prassas, “Employment in financial activities: double billed by housing and financial crises,” *Monthly Labor Review*, this issue, pp. 40–44, www.bls.gov/opub/mlr/2011/04/art7full.pdf.

⁵ For an overview of overall employment trends during the 2007–09 recession, see John Eddlemon, “Payroll employment turns the corner in 2010,” *Monthly Labor Review*, March 2011, pp. 23–32, www.bls.gov/opub/mlr/2011/03/art2full.pdf.

⁶ By deflating the Census data with CPI data, the effects of menu price increases on the changes in retail sales in food services and drinking places are removed. The seasonally adjusted “food away from home” component of the CPI-U for all U.S. cities was used to measure real personal consumption expenditures.

⁷ Reference is to data released by the Department of Commerce’s Office of Travel and Tourism Industries. See “2008 Monthly Tourism Statistics,” Table C and “2009 Monthly Tourism Statistics,” Table C.

⁸ The arts, entertainment, and recreation sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their patrons. As defined by NAICS, this sector comprises (1) establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and (3) establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

The decline in work hours during the 2007–09 recession

Average weekly hours for employees in private industry decreased across all industries; hours were pulled down further as a result of heavy job losses in industries with above-average workweeks

Steven Kroll

The average workweek for all employees on private nonagricultural payrolls decreased by 0.9 hour during the December 2007–June 2009 recession. Aggregate weekly hours, the product of employment and average weekly hours, fell even more. Both the workweek and aggregate hours peaked 6 months prior to the business cycle, which reached its high point in June 2007. Average weekly hours bottomed out in June 2009; however, aggregate weekly hours lagged the end of the recession, with its trough not occurring until October 2009.¹ (See chart 1.) Goods-producing industries experienced steeper declines in both job loss and the average workweek than their private service-providing counterparts.

Hours data for all employees were first published in 2007, so such data cannot be used to compare the 2007–09 recession with past recessions. Hours and employment of production and nonsupervisory employees (together, production workers), who represent about 80 percent of all employees, allow historical comparisons back to 1964. As in previous recessions, in the recent recession goods-producing industries experienced steeper employment losses and sharper declines in the average weekly hours of production workers than did service-providing industries. Still, although less sensitive to the most recent cyclical downturn than the goods-producing sector, the private service-providing sector exhibited substantially

greater reductions in hours for production workers than in past recessions. Indeed, decreases in aggregate weekly hours in service industries were 4 times greater than in any previous recession dating back to 1973.

As 2010 came to a close, neither the average workweek nor aggregate weekly hours had recovered to their prerecession levels.

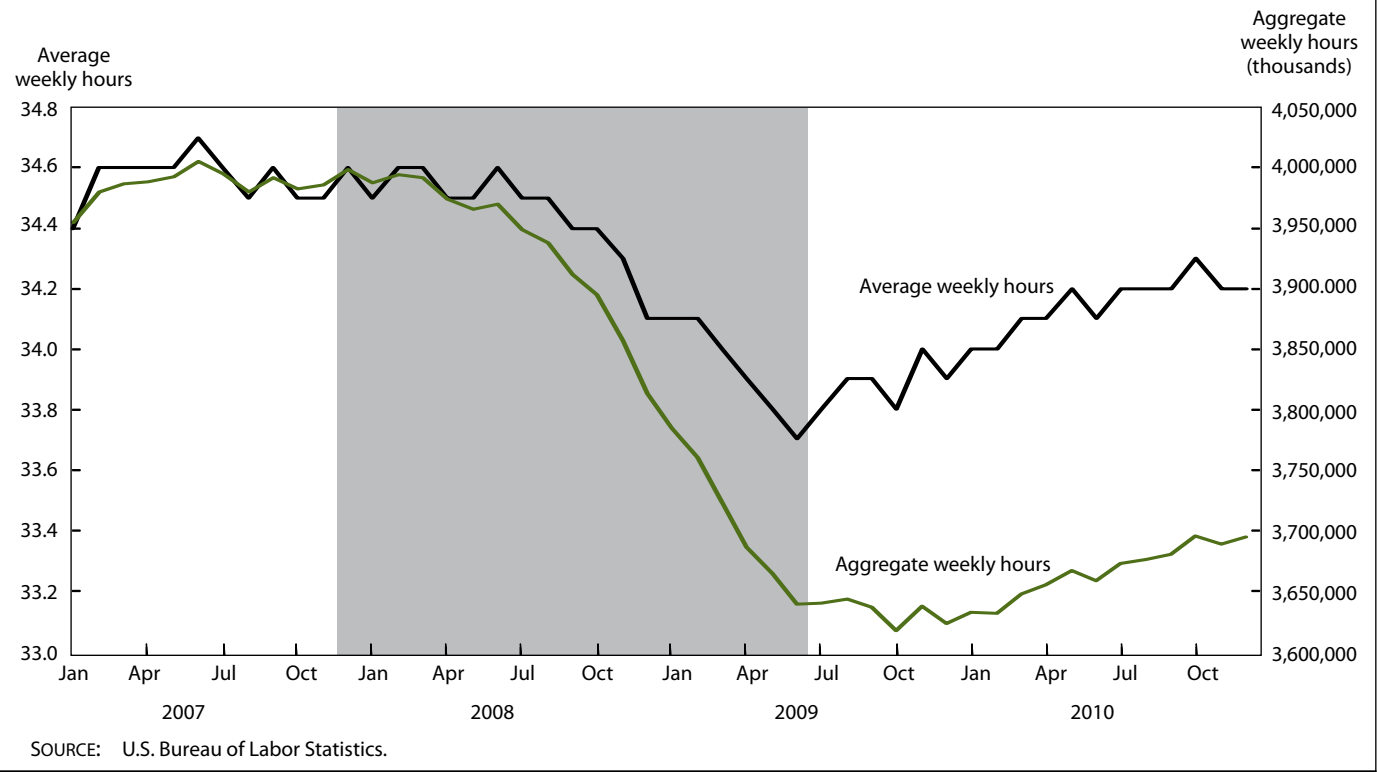
Hours and the business cycle

Average weekly hours of production workers in manufacturing are viewed as a leading indicator in the business cycle. In theory, when demand for their goods or services changes, businesses are more likely to adjust worker hours before hiring or laying off workers. Therefore, changes in average weekly hours can signal increases or decreases in overall economic activity. Average weekly hours of production workers in manufacturing are currently a component of the leading index published by The Conference Board.²

Aggregate weekly hours of all employees are defined as the product of average weekly hours of all employees and total number of employees.³ The total number of employees is currently a component of the coincident index published by The Conference Board. Because aggregate weekly hours are weighted by employment, they exhibit a tendency to move coincidentally with the business cycle.

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Chart 1. Average weekly hours and aggregate weekly hours, all private employees, seasonally adjusted, January 2007–December 2010



Industry-level analysis of aggregate weekly hours helps to identify the industries that drive changes to the top-level estimate of the average number of hours in the workweek. Changes in this average at the total private level are driven by changes in industries' employment levels and average workweek hours. When workers employed in industries with higher-than-average workweek hours are laid off disproportionately, all else remaining equal, the loss of their hours applies downward pressure on total hours worked in private industry during the workweek. Conversely, when workers are laid off in industries with lower-than-average workweeks, upward pressure is applied to the total private estimate. Finally, if all employees, on average, are getting paid for fewer work hours, downward pressure on total private hours is applied.⁴

Drop in hours during the recession

During the 2007–09 recession, average weekly hours for all employees on private nonagricultural payrolls decreased by 0.9 hour, or 2.6 percent, while aggregate weekly hours fell more steeply, by 9.1 percent. (See table 1.) The goods-producing sector experienced significant declines

in both average weekly hours and employment levels. Because total private average weekly hours are weighted by industry employment, both the very large employment losses and the decreases in the workweek in goods-producing industries pulled down the average workweek for all private sector industries.

Average weekly hours for construction fell by 1.1 hours. Although construction experienced the smallest reduction in average weekly hours among goods-producing industries during the recession, heavy job losses in the sector led to the largest relative reduction in aggregate weekly hours in the economy: total weekly hours in construction dropped by 22.1 percent. Aggregate weekly hours in construction declined 31.1 percent from a peak in December 2006 to a trough in February 2010.

Average weekly hours for manufacturing fell by 1.5 hours, or 3.7 percent, during the recession. From peak to trough, aggregate weekly hours decreased substantially more, by 17.8 percent, more than one-quarter of the decrease in aggregate weekly hours for the entire economy. Close to three-quarters of the reduction in aggregate weekly hours for manufacturing occurred in durable goods industries, in which transportation equipment, machin-

Table 1. Changes in employment and hours, all employees, by industry, December 2007– June 2009

| Industry | All employees | | | Average weekly hours | | | Aggregate hours | | |
|---|-----------------------------|----------------|--------------------------------|----------------------|-----------------|----------------|-----------------------------|----------------|--------------------------------|
| | Change in level (thousands) | Percent change | Change in percent distribution | December 2007 level | Change in level | Percent change | Change in level (thousands) | Percent change | Change in percent distribution |
| Total private..... | -7,670 | -6.6 | 100.0 | 34.6 | -0.9 | -2.6 | -362,525 | -9.1 | 100.0 |
| Goods producing | -3,550 | -16.2 | 46.3 | 39.7 | -1.4 | -3.5 | -166,719 | -19.1 | 46.0 |
| Mining and logging..... | -54 | -7.3 | .7 | 44.3 | -2.5 | -5.6 | -4,107 | -12.5 | 1.1 |
| Construction | -1,484 | -19.8 | 19.3 | 38.3 | -1.1 | -2.9 | -63,440 | -22.1 | 17.5 |
| Manufacturing | -2,012 | -14.6 | 26.2 | 40.2 | -1.5 | -3.7 | -98,474 | -17.8 | 27.2 |
| Service providing | -4,120 | -4.4 | 53.7 | 33.4 | -.6 | -1.8 | -191,320 | -6.1 | 52.8 |
| Wholesale trade | -458 | -7.6 | 6.0 | 38.4 | -.6 | -1.6 | -20,939 | -9.0 | 5.8 |
| Retail trade..... | -1,047 | -6.7 | 13.7 | 31.7 | -.6 | -1.9 | -41,922 | -8.5 | 11.6 |
| Transportation and warehousing | -333 | -7.3 | 4.3 | 38.5 | -.5 | -1.3 | -14,928 | -8.5 | 4.1 |
| Utilities..... | 4 | .6 | .0 | 42.1 | -1.6 | -3.8 | -745 | -3.2 | .2 |
| Information..... | -229 | -7.6 | 3.0 | 36.3 | .1 | .3 | -8,033 | -7.3 | 2.2 |
| Financial activities..... | -473 | -5.8 | 6.2 | 36.6 | -.3 | -.8 | -19,637 | -6.5 | 5.4 |
| Professional and business services..... | -1,608 | -8.9 | 21.0 | 35.3 | -.3 | -.8 | -61,696 | -9.7 | 17.0 |
| Education and health services | 619 | 3.3 | -8.1 | 33.6 | -.8 | -2.4 | 5,459 | .9 | -1.5 |
| Leisure and hospitality | -454 | -3.4 | 5.9 | 26.1 | -.6 | -2.3 | -19,700 | -5.6 | 5.4 |
| Other services..... | -140 | -2.5 | 1.8 | 32.7 | -1.2 | -3.7 | -11,027 | -6.1 | 3.0 |

SOURCE: U.S. Bureau of Labor Statistics.

ery, and fabricated metal in turn accounted for more than half of the decrease in hours. The sharp drop in aggregate weekly hours for durable goods industries is attributable to large cuts in payroll employment. Employment in transportation equipment fell in excess of 20 percent during the recent recession, the largest net reduction in aggregate hours in durable goods and the decline that contributed the most to employment losses in manufacturing.⁵

Among nondurable industries, the steepest decline was experienced in plastics and rubber products manufacturing, which accounted for one-quarter of the reduction in aggregate hours in those industries. Primarily responsible for the fall in aggregate weekly hours in plastics and rubber products manufacturing were decreases in employment.

For production workers in manufacturing, average weekly hours fell by 1.5 hours (see table 2), at least twice the drop posted in each of the previous two recessions. Historically viewed as a leading economic indicator of the business cycle, the workweek for manufacturing production workers was not as prescient a harbinger of the most recent recession: average weekly hours did not consistently fall below the 2007 average until September 2008, a full

9 months after the beginning of the recession.

Within service-providing industries, utilities and other services (repair services, personal services, and membership organizations) experienced the largest nominal and relative declines in average weekly hours. Among private service-providing industries, the information sector experienced no reduction in the average workweek during the recession.

Service industry employers responded in different ways to meet their labor needs during the recession. In some industries, employers were more likely to shorten the workweek and maintain their payroll employment levels; in others, employers trimmed employment. For example, the average workweek for professional and business services was shortened by 0.8 percent, but aggregate hours dropped by 9.7 percent, the largest decline within the private service sector. (See table 1.) The large drop in aggregate weekly hours relative to the small decrease in average weekly hours illustrates employers' tendency to cut payroll employment rather than hours. Retail trade, wholesale trade, financial activities, and transportation and warehousing also exhibited this trend.

Elsewhere in the service-providing sector, other industries relied more on reduced hours than on laying off personnel. Although average weekly hours in utilities dropped 3.8 percent, employment held relatively steady and aggregate weekly hours fell by only 3.2 percent, the smallest decline among service industries. Within private education and health services, job gains more than offset decreases in the workweek, resulting in increases in aggregate hours.

Among the service-providing industries, aggregate weekly hours fell by 9.7 percent, accounting for more than one-sixth of the decrease in private sector hours during the recession. Employment services, architectural and engineering services, and services to building and dwellings contributed most to the decline.

Financial activities experienced a small decrease in the average workweek during the recent recession. Declines in aggregate weekly hours were attributable primarily to decreases in employment. Credit intermediation and related activities accounted for more than one-half of the decrease in aggregate weekly hours for financial activities from December 2007 to June 2009.

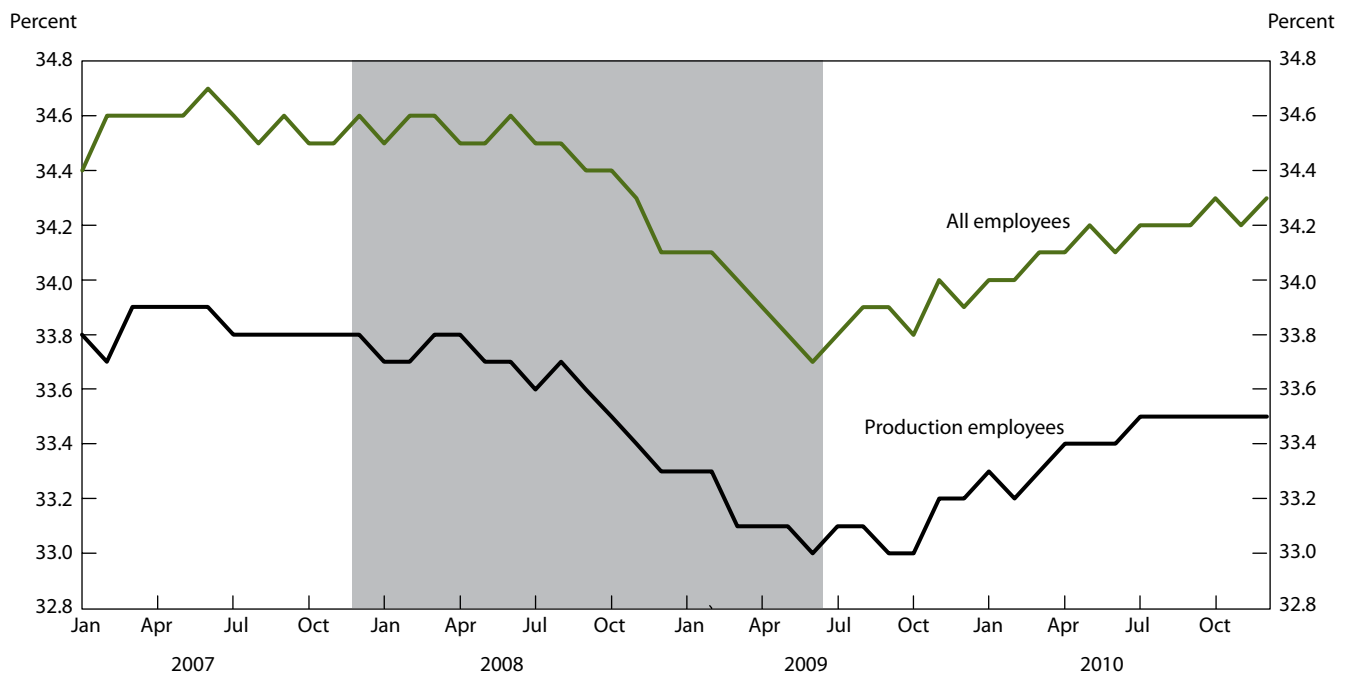
Three recessions compared

Hours data for all employees start in 2006; therefore, such data cannot be used to compare the 2007–09 recession with past recessions. Fortunately, monthly changes in average weekly hours for all employees track changes in average weekly hours for production workers. (See chart 2.) Because production workers are about 80 percent of all employees, historical comparisons of hours data for these workers can be made back to 1964.

Reductions in average weekly hours for production workers were greater during the 2007–09 recession than during the 1990–91 recession or the 2001 recession. The average workweek for all such workers in private industry declined 2.1 percent, far more than the drop of 0.9 percent experienced during each of the two earlier recessions.

Holding to historical trends, decreases in average weekly hours for goods-producing industries during the 2007–09 recession were substantially greater than the decreases in hours of most of their service-providing counterparts. However, the average workweek for the private service-providing sector did fall more in the 2007–09

Chart 2. Average weekly hours, all employees and production employees, seasonally adjusted, January 2007–December 2010



SOURCE: U.S. Bureau of Labor Statistics.

recession than during the earlier two downturns. The average workweek in the service sector fell by 0.3 percent during the 1990–91 recession; the drop quadrupled to 1.2 percent in the most recent recession. Comparing hours in service-producing industries in all three recessions reveals that, among the service-producing industries, the percent decrease in the workweek for education and health services, transportation and warehousing, and the catchall category of other services was greater in the 2007–09 recession than in the other two recessions.

Professional and business services exhibited a smaller drop in average weekly hours during the 2007–09 recession than during the 2001 recession. However, when job loss is taken into account, aggregate weekly hours for production workers in professional and business services fell by 9.7 percent in the recent recession, the greatest percent loss among all private service industries and a larger decline than in all other recessions.

Interesting trends emerge from a comparison of the decreases in aggregate weekly hours by industry for the three recessions. (See table 3.) Financial activities, a prominent player in the most recent recession, was not immune from the business cycle: from December 2007

to June 2009, aggregate hours in the industry decreased by 4.4 percent, much weaker than the modest growth seen in the previous two recessions. In the construction and retail trade industries, the fall in aggregate weekly hours during the 2007–09 recession was greater than the 1990–91 decline in each of those industries and greater still than the decreases they experienced during the 2001 recession.

The industries that brought down the total private average workweek during the most recent recession were mostly the same ones that did so in the past. Manufacturing, construction, professional and business services, and retail trade were largely responsible for the decrease in the workweek in both the 2007–09 recession and the 1990–91 recession. Manufacturing and professional and business services accounted for a majority of the fall in total private average weekly hours during the 2001 recession.

Work hours after the recession

Since reaching a trough of 33.7 hours in October 2009, the average number of hours worked per week by all pri-

Table 2. Changes in employment and hours, all nonsupervisory and production employees, by industry, December 2007–June 2009

| Industry | Production employees | | | Average weekly hours | | | Aggregate hours | | |
|--|-----------------------------|----------------|--------------------------------|----------------------|-----------------|----------------|-----------------------------|----------------|--------------------------------|
| | Change in level (thousands) | Percent change | Change in percent distribution | December 2007 level | Change in level | Percent change | Change in level (thousands) | Percent change | Change in percent distribution |
| Total private..... | -6,463 | -6.8 | 100.0 | 33.8 | -0.8 | -2.4 | -289,548 | -9.0 | 100.0 |
| Goods producing | -3,012 | -18.5 | 46.6 | 40.6 | -1.6 | -3.9 | -143,502 | -21.7 | 49.6 |
| Mining and logging..... | -54 | -9.7 | .8 | 45.9 | -2.8 | -6.1 | -3,892 | -15.2 | 1.3 |
| Construction | -1,245 | -21.5 | 19.3 | 39.1 | -1.5 | -3.8 | -55,505 | -24.5 | 19.2 |
| Manufacturing | -1,713 | -17.3 | 26.5 | 41.1 | -1.5 | -3.6 | -82,711 | -20.3 | 28.6 |
| Service providing | -3,451 | -4.4 | 53.4 | 32.4 | -.4 | -1.2 | -142,058 | -5.5 | 49.1 |
| Wholesale trade | -399 | -8.2 | 6.2 | 38.2 | -.6 | -1.6 | -17,948 | -9.6 | 6.2 |
| Retail trade..... | -919 | -6.9 | 14.2 | 30.1 | -.3 | -1.0 | -31,412 | -7.8 | 10.8 |
| Transportation and warehousing..... | -286 | -7.2 | 4.4 | 36.8 | -1.1 | -3.0 | -14,567 | -10.0 | 5.0 |
| Utilities | 6 | 1.4 | -.1 | 42.8 | -1.0 | -2.3 | -190 | -1.0 | .1 |
| Information..... | -179 | -7.4 | 2.8 | 36.3 | .1 | .3 | -6,274 | -7.2 | 2.2 |
| Financial activities..... | -308 | -4.9 | 4.8 | 35.7 | .2 | .6 | -9,798 | -4.4 | 3.4 |
| Professional and business services | -1,467 | -9.9 | 22.7 | 34.8 | -.1 | -.3 | -52,392 | -10.1 | 18.1 |
| Education and health services... | 610 | 3.8 | -9.4 | 32.6 | -.4 | -1.2 | 13,156 | 2.5 | -4.5 |
| Leisure and hospitality | -406 | -3.4 | 6.3 | 25.3 | -.6 | -2.4 | -17,210 | -5.7 | 5.9 |
| Other services..... | -103 | -2.2 | 1.6 | 30.9 | -.5 | -1.6 | -5,430 | -3.8 | 1.9 |

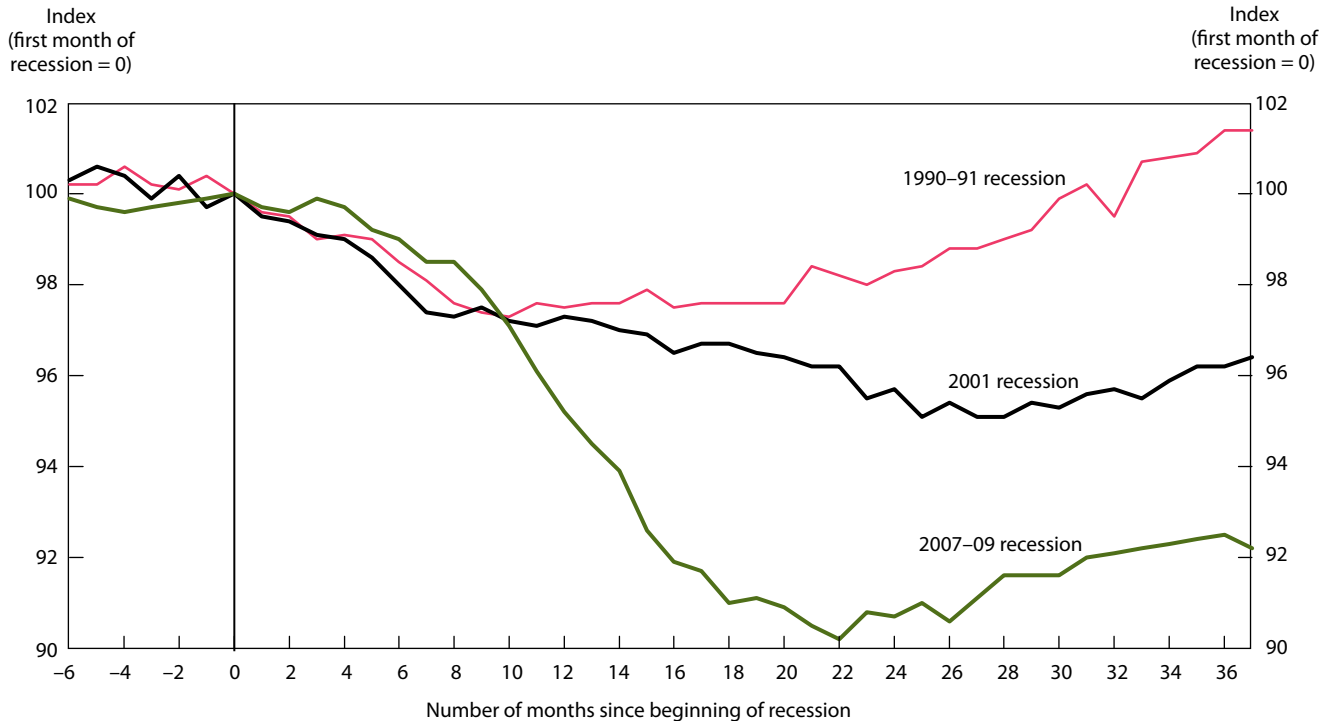
SOURCE: U.S. Bureau of Labor Statistics.

Table 3. Changes in aggregate weekly hours of nonsupervisory and production employees from beginning to end of recession, three recessions, by industry, 1990–2009

| Industry | 1990–91 recession | | | 2001 recession | | | 2007–09 recession | | |
|---|-----------------------------|----------------|--------------------------------|-----------------------------|----------------|--------------------------------|-----------------------------|----------------|--------------------------------|
| | Change in level (thousands) | Percent change | Change in percent distribution | Change in level (thousands) | Percent change | Change in percent distribution | Change in level (thousands) | Percent change | Change in percent distribution |
| Total private..... | -59,804 | -2.4 | 100.0 | -83,170 | -2.7 | 100.0 | -289,548 | -9.0 | 100.0 |
| Goods producing | -41,396 | -6.0 | 69.2 | -45,494 | -6.3 | 54.7 | -143,502 | -21.7 | 49.6 |
| Mining and logging..... | -445 | -1.8 | .7 | -496 | -2.4 | .6 | -3,892 | -15.2 | 1.3 |
| Construction | -13,799 | -8.8 | 23.1 | -4,184 | -2.0 | 5.0 | -55,505 | -24.5 | 19.2 |
| Manufacturing | -26,924 | -5.2 | 45.0 | -41,284 | -8.4 | 49.6 | -82,711 | -20.3 | 28.6 |
| Service providing | -13,419 | -.7 | 22.4 | -35,542 | -1.5 | 42.7 | -142,058 | -5.5 | 49.1 |
| Wholesale trade | -1,671 | -1.0 | 2.8 | -4,593 | -2.6 | 5.5 | -17,948 | -9.6 | 6.2 |
| Retail trade..... | -9,233 | -2.7 | 15.4 | -4,102 | -1.0 | 4.9 | -31,412 | -7.8 | 10.8 |
| Transportation and warehousing..... | -1,281 | -1.2 | 2.1 | -8,127 | -5.8 | 9.8 | -14,567 | -10.0 | 5.0 |
| Utilities | -191 | -.8 | .3 | -451 | -2.2 | .5 | -190 | -1.0 | .1 |
| Information..... | -206 | -.3 | .3 | -3,090 | -3.3 | 3.7 | -6,274 | -7.2 | 2.2 |
| Financial activities..... | 316 | .2 | -.5 | 1,428 | .7 | -1.7 | -9,798 | -4.4 | 3.4 |
| Professional and business services..... | -6,445 | -2.1 | 10.8 | -26,103 | -5.5 | 31.4 | -52,392 | -10.1 | 18.1 |
| Education and health services | 9,900 | 3.2 | -16.6 | 11,434 | 2.6 | -13.7 | 13,156 | 2.5 | -4.5 |
| Leisure and hospitality | -3,642 | -1.7 | 6.1 | -5,065 | -1.8 | 6.1 | -17,210 | -5.7 | 5.9 |
| Other services..... | -650 | -.6 | 1.1 | 2,097 | 1.5 | -2.5 | -5,430 | -3.8 | 1.9 |

SOURCE: U.S. Bureau of Labor Statistics.

Chart 3. Index of aggregate weekly hours, all private nonsupervisory and production employees, seasonally adjusted



SOURCE: U.S. Bureau of Labor Statistics.

vate sector employees has rebounded to 34.3 hours, or 0.4 hour below the level observed at the start of the recession. In response to the increase in economic activity seen since the third quarter of 2009, employers have exhibited a tendency to extend the average workweek, as opposed to expanding payroll employment to match increased

demand.⁶ Still, even with the steady progress of average weekly hours now being made toward reaching prerecession levels, growth in aggregate weekly hours has been much slower: through December 2010, aggregate weekly hours remained 7.7 percent below the December 2007 level. (See chart 3.) □

Notes

¹ Recessions are identified by the National Bureau of Economic Research (NBER). For information, see “Information on Recessions and Recoveries, the NBER Business Cycle Dating Committee, and related topics” (Cambridge, MA, National Bureau of Economic Research, updated daily), <http://www.nber.org/cycles/main.html> (visited Dec. 13, 2010). The data on employment, hours, and earnings used in this article are from the Current Employment Statistics (CES) survey, a monthly survey of about 140,000 nonfarm businesses and government agencies representing about 440,000 establishments. For more information on the survey’s concepts and methodology, see *BLS Handbook of Methods*, chapter 2, “Employment, Hours, and Earnings from the Establishment Survey” (U.S. Bureau of Labor Statistics, no date), <http://www.bls.gov/opub/hom/pdf/homch2.pdf> (visited Dec. 13, 2010). To access CES data, see “Current Employment Statistics - CES (National)” (U.S. Bureau of Labor Statistics, no date), <http://www.bls.gov/ces> (visited Dec. 13, 2010). Data used in this article are seasonally adjusted unless otherwise noted.

² The Conference Board is a global, independent business membership and research association. To access the Board’s coincident and leading index data, see “Global Business Cycle Indicators,” <http://www.conference-board.org/data/bcicountry.cfm?cid=1> (visited Apr. 11, 2011).

The Bureau of Labor Statistics produces data on hours and earnings of production and nonsupervisory employees in the private sector. The definition of “production and nonsupervisory employees” varies by industry. Employment, hours, and earnings estimates are for production employees in manufacturing and in mining and logging, construction workers in construction, and nonsupervisory employees in private

service-providing industries. Production workers as a percentage of all workers have remained fairly constant, at about 80 percent over the years. Therefore, it is safe to assume that employment trends of production workers track overall employment trends in each industry supersector. (See chart 2; see also *North American Industry Classification System: United States, 1997* (U.S. Census Bureau, 1997), and *North American Industry Classification System, 2002* (U.S. Census Bureau, 2002), for a definition of “supersector.”)

³ Aggregate weekly hours for production workers are defined analogously to aggregate weekly hours for all employees. Aggregate weekly hours for production workers is the product of average weekly hours for production workers and number of production workers.

⁴ Material on the industry-level analysis of hours in this paragraph is taken largely from Julie Hatch Maxfield, “Jobs in 2005: How do they compare with their March 2001 counterparts,” *Monthly Labor Review*, July 2006, pp. 15–26 (see especially pp. 17–18), <http://www.bls.gov/opub/mlr/2006/07/art2full.pdf>.

⁵ For more information about employment in manufacturing, see Megan M. Barker, “Manufacturing employment hard hit during the 2007–09 recession,” this issue, pp. 28–33.

⁶ The Bureau of Economic Analysis produces and publishes estimates of gross domestic product. Real gross domestic product has been increasing steadily since the third quarter of 2009. For more information, see “National Income and Product Accounts Table” (Bureau of Economic Analysis, Mar. 25, 2011), <http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=5&FirstYear=2009&LastYear=2010&Freq=Qtr>.

Consumer Expenditure Survey Microdata Users' Workshop, July 2010

Geoffrey Paulin

The Consumer Expenditure Survey (CE) is the most detailed source of expenditures, demographics, and income data collected by the Federal Government. The data are collected in two component surveys: the Quarterly Interview Survey (henceforth referred to as the Interview Survey) and the Diary Survey. Each year, the CE program releases microdata from these surveys; these microdata are used by researchers in a variety of areas, including academia, government, market research, and other private industry.

Since 2006, the Division of Consumer Expenditure Surveys (DCES) has conducted an annual workshop each July for users of the CE microdata. Held in the conference facilities of the Bureau of Labor Statistics (BLS) headquarters in Washington, D.C., the workshops have included speakers demonstrating features of the data, as well as reports from researchers who have used these data in their work. Each year, the format has changed to incorporate suggestions from participants, but the basic framework has remained intact.

In July 2009, the program was expanded from two days to three 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 especially for more experienced users. The program was arranged in this way to accommodate as many potential participants as possible. That is, any attendee could participate in one, two, or all three days of the workshop and benefit from sessions geared toward his or her expertise.

July 2010 workshop

The July 2010 workshop featured a slightly different format. Because of comments from the 2009 workshop, research presentations were spread out over the three days. Nevertheless, the training and data-descriptive sessions were organized progressively so that participants could attend the combination of days appropriate to their levels of expertise in using the data. The speakers at the workshop did an excellent job presenting not just results of their work, but processes used, problems or data limitations encountered and how they were handled, and other practical considerations.

Finally, a new feature called “meet with an expert” was initiated. In this feature, participants had the opportunity to make one-on-one appointments with an expert data user from the staff of the Consumer Expenditure Survey program for an in-depth discussion about their specific or general questions regarding the data or its uses. Several participants did so.

First day. The first day of the 2010 workshop opened with an overview of the CE, featuring topics such as how

the data are collected and published (Veri Crain). The overview was followed by a research presentation that combined data from the CE and the Consumer Price Index to discover whether changes in spending patterns at regional levels were due to price changes, population changes, or other factors (Cassandra Wirth, Midwest BLS Information Office in Chicago). Next was an introduction specifically to the microdata, including an explanation of its features (Bill Passero and Jeff Crilley), which was followed by a research presentation on estimation of wives' work-related costs in dual-earner households (Seonglim Lee, Sungkyunkwan University, South Korea). The afternoon included research presentations on expenditures for frozen and prepared meals (Megumi Omori, Bloomsburg University) and comparisons of charitable contributions by men and women (Sanae Tashiro, Rhode Island College). These presentations were followed by two practical hands-on training sessions with expert users from the DCES staff (Laura Paszkiewicz and Crilley); the presenters demonstrated appropriate use of the files and variables to obtain estimates while participants practiced together on shared laptops.¹

Second day. The second day began with presentations on advanced topics, including technical details about sampling methods and construction of sample weights (Catherine Hackett, Division of Price Statistical Methods), imputation and allocation of microdata (Troy Olson), and common questions

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about “calendar” versus “collection” period expenditures (Passero).² Following this, a practical training session described specific steps required to compute calendar year estimates, both unweighted and weighted (Paszkievicz and Crilley).

After a break for lunch, the afternoon opened with two research presentations. The first described expenditure patterns for low-income households, and estimated how eligibility for certain types of public assistance would differ under expenditure-based and income-based measures of poverty (James Mabli, Mathematical Policy Research, Inc.). This was followed by a presentation demonstrating specific programming code used in the computation of health care expenditures by Medicare households (Anthony Damico, The Kaiser Family Foundation). This presentation led naturally to the next practical training session, which covered procedures for merging data sets and then manipulating the results to compute statistical measures (Passero).

The day concluded with two presentations by BLS staff; the first was by Brian Baker and Casey Homan, editors of the *Monthly Labor Review*. Their presentation described the publication process from submission to printing for authors who were interested in having their works appear in this journal. Next came a brief “sneak peek” at changes to the microdata files that would occur with the release of the 2009 microdata, including a description of never-before-released “paradata” regarding the interview process itself, such as contact history and whether the interview was by personal visit or telephone (Steve Henderson).

Third day. The third day featured advanced topics: using data from participants in all four published inter-

views, rather than treating observations from each quarter independently (Passero); an explanation of how sales taxes are applied to expenditure reports during the data production process (Meaghan Smith, formerly Duetsch); proper use of imputed income data (Geoffrey Paulin); and proper use of sample weights in computing population estimates (Paulin). Specifically, the sample weights session noted that proper use of weights requires a special technique to account for sample design effects. If this technique is not employed, there will be incorrect estimates of variances and regression parameters.³ This session was followed by a research presentation on joint determination of life and health insurance (Ashish Kumar, State University of New York, Buffalo). The morning concluded with the workshop’s final practical training session, which featured discussion of a program included with the microdata for use in computing proper standard errors for means and regression results when using various kinds of data; unweighted non-income data; population-weighted non-income data; and multiply-imputed income data, both unweighted and population-weighted.

The afternoon started with two research presentations. The first described the use of the CE data as part of a transdisciplinary project studying obesity (Amanda Goldstein, Center for Rural Studies, University of Vermont). The second described work in progress by a researcher (Jeff Lundy, University of California, San Diego) who had recently been granted access to confidential data sets as part of the BLS “onsite researcher” program (<http://www.bls.gov/bls/blsresda.htm>). The research specifically investigates characteristics of consumers whose spending exceeds income, and analyzes them from a sociological

perspective. The day concluded with CE program staff soliciting feedback from the participants.

Future workshops

The next workshop will be held July 27–29, 2011. It will be free of charge to all participants, although advance registration is required. For more information about the 2010 and 2011 workshops, visit the CE website (<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 <http://www.bls.gov/cex/csxannualworkshop.htm>.

Abstracts of 2010 presentations

Following are abstracts of the papers read at the 2010 conference, listed in the order in which the papers were presented, and based on summaries written by their authors:

Household spending patterns by region. Cassandra Wirth (formerly Yocum), economist, Office of Field Operations, Midwest BLS Information Office in Chicago,⁴ Division of Economic Analysis and Information, presented “Household Spending Patterns: A Comparison of Four Census Regions.” This paper reviews expenditures made by households in selected areas within four regions of the United States as defined by the U.S. Census Bureau. Following a model previously published in the *Monthly Labor Review*, the author breaks down these aggregate expenditures into five categories of change that can impact total expenditures: population growth within a geographic region, changes in population concentrations among local areas within a geographic region, changes in the definitions

of goods and services as collected and priced by the Consumer Price Index (CPI), price changes, and quantity changes. For each region, the paper discusses some of the largest impacts of each component. The paper provides comparisons of results among regions for selected goods and services in each of the eight major groups of commodities and services used by the CPI.⁵

Earnings contributions of wives. Seonglim Lee, associate professor, Department of Consumer and Family Sciences, Sungkyunkwan University (Seoul, South Korea), presented “The estimation of wife’s work-related costs in dual earner households.” This paper evaluates wives’ earnings contributions to household income in dual-earner households and to household income class and mobility. This work-in-progress uses data from the 2002–03 Interview Surveys to compare expenditure patterns for selected goods and services when comparing husband/wife consumer units where the wife is working full-time with consumer units where the wife is not employed outside of the home.

The change in expenditures on frozen and prepared foods. Megumi Omori, assistant professor of sociology, Department of Sociology, Social Work, and Criminal Justice, Bloomsburg University, presented “Expenditure of Frozen and Prepared Meals: 1980–2008 Consumer Expenditure Diary Data.” According to the literature, as women’s labor force participation has increased, hours spent on household chores have decreased in the U.S. over the past three decades. The reduction in household chore hours is often attributed to an increase in the frequency of dining out. However, over the past several years, there is little evidence of an increase

in dining out: the mean frequency of weekly dining out was approximately 1.3 in 1990 and 1.25 in 2006. One way to reduce meal-related household chore hours, aside from dining out, is to use prepared and frozen foods. Very little research has been done to examine a possible change in the use of prepared and frozen food. By using the Consumer Expenditure Diary Survey, the study in progress tries to find expenditures of frozen and prepared meals since 1980. Specifically, the study uses Universal Classification Codes (UCCs) 180210 (frozen meals), 180220 (frozen prepared food), and 180710 (miscellaneous prepared foods). Because these codes have remained the same since 1980, the study is able to directly compare consumer unit expenditures on these items over a nearly three-decade span. Although the presentation included results of the research, the primary focus of the presentation was the methods and applications used in studying the data.

Few gender differences in philanthropic giving. Sanae Tashiro, assistant professor of economics, Rhode Island College, presented “Are Women More Generous Than Men? Evidence from the U.S. Consumer Expenditure Survey.” Using data from the 2006 CE, the paper tested hypotheses based on theories of human and social capital by examining whether gender, age, education, income, race, and ethnicity affect giving. As a result of comments from the workshop, the paper has been revised to include Heckman’s two-stage sample selection estimates, which show that gender differences in philanthropic behavior are non-existent. Education, annual income, wealth, and Hispanic ethnicity increase the probability of giving but have no effect on the actual donation amount. Estimates further show that

age and race interact with gender to affect differences in giving—older women are more likely than younger men to donate but give smaller shares of income, while White women, Black women, and Asian women are less likely to donate, and those who do give smaller dollar amounts than do women of other races.

Expenditures of low-income households. James Mabl of Mathematica Policy Research, Inc. presented “Low-Income Household Spending Patterns and Measures of Poverty,” which was coauthored by Laura Castner, project director. The presentation described expenditure patterns for low-income households, how eligibility for certain types of public assistance would be expected to differ under expenditure-based and income-based measures of poverty, and how the estimates were obtained using the CE Interview Survey. In their report, the authors examined how low-income households in 2005 allocated income across consumption categories. The authors compared expenditures of participants in the Supplemental Nutrition Assistance Program (SNAP)—the Federal transfer program formerly known as the Food Stamp Program—with data for two other groups of low-income households: those whose income made them eligible for SNAP but did not participate, and households whose income exceeded SNAP eligibility limits. For each of the three groups, the authors estimated how a small increase in income would be allocated across each consumption category, and analyzed how eligibility for SNAP could change if it were based on expenditures rather than income. In addition, the authors explored the use of savings and credit across the three groups.⁶

Purchases by Medicare recipients. An-

thony Damico, The Kaiser Family Foundation, presented “Health Care on a Budget: An Analysis of Spending by Medicare Households.” This presentation was designed to teach users how to define any population of interest from among the interview files and then rapidly produce graphs and charts about any expenditure category of interest. First, the presenter explained how to narrow expenditure categories to only the ones of interest. A researcher might be interested in apparel and services, alcoholic beverages, or education; although the presentation used healthcare as an example, a few nominal changes allow analysis of other categories of interest. Second, by making some minor edits to the SAS program included with the data set in the SAS programs folder—“Intrvw Mean and SE.sas”—one can limit the output to only the expenditures of interest, and the output can be broken out by any demographic group that one can identify by the family files. Third, in order to increase the number of ways to identify demographic groups, this presentation reviewed how to merge the family files with some of the other interview files. After completing those three steps, the researcher will have an output file containing the expenditure categories that he or she is most interested in, broken down and filtered according to precise analytic needs. Again, the example used was household healthcare expenditure categories among Medicare beneficiaries, broken down by various demographic groupings. Finally, the presentation included a technique that can be used to quickly create an “all other” expenditure category, a category which combines multiple categories.

Determinants for choosing health and life insurance. Ashish Kumar, Ph.D.

candidate in marketing, School of Management, The State University of New York (SUNY) at Buffalo, presented “On the Relationship Between Health Insurance and Life Insurance Choice: A Disaggregate Level Analysis.” This paper investigated the joint determination of household choice for health insurance and life insurance. Using the 2008 Consumer Expenditure Survey data and assuming households consider purchasing health insurance and life insurance in order to manage life’s financial risks, the paper modeled household choice for those purchases after accounting for household characteristics, health and disability status, and insurance characteristics. The model that was used helped to assess the impact health insurance choice has on the choice of life insurance, and analyzed the correlation between these two choices. The result suggests that health insurance choice positively affects the choice of life insurance and that these two choices are positively correlated, which indicates that these two types of insurances are complementary.

A transdisciplinary approach to understanding obesity. Amanda Goldstein, MS., research associate, Center for Rural Studies, University of Vermont, presented “Comparison of Discipline Specific Food Categorization Within the Consumer Expenditure Survey When Examining Overweight.” Although obesity continues to be a public health concern in the United States and throughout the world, obtaining and maintaining a healthy weight is a decision—involving time and goods devoted to meal production and energy expenditure—that can only be made at the household level. Researchers tend to focus on obesity from distinct disciplinary perspectives rather than recognizing

that the obesity epidemic is multidimensional and that a transdisciplinary approach is required to gain a complete understanding of the obesity epidemic. Transdisciplinary work should be a flowing and adaptive process driven by collaboration in the design, implementation, and application of research. Current efforts suffer from lack of both shared language and terms of understanding across disciplines. The study investigates the magnitude of the differences in definition between economists and nutritionists and how such differences in definition impact the analyses of the production of a healthy weight. Each profession classified detailed food expenditure data from the Consumer Expenditure Survey into broad food groups. Average expenditures for each broad food group then were compared to test for discipline-based differences. Statistically significant differences in categorizations were found between the disciplines, as were sharply contrasting conclusions concerning what contributes to obesity. The study concludes that the epidemic is likely to continue to plague this country until a transdisciplinary approach to the problem integrates both across disciplines and across institutions.

Investigating why Americans overspend. Jeff D. Lundy, Ph.D. candidate in sociology, University of California, San Diego, presented “Keeping Up Appearances or Just Keeping Afloat: How and Why American Households Overspend?” To address why Americans overspend, this paper explores how overspending is distributed among American households, and compares the empirical conformity of that distribution with the expectations of prominent theorists. By examining which households buy which kinds of goods, this research advances

our understanding of the social and economic factors that contribute to overspending. The phenomenon is found to be widespread, but its extent varies depending on the demographic group and time period over which it is examined. Results suggest that over-

spending has the highest prevalence among low-income, non-wealth-owning households. Routine overspending is found to have little explanatory power. However, evidence suggests that indicators of a liquidity crisis are predictive of overspending.

The presentation also described the onsite researcher program, in which selected applicants can obtain access to confidential BLS microdata files to conduct approved statistical analyses (<http://www.bls.gov/bls/blsresda.htm>). □

Speakers at the workshop

BLS staff of the Division of Consumer Expenditure Surveys:

- Crain, Veri, economist, Branch of Information and Analysis; day 1
- Crilley, Jeffrey, economist, formerly with Branch of Information and Analysis; days 1 and 2
- Smith (formerly 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; days 1 and 2
- Olson, Troy, supervisory economist, Chief, Phase 3 Section, Branch of Production and Control; day 2
- Passero, Bill, senior economist, Branch of Information and Analysis; all days
- Paszkievicz, Laura, senior economist, Branch of Information and Analysis; days 1 and 2
- Paulin, Geoffrey, senior economist, Branch of Information and Analysis; day 3

Other BLS speakers:

- Baker, Brian, technical writer-editor, Office of Publications and Special Studies, *Monthly Labor Review*; day 2
- Hackett, Catherine, mathematical statistician, Division of Price Statistical Methods; day 2
- Homan, Casey, technical writer-editor, Office of Publications and Special Studies, *Monthly Labor Review*; day 2
- Wirth (formerly Yocum), Cassandra, economist, Office of Field Operations, Midwest BLS Information Office in Chicago,⁷ Division of Economic Analysis and Information; day 1

Speakers from outside BLS:

- Damico, Anthony, The Kaiser Family Foundation, "Health Care

- on a Budget: An Analysis of Spending by Medicare Households" (Interview Survey), day 2
- Goldstein, Amanda, MS., research associate, Center for Rural Studies, University of Vermont, "Comparison of Discipline Specific Food Categorization Within the Consumer Expenditure Survey When Examining Overweight" (Diary Survey), day 3
- Kumar, Ashish, Ph.D. candidate in marketing, The State University of New York (SUNY) at Buffalo, "Joint Determination of Health Insurance and Life Insurance Choice Using Data from the Consumer Expenditure Survey" (Interview Survey), day 3
- Lee, Seonglim, associate professor, Department of Consumer and Family Sciences, Sungkyunkwan University, Seoul, South Korea, "The Estimation of Wife's Work-Related Costs in Dual Earner Households" (Interview Survey), day 1
- Lundy, Jeff, Ph.D. candidate in sociology, University of California, San Diego, "Accessing Confidential CE Microdata—with an example of research using the confidential data set" (Interview Survey), day 3
- Mabli, James, Mathematica Policy Research, Inc., "Low-Income Household Spending Patterns and Measures of Poverty," co-authored with Laura Castner, project director (Interview Survey), day 2
- Omori, Megumi, assistant professor of sociology, Department of Sociology, Social Work, and Criminal Justice, Bloomsburg University, "Expenditure of Frozen and Prepared Meals: 1980–2008" (Diary Survey), day 1
- Tashiro, Sanae, assistant professor of economics, Rhode Island College, "Are Women More Generous than Men?: Evidence from the U.S. Consumer Expenditure Survey Data" (Interview Survey), day 1

Notes

¹ Topics covered included a brief overview of the microdata files and structure, summary variables (i.e., aggregated values for various expenditure categories), and estimating un-weighted and weighted mean expenditures using FMLY, MEMB, and MTAB files from the Interview Survey, and FMLY and EXPN files from the Diary Survey. For each survey, the FMLY file contains information for the consumer unit as a whole, such as region of residence and summary variables for expenditure categories such as total expenditures, housing, and apparel in the Interview Survey; and fresh fruits, fresh vegetables, nonalcoholic beverages, and nonprescription drugs and supplies in the Diary Survey. (For the definition of a consumer unit, see “About the CE Data.”) The MEMB files contain information for each member of the consumer unit, such as age, ethnicity, and educational attainment. However, the files contain no expenditures, as expenditure data are collected for the consumer unit as a whole, and therefore are not available for specific members, except in single-member consumer units. The MTAB files in the Interview Survey include information on expenditures at very detailed levels (e.g., food or board at school; rent of dwelling; bedroom linens; girls’ hosiery; and boys’ footwear). The

EXPN files in the Diary Survey are similar to the MTAB files in the Interview Survey, in that they also include information on expenditures at very detailed levels (e.g., apples; bananas; oranges; other fresh fruits; and citrus fruits excluding oranges, which aggregate to form the summary variable “FRSHFRUT” in the Diary Survey FMLY file). There are also files called EXPN in the Interview Survey, which contain even more detailed breakdowns for certain expenditures, and other detailed information for some items, such as the number of members of the consumer unit that are covered by a particular health insurance policy. However, the EXPN files from the Interview Survey were not discussed in this part of the training.

² In the Interview Survey, the three-month recall period may include expenditures made in a prior year. For example, persons interviewed in February will report expenditures occurring in November and December of the prior year, as well as expenditures occurring in January of the current year. Those interested in computing expenditures for the collection period can sum expenditures for these three months to obtain their results. However, those interested in computing expenditures that occurred within the same calendar year must

take extra steps to include the November and December expenditures only with prior year expenditures, and those made in January only with current year expenditures.

³ The CE sample design is pseudo-random. However, proper use of weights requires use of the method of Balanced Repeated Replication.

⁴ At the time the presentation was submitted to the workshop planning team for consideration, Ms. Wirth was employed by the Mountain-Plains BLS Information Office in Kansas City. She later moved to the Midwest BLS Information Office in Chicago.

⁵ This abstract is based on an abstract which can be found at <http://www.bls.gov/osmr/abstract/ec/ec070110.htm> (visited November 15, 2010). The full working paper can be found at <http://www.bls.gov/osmr/pdf/ec070110.pdf> (visited April 26, 2011).

⁶ This abstract is based on a report which can be found at <http://www.fns.usda.gov/ora/menu/Published/snap/FILES/Participation/SpendingPatterns.pdf>, Executive Summary, p. xiii (visited November 16, 2010).

⁷ See note 4.

APPENDIX: About the CE data

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 items (for example, major appliances, and cars and trucks) and recurring items (for instance, payments for rent, mortgage, and insurance). Data on some expenditures, such as food at home, are collected globally.¹ 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.² 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

¹ 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.

² 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.

Current unemployment: cyclical or structural?

Economists don't just see *unemployment*; they see different kinds of unemployment, two of which are *cyclical unemployment* and *structural unemployment*.

Cyclical unemployment decreases and increases along with the ups and downs of the business cycle's periods of economic growth and recession. Cyclical unemployment due a recession subsides as business gets better, sales pick up, and consumer confidence improves. During a recession, the number of unemployed exceeds the number of job openings, but those without jobs have the experience and skills that employers will want as bust becomes boom.

Structural unemployment is described as resulting from some mismatch between the employers looking to hire and the unemployed seeking jobs—for example, where an “old” industry is in terminal decline while a very different “new” industry emerges. It might be that the number of job openings is large relative to the number of unemployed but that the unemployed lack the skills that employers are seeking. The geographical form of structural unemployment occurs when jobseekers are in one place while job openings are in another.

At any given time, total unemployment is likely to be a combination of both cyclical and structural unemployment (plus a couple of other types of unemployment). Knowing which type of unemployment predominates is important, especially during a time of high unemployment, because each type requires a different remedy. Economists studying labor markets have long sought

methods to distinguish the cyclical from the structural.

In “Recent College Graduates and the Labor Market” (*FRBSF Economic Letter*, Federal Reserve Bank of San Francisco, Mar. 21, 2011), Bart Hobijn, Colin Gardiner, and Theodore Wiles present a way to determine whether structural factors are predominant in the current unemployment rate.

The authors compare BLS unemployment data for recent college graduates with corresponding data for the labor force as a whole. The reason for this comparison is that recent college graduates—being highly (and recently) educated and ready to move for a job—are less likely to be affected by structural factors related to skills and geography. The authors find that the labor market for recent college graduates is just as bad, or even worse, than the labor market for all workers. This finding is taken as evidence that structural factors are not a substantial contributor to current unemployment; in other words, the authors contend that current unemployment is mostly cyclical in nature. A similar analysis of data on part-time work and the earnings of recent college graduates supports this conclusion.

Male Hispanic immigrants and occupational risk

In recent years, social scientists, policymakers, and mainstream media have noted that Hispanics, especially men, account for a disproportionately large share of workplace fatalities, a trend that began around 1998. What's more, among Hispanics, immigrants account for a disproportionately high percentage

of workplace deaths. The rise in fatalities in the workplace among Hispanics has been attributed partially to low levels of English-language proficiency; with this in mind, professors Alberto Dávila, Marie T. Mora, and Rebecca González have written an article titled “English-Language Proficiency and Occupational Risk Among Hispanic Immigrant Men in the United States” (*Industrial Relations*, April 2011, pp. 263–96) that focuses on whether English-language skills affect the relationship between occupational risk and earnings for male Hispanic immigrants in the United States. In their analysis, the authors use data from the Census of Fatal Occupational Injuries, the Survey of Occupational Injuries and Illnesses, and the 2000 U.S. Census.

There are at least three ways in which English proficiency could affect occupational risk: (1) Limited-English-proficient (LEP) workers may not fully understand safety instructions because of the language barrier. (2) LEP workers could end up in more dangerous jobs because their lack of English proficiency has severely restricted their employment options. (3) The LEP might be, on average, less risk averse than workers with English fluency and might therefore choose riskier jobs in order to make more money.

Dávila, Mora, and González find that LEP Hispanic immigrant men had a significantly higher incidence of fatalities and injuries in 2000 than did Hispanic immigrant men who were proficient in English. The occupational risk experienced by Black American men was similar to that experienced by English-proficient Hispanic men. In addition, the authors find data which they believe

suggest that most LEP Hispanic immigrants with dangerous jobs actually were not pushed into those jobs but instead sought them in order to avoid the lower pay typically associated with weak English skills. By comparing data on Hispanic workers who have U.S. citizenship with data on those who do not, the authors find support for the hypothesis that undocumented workers seek

riskier jobs because they are less risk averse as a group; most of them demonstrated a tolerance for risk by making the typically dangerous illegal trip across the border and into the United States.

The data in the article also show that LEP Hispanic men received greater wages in compensation for unsafe working conditions than English-proficient men (including

Whites and Blacks). The authors speculate that many undocumented workers, a large number of whom are LEP, may be earning a premium in dangerous positions because their employers find it more cost effective to pay them a little more but not have them covered by workers' compensation insurance than to properly report workers' compensation information. □

Vegas at Odds

Vegas at Odds: Labor Conflict in a Leisure Economy, 1960-1985. By James P. Kraft, Baltimore, MD, The Johns Hopkins University Press, 2010, 273 pp., \$55.00/hardback.

Las Vegas resorts employ workers in a number of occupations including chefs, musicians, clerks, parking attendants, security staff, repair workers, bartenders, casino dealers, and housekeepers. Unfortunately, labor relations between workers and management in the industry have been “at odds” in many ways, as James P. Kraft examines in this book that focuses on the years 1960 to 1985.

The first gambling establishments and resorts in Las Vegas were started by entrepreneurs. In the late 1960s, ownership of resorts began changing from entrepreneurs to publicly traded corporations. This change put distance between the workers and owners and created an “impersonal face of management in the new age of corporate control of the Las Vegas tourist business.”

Both custom and law segmented the labor market in Las Vegas before the civil rights laws of the 1960s had an effect. The best jobs were almost always held by white men. Public ordinances barred women from working as bartenders. Dealers and resorts restricted African Americans to working in areas of housekeeping and cleaning. In the history of the fight for equal rights, Kraft includes how public policy, resort owners, and unions reshaped the composition of resort workforces.

Unions were established before the rise of corporate ownership. The Hotel Employees and Restaurant

Employees International Union, known as the “Culinary,” is the largest organization of Las Vegas resort workers. Established in 1938, it includes kitchen workers, housekeepers, bellmen, cocktail waitresses, and other “front-of-the-house” workers. Interestingly, casino dealers are not unionized. According to Kraft, dealers never did organize “because of the adroitness of management in making these concessions, the shortcomings of the union leaders behind the effort, and the indifference or resistance of many dealers to unionization.” The other large union in Las Vegas is the Bartenders and Beverage Dispensers Union. The many smaller unions generally follow the agreements set in the contracts of the two large unions.

In 1956, about a dozen Strip properties formed the Nevada Industrial Council to bargain with the unions. Twelve downtown gambling establishments bargained through the Downtown Casino Association. Later, in 1968, 16 major resorts joined together to transform the Nevada Resort Association (NRA) by making it responsible for negotiating their labor contracts.

Several strikes took place in Las Vegas during the time period Kraft examines. The two largest strikes occurred in 1976 and 1984. Kraft provides an overview of the issues, negotiations, and leaders of both sides.

In 1976, four union contracts expired at the same time and 13,000 workers at 15 major resorts went on strike. Workers from other unions would not cross picket lines, so a dozen resorts had to shut down. One of the main issues was the right of union workers to honor picket lines of other unions, called sympathy

strikes. The governor became involved in the negotiations and compromises were eventually reached. The strike lasted 16 days and caused major financial losses to resorts and to the city as a whole.

In April 1984, more than 20,000 workers from four unions went on strike. The issues included employer contributions to union health and welfare funds, the length of contracts, and sympathy strikes. Several resorts reached agreements quickly. The NRA properties were prepared for the strike and remained open with managers, nonunion employees, and temporary workers covering the limited services still offered. Some picketers harassed the strikebreakers and guests, and there were several clashes between picketers and police with almost 1,000 picketers arrested during the strike. Many workers returned to work after a few weeks because of financial need and the threat of permanent replacement. The Culinary and Bartender unions reached agreements with many but not all of the NRA properties in May. Then, in June 1984, the smaller unions agreed to new contracts. However, the conflict was not completely over until July 1985 when several small resorts filled their positions with nonunion workers. It was the longest and most costly strike ever, and was considered by some to be a major setback for organized labor in Las Vegas.

Kraft uses numerous sources in compiling the labor history of Las Vegas from 1960 to 1985 and does a good job of presenting the views from both sides. Kraft includes some “recollections of employees” whose reflections on their work experiences are interesting and entertaining. In addition, photos of Las Vegas and

workers during this time period help the reader visualize the work atmosphere. Kraft devotes a chapter to workplace incidents to provide an overview of the labor arbitration process. Sometimes the arbitrator ruled in favor of the employee and sometimes in favor of the employer.

Kraft uses these cases to shed light on specific workplace experiences and the perspectives and attitudes of both sides.

This book would appeal to anyone interested in the history of Las Vegas, labor relations, organized labor, or knowing more about the worker

struggles that took place behind the neon lights. □

—Amy Butler
Office of Employment and
Unemployment Statistics
Division of Current Employment
Statistics
Bureau of Labor Statistics

Book review interest?

Interested in reviewing a book for the *Monthly Labor Review*? We have a number of books by distinguished authors on economics, industrial relations, other social sciences, and related issues waiting to be reviewed. Please contact us via e-mail at mlr@bls.gov for more information.

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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/

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

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/

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).

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) 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 posi-

tions. 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/

ADDITIONAL INFORMATION on the Employment Cost Index is available at 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 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 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

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 adjusted to 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/opus/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 and 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 Introduction and Appendix B. Country Notes in *International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts, 10 Countries, 1997-2009*, on the Internet at www.bls.gov/ilc/flscomparelf.htm, and the Notes for Table 1 in the monthly report *International Unemployment Rates and Employment Indexes, Seasonally Adjusted, 2008-2010*,

on the Internet at www.bls.gov/ilc/intl_unemployment_rates_monthly.htm.

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 19 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 (NAICS 97).

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 the United States, the output measure is a chain-weighted index of real value added produced by the Bureau of Economic Analysis. BLS uses this series here to preserve international comparability. However, for its domestic industry measures, shown in tables 47–50 in this section, BLS uses a different output measures called “sectoral output,” which is gross output less intra-sector 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 Czech Republic, Finland, and the United Kingdom, compensation is reduced in certain years 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.

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 accounts and other statistics used for the long-term measures become available. For more in-depth information on sources and methods, see <http://www.bls.gov/news.release/prod4.toc.htm>.

FOR ADDITIONAL INFORMATION on international comparisons, contact the Division of International Labor Comparisons: (202) 691-5654 or ilchelp@bls.gov.

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/.

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 ac-

counts, 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/

1. Labor market indicators

| Selected indicators | 2009 | 2010 | 2008 | 2009 | | | | | 2010 | | | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | | | IV | I | II | III | IV | I | II | III | IV | |
| Employment data | | | | | | | | | | | | |
| Employment status of the civilian noninstitutional population (household survey): ¹ | | | | | | | | | | | | |
| Labor force participation rate..... | 65.4 | 64.7 | 65.9 | 65.7 | 65.7 | 65.3 | 64.9 | 64.8 | 64.9 | 64.7 | 64.5 | |
| Employment-population ratio..... | 59.3 | 58.5 | 61.3 | 60.3 | 59.7 | 59.0 | 58.4 | 58.5 | 58.6 | 58.5 | 58.3 | |
| Unemployment rate..... | 9.3 | 9.6 | 6.9 | 8.2 | 9.3 | 9.7 | 10.0 | 9.7 | 9.6 | 9.6 | 9.6 | |
| Men..... | 10.3 | 10.5 | 7.6 | 9.0 | 10.4 | 10.8 | 11.2 | 10.7 | 10.6 | 10.5 | 10.3 | |
| 16 to 24 years..... | 20.1 | 20.8 | 16.5 | 18.1 | 19.9 | 20.7 | 22.0 | 21.5 | 20.9 | 20.7 | 20.2 | |
| 25 years and older..... | 8.8 | 8.9 | 6.1 | 7.6 | 8.9 | 9.4 | 9.5 | 9.0 | 9.0 | 9.0 | 8.8 | |
| Women..... | 8.1 | 8.6 | 6.2 | 7.3 | 8.0 | 8.3 | 8.7 | 8.5 | 8.6 | 8.6 | 8.8 | |
| 16 to 24 years..... | 14.9 | 15.8 | 11.7 | 13.2 | 14.6 | 15.6 | 15.9 | 15.5 | 16.0 | 15.5 | 16.4 | |
| 25 years and older..... | 6.9 | 7.4 | 5.3 | 6.2 | 6.9 | 7.1 | 7.5 | 7.4 | 7.4 | 7.4 | 7.6 | |
| Employment, nonfarm (payroll data), in thousands: ¹ | | | | | | | | | | | | |
| Total nonfarm..... | 130,920 | 130,262 | 134,328 | 132,070 | 130,640 | 129,857 | 129,588 | 129,849 | 130,419 | 130,328 | 130,712 | |
| Total private..... | 108,371 | 107,791 | 111,767 | 109,510 | 108,075 | 107,377 | 107,107 | 107,343 | 107,696 | 108,068 | 108,453 | |
| Goods-producing..... | 18,620 | 17,987 | 20,294 | 19,233 | 18,503 | 18,124 | 17,906 | 17,905 | 17,994 | 18,038 | 18,041 | |
| Manufacturing..... | 11,883 | 11,644 | 12,822 | 12,212 | 11,782 | 11,634 | 11,534 | 11,591 | 11,672 | 11,672 | 11,670 | |
| Service-providing..... | 112,300 | 112,275 | 114,031 | 112,837 | 112,137 | 111,733 | 111,682 | 111,944 | 112,425 | 112,290 | 112,671 | |
| Average hours: | | | | | | | | | | | | |
| Total private..... | 33.1 | 33.4 | 33.3 | 33.1 | 33.0 | 33.1 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | |
| Manufacturing..... | 39.8 | 41.1 | 39.8 | 39.4 | 39.5 | 39.9 | 40.5 | 41.0 | 41.0 | 41.2 | 41.2 | |
| Overtime..... | 2.9 | 3.8 | 2.9 | 2.6 | 2.8 | 3.0 | 3.4 | 3.7 | 3.9 | 3.9 | 4.0 | |
| Employment Cost Index^{1,2,3} | | | | | | | | | | | | |
| Total compensation: | | | | | | | | | | | | |
| Civilian nonfarm ⁴ | 1.4 | 2.0 | .3 | .4 | .3 | .5 | .2 | .7 | .4 | .5 | .3 | |
| Private nonfarm..... | 1.2 | 2.1 | .2 | .4 | .3 | .4 | .2 | .8 | .5 | .4 | .3 | |
| Goods-producing ⁵ | 1.0 | 2.3 | .3 | .4 | .3 | .2 | .2 | 1.0 | .5 | .6 | .1 | |
| Service-providing ⁵ | 1.3 | 2.0 | .3 | .4 | .3 | .4 | .3 | .7 | .4 | .4 | .4 | |
| State and local government..... | 2.3 | 1.8 | .3 | .6 | .4 | 1.0 | .3 | .3 | .2 | 1.0 | .3 | |
| Workers by bargaining status (private nonfarm): | | | | | | | | | | | | |
| Union..... | 2.9 | 3.3 | .6 | 1.0 | .6 | .6 | .5 | 1.5 | .8 | .8 | .2 | |
| Nonunion..... | .9 | 1.8 | .2 | .3 | .2 | .3 | .2 | .7 | .5 | .4 | .3 | |

¹ Quarterly data seasonally adjusted.

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

³ 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.

⁴ Excludes Federal and private household workers.

⁵ 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 | 2009 | 2010 | 2008 | 2009 | | | | | 2010 | | | |
|--|-------|------|-------|------|------|------|------|-----|------|------|-----|--|
| | | | IV | I | II | III | IV | I | II | III | IV | |
| Compensation data ^{1, 2, 3} | | | | | | | | | | | | |
| Employment Cost Index—compensation: | | | | | | | | | | | | |
| Civilian nonfarm..... | 1.4 | 2.0 | 0.3 | 0.4 | 0.3 | 0.5 | 0.2 | 0.7 | 0.4 | 0.5 | 0.3 | |
| Private nonfarm..... | 1.2 | 2.1 | .2 | .4 | .3 | .4 | .2 | .8 | .5 | .4 | .3 | |
| Employment Cost Index—wages and salaries: | | | | | | | | | | | | |
| Civilian nonfarm..... | 1.5 | 1.6 | .3 | .4 | .4 | .5 | .3 | .4 | .4 | .4 | .4 | |
| Private nonfarm..... | 1.3 | 1.8 | .3 | .4 | .3 | .5 | .3 | .5 | .4 | .4 | .4 | |
| Price data ¹ | | | | | | | | | | | | |
| Consumer Price Index (All Urban Consumers): All Items..... | -4 | 1.6 | -3.9 | 1.2 | 1.4 | .1 | .0 | .8 | .2 | .2 | .3 | |
| Producer Price Index: | | | | | | | | | | | | |
| Finished goods..... | -2.6 | 4.3 | -7.4 | .2 | 3.1 | -6 | 1.6 | 1.8 | -1 | .7 | 1.6 | |
| Finished consumer goods..... | -3.9 | 5.6 | -10.0 | .3 | 4.3 | -7 | 1.9 | 2.4 | -1 | .9 | 1.8 | |
| Capital equipment..... | 1.9 | .4 | 1.9 | -2 | -2 | -4 | .8 | .0 | -1 | .0 | .5 | |
| Intermediate materials, supplies, and components..... | -8.4 | 6.4 | -13.6 | -2.1 | 2.8 | 1.2 | 1.1 | 2.6 | 1.2 | .6 | 2.0 | |
| Crude materials..... | -30.4 | 21.0 | -32.1 | -7.2 | 12.3 | -3.5 | 12.7 | 8.8 | -4.2 | 2.5 | 8.2 | |
| Productivity data ⁴ | | | | | | | | | | | | |
| Output per hour of all persons: | | | | | | | | | | | | |
| Business sector..... | 3.5 | 3.6 | -3 | 3.5 | 8.3 | 7.2 | 6.1 | 3.5 | -1.8 | 2.6 | 2.4 | |
| Nonfarm business sector..... | 3.5 | 3.6 | -1 | 3.4 | 8.4 | 7.0 | 6.0 | 3.9 | -1.8 | 2.4 | 2.6 | |
| Nonfinancial corporations ⁵ | 1.8 | - | 1.0 | -4.2 | 4.3 | 5.9 | 12.8 | 8.7 | .1 | -3.5 | - | |

¹ 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.

² Excludes Federal and private household workers.

³ 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.

⁴ 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.

⁵ Output per hour of all employees.

3. Alternative measures of wage and compensation changes

| Components | Quarterly change | | | | | Four quarters ending— | | | | |
|--|------------------|------|-----|-----|-----|-----------------------|------|-----|-----|-----|
| | 2009 | 2010 | | | | 2009 | 2010 | | | |
| | | IV | I | II | III | | IV | I | II | III |
| Average hourly compensation: ¹ | | | | | | | | | | |
| All persons, business sector..... | 1.5 | -1.1 | 2.7 | 2.6 | 1.8 | 2.5 | 3.2 | 1.7 | 1.4 | 1.5 |
| All persons, nonfarm business sector..... | 1.5 | -9 | 2.9 | 2.3 | 1.9 | 2.5 | 3.2 | 1.7 | 1.4 | 1.5 |
| Employment Cost Index—compensation: ² | | | | | | | | | | |
| Civilian nonfarm ³ | .2 | .7 | .4 | .5 | .3 | 1.4 | 1.7 | 1.9 | 1.9 | 2.0 |
| Private nonfarm..... | .2 | .8 | .5 | .4 | .3 | 1.2 | 1.6 | 1.9 | 2.0 | 2.1 |
| Union..... | .5 | 1.5 | .8 | .8 | .2 | 2.9 | 3.4 | 3.6 | 3.7 | 3.3 |
| Nonunion..... | .2 | .7 | .5 | .4 | .3 | .9 | 1.4 | 1.6 | 1.7 | 1.8 |
| State and local government..... | .3 | .3 | .2 | 1.0 | .3 | 2.3 | 2.0 | 1.7 | 1.8 | 1.8 |
| Employment Cost Index—wages and salaries: ² | | | | | | | | | | |
| Civilian nonfarm ³ | .3 | .4 | .4 | .4 | .4 | 1.5 | 1.5 | 1.6 | 1.5 | 1.6 |
| Private nonfarm..... | .2 | .5 | .4 | .4 | .4 | 1.3 | 1.5 | 1.6 | 1.6 | 1.8 |
| Union..... | .6 | .5 | .5 | .5 | .2 | 2.6 | 2.5 | 2.3 | 2.3 | 1.8 |
| Nonunion..... | .3 | .5 | .4 | .4 | .3 | 1.2 | 1.3 | 1.5 | 1.6 | 1.6 |
| State and local government..... | .3 | .2 | .2 | .6 | .2 | 1.9 | 1.6 | 1.3 | 1.2 | 1.2 |

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

² 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.

³ 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 | | 2010 | | | | | | | | | | 2011 | | |
|--|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 2009 | 2010 | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. |
| Hispanic or Latino ethnicity | | | | | | | | | | | | | | | |
| Civilian noninstitutional | | | | | | | | | | | | | | | |
| population ¹ | 32,891 | 33,713 | 33,335 | 33,414 | 33,498 | 33,578 | 33,662 | 33,747 | 33,836 | 33,927 | 34,014 | 34,102 | 34,188 | 34,001 | 34,079 |
| Civilian labor force..... | 22,352 | 22,748 | 22,639 | 22,697 | 22,674 | 22,739 | 22,677 | 22,737 | 22,733 | 22,896 | 22,814 | 22,915 | 22,868 | 22,823 | 22,519 |
| Participation rate..... | 68.0 | 67.5 | 67.9 | 67.9 | 67.7 | 67.7 | 67.4 | 67.4 | 67.2 | 67.5 | 67.1 | 67.2 | 66.9 | 67.1 | 66.1 |
| Employed..... | 19,647 | 19,906 | 19,849 | 19,854 | 19,854 | 19,913 | 19,867 | 19,980 | 19,991 | 20,042 | 19,936 | 19,899 | 19,906 | 20,099 | 19,912 |
| Employment-population ratio ² | 59.7 | 59.0 | 59.5 | 59.4 | 59.3 | 59.3 | 59.0 | 59.2 | 59.1 | 59.1 | 58.6 | 58.4 | 58.2 | 59.1 | 58.4 |
| Unemployed..... | 2,706 | 2,843 | 2,791 | 2,843 | 2,820 | 2,826 | 2,810 | 2,757 | 2,742 | 2,854 | 2,878 | 3,016 | 2,962 | 2,724 | 2,606 |
| Unemployment rate..... | 12.1 | 12.5 | 12.3 | 12.5 | 12.4 | 12.4 | 12.4 | 12.1 | 12.1 | 12.5 | 12.6 | 13.2 | 13.0 | 11.9 | 11.6 |
| Not in the labor force..... | 10,539 | 10,964 | 10,695 | 10,716 | 10,824 | 10,839 | 10,986 | 11,010 | 11,102 | 11,031 | 11,201 | 11,188 | 11,320 | 11,178 | 11,561 |

¹ The population figures are not seasonally adjusted.

² Civilian employment as a percent of the civilian noninstitutional population.

³ 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 | | 2010 | | | | | | | | | | 2011 | | |
|--|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 2009 | 2010 | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. |
| Characteristic | | | | | | | | | | | | | | | |
| Employed, 16 years and older.. | 139,877 | 139,064 | 138,698 | 138,952 | 139,382 | 139,353 | 139,092 | 138,991 | 139,267 | 139,378 | 139,084 | 138,909 | 139,206 | 139,323 | 139,573 |
| Men..... | 73,670 | 73,359 | 72,884 | 73,163 | 73,526 | 73,603 | 73,385 | 73,466 | 73,600 | 73,594 | 73,470 | 73,337 | 73,600 | 73,800 | 74,122 |
| Women..... | 66,208 | 65,705 | 65,813 | 65,789 | 65,856 | 65,750 | 65,706 | 65,526 | 65,667 | 65,784 | 65,613 | 65,572 | 65,605 | 65,523 | 65,451 |
| Married men, spouse present..... | 43,998 | 43,292 | 43,210 | 43,152 | 43,248 | 43,343 | 43,341 | 43,372 | 43,418 | 43,701 | 43,301 | 43,130 | 43,081 | 42,915 | 42,957 |
| Married women, spouse present..... | 35,207 | 34,582 | 35,207 | 34,810 | 34,592 | 34,231 | 34,359 | 34,345 | 34,271 | 34,469 | 34,553 | 34,543 | 34,612 | 34,571 | 34,496 |
| Persons at work part time¹ | | | | | | | | | | | | | | | |
| All industries: | | | | | | | | | | | | | | | |
| Part time for economic reasons..... | 8,913 | 8,874 | 8,793 | 9,012 | 9,146 | 8,776 | 8,631 | 8,533 | 8,883 | 9,506 | 9,100 | 8,960 | 8,931 | 8,407 | 8,340 |
| Slack work or business conditions..... | 6,648 | 6,174 | 6,188 | 6,174 | 6,247 | 6,141 | 6,172 | 6,164 | 6,357 | 6,732 | 6,174 | 6,025 | 6,011 | 5,771 | 5,630 |
| Could only find part-time work..... | 1,966 | 2,375 | 2,174 | 2,351 | 2,492 | 2,299 | 2,123 | 2,301 | 2,379 | 2,478 | 2,564 | 2,557 | 2,568 | 2,510 | 2,415 |
| Part time for noneconomic reasons..... | 18,710 | 18,251 | 18,326 | 18,334 | 18,035 | 17,977 | 17,963 | 18,219 | 18,566 | 18,256 | 18,230 | 18,326 | 18,184 | 17,929 | 18,220 |
| Nonagricultural industries: | | | | | | | | | | | | | | | |
| Part time for economic reasons..... | 8,791 | 8,744 | 8,659 | 8,903 | 9,048 | 8,630 | 8,482 | 8,384 | 8,752 | 9,380 | 8,991 | 8,822 | 8,789 | 8,242 | 8,248 |
| Slack work or business conditions..... | 6,556 | 6,087 | 6,085 | 6,093 | 6,186 | 6,038 | 6,080 | 6,051 | 6,276 | 6,649 | 6,108 | 5,941 | 5,911 | 5,661 | 5,558 |
| Could only find part-time work..... | 1,955 | 2,358 | 2,169 | 2,378 | 2,480 | 2,282 | 2,098 | 2,235 | 2,347 | 2,454 | 2,534 | 2,555 | 2,542 | 2,513 | 2,383 |
| Part time for noneconomic reasons..... | 18,372 | 17,911 | 17,987 | 18,001 | 17,733 | 17,691 | 17,694 | 17,886 | 18,175 | 17,911 | 17,848 | 17,929 | 17,829 | 17,552 | 17,835 |

¹ 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.

10. Unemployment rates by State, seasonally adjusted

| State | Jan. 2010 | Dec. 2010 ^P | Jan. 2011 ^P | State | Jan. 2010 | Dec. 2010 ^P | Jan. 2011 ^P |
|---------------------------|-----------|------------------------|------------------------|---------------------|-----------|------------------------|------------------------|
| Alabama..... | 10.3 | 9.1 | 9.3 | Missouri..... | 9.7 | 9.6 | 9.5 |
| Alaska..... | 8.2 | 7.9 | 7.8 | Montana..... | 7.0 | 7.4 | 7.5 |
| Arizona..... | 10.3 | 9.6 | 9.6 | Nebraska..... | 5.0 | 4.3 | 4.3 |
| Arkansas..... | 8.0 | 7.9 | 7.8 | Nevada..... | 14.6 | 14.9 | 14.2 |
| California..... | 12.3 | 12.5 | 12.4 | New Hampshire..... | 6.7 | 5.6 | 5.6 |
| Colorado..... | 8.9 | 8.9 | 9.1 | New Jersey..... | 9.8 | 9.1 | 9.1 |
| Connecticut..... | 9.1 | 9.0 | 9.0 | New Mexico..... | 8.1 | 8.6 | 8.7 |
| Delaware..... | 8.8 | 8.5 | 8.5 | New York..... | 8.9 | 8.2 | 8.2 |
| District of Columbia..... | 10.3 | 9.6 | 9.6 | North Carolina..... | 11.4 | 9.8 | 9.8 |
| Florida..... | 11.3 | 12.0 | 11.9 | North Dakota..... | 4.1 | 3.8 | 3.8 |
| Georgia..... | 10.4 | 10.4 | 10.3 | Ohio..... | 10.6 | 9.5 | 9.3 |
| Hawaii..... | 6.9 | 6.3 | 6.3 | Oklahoma..... | 7.3 | 6.8 | 6.6 |
| Idaho..... | 8.9 | 9.7 | 9.7 | Oregon..... | 11.0 | 10.6 | 10.4 |
| Illinois..... | 11.2 | 9.2 | 9.0 | Pennsylvania..... | 8.8 | 8.5 | 8.3 |
| Indiana..... | 10.7 | 9.5 | 9.1 | Rhode Island..... | 11.8 | 11.5 | 11.3 |
| Iowa..... | 6.1 | 6.1 | 6.1 | South Carolina..... | 11.7 | 10.9 | 10.5 |
| Kansas..... | 7.2 | 6.8 | 6.8 | South Dakota..... | 5.2 | 4.7 | 4.7 |
| Kentucky..... | 11.0 | 10.3 | 10.4 | Tennessee..... | 10.4 | 9.4 | 9.4 |
| Louisiana..... | 7.1 | 7.7 | 7.8 | Texas..... | 8.2 | 8.3 | 8.3 |
| Maine..... | 8.4 | 7.5 | 7.5 | Utah..... | 8.0 | 7.5 | 7.6 |
| Maryland..... | 7.7 | 7.4 | 7.2 | Vermont..... | 6.7 | 5.8 | 5.7 |
| Massachusetts..... | 8.8 | 8.3 | 8.3 | Virginia..... | 7.2 | 6.6 | 6.5 |
| Michigan..... | 13.7 | 11.1 | 10.7 | Washington..... | 10.0 | 9.3 | 9.2 |
| Minnesota..... | 7.8 | 6.9 | 6.7 | West Virginia..... | 8.7 | 9.7 | 9.6 |
| Mississippi..... | 11.0 | 10.2 | 10.1 | Wisconsin..... | 9.2 | 7.5 | 7.4 |
| | | | | Wyoming..... | 7.6 | 6.4 | 6.3 |

^P = preliminary

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

| State | Jan. 2010 | Dec. 2010 ^P | Jan. 2011 ^P | State | Jan. 2010 | Dec. 2010 ^P | Jan. 2011 ^P |
|---------------------------|------------|------------------------|------------------------|---------------------|------------|------------------------|------------------------|
| Alabama..... | 2,149,237 | 2,114,655 | 2,117,944 | Missouri..... | 3,027,927 | 3,000,851 | 3,006,228 |
| Alaska..... | 360,634 | 362,998 | 363,205 | Montana..... | 495,820 | 497,567 | 498,032 |
| Arizona..... | 3,168,734 | 3,172,761 | 3,171,496 | Nebraska..... | 977,542 | 976,325 | 978,648 |
| Arkansas..... | 1,349,988 | 1,361,022 | 1,362,440 | Nevada..... | 1,360,449 | 1,334,583 | 1,323,809 |
| California..... | 18,177,493 | 18,150,832 | 18,150,676 | New Hampshire..... | 743,919 | 743,682 | 744,201 |
| Colorado..... | 2,700,190 | 2,668,432 | 2,670,797 | New Jersey..... | 4,522,193 | 4,472,545 | 4,468,662 |
| Connecticut..... | 1,892,432 | 1,896,645 | 1,896,569 | New Mexico..... | 946,360 | 956,479 | 955,756 |
| Delaware..... | 430,152 | 422,624 | 423,213 | New York..... | 9,658,335 | 9,574,933 | 9,585,590 |
| District of Columbia..... | 334,575 | 331,150 | 332,378 | North Carolina..... | 4,546,492 | 4,461,716 | 4,464,112 |
| Florida..... | 9,158,058 | 9,280,145 | 9,278,147 | North Dakota..... | 369,069 | 370,998 | 371,408 |
| Georgia..... | 4,719,230 | 4,685,727 | 4,681,475 | Ohio..... | 5,900,655 | 5,893,907 | 5,895,103 |
| Hawaii..... | 628,632 | 630,713 | 630,501 | Oklahoma..... | 1,757,156 | 1,749,406 | 1,744,563 |
| Idaho..... | 754,660 | 758,929 | 759,558 | Oregon..... | 1,974,440 | 1,991,714 | 1,993,068 |
| Illinois..... | 6,618,986 | 6,666,130 | 6,648,545 | Pennsylvania..... | 6,347,173 | 6,326,175 | 6,345,975 |
| Indiana..... | 3,143,345 | 3,126,053 | 3,120,223 | Rhode Island..... | 571,916 | 577,253 | 576,230 |
| Iowa..... | 1,664,332 | 1,675,573 | 1,678,395 | South Carolina..... | 2,167,518 | 2,164,091 | 2,158,956 |
| Kansas..... | 1,504,010 | 1,500,587 | 1,500,749 | South Dakota..... | 442,302 | 445,279 | 446,161 |
| Kentucky..... | 2,082,019 | 2,091,140 | 2,097,123 | Tennessee..... | 3,050,491 | 3,063,125 | 3,072,278 |
| Louisiana..... | 2,064,325 | 2,089,232 | 2,088,336 | Texas..... | 12,045,259 | 12,209,364 | 12,212,156 |
| Maine..... | 697,163 | 698,520 | 698,856 | Utah..... | 1,377,750 | 1,356,090 | 1,355,830 |
| Maryland..... | 2,980,082 | 2,979,485 | 2,976,024 | Vermont..... | 359,623 | 361,235 | 362,547 |
| Massachusetts..... | 3,482,130 | 3,499,946 | 3,502,066 | Virginia..... | 4,186,507 | 4,182,608 | 4,184,564 |
| Michigan..... | 4,815,312 | 4,745,906 | 4,741,789 | Washington..... | 3,526,523 | 3,529,632 | 3,517,011 |
| Minnesota..... | 2,951,801 | 2,964,192 | 2,959,371 | West Virginia..... | 788,312 | 778,935 | 780,003 |
| Mississippi..... | 1,308,649 | 1,320,565 | 1,324,078 | Wisconsin..... | 3,080,475 | 3,044,726 | 3,045,284 |
| | | | | Wyoming..... | 296,277 | 291,118 | 290,847 |

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

^P = preliminary

14. Average hourly earnings of production or nonsupervisory workers¹ on private nonfarm payrolls, by industry, monthly data seasonally adjusted

| Industry | Annual average | | 2010 | | | | | | | | | | | 2011 | |
|---|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------|-------------------|
| | 2009 | 2010 | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. ^P | Feb. ^P |
| TOTAL PRIVATE | | | | | | | | | | | | | | | |
| Current dollars..... | \$18.63 | \$19.07 | \$18.93 | \$18.93 | \$18.98 | \$19.03 | \$19.05 | \$19.08 | \$19.13 | \$19.14 | \$19.23 | \$19.24 | \$19.23 | \$19.31 | \$19.32 |
| Constant (1982) dollars..... | 8.89 | 8.91 | 8.86 | 8.86 | 8.89 | 8.93 | 8.97 | 8.94 | 8.94 | 8.93 | 8.94 | 8.94 | 8.89 | 8.88 | 8.83 |
| GOODS-PRODUCING..... | 19.90 | 20.28 | 20.14 | 20.16 | 20.18 | 20.21 | 20.24 | 20.26 | 20.33 | 20.33 | 20.41 | 20.45 | 20.49 | 20.55 | 20.58 |
| Natural resources and mining..... | 23.29 | 23.83 | 23.67 | 23.85 | 23.79 | 23.76 | 23.86 | 23.92 | 23.87 | 24.10 | 23.86 | 24.02 | 24.02 | 24.14 | 24.24 |
| Construction..... | 22.66 | 23.22 | 23.12 | 23.12 | 23.07 | 23.10 | 23.16 | 23.22 | 23.30 | 23.21 | 23.38 | 23.42 | 23.44 | 23.48 | 23.49 |
| Manufacturing..... | 18.24 | 18.61 | 18.48 | 18.49 | 18.51 | 18.59 | 18.59 | 18.60 | 18.63 | 18.65 | 18.71 | 18.75 | 18.80 | 18.91 | 18.91 |
| Excluding overtime..... | 17.59 | 17.78 | 17.71 | 17.69 | 17.69 | 17.74 | 17.77 | 17.78 | 17.81 | 17.81 | 17.86 | 17.88 | 17.93 | 18.01 | 18.00 |
| Durable goods..... | 19.36 | 19.80 | 19.71 | 19.68 | 19.70 | 19.78 | 19.76 | 19.76 | 19.79 | 19.81 | 19.88 | 19.94 | 20.03 | 20.14 | 20.12 |
| Nondurable goods..... | 16.56 | 16.80 | 16.66 | 16.72 | 16.74 | 16.81 | 16.81 | 16.84 | 16.88 | 16.89 | 16.92 | 16.91 | 16.91 | 16.99 | 17.02 |
| PRIVATE SERVICE-PRIVATE SERVICE-PROVIDING..... | 18.35 | 18.81 | 18.68 | 18.67 | 18.73 | 18.78 | 18.80 | 18.83 | 18.87 | 18.88 | 18.98 | 18.98 | 18.97 | 19.05 | 19.05 |
| Trade, transportation, and utilities..... | 16.48 | 16.83 | 16.73 | 16.72 | 16.78 | 16.81 | 16.81 | 16.81 | 16.84 | 16.90 | 16.99 | 16.96 | 16.97 | 17.04 | 17.03 |
| Wholesale trade..... | 20.84 | 21.53 | 21.37 | 21.36 | 21.45 | 21.47 | 21.51 | 21.55 | 21.55 | 21.64 | 21.82 | 21.73 | 21.79 | 21.90 | 21.86 |
| Retail trade..... | 13.01 | 13.24 | 13.18 | 13.17 | 13.20 | 13.20 | 13.22 | 13.23 | 13.25 | 13.29 | 13.38 | 13.37 | 13.36 | 13.37 | 13.37 |
| Transportation and warehousing..... | 18.81 | 19.17 | 19.09 | 19.12 | 19.14 | 19.28 | 19.12 | 19.12 | 19.19 | 19.18 | 19.22 | 19.22 | 19.28 | 19.47 | 19.38 |
| Utilities..... | 29.48 | 30.04 | 29.86 | 29.65 | 29.83 | 30.15 | 30.12 | 30.22 | 30.27 | 30.28 | 30.38 | 30.26 | 30.13 | 30.23 | 30.15 |
| Information..... | 25.45 | 25.86 | 25.63 | 25.64 | 25.63 | 25.81 | 25.78 | 26.04 | 25.91 | 26.01 | 26.22 | 26.13 | 26.09 | 26.23 | 26.32 |
| Financial activities..... | 20.85 | 21.49 | 21.31 | 21.40 | 21.43 | 21.43 | 21.47 | 21.54 | 21.57 | 21.45 | 21.68 | 21.69 | 21.63 | 21.74 | 21.63 |
| Professional and business services..... | 22.35 | 22.78 | 22.69 | 22.62 | 22.69 | 22.76 | 22.78 | 22.85 | 22.93 | 22.94 | 23.00 | 22.96 | 22.84 | 23.02 | 23.02 |
| Education and health services..... | 19.49 | 20.12 | 19.85 | 19.91 | 19.98 | 20.03 | 20.08 | 20.14 | 20.20 | 20.24 | 20.33 | 20.37 | 20.42 | 20.48 | 20.50 |
| Leisure and hospitality..... | 11.12 | 11.31 | 11.31 | 11.32 | 11.32 | 11.35 | 11.34 | 11.33 | 11.35 | 11.27 | 11.30 | 11.30 | 11.31 | 11.32 | 11.35 |
| Other services..... | 16.59 | 17.08 | 16.95 | 16.98 | 17.01 | 17.06 | 17.10 | 17.09 | 17.08 | 17.13 | 17.19 | 17.26 | 17.24 | 17.22 | 17.21 |

¹ 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.

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. |
|--|------|------|------|------|------|------|------|------|-------|------|------|------|
| Private nonfarm payrolls, 278 industries | | | | | | | | | | | | |
| Over 1-month span: | | | | | | | | | | | | |
| 2007..... | 60.1 | 55.8 | 58.1 | 51.9 | 54.7 | 47.9 | 48.7 | 43.1 | 53.7 | 54.1 | 54.5 | 50.7 |
| 2008..... | 50.6 | 47.6 | 50.2 | 42.1 | 41.9 | 34.5 | 30.5 | 33.1 | 30.0 | 32.0 | 23.4 | 20.6 |
| 2009..... | 19.5 | 18.5 | 17.0 | 18.2 | 27.9 | 25.5 | 30.0 | 33.3 | 34.3 | 29.0 | 38.8 | 38.4 |
| 2010..... | 46.1 | 48.3 | 58.8 | 63.9 | 56.0 | 55.2 | 56.4 | 53.7 | 51.9 | 58.2 | 57.7 | 58.6 |
| 2011..... | 60.5 | 68.7 | | | | | | | | | | |
| Over 3-month span: | | | | | | | | | | | | |
| 2007..... | 60.7 | 59.0 | 62.0 | 57.5 | 58.1 | 54.5 | 51.7 | 48.1 | 49.6 | 47.6 | 57.1 | 53.2 |
| 2008..... | 57.1 | 47.6 | 47.9 | 43.3 | 37.6 | 32.4 | 30.9 | 27.7 | 26.0 | 26.0 | 22.1 | 19.9 |
| 2009..... | 18.4 | 13.3 | 12.5 | 14.2 | 17.8 | 20.4 | 20.6 | 20.6 | 28.3 | 25.1 | 27.7 | 28.3 |
| 2010..... | 32.2 | 39.7 | 50.9 | 59.0 | 64.0 | 60.7 | 56.9 | 56.4 | 56.0 | 58.8 | 59.2 | 62.9 |
| 2011..... | 61.8 | 67.6 | | | | | | | | | | |
| Over 6-month span: | | | | | | | | | | | | |
| 2007..... | 59.9 | 59.4 | 63.5 | 62.4 | 59.4 | 58.8 | 55.6 | 54.3 | 56.4 | 51.1 | 53.0 | 52.1 |
| 2008..... | 50.6 | 51.7 | 51.7 | 49.4 | 42.3 | 36.1 | 33.1 | 29.6 | 26.6 | 27.2 | 23.6 | 22.3 |
| 2009..... | 19.1 | 15.5 | 13.3 | 11.6 | 13.9 | 12.4 | 14.2 | 16.1 | 18.5 | 20.4 | 22.7 | 24.2 |
| 2010..... | 25.1 | 26.4 | 34.1 | 45.5 | 51.9 | 55.6 | 58.8 | 63.1 | 63.3 | 58.4 | 59.6 | 61.8 |
| 2011..... | 64.8 | 66.9 | | | | | | | | | | |
| Over 12-month span: | | | | | | | | | | | | |
| 2007..... | 63.5 | 59.2 | 60.9 | 59.7 | 59.4 | 58.4 | 56.9 | 57.1 | 59.9 | 59.4 | 58.6 | 60.1 |
| 2008..... | 54.9 | 56.6 | 53.0 | 47.0 | 48.1 | 43.8 | 40.6 | 39.7 | 36.0 | 32.6 | 28.5 | 26.6 |
| 2009..... | 24.9 | 17.4 | 15.2 | 15.0 | 15.4 | 15.7 | 14.4 | 12.7 | 13.9 | 14.4 | 13.9 | 15.5 |
| 2010..... | 15.7 | 15.5 | 18.9 | 23.4 | 28.1 | 35.0 | 41.8 | 42.1 | 45.1 | 50.6 | 54.7 | 58.6 |
| 2011..... | 60.1 | 68.4 | | | | | | | | | | |
| Manufacturing payrolls, 84 industries | | | | | | | | | | | | |
| Over 1-month span: | | | | | | | | | | | | |
| 2007..... | 54.9 | 43.2 | 37.0 | 28.4 | 40.1 | 34.6 | 38.9 | 26.5 | 35.2 | 36.4 | 52.5 | 41.4 |
| 2008..... | 41.4 | 36.4 | 43.8 | 35.8 | 41.4 | 24.7 | 17.9 | 22.2 | 19.1 | 22.2 | 11.1 | 7.4 |
| 2009..... | 6.8 | 10.5 | 7.4 | 16.0 | 8.0 | 9.3 | 24.7 | 25.3 | 22.2 | 23.5 | 32.7 | 37.7 |
| 2010..... | 38.9 | 53.1 | 53.7 | 66.7 | 62.3 | 51.2 | 51.9 | 44.4 | 49.4 | 45.1 | 58.0 | 59.3 |
| 2011..... | 73.5 | 66.0 | | | | | | | | | | |
| Over 3-month span: | | | | | | | | | | | | |
| 2007..... | 42.0 | 35.8 | 46.9 | 32.1 | 33.3 | 35.2 | 30.9 | 29.6 | 24.1 | 23.5 | 35.8 | 40.1 |
| 2008..... | 50.0 | 37.7 | 35.8 | 33.3 | 34.0 | 27.2 | 19.8 | 11.7 | 15.4 | 13.6 | 13.6 | 7.4 |
| 2009..... | 5.6 | 2.5 | 4.3 | 8.6 | 7.4 | 6.8 | 4.9 | 8.0 | 17.9 | 14.2 | 20.4 | 24.1 |
| 2010..... | 29.6 | 43.8 | 48.8 | 60.5 | 65.4 | 63.0 | 56.8 | 51.2 | 49.4 | 44.4 | 54.9 | 56.2 |
| 2011..... | 64.2 | 72.8 | | | | | | | | | | |
| Over 6-month span: | | | | | | | | | | | | |
| 2007..... | 35.2 | 32.1 | 33.3 | 35.2 | 34.6 | 38.9 | 34.0 | 27.2 | 27.2 | 23.5 | 30.2 | 24.7 |
| 2008..... | 25.9 | 28.4 | 41.4 | 39.5 | 35.8 | 29.6 | 22.2 | 18.5 | 10.5 | 15.4 | 13.6 | 11.7 |
| 2009..... | 7.4 | 4.9 | 2.5 | 4.3 | 2.5 | 6.2 | 8.6 | 6.2 | 6.2 | 6.2 | 8.6 | 14.2 |
| 2010..... | 16.7 | 19.8 | 30.2 | 42.0 | 49.4 | 54.3 | 60.5 | 61.7 | 61.7 | 48.8 | 51.9 | 54.9 |
| 2011..... | 59.9 | 62.3 | | | | | | | | | | |
| Over 12-month span: | | | | | | | | | | | | |
| 2007..... | 39.5 | 36.4 | 37.0 | 31.5 | 29.6 | 30.2 | 30.2 | 28.4 | 32.7 | 29.6 | 35.2 | 36.4 |
| 2008..... | 28.4 | 29.6 | 26.5 | 24.7 | 30.2 | 25.9 | 22.2 | 19.8 | 23.5 | 19.1 | 15.4 | 13.6 |
| 2009..... | 7.4 | 3.7 | 4.9 | 6.2 | 3.7 | 4.9 | 7.4 | 3.7 | 4.9 | 4.9 | 3.7 | 4.3 |
| 2010..... | 5.6 | 1.2 | 6.2 | 7.4 | 18.5 | 25.9 | 35.8 | 35.2 | 40.1 | 45.7 | 48.8 | 54.9 |
| 2011..... | 58.6 | 64.2 | | | | | | | | | | |

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 ¹ (in thousands) | | | | | | | Percent | | | | | | | |
|---|------------------------------------|-------|-------|-------|-------|-------|-------------------|---------|-------|------|------|------|------|-------------------|--|
| | 2010 | | | | | 2011 | | 2010 | | | | | 2011 | | |
| | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | |
| Total ² | 2,862 | 2,756 | 2,905 | 2,966 | 2,921 | 2,741 | 3,093 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.3 | |
| Industry | | | | | | | | | | | | | | | |
| Total private ² | 2,556 | 2,429 | 2,560 | 2,639 | 2,500 | 2,418 | 2,759 | 2.3 | 2.2 | 2.3 | 2.4 | 2.3 | 2.2 | 2.5 | |
| Construction..... | 54 | 68 | 69 | 94 | 44 | 60 | 62 | 1.0 | 1.2 | 1.2 | 1.7 | 0.8 | 1.1 | 1.1 | |
| Manufacturing..... | 173 | 183 | 193 | 213 | 184 | 207 | 204 | 1.5 | 1.6 | 1.6 | 1.8 | 1.6 | 1.7 | 1.7 | |
| Trade, transportation, and utilities..... | 409 | 419 | 445 | 430 | 463 | 470 | 453 | 1.6 | 1.7 | 1.8 | 1.7 | 1.8 | 1.9 | 1.8 | |
| Professional and business services..... | 613 | 554 | 575 | 647 | 609 | 459 | 675 | 3.5 | 3.2 | 3.3 | 3.7 | 3.5 | 2.6 | 3.8 | |
| Education and health services..... | 477 | 510 | 569 | 528 | 510 | 482 | 557 | 2.4 | 2.5 | 2.8 | 2.6 | 2.5 | 2.4 | 2.7 | |
| Leisure and hospitality..... | 350 | 284 | 274 | 253 | 270 | 301 | 382 | 2.6 | 2.1 | 2.1 | 1.9 | 2.0 | 2.3 | 2.8 | |
| Government..... | 306 | 326 | 345 | 327 | 421 | 323 | 334 | 1.3 | 1.4 | 1.5 | 1.4 | 1.9 | 1.4 | 1.5 | |
| Region³ | | | | | | | | | | | | | | | |
| Northeast..... | 594 | 559 | 605 | 603 | 548 | 492 | 599 | 2.3 | 2.2 | 2.4 | 2.4 | 2.2 | 1.9 | 2.3 | |
| South..... | 1,035 | 1,015 | 1,084 | 1,053 | 1,023 | 960 | 1,139 | 2.2 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 2.4 | |
| Midwest..... | 612 | 540 | 584 | 634 | 617 | 513 | 622 | 2.0 | 1.8 | 1.9 | 2.1 | 2.0 | 1.7 | 2.1 | |
| West..... | 685 | 648 | 740 | 769 | 829 | 573 | 694 | 2.3 | 2.2 | 2.5 | 2.6 | 2.8 | 2.0 | 2.4 | |

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

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

³ **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.
^P = preliminary.

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

| Industry and region | Levels ¹ (in thousands) | | | | | | | Percent | | | | | | | |
|---|------------------------------------|-------|-------|-------|-------|-------|-------------------|---------|-------|------|------|------|------|-------------------|--|
| | 2010 | | | | | 2011 | | 2010 | | | | | 2011 | | |
| | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | |
| Total ² | 3,886 | 3,869 | 3,865 | 3,943 | 3,905 | 3,769 | 3,907 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.9 | 3.0 | |
| Industry | | | | | | | | | | | | | | | |
| Total private ² | 3,627 | 3,614 | 3,580 | 3,668 | 3,631 | 3,494 | 3,646 | 3.4 | 3.4 | 3.3 | 3.4 | 3.4 | 3.2 | 3.4 | |
| Construction..... | 332 | 327 | 331 | 324 | 356 | 254 | 310 | 6.0 | 5.9 | 6.0 | 5.9 | 6.5 | 4.6 | 5.6 | |
| Manufacturing..... | 259 | 240 | 259 | 272 | 264 | 246 | 245 | 2.2 | 2.1 | 2.2 | 2.4 | 2.3 | 2.1 | 2.1 | |
| Trade, transportation, and utilities..... | 749 | 776 | 777 | 799 | 756 | 783 | 801 | 3.0 | 3.2 | 3.1 | 3.2 | 3.1 | 3.2 | 3.2 | |
| Professional and business services..... | 777 | 747 | 730 | 761 | 780 | 810 | 812 | 4.6 | 4.5 | 4.4 | 4.5 | 4.6 | 4.8 | 4.8 | |
| Education and health services..... | 471 | 487 | 465 | 491 | 465 | 437 | 464 | 2.4 | 2.5 | 2.4 | 2.5 | 2.4 | 2.2 | 2.3 | |
| Leisure and hospitality..... | 628 | 645 | 596 | 590 | 596 | 588 | 610 | 4.8 | 4.9 | 4.6 | 4.5 | 4.6 | 4.5 | 4.7 | |
| Government..... | 259 | 255 | 285 | 275 | 274 | 275 | 261 | 1.2 | 1.1 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | |
| Region³ | | | | | | | | | | | | | | | |
| Northeast..... | 670 | 724 | 690 | 701 | 680 | 633 | 630 | 2.7 | 2.9 | 2.8 | 2.8 | 2.7 | 2.5 | 2.5 | |
| South..... | 1,465 | 1,427 | 1,449 | 1,572 | 1,513 | 1,412 | 1,442 | 3.1 | 3.0 | 3.1 | 3.3 | 3.2 | 3.0 | 3.1 | |
| Midwest..... | 899 | 854 | 880 | 879 | 878 | 920 | 820 | 3.1 | 2.9 | 3.0 | 3.0 | 3.0 | 3.1 | 2.8 | |
| West..... | 845 | 852 | 839 | 883 | 806 | 939 | 827 | 3.0 | 3.0 | 2.9 | 3.1 | 2.8 | 3.3 | 2.9 | |

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

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

³ **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.
^P = preliminary.

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

| Industry and region | Levels ¹ (in thousands) | | | | | | | Percent | | | | | | | |
|---|------------------------------------|-------|-------|-------|-------|-------|-------------------|---------|-------|------|------|------|------|-------------------|--|
| | 2010 | | | | | 2011 | | 2010 | | | | | 2011 | | |
| | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | |
| Total ² | 3,996 | 3,904 | 3,702 | 3,869 | 3,836 | 3,612 | 3,792 | 3.1 | 3.0 | 2.8 | 3.0 | 2.9 | 2.8 | 2.9 | |
| Industry | | | | | | | | | | | | | | | |
| Total private ² | 3,556 | 3,526 | 3,436 | 3,568 | 3,539 | 3,337 | 3,512 | 3.3 | 3.3 | 3.2 | 3.3 | 3.3 | 3.1 | 3.2 | |
| Construction..... | 320 | 330 | 323 | 342 | 393 | 281 | 294 | 5.8 | 6.0 | 5.9 | 6.2 | 7.2 | 5.1 | 5.3 | |
| Manufacturing..... | 279 | 245 | 266 | 265 | 252 | 184 | 229 | 2.4 | 2.1 | 2.3 | 2.3 | 2.2 | 1.6 | 2.0 | |
| Trade, transportation, and utilities..... | 769 | 763 | 741 | 773 | 718 | 769 | 794 | 3.1 | 3.1 | 3.0 | 3.1 | 2.9 | 3.1 | 3.2 | |
| Professional and business services..... | 757 | 742 | 709 | 687 | 735 | 756 | 771 | 4.5 | 4.4 | 4.2 | 4.1 | 4.3 | 4.5 | 4.5 | |
| Education and health services..... | 429 | 460 | 408 | 460 | 450 | 394 | 441 | 2.2 | 2.3 | 2.1 | 2.3 | 2.3 | 2.0 | 2.2 | |
| Leisure and hospitality..... | 601 | 607 | 613 | 595 | 583 | 596 | 594 | 4.6 | 4.6 | 4.7 | 4.6 | 4.5 | 4.6 | 4.5 | |
| Government..... | 440 | 379 | 265 | 300 | 297 | 275 | 280 | 2.0 | 1.7 | 1.2 | 1.3 | 1.3 | 1.2 | 1.3 | |
| Region³ | | | | | | | | | | | | | | | |
| Northeast..... | 684 | 664 | 678 | 715 | 598 | 569 | 686 | 2.8 | 2.7 | 2.7 | 2.9 | 2.4 | 2.3 | 2.8 | |
| South..... | 1,494 | 1,456 | 1,290 | 1,407 | 1,476 | 1,499 | 1,465 | 3.2 | 3.1 | 2.7 | 3.0 | 3.1 | 3.2 | 3.1 | |
| Midwest..... | 886 | 902 | 822 | 890 | 841 | 912 | 803 | 3.0 | 3.1 | 2.8 | 3.0 | 2.8 | 3.1 | 2.7 | |
| West..... | 823 | 851 | 782 | 829 | 759 | 817 | 846 | 2.9 | 3.0 | 2.7 | 2.9 | 2.7 | 2.9 | 2.9 | |

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

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

³ **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.

^P= preliminary

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

| Industry and region | Levels ¹ (in thousands) | | | | | | | Percent | | | | | | | |
|---|------------------------------------|-------|-------|-------|-------|-------|-------------------|---------|-------|------|------|------|------|-------------------|--|
| | 2010 | | | | | 2011 | | 2010 | | | | | 2011 | | |
| | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P | |
| Total ² | 1,846 | 1,843 | 1,755 | 1,756 | 1,838 | 1,679 | 1,924 | 1.4 | 1.4 | 1.4 | 1.3 | 1.4 | 1.3 | 1.5 | |
| Industry | | | | | | | | | | | | | | | |
| Total private ² | 1,726 | 1,723 | 1,654 | 1,653 | 1,731 | 1,572 | 1,809 | 1.6 | 1.6 | 1.5 | 1.5 | 1.6 | 1.5 | 1.7 | |
| Construction..... | 77 | 80 | 77 | 56 | 81 | 56 | 50 | 1.4 | 1.5 | 1.4 | 1.0 | 1.5 | 1.0 | .9 | |
| Manufacturing..... | 101 | 93 | 95 | 103 | 107 | 83 | 86 | .9 | .8 | .8 | .9 | .9 | .7 | .7 | |
| Trade, transportation, and utilities..... | 398 | 411 | 376 | 388 | 373 | 338 | 464 | 1.6 | 1.7 | 1.5 | 1.6 | 1.5 | 1.4 | 1.9 | |
| Professional and business services..... | 363 | 337 | 342 | 317 | 335 | 361 | 405 | 2.2 | 2.0 | 2.0 | 1.9 | 2.0 | 2.1 | 2.4 | |
| Education and health services..... | 230 | 235 | 228 | 248 | 244 | 206 | 239 | 1.2 | 1.2 | 1.2 | 1.3 | 1.2 | 1.0 | 1.2 | |
| Leisure and hospitality..... | 366 | 358 | 357 | 335 | 368 | 352 | 362 | 2.8 | 2.7 | 2.7 | 2.6 | 2.8 | 2.7 | 2.8 | |
| Government..... | 120 | 120 | 101 | 102 | 107 | 107 | 115 | .5 | .5 | .5 | .5 | .5 | .5 | .5 | |
| Region³ | | | | | | | | | | | | | | | |
| Northeast..... | 308 | 262 | 266 | 248 | 251 | 214 | 345 | 1.2 | 1.1 | 1.1 | 1.0 | 1.0 | .9 | 1.4 | |
| South..... | 737 | 762 | 679 | 702 | 761 | 656 | 796 | 1.6 | 1.6 | 1.4 | 1.5 | 1.6 | 1.4 | 1.7 | |
| Midwest..... | 426 | 374 | 415 | 403 | 411 | 368 | 466 | 1.4 | 1.3 | 1.4 | 1.4 | 1.4 | 1.2 | 1.6 | |
| West..... | 402 | 382 | 377 | 367 | 343 | 366 | 445 | 1.4 | 1.3 | 1.3 | 1.3 | 1.2 | 1.3 | 1.6 | |

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

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

³ **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.

^P = preliminary.

22. Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2010.

| County by NAICS supersector | Establishments, third quarter 2010 (thousands) | Employment | | Average weekly wage ¹ | |
|--------------------------------------|---|----------------------------------|--|----------------------------------|--|
| | | September 2010 (thousands) | Percent change, September 2009-10 ² | Third quarter 2010 | Percent change, third quarter 2009-10 ² |
| United States ³ | 9,044.4 | 128,440.4 | 0.2 | \$870 | 3.4 |
| Private industry | 8,746.3 | 107,007.4 | .4 | 861 | 4.0 |
| Natural resources and mining | 126.9 | 1,926.7 | 3.3 | 884 | 5.7 |
| Construction | 796.6 | 5,686.9 | -4.6 | 946 | 1.3 |
| Manufacturing | 343.4 | 11,584.3 | -3 | 1,074 | 6.8 |
| Trade, transportation, and utilities | 1,877.4 | 24,381.8 | -2 | 742 | 4.4 |
| Information | 144.5 | 2,701.5 | -2.3 | 1,416 | 7.4 |
| Financial activities | 818.0 | 7,379.9 | -1.7 | 1,235 | 4.6 |
| Professional and business services | 1,544.9 | 16,869.8 | 3.3 | 1,093 | 3.1 |
| Education and health services | 893.5 | 18,661.9 | 1.9 | 842 | 2.8 |
| Leisure and hospitality | 748.6 | 13,292.8 | .7 | 370 | 3.6 |
| Other services | 1,267.9 | 4,342.8 | -1 | 562 | 3.5 |
| Government | 298.0 | 21,433.0 | -8 | 918 | 1.2 |
| Los Angeles, CA | 427.0 | 3,844.5 | -8 | 972 | 3.1 |
| Private industry | 421.4 | 3,311.1 | -3 | 948 | 3.6 |
| Natural resources and mining | .5 | 10.8 | 5.9 | 1,903 | 45.9 |
| Construction | 13.0 | 104.2 | -9.3 | 1,010 | -1.6 |
| Manufacturing | 13.5 | 374.1 | -1.7 | 1,079 | 4.6 |
| Trade, transportation, and utilities | 52.2 | 732.2 | .1 | 783 | 2.9 |
| Information | 8.5 | 196.9 | 1.2 | 1,644 | 3.1 |
| Financial activities | 22.4 | 209.4 | -1.1 | 1,456 | 8.4 |
| Professional and business services | 42.0 | 528.2 | .9 | 1,145 | 1.1 |
| Education and health services | 29.0 | 508.8 | 2.6 | 931 | 2.6 |
| Leisure and hospitality | 27.1 | 390.4 | .9 | 544 | 2.6 |
| Other services | 200.8 | 248.5 | -5.9 | 451 | 7.9 |
| Government | 5.6 | 533.4 | -4.0 | 1,123 | 1.1 |
| Cook, IL | 143.4 | 2,354.8 | -4 | 1,008 | 3.2 |
| Private industry | 142.0 | 2,055.8 | -1 | 1,000 | 3.5 |
| Natural resources and mining | .1 | 1.0 | -8.4 | 1,051 | 7.5 |
| Construction | 12.2 | 67.2 | -10.0 | 1,228 | -3.3 |
| Manufacturing | 6.7 | 194.3 | -1.0 | 1,069 | 6.3 |
| Trade, transportation, and utilities | 27.7 | 428.9 | .2 | 784 | 3.2 |
| Information | 2.6 | 51.0 | -3.5 | 1,439 | 6.4 |
| Financial activities | 15.4 | 187.9 | -2.8 | 1,644 | 7.6 |
| Professional and business services | 30.2 | 407.7 | 2.6 | 1,259 | 1.7 |
| Education and health services | 14.9 | 391.0 | (^d) | 903 | (^d) |
| Leisure and hospitality | 12.4 | 230.9 | .2 | 463 | 4.5 |
| Other services | 15.4 | 92.5 | (^d) | 761 | 5.3 |
| Government | 1.4 | 298.9 | -2.5 | 1,067 | 1.5 |
| New York, NY | 120.9 | 2,273.0 | 1.2 | 1,572 | 4.7 |
| Private industry | 120.6 | 1,834.9 | 1.6 | 1,685 | 4.6 |
| Natural resources and mining | .0 | .1 | -5.0 | 1,853 | -9.3 |
| Construction | 2.2 | 30.5 | -7.0 | 1,608 | 3.5 |
| Manufacturing | 2.5 | 26.7 | -2.5 | 1,256 | 6.1 |
| Trade, transportation, and utilities | 21.1 | 233.4 | 2.2 | 1,130 | 2.4 |
| Information | 4.4 | 131.0 | -8 | 2,042 | 7.8 |
| Financial activities | 19.0 | 348.8 | 1.3 | 2,903 | 5.5 |
| Professional and business services | 25.6 | 458.2 | 1.9 | 1,880 | 3.8 |
| Education and health services | 9.1 | 290.0 | 1.7 | 1,147 | 5.5 |
| Leisure and hospitality | 12.3 | 223.3 | 3.2 | 756 | 3.7 |
| Other services | 18.6 | 86.3 | .2 | 1,026 | 9.5 |
| Government | .3 | 438.1 | -6 | 1,098 | 3.8 |
| Harris, TX | 100.0 | 1,995.8 | 1.1 | 1,083 | 3.9 |
| Private industry | 99.4 | 1,734.1 | 1.0 | 1,095 | 4.6 |
| Natural resources and mining | 1.6 | 75.2 | 4.0 | 2,692 | 3.9 |
| Construction | 6.5 | 133.6 | -3.4 | 1,038 | .6 |
| Manufacturing | 4.5 | 169.0 | .4 | 1,357 | 6.6 |
| Trade, transportation, and utilities | 22.5 | 415.8 | .2 | 969 | 5.4 |
| Information | 1.3 | 27.9 | -5.1 | 1,298 | 6.1 |
| Financial activities | 10.4 | 111.4 | -2.8 | 1,283 | 5.5 |
| Professional and business services | 19.8 | 322.3 | 2.8 | 1,310 | 4.6 |
| Education and health services | 11.1 | 238.7 | 3.5 | 902 | 3.7 |
| Leisure and hospitality | 8.0 | 179.2 | 1.2 | 398 | 2.3 |
| Other services | 13.2 | 59.8 | 3.0 | 620 | 2.1 |
| Government | .6 | 261.7 | (^d) | 1,003 | (^d) |
| Maricopa, AZ | 95.0 | 1,597.0 | -5 | 859 | 2.4 |
| Private industry | 94.3 | 1,382.4 | -3 | 851 | 2.9 |
| Natural resources and mining | .5 | 6.5 | -12.0 | 787 | 9.8 |
| Construction | 8.9 | 80.4 | -10.0 | 892 | 2.4 |
| Manufacturing | 3.2 | 106.6 | -2.6 | 1,250 | 9.6 |
| Trade, transportation, and utilities | 22.0 | 328.7 | -1.0 | 797 | 4.2 |
| Information | 1.5 | 26.7 | 1.3 | 1,118 | 2.2 |
| Financial activities | 11.3 | 131.2 | -2.1 | 1,025 | 2.9 |
| Professional and business services | 22.0 | 259.5 | .7 | 896 | .4 |
| Education and health services | 10.4 | 231.5 | (^d) | 919 | (^d) |
| Leisure and hospitality | 6.9 | 165.5 | .3 | 409 | 3.0 |
| Other services | 6.8 | 45.1 | -3 | 571 | 2.5 |
| Government | .7 | 214.6 | -1.8 | 915 | -7 |

See footnotes at end of table.

22. Continued—Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2010.

| County by NAICS supersector | Establishments, third quarter 2010 (thousands) | Employment | | Average weekly wage ¹ | |
|--|---|----------------------------------|--|----------------------------------|--|
| | | September 2010 (thousands) | Percent change, September 2009-10 ² | Third quarter 2010 | Percent change, third quarter 2009-10 ² |
| Dallas, TX | 67.8 | 1,415.0 | 0.9 | \$1,032 | 2.0 |
| Private industry | 67.3 | 1,246.2 | .9 | 1,035 | 2.0 |
| Natural resources and mining | .6 | 8.4 | 10.9 | 2,861 | -.1 |
| Construction | 4.0 | 69.2 | -3.6 | 944 | -.4 |
| Manufacturing | 2.9 | 113.1 | -3.8 | 1,174 | 2.2 |
| Trade, transportation, and utilities | 14.9 | 279.8 | .1 | 961 | 2.9 |
| Information | 1.6 | 45.1 | -.3 | 1,507 | 3.5 |
| Financial activities | 8.5 | 136.0 | -.8 | 1,329 | 2.5 |
| Professional and business services | 14.8 | 261.7 | 3.7 | 1,175 | 1.2 |
| Education and health services | 7.0 | 165.3 | 3.4 | 962 | 2.2 |
| Leisure and hospitality | 5.5 | 128.5 | 1.7 | 462 | 2.0 |
| Other services | 7.0 | 38.2 | 1.7 | 642 | 1.4 |
| Government | .5 | 168.9 | 1.0 | 1,005 | 1.5 |
| Orange, CA | 101.7 | 1,348.8 | -.1 | 975 | 2.8 |
| Private industry | 100.4 | 1,215.9 | .3 | 966 | 3.2 |
| Natural resources and mining | .2 | 3.9 | -1.9 | 620 | -2.7 |
| Construction | 6.4 | 67.9 | -5.0 | 1,073 | -3.1 |
| Manufacturing | 5.0 | 151.0 | -.4 | 1,244 | 9.0 |
| Trade, transportation, and utilities | 16.4 | 243.5 | -.4 | 905 | 4.3 |
| Information | 1.3 | 24.3 | -8.2 | 1,463 | 8.0 |
| Financial activities | 9.8 | 104.0 | .2 | 1,363 | 5.2 |
| Professional and business services | 18.8 | 244.0 | 2.0 | 1,092 | .3 |
| Education and health services | 10.4 | 154.5 | 2.9 | 940 | 1.4 |
| Leisure and hospitality | 7.1 | 171.7 | -.1 | 431 | 4.9 |
| Other services | 20.7 | 48.4 | .5 | 539 | 2.5 |
| Government | 1.4 | 132.9 | -2.9 | 1,060 | .2 |
| San Diego, CA | 97.7 | 1,238.6 | .4 | 943 | 2.7 |
| Private industry | 96.3 | 1,021.5 | .4 | 917 | 2.8 |
| Natural resources and mining | .7 | 10.7 | 5.6 | 582 | -.7 |
| Construction | 6.4 | 55.7 | -5.5 | 1,045 | .6 |
| Manufacturing | 3.0 | 93.0 | .1 | 1,326 | 7.2 |
| Trade, transportation, and utilities | 13.7 | 196.4 | -.3 | 742 | 1.6 |
| Information | 1.2 | 25.0 | -2.8 | 1,572 | 10.1 |
| Financial activities | 8.6 | 66.9 | -1.4 | 1,119 | 4.0 |
| Professional and business services | 16.2 | 210.8 | 1.8 | 1,223 | .2 |
| Education and health services | 8.4 | 145.5 | 2.8 | 907 | 2.4 |
| Leisure and hospitality | 7.0 | 157.4 | .3 | 425 | 4.9 |
| Other services | 27.3 | 57.7 | .1 | 540 | 11.6 |
| Government | 1.4 | 217.1 | .2 | 1,069 | (⁴) |
| King, WA | 83.0 | 1,121.8 | .1 | 1,234 | 4.7 |
| Private industry | 82.4 | 967.6 | .1 | 1,248 | 4.6 |
| Natural resources and mining | .4 | 2.9 | -4.4 | 1,162 | 9.5 |
| Construction | 6.0 | 49.1 | -8.8 | 1,134 | 1.1 |
| Manufacturing | 2.3 | 97.3 | -2.4 | 1,455 | 10.4 |
| Trade, transportation, and utilities | 14.9 | 204.5 | .4 | 977 | 6.8 |
| Information | 1.8 | 79.9 | 1.0 | 3,605 | 6.4 |
| Financial activities | 6.6 | 64.6 | -4.4 | 1,297 | -1.3 |
| Professional and business services | 14.3 | 177.8 | 3.2 | 1,329 | 4.7 |
| Education and health services | 7.0 | 130.3 | .2 | 930 | 3.6 |
| Leisure and hospitality | 6.5 | 109.8 | -.1 | 456 | .2 |
| Other services | 22.8 | 51.4 | 8.6 | 572 | -4.7 |
| Government | .6 | 154.2 | .1 | 1,142 | (⁴) |
| Miami-Dade, FL | 85.0 | 940.9 | .3 | 853 | 1.5 |
| Private industry | 84.7 | 797.9 | .7 | 819 | 1.7 |
| Natural resources and mining | .5 | 6.8 | -.2 | 489 | .6 |
| Construction | 5.3 | 31.4 | -9.3 | 859 | -.2 |
| Manufacturing | 2.6 | 34.7 | -4.3 | 805 | 5.6 |
| Trade, transportation, and utilities | 24.1 | 236.4 | 1.9 | 757 | 1.6 |
| Information | 1.5 | 17.1 | -1.5 | 1,289 | 5.5 |
| Financial activities | 9.0 | 60.4 | -1.0 | 1,216 | 5.6 |
| Professional and business services | 17.8 | 121.5 | .4 | 993 | -2.8 |
| Education and health services | 9.6 | 149.6 | 1.0 | 862 | 4.5 |
| Leisure and hospitality | 6.3 | 104.8 | 3.7 | 497 | 4.6 |
| Other services | 7.7 | 34.8 | 1.5 | 553 | 2.6 |
| Government | .4 | 143.0 | -1.8 | 1,047 | 1.1 |

¹ Average weekly wages were calculated using unrounded data.

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

³ Totals for the United States do not include data for Puerto Rico or the

Virgin Islands.

⁴ 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, third quarter 2010.

| State | Establishments, third quarter 2010 (thousands) | Employment | | Average weekly wage ¹ | |
|----------------------------------|---|----------------------------------|---|----------------------------------|---|
| | | September 2010 (thousands) | Percent change, September 2009-10 | Third quarter 2010 | Percent change, third quarter 2009-10 |
| United States ² | 9,044.4 | 128,440.4 | 0.2 | \$870 | 3.4 |
| Alabama | 116.8 | 1,813.9 | -.1 | 774 | 4.0 |
| Alaska | 21.4 | 333.5 | 1.3 | 926 | 4.4 |
| Arizona | 147.2 | 2,342.3 | -.9 | 821 | 2.6 |
| Arkansas | 85.6 | 1,147.0 | .8 | 684 | 3.8 |
| California | 1,347.5 | 14,469.7 | -.3 | 982 | 3.3 |
| Colorado | 173.2 | 2,183.8 | -.2 | 898 | 2.5 |
| Connecticut | 111.4 | 1,611.9 | .0 | 1,069 | 4.3 |
| Delaware | 28.4 | 404.7 | .8 | 902 | 2.4 |
| District of Columbia | 35.0 | 693.8 | 2.0 | 1,471 | 1.2 |
| Florida | 595.2 | 7,045.3 | .0 | 780 | 2.8 |
| Georgia | 268.2 | 3,749.9 | -.1 | 823 | 2.7 |
| Hawaii | 38.9 | 585.6 | -.1 | 804 | 2.2 |
| Idaho | 55.0 | 616.8 | -1.1 | 667 | 3.1 |
| Illinois | 378.6 | 5,539.5 | .0 | 916 | 4.0 |
| Indiana | 157.2 | 2,736.7 | .8 | 742 | 3.9 |
| Iowa | 94.3 | 1,439.8 | -.5 | 719 | 3.6 |
| Kansas | 87.5 | 1,296.1 | -1.0 | 731 | 3.5 |
| Kentucky | 110.1 | 1,728.3 | .8 | 729 | 3.3 |
| Louisiana | 131.0 | 1,834.8 | .0 | 790 | 3.9 |
| Maine | 49.2 | 589.4 | -.6 | 714 | 3.6 |
| Maryland | 163.8 | 2,469.7 | .5 | 966 | 2.7 |
| Massachusetts | 221.1 | 3,169.8 | .8 | 1,069 | 4.5 |
| Michigan | 247.6 | 3,825.9 | .9 | 840 | 3.8 |
| Minnesota | 164.7 | 2,574.3 | .4 | 875 | 4.7 |
| Mississippi | 69.5 | 1,077.4 | .0 | 653 | 2.8 |
| Missouri | 174.5 | 2,596.8 | -.5 | 764 | 2.7 |
| Montana | 42.4 | 428.7 | .0 | 647 | 1.6 |
| Nebraska | 60.0 | 899.8 | -.2 | 708 | 2.8 |
| Nevada | 71.2 | 1,106.8 | -1.7 | 815 | 1.2 |
| New Hampshire | 48.4 | 608.9 | .1 | 854 | 2.9 |
| New Jersey | 265.6 | 3,759.0 | -.4 | 1,024 | 2.8 |
| New Mexico | 54.8 | 785.9 | -1.0 | 745 | 2.9 |
| New York | 591.6 | 8,364.2 | .5 | 1,057 | 4.3 |
| North Carolina | 251.7 | 3,806.2 | -.3 | 768 | 3.1 |
| North Dakota | 26.4 | 366.1 | 3.0 | 726 | 6.8 |
| Ohio | 286.4 | 4,942.1 | .3 | 791 | 3.4 |
| Oklahoma | 102.2 | 1,487.5 | -.2 | 726 | 4.0 |
| Oregon | 131.0 | 1,620.5 | .3 | 791 | 3.1 |
| Pennsylvania | 341.0 | 5,500.9 | .9 | 860 | 4.1 |
| Rhode Island | 35.2 | 456.0 | .8 | 826 | 4.2 |
| South Carolina | 111.4 | 1,763.7 | .5 | 714 | 3.9 |
| South Dakota | 30.9 | 393.7 | .4 | 660 | 4.3 |
| Tennessee | 139.6 | 2,578.3 | .8 | 777 | 4.3 |
| Texas | 572.4 | 10,204.5 | 1.5 | 876 | 3.7 |
| Utah | 83.7 | 1,160.6 | .5 | 740 | 2.2 |
| Vermont | 24.4 | 294.3 | .5 | 752 | 2.6 |
| Virginia | 232.9 | 3,544.1 | .4 | 930 | 3.8 |
| Washington | 237.0 | 2,855.7 | -.3 | 953 | 4.0 |
| West Virginia | 48.4 | 699.4 | 1.1 | 702 | 4.3 |
| Wisconsin | 157.6 | 2,657.7 | .5 | 752 | 3.6 |
| Wyoming | 25.2 | 278.9 | .0 | 793 | 4.9 |
| Puerto Rico | 49.6 | 910.0 | -2.7 | 502 | 1.6 |
| Virgin Islands | 3.6 | 43.5 | 2.3 | 754 | 4.3 |

¹ 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.

² 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 |
|--|------------------------|---------------------------|-----------------------------------|----------------------------------|---------------------|
| Total covered (UI and UCFE) | | | | | |
| 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 |
| 2009 | 9,003,197 | 128,607,842 | 5,859,232,422 | 45,559 | 876 |
| UI covered | | | | | |
| 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 |
| 2009 | 8,937,616 | 125,781,130 | 5,667,704,722 | 45,060 | 867 |
| Private industry covered | | | | | |
| 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 |
| 2009 | 8,709,115 | 106,947,104 | 4,829,211,805 | 45,155 | 868 |
| State government covered | | | | | |
| 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 |
| 2009 | 67,075 | 4,639,715 | 226,148,903 | 48,742 | 937 |
| Local government covered | | | | | |
| 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 |
| 2009 | 161,427 | 14,194,311 | 612,344,014 | 43,140 | 830 |
| Federal government covered (UCFE) | | | | | |
| 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 |
| 2009 | 65,581 | 2,826,713 | 191,527,700 | 67,756 | 1,303 |

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 2009

| Industry, establishments, and employment | Total | Size of establishments | | | | | | | | |
|---|-------------|-----------------------------------|----------------|------------------|------------------|------------------|--------------------|--------------------|--------------------|-----------------------|
| | | Fewer than 5 workers ¹ | 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 |
| Total all industries² | | | | | | | | | | |
| Establishments, first quarter | 8,673,470 | 5,396,379 | 1,372,066 | 917,124 | 619,710 | 208,342 | 116,230 | 28,460 | 10,018 | 5,141 |
| Employment, March | 106,811,928 | 7,655,167 | 9,090,916 | 12,402,665 | 18,661,722 | 14,311,905 | 17,267,316 | 9,739,523 | 6,812,850 | 10,869,864 |
| Natural resources and mining | | | | | | | | | | |
| Establishments, first quarter | 125,678 | 71,920 | 23,395 | 14,867 | 9,674 | 3,218 | 1,798 | 557 | 189 | 60 |
| Employment, March | 1,671,238 | 114,506 | 154,613 | 200,225 | 290,721 | 219,346 | 272,879 | 190,717 | 127,225 | 101,006 |
| Construction | | | | | | | | | | |
| Establishments, first quarter | 841,895 | 593,637 | 117,797 | 69,486 | 42,421 | 12,009 | 5,208 | 1,004 | 254 | 79 |
| Employment, March | 5,927,257 | 750,065 | 771,369 | 934,164 | 1,265,441 | 817,103 | 768,721 | 335,349 | 170,276 | 114,769 |
| Manufacturing | | | | | | | | | | |
| Establishments, first quarter | 353,643 | 145,720 | 59,845 | 52,049 | 48,545 | 22,752 | 16,627 | 5,187 | 1,972 | 946 |
| Employment, March | 12,092,961 | 244,232 | 401,010 | 715,491 | 1,510,229 | 1,588,920 | 2,528,984 | 1,779,448 | 1,333,297 | 1,991,350 |
| Trade, transportation, and utilities | | | | | | | | | | |
| Establishments, first quarter | 1,894,905 | 1,033,036 | 375,292 | 246,643 | 148,518 | 49,772 | 32,487 | 7,193 | 1,500 | 464 |
| Employment, March | 24,586,392 | 1,677,443 | 2,499,579 | 3,315,288 | 4,451,666 | 3,466,697 | 4,754,309 | 2,475,362 | 986,198 | 959,850 |
| Information | | | | | | | | | | |
| Establishments, first quarter | 146,483 | 86,433 | 20,709 | 15,824 | 13,049 | 5,437 | 3,310 | 1,046 | 458 | 217 |
| Employment, March | 2,855,390 | 116,231 | 137,955 | 215,809 | 401,856 | 374,575 | 498,814 | 363,892 | 311,123 | 435,135 |
| Financial activities | | | | | | | | | | |
| Establishments, first quarter | 841,782 | 557,483 | 151,027 | 76,069 | 37,169 | 11,153 | 5,768 | 1,759 | 907 | 447 |
| Employment, March | 7,643,521 | 858,488 | 993,689 | 1,001,354 | 1,107,323 | 763,190 | 864,862 | 608,781 | 630,533 | 815,301 |
| Professional and business services | | | | | | | | | | |
| Establishments, first quarter | 1,517,365 | 1,055,297 | 196,348 | 124,698 | 83,581 | 30,884 | 18,369 | 5,326 | 2,047 | 815 |
| Employment, March | 16,516,273 | 1,410,994 | 1,290,519 | 1,682,005 | 2,542,519 | 2,131,798 | 2,769,134 | 1,819,751 | 1,394,329 | 1,475,224 |
| Education and health services | | | | | | | | | | |
| Establishments, first quarter | 858,136 | 417,186 | 184,310 | 120,602 | 78,973 | 28,774 | 20,050 | 4,427 | 1,976 | 1,838 |
| Employment, March | 18,268,572 | 733,986 | 1,225,826 | 1,623,193 | 2,380,692 | 2,002,526 | 3,016,357 | 1,503,953 | 1,376,575 | 4,405,464 |
| Leisure and hospitality | | | | | | | | | | |
| Establishments, first quarter | 733,354 | 283,960 | 124,005 | 140,576 | 133,542 | 38,935 | 9,942 | 1,532 | 603 | 259 |
| Employment, March | 12,723,443 | 448,520 | 837,732 | 1,973,561 | 4,006,199 | 2,578,345 | 1,402,865 | 518,812 | 411,444 | 545,965 |
| Other services | | | | | | | | | | |
| Establishments, first quarter | 1,193,934 | 988,947 | 116,718 | 55,617 | 24,052 | 5,381 | 2,663 | 428 | 112 | 16 |
| Employment, March | 4,361,271 | 1,168,997 | 762,081 | 732,752 | 699,997 | 367,591 | 389,163 | 143,040 | 71,850 | 25,800 |

¹ Includes establishments that reported no workers in March 2009.

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

² Includes data for unclassified establishments, not shown separately.

26. Average annual wages for 2008 and 2009 for all covered workers¹ by metropolitan area

| Metropolitan area ² | Average annual wages ³ | | |
|---|-----------------------------------|----------|-------------------------|
| | 2008 | 2009 | Percent change, 2008-09 |
| Metropolitan areas ⁴ | \$47,194 | \$47,127 | -0.1 |
| Abilene, TX | 32,649 | 32,807 | 0.5 |
| Aguadilla-Isabela-San Sebastian, PR | 20,714 | 21,887 | 5.7 |
| Akron, OH | 40,376 | 40,447 | 0.2 |
| Albany, GA | 34,314 | 35,160 | 2.5 |
| Albany-Schenectady-Troy, NY | 43,912 | 44,859 | 2.2 |
| Albuquerque, NM | 39,342 | 40,301 | 2.4 |
| Alexandria, LA | 34,783 | 35,446 | 1.9 |
| Allentown-Bethlehem-Easton, PA-NJ | 42,500 | 42,577 | 0.2 |
| Altoona, PA | 32,986 | 33,827 | 2.5 |
| Amarillo, TX | 38,215 | 37,938 | -0.7 |
| Ames, IA | 38,558 | 39,301 | 1.9 |
| Anchorage, AK | 46,935 | 48,345 | 3.0 |
| Anderson, IN | 31,326 | 31,363 | 0.1 |
| Anderson, SC | 32,322 | 32,599 | 0.9 |
| Ann Arbor, MI | 48,987 | 48,925 | -0.1 |
| Anniston-Oxford, AL | 36,227 | 36,773 | 1.5 |
| Appleton, WI | 37,522 | 37,219 | -0.8 |
| Asheville, NC | 34,070 | 34,259 | 0.6 |
| Athens-Clarke County, GA | 35,503 | 35,948 | 1.3 |
| Atlanta-Sandy Springs-Marietta, GA | 48,064 | 48,156 | 0.2 |
| Atlantic City, NJ | 40,337 | 39,810 | -1.3 |
| Auburn-Opelika, AL | 32,651 | 33,367 | 2.2 |
| Augusta-Richmond County, GA-SC | 38,068 | 38,778 | 1.9 |
| Austin-Round Rock, TX | 47,355 | 47,183 | -0.4 |
| Bakersfield, CA | 39,476 | 40,046 | 1.4 |
| Baltimore-Towson, MD | 48,438 | 49,214 | 1.6 |
| Bangor, ME | 33,829 | 34,620 | 2.3 |
| Barnstable Town, MA | 38,839 | 39,970 | 0.3 |
| Baton Rouge, LA | 41,961 | 42,677 | 1.7 |
| Battle Creek, MI | 42,782 | 43,555 | 1.8 |
| Bay City, MI | 36,489 | 36,940 | 1.2 |
| Beaumont-Port Arthur, TX | 43,302 | 43,224 | -0.2 |
| Bellingham, WA | 35,864 | 36,757 | 2.5 |
| Bend, OR | 35,044 | 35,336 | 0.8 |
| Billings, MT | 36,155 | 36,660 | 1.4 |
| Binghamton, NY | 37,731 | 38,200 | 1.2 |
| Birmingham-Hoover, AL | 43,651 | 43,783 | 0.3 |
| Bismarck, ND | 35,389 | 36,082 | 2.0 |
| Blacksburg-Christiansburg-Radford, VA | 35,272 | 35,344 | 0.2 |
| Bloomington, IN | 33,220 | 33,828 | 1.8 |
| Bloomington-Normal, IL | 43,918 | 44,925 | 2.3 |
| Boise City-Nampa, ID | 37,315 | 37,410 | 0.3 |
| Boston-Cambridge-Quincy, MA-NH | 61,128 | 60,549 | -0.9 |
| Boulder, CO | 53,455 | 52,433 | -1.9 |
| Bowling Green, KY | 34,861 | 34,824 | -0.1 |
| Bremerton-Silverdale, WA | 40,421 | 42,128 | 4.2 |
| Bridgeport-Stamford-Norwalk, CT | 80,018 | 77,076 | -3.7 |
| Brownsville-Harlingen, TX | 28,342 | 28,855 | 1.8 |
| Brunswick, GA | 34,458 | 34,852 | 1.1 |
| Buffalo-Niagara Falls, NY | 38,984 | 39,218 | 0.6 |
| Burlington, NC | 34,283 | 33,094 | -3.5 |
| Burlington-South Burlington, VT | 43,559 | 44,101 | 1.2 |
| Canton-Massillon, OH | 34,897 | 34,726 | -0.5 |
| Cape Coral-Fort Myers, FL | 37,866 | 37,641 | -0.6 |
| Carson City, NV | 43,858 | 44,532 | 1.5 |
| Casper, WY | 43,851 | 42,385 | -3.3 |
| Cedar Rapids, IA | 42,356 | 41,874 | -1.1 |
| Champaign-Urbana, IL | 37,408 | 38,478 | 2.9 |
| Charleston, WV | 40,442 | 41,436 | 2.5 |
| Charleston-North Charleston, SC | 38,035 | 38,766 | 1.9 |
| Charlotte-Gastonia-Concord, NC-SC | 47,332 | 46,291 | -2.2 |
| Charlottesville, VA | 41,777 | 42,688 | 2.2 |
| Chattanooga, TN-GA | 37,258 | 37,839 | 1.6 |
| Cheyenne, WY | 37,452 | 38,378 | 2.5 |
| Chicago-Naperville-Joliet, IL-IN-WI | 51,775 | 51,048 | -1.4 |
| Chico, CA | 34,310 | 35,179 | 2.5 |
| Cincinnati-Middletown, OH-KY-IN | 43,801 | 44,012 | 0.5 |
| Clarksville, TN-KY | 32,991 | 33,282 | 0.9 |
| Cleveland, TN | 35,010 | 35,029 | 0.1 |
| Cleveland-Elyria-Mentor, OH | 43,467 | 43,256 | -0.5 |
| Coeur d'Alene, ID | 31,353 | 31,513 | 0.5 |
| College Station-Bryan, TX | 33,967 | 34,332 | 1.1 |
| Colorado Springs, CO | 40,973 | 41,885 | 2.2 |
| Columbia, MO | 34,331 | 35,431 | 3.2 |
| Columbia, SC | 37,514 | 38,314 | 2.1 |
| Columbus, GA-AL | 35,067 | 35,614 | 1.6 |
| Columbus, IN | 42,610 | 41,540 | -2.5 |
| Columbus, OH | 43,533 | 43,877 | 0.8 |
| Corpus Christi, TX | 38,771 | 38,090 | -1.8 |
| Corvallis, OR | 42,343 | 42,700 | 0.8 |

See footnotes at end of table.

26. Continued — Average annual wages for 2008 and 2009 for all covered workers¹ by metropolitan area

| Metropolitan area ² | Average annual wages ³ | | |
|--|-----------------------------------|----------|-------------------------|
| | 2008 | 2009 | Percent change, 2008-09 |
| Cumberland, MD-WV | \$32,583 | \$33,409 | 2.5 |
| Dallas-Fort Worth-Arlington, TX | 50,331 | 49,965 | -0.7 |
| Dalton, GA | 34,403 | 35,024 | 1.8 |
| Danville, IL | 35,602 | 35,552 | -0.1 |
| Danville, VA | 30,580 | 30,778 | 0.6 |
| Davenport-Moline-Rock Island, IA-IL | 40,425 | 40,790 | 0.9 |
| Dayton, OH | 40,824 | 40,972 | 0.4 |
| Decatur, AL | 36,855 | 37,145 | 0.8 |
| Decatur, IL | 42,012 | 41,741 | -0.6 |
| Daytona-Daytona Beach-Ormond Beach, FL | 32,938 | 33,021 | 0.3 |
| Denver-Aurora, CO | 51,270 | 51,733 | 0.9 |
| Des Moines, IA | 43,918 | 44,073 | 0.4 |
| Detroit-Warren-Livonia, MI | 50,081 | 48,821 | -2.5 |
| Dothan, AL | 32,965 | 33,888 | 2.8 |
| Dover, DE | 36,375 | 37,039 | 1.8 |
| Dubuque, IA | 35,656 | 35,665 | 0.0 |
| Duluth, MN-WI | 36,307 | 36,045 | -0.7 |
| Durham, NC | 53,700 | 54,857 | 2.2 |
| Eau Claire, WI | 33,549 | 34,186 | 1.9 |
| El Centro, CA | 33,239 | 34,220 | 3.0 |
| Elizabethtown, KY | 33,728 | 34,970 | 3.7 |
| Elkhart-Goshen, IN | 35,858 | 35,823 | -0.1 |
| Elmira, NY | 36,984 | 36,995 | 0.0 |
| El Paso, TX | 31,837 | 32,665 | 2.6 |
| Erie, PA | 35,992 | 35,995 | 0.0 |
| Eugene-Springfield, OR | 35,380 | 35,497 | 0.3 |
| Evansville, IN-KY | 38,304 | 38,219 | -0.2 |
| Fairbanks, AK | 44,225 | 45,328 | 2.5 |
| Fajardo, PR | 22,984 | 23,467 | 2.1 |
| Fargo, ND-MN | 36,745 | 37,309 | 1.5 |
| Farmington, NM | 41,155 | 40,437 | -1.7 |
| Fayetteville, NC | 34,619 | 35,755 | 3.3 |
| Fayetteville-Springdale-Rogers, AR-MO | 39,025 | 40,265 | 3.2 |
| Flagstaff, AZ | 35,353 | 36,050 | 2.0 |
| Flint, MI | 39,206 | 38,682 | -1.3 |
| Florence, SC | 34,841 | 35,509 | 1.9 |
| Florence-Muscle Shoals, AL | 32,088 | 32,471 | 1.2 |
| Fond du Lac, WI | 36,166 | 35,667 | -1.4 |
| Fort Collins-Loveland, CO | 40,154 | 40,251 | 0.2 |
| Fort Smith, AR-OK | 32,130 | 32,004 | -0.4 |
| Fort Walton Beach-Crestview-Destin, FL | 36,454 | 37,823 | 3.8 |
| Fort Wayne, IN | 36,806 | 37,038 | 0.6 |
| Fresno, CA | 36,038 | 36,427 | 1.1 |
| Gadsden, AL | 31,718 | 32,652 | 2.9 |
| Gainesville, FL | 37,282 | 38,863 | 4.2 |
| Gainesville, GA | 37,929 | 37,924 | 0.0 |
| Glens Falls, NY | 34,531 | 35,215 | 2.0 |
| Goldsboro, NC | 30,607 | 30,941 | 1.1 |
| Grand Forks, ND-MN | 32,207 | 33,455 | 3.9 |
| Grand Junction, CO | 39,246 | 38,450 | -2.0 |
| Grand Rapids-Wyoming, MI | 39,868 | 40,341 | 1.2 |
| Great Falls, MT | 31,962 | 32,737 | 2.4 |
| Greeley, CO | 38,700 | 37,656 | -2.7 |
| Green Bay, WI | 39,247 | 39,387 | 0.4 |
| Greensboro-High Point, NC | 37,919 | 38,020 | 0.3 |
| Greenville, NC | 34,672 | 35,542 | 2.5 |
| Greenville, SC | 37,592 | 37,921 | 0.9 |
| Guayama, PR | 27,189 | 28,415 | 4.5 |
| Gulfport-Biloxi, MS | 35,700 | 36,251 | 1.5 |
| Hagerstown-Martinsburg, MD-WV | 36,472 | 36,459 | 0.0 |
| Hanford-Corcoran, CA | 35,374 | 35,402 | 0.1 |
| Harrisburg-Carlisle, PA | 42,330 | 43,152 | 1.9 |
| Harrisonburg, VA | 34,197 | 34,814 | 1.8 |
| Hartford-West Hartford-East Hartford, CT | 54,446 | 54,534 | 0.2 |
| Hattiesburg, MS | 31,629 | 32,320 | 2.2 |
| Hickory-Lenoir-Morganton, NC | 32,810 | 32,429 | -1.2 |
| Hinesville-Fort Stewart, GA | 33,854 | 35,032 | 3.5 |
| Holland-Grand Haven, MI | 37,953 | 37,080 | -2.3 |
| Honolulu, HI | 42,090 | 42,814 | 1.7 |
| Hot Springs, AR | 29,042 | 29,414 | 1.3 |
| Houma-Bayou Cane-Thibodaux, LA | 44,345 | 44,264 | -0.2 |
| Houston-Baytown-Sugar Land, TX | 55,407 | 54,779 | -1.1 |
| Huntington-Ashland, WV-KY-OH | 35,717 | 36,835 | 3.1 |
| Huntsville, AL | 47,427 | 49,240 | 3.8 |
| Idaho Falls, ID | 30,485 | 30,875 | 1.3 |
| Indianapolis, IN | 43,128 | 43,078 | -0.1 |
| Iowa City, IA | 39,070 | 39,703 | 1.6 |
| Ithaca, NY | 41,689 | 42,779 | 2.6 |
| Jackson, MI | 38,672 | 38,635 | -0.1 |
| Jackson, MS | 36,730 | 37,118 | 1.1 |

See footnotes at end of table.

26. Continued — Average annual wages for 2008 and 2009 for all covered workers¹ by metropolitan area

| Metropolitan area ² | Average annual wages ³ | | |
|--|-----------------------------------|----------|-------------------------|
| | 2008 | 2009 | Percent change, 2008-09 |
| Jackson, TN | \$35,975 | \$35,959 | 0.0 |
| Jacksonville, FL | 41,524 | 41,804 | 0.7 |
| Jacksonville, NC | 27,893 | 29,006 | 4.0 |
| Janesville, WI | 36,906 | 36,652 | -0.7 |
| Jefferson City, MO | 33,766 | 34,474 | 2.1 |
| Johnson City, TN | 32,759 | 33,949 | 3.6 |
| Johnstown, PA | 32,464 | 33,238 | 2.4 |
| Jonesboro, AR | 31,532 | 31,793 | 0.8 |
| Joplin, MO | 32,156 | 32,741 | 1.8 |
| Kalamazoo-Portage, MI | 40,333 | 40,044 | -0.7 |
| Kankakee-Bradley, IL | 34,451 | 34,539 | 0.3 |
| Kansas City, MO-KS | 44,155 | 44,331 | 0.4 |
| Kennewick-Richland-Pasco, WA | 41,878 | 43,705 | 4.4 |
| Killeen-Temple-Fort Hood, TX | 34,299 | 35,674 | 4.0 |
| Kingsport-Bristol-Bristol, TN-VA | 37,260 | 37,234 | -0.1 |
| Kingston, NY | 35,883 | 36,325 | 1.2 |
| Knoxville, TN | 38,912 | 39,353 | 1.1 |
| Kokomo, IN | 44,117 | 42,248 | -4.2 |
| La Crosse, WI-MN | 34,078 | 34,836 | 2.2 |
| Lafayette, IN | 37,832 | 38,313 | 1.3 |
| Lafayette, LA | 42,748 | 42,050 | -1.6 |
| Lake Charles, LA | 39,982 | 39,263 | -1.8 |
| Lakeland, FL | 35,195 | 35,485 | 0.8 |
| Lancaster, PA | 38,127 | 38,328 | 0.5 |
| Lansing-East Lansing, MI | 42,339 | 42,764 | 1.0 |
| Laredo, TX | 29,572 | 29,952 | 1.3 |
| Las Cruces, NM | 32,894 | 34,264 | 4.2 |
| Las Vegas-Paradise, NV | 43,120 | 42,674 | -1.0 |
| Lawrence, KS | 32,313 | 32,863 | 1.7 |
| Lawton, OK | 32,258 | 33,206 | 2.9 |
| Lebanon, PA | 33,900 | 34,416 | 1.5 |
| Lewiston, ID-WA | 32,783 | 32,850 | 0.2 |
| Lewiston-Auburn, ME | 34,396 | 34,678 | 0.8 |
| Lexington-Fayette, KY | 40,034 | 40,446 | 1.0 |
| Lima, OH | 35,381 | 36,224 | 2.4 |
| Lincoln, NE | 35,834 | 36,281 | 1.2 |
| Little Rock-North Little Rock, AR | 38,902 | 40,331 | 3.7 |
| Logan, UT-ID | 29,392 | 29,608 | 0.7 |
| Longview, TX | 38,902 | 38,215 | -1.8 |
| Longview, WA | 37,806 | 38,300 | 1.3 |
| Los Angeles-Long Beach-Santa Ana, CA | 51,520 | 51,344 | -0.3 |
| Louisville, KY-IN | 40,596 | 41,101 | 1.2 |
| Lubbock, TX | 33,867 | 34,318 | 1.3 |
| Lynchburg, VA | 35,207 | 35,503 | 0.8 |
| Macon, GA | 34,823 | 35,718 | 2.6 |
| Madera, CA | 34,405 | 34,726 | 0.9 |
| Madison, WI | 42,623 | 42,861 | 0.6 |
| Manchester-Nashua, NH | 50,629 | 49,899 | -1.4 |
| Manfield, OH | 33,946 | 33,256 | -2.0 |
| Mayaguez, PR | 22,394 | 23,634 | 5.5 |
| McAllen-Edinburg-Pharr, TX | 28,498 | 29,197 | 2.5 |
| Medford, OR | 33,402 | 34,047 | 1.9 |
| Memphis, TN-MS-AR | 43,124 | 43,318 | 0.4 |
| Merced, CA | 33,903 | 34,284 | 1.1 |
| Miami-Fort Lauderdale-Miami Beach, FL | 44,199 | 44,514 | 0.7 |
| Michigan City-La Porte, IN | 33,507 | 33,288 | -0.7 |
| Midland, TX | 50,116 | 47,557 | -5.1 |
| Milwaukee-Waukesha-West Allis, WI | 44,462 | 44,446 | 0.0 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 51,044 | 50,107 | -1.8 |
| Missoula, MT | 33,414 | 33,869 | 1.4 |
| Mobile, AL | 38,180 | 39,295 | 2.9 |
| Modesto, CA | 37,867 | 38,657 | 2.1 |
| Monroe, LA | 32,796 | 33,765 | 3.0 |
| Monroe, MI | 41,849 | 41,055 | -1.9 |
| Montgomery, AL | 37,552 | 38,441 | 2.4 |
| Morgantown, WV | 37,082 | 38,637 | 4.2 |
| Morristown, TN | 32,858 | 32,903 | 0.1 |
| Mount Vernon-Anacortes, WA | 36,230 | 37,098 | 2.4 |
| Muncie, IN | 32,420 | 32,822 | 1.2 |
| Muskegon-Norton Shores, MI | 36,033 | 35,654 | -1.1 |
| Myrtle Beach-Conway-North Myrtle Beach, SC | 28,450 | 28,132 | -1.1 |
| Napa, CA | 45,061 | 45,174 | 0.3 |
| Naples-Marco Island, FL | 40,178 | 39,808 | -0.9 |
| Nashville-Davidson--Murfreesboro, TN | 43,964 | 43,811 | -0.3 |
| New Haven-Milford, CT | 48,239 | 48,681 | 0.9 |
| New Orleans-Metairie-Kenner, LA | 45,108 | 45,121 | 0.0 |
| New York-Northern New Jersey-Long Island, NY-NJ-PA | 66,548 | 63,773 | -4.2 |
| Niles-Benton Harbor, MI | 38,814 | 39,097 | 0.7 |
| Norwich-New London, CT | 46,727 | 47,245 | 1.1 |
| Ocala, FL | 32,579 | 32,724 | 0.4 |

See footnotes at end of table.

26. Continued — Average annual wages for 2008 and 2009 for all covered workers¹ by metropolitan area

| Metropolitan area ² | Average annual wages ³ | | |
|---|-----------------------------------|----------|-------------------------|
| | 2008 | 2009 | Percent change, 2008-09 |
| Ocean City, NJ | \$33,529 | \$33,477 | -0.2 |
| Odessa, TX | 44,316 | 42,295 | -4.6 |
| Ogden-Clearfield, UT | 34,778 | 35,562 | 2.3 |
| Oklahoma City, OK | 39,363 | 39,525 | 0.4 |
| Olympia, WA | 40,714 | 41,921 | 3.0 |
| Omaha-Council Bluffs, NE-IA | 40,097 | 40,555 | 1.1 |
| Orlando, FL | 39,322 | 39,225 | -0.2 |
| Oshkosh-Neenah, WI | 41,781 | 41,300 | -1.2 |
| Owensboro, KY | 34,956 | 35,264 | 0.9 |
| Oxnard-Thousand Oaks-Ventura, CA | 46,490 | 47,066 | 1.2 |
| Palm Bay-Melbourne-Titusville, FL | 42,089 | 43,111 | 2.4 |
| Panama City-Lynn Haven, FL | 34,361 | 34,857 | 1.4 |
| Parkersburg-Marietta, WV-OH | 35,102 | 35,650 | 1.6 |
| Pascagoula, MS | 42,734 | 43,509 | 1.8 |
| Pensacola-Ferry Pass-Brent, FL | 34,829 | 35,683 | 2.5 |
| Peoria, IL | 44,562 | 44,747 | 0.4 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 51,814 | 52,237 | 0.8 |
| Phoenix-Mesa-Scottsdale, AZ | 44,482 | 44,838 | 0.8 |
| Pine Bluff, AR | 34,106 | 34,588 | 1.4 |
| Pittsburgh, PA | 44,124 | 44,234 | 0.2 |
| Pittsfield, MA | 38,957 | 38,690 | -0.7 |
| Pocatello, ID | 30,608 | 30,690 | 0.3 |
| Ponce, PR | 21,818 | 22,556 | 3.4 |
| Portland-South Portland-Biddeford, ME | 39,711 | 40,012 | 0.8 |
| Portland-Vancouver-Beaverton, OR-WA | 45,326 | 45,544 | 0.5 |
| Port St. Lucie-Fort Pierce, FL | 36,174 | 36,130 | -0.1 |
| Poughkeepsie-Newburgh-Middletown, NY | 42,148 | 43,054 | 2.1 |
| Prescott, AZ | 33,004 | 32,927 | -0.2 |
| Providence-New Bedford-Fall River, RI-MA | 42,141 | 42,428 | 0.7 |
| Provo-Orem, UT | 35,516 | 35,695 | 0.5 |
| Pueblo, CO | 34,055 | 34,889 | 2.4 |
| Punta Gorda, FL | 32,927 | 32,563 | -1.1 |
| Racine, WI | 41,232 | 40,623 | -1.5 |
| Raleigh-Cary, NC | 43,912 | 44,016 | 0.2 |
| Rapid City, SD | 32,227 | 32,821 | 1.8 |
| Reading, PA | 40,691 | 41,083 | 1.0 |
| Redding, CA | 35,655 | 35,912 | 0.7 |
| Reno-Sparks, NV | 42,167 | 42,232 | 0.2 |
| Richmond, VA | 45,244 | 44,960 | -0.6 |
| Riverside-San Bernardino-Ontario, CA | 38,617 | 38,729 | 0.3 |
| Roanoke, VA | 36,475 | 37,153 | 1.9 |
| Rochester, MN | 46,196 | 46,999 | 1.7 |
| Rochester, NY | 41,728 | 41,761 | 0.1 |
| Rockford, IL | 39,210 | 38,843 | -0.9 |
| Rocky Mount, NC | 33,110 | 33,613 | 1.5 |
| Rome, GA | 35,229 | 35,913 | 1.9 |
| Sacramento-Arden-Arcade-Roseville, CA | 47,924 | 48,204 | 0.6 |
| Saginaw-Saginaw Township North, MI | 37,549 | 38,009 | 1.2 |
| St. Cloud, MN | 35,069 | 35,883 | 2.3 |
| St. George, UT | 29,291 | 29,608 | 1.1 |
| St. Joseph, MO-KS | 32,651 | 33,555 | 2.8 |
| St. Louis, MO-IL | 45,419 | 44,080 | -2.9 |
| Salem, OR | 34,891 | 35,691 | 2.3 |
| Salinas, CA | 40,235 | 40,258 | 0.1 |
| Salisbury, MD | 35,901 | 36,396 | 1.4 |
| Salt Lake City, UT | 41,628 | 42,613 | 2.4 |
| San Angelo, TX | 32,852 | 33,043 | 0.6 |
| San Antonio, TX | 38,876 | 39,596 | 1.9 |
| San Diego-Carlsbad-San Marcos, CA | 49,079 | 49,240 | 0.3 |
| Sandusky, OH | 33,760 | 33,117 | -1.9 |
| San Francisco-Oakland-Fremont, CA | 65,100 | 65,367 | 0.4 |
| San German-Cabo Rojo, PR | 19,875 | 20,452 | 2.9 |
| San Jose-Sunnyvale-Santa Clara, CA | 80,063 | 79,609 | -0.6 |
| San Juan-Caguas-Guaynabo, PR | 26,839 | 27,620 | 2.9 |
| San Luis Obispo-Paso Robles, CA | 38,134 | 38,913 | 2.0 |
| Santa Barbara-Santa Maria-Goleta, CA | 42,617 | 43,257 | 1.5 |
| Santa Cruz-Watsonville, CA | 41,471 | 40,880 | -1.4 |
| Santa Fe, NM | 38,646 | 39,536 | 2.3 |
| Santa Rosa-Petaluma, CA | 43,757 | 43,274 | -1.1 |
| Sarasota-Bradenton-Venice, FL | 36,781 | 36,856 | 0.2 |
| Savannah, GA | 37,846 | 38,343 | 1.3 |
| Scranton-Wilkes-Barre, PA | 34,902 | 35,404 | 1.4 |
| Seattle-Tacoma-Bellevue, WA | 53,667 | 54,650 | 1.8 |
| Sheboygan, WI | 37,834 | 38,114 | 0.7 |
| Sherman-Denison, TX | 36,081 | 36,151 | 0.2 |
| Shreveport-Bossier City, LA | 36,308 | 36,706 | 1.1 |
| Sioux City, IA-NE-SD | 34,326 | 34,087 | -0.7 |
| Sioux Falls, SD | 36,982 | 37,562 | 1.6 |
| South Bend-Mishawaka, IN-MI | 37,654 | 37,811 | 0.4 |
| Spartanburg, SC | 39,313 | 39,104 | -0.5 |

See footnotes at end of table.

26. Continued — Average annual wages for 2008 and 2009 for all covered workers¹ by metropolitan area

| Metropolitan area ² | Average annual wages ³ | | |
|--|-----------------------------------|----------|-------------------------|
| | 2008 | 2009 | Percent change, 2008-09 |
| Spokane, WA | \$36,792 | \$38,112 | 3.6 |
| Springfield, IL | 44,416 | 45,602 | 2.7 |
| Springfield, MA | 40,969 | 41,248 | 0.7 |
| Springfield, MO | 32,971 | 33,615 | 2.0 |
| Springfield, OH | 33,158 | 33,725 | 1.7 |
| State College, PA | 38,050 | 38,658 | 1.6 |
| Stockton, CA | 39,075 | 39,274 | 0.5 |
| Sumter, SC | 30,842 | 31,074 | 0.8 |
| Syracuse, NY | 40,554 | 41,141 | 1.4 |
| Tallahassee, FL | 37,433 | 38,083 | 1.7 |
| Tampa-St. Petersburg-Clearwater, FL | 40,521 | 41,480 | 2.4 |
| Terre Haute, IN | 33,562 | 33,470 | -0.3 |
| Texarkana, TX-Texarkana, AR | 35,002 | 35,288 | 0.8 |
| Toledo, OH | 39,686 | 39,098 | -1.5 |
| Topeka, KS | 36,714 | 37,651 | 2.6 |
| Trenton-Ewing, NJ | 60,135 | 59,313 | -1.4 |
| Tucson, AZ | 39,973 | 40,071 | 0.2 |
| Tulsa, OK | 40,205 | 40,108 | -0.2 |
| Tuscaloosa, AL | 37,949 | 38,309 | 0.9 |
| Tyler, TX | 38,817 | 38,845 | 0.1 |
| Utica-Rome, NY | 34,936 | 35,492 | 1.6 |
| Valdosta, GA | 29,288 | 29,661 | 1.3 |
| Vallejo-Fairfield, CA | 45,264 | 47,287 | 4.5 |
| Vero Beach, FL | 36,557 | 35,937 | -1.7 |
| Victoria, TX | 39,888 | 38,608 | -3.2 |
| Vineland-Millville-Bridgeton, NJ | 40,709 | 41,145 | 1.1 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 38,696 | 39,614 | 2.4 |
| Visalia-Porterville, CA | 32,018 | 32,125 | 0.3 |
| Waco, TX | 35,698 | 36,731 | 2.9 |
| Warner Robins, GA | 40,457 | 41,820 | 3.4 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 62,653 | 64,032 | 2.2 |
| Waterloo-Cedar Falls, IA | 37,363 | 37,919 | 1.5 |
| Wausau, WI | 36,477 | 36,344 | -0.4 |
| Weirton-Steubenville, WV-OH | 35,356 | 34,113 | -3.5 |
| Wenatchee, WA | 30,750 | 31,200 | 1.5 |
| Wheeling, WV-OH | 32,915 | 33,583 | 2.0 |
| Wichita, KS | 40,423 | 40,138 | -0.7 |
| Wichita Falls, TX | 34,185 | 33,698 | -1.4 |
| Williamsport, PA | 33,340 | 34,188 | 2.5 |
| Wilmington, NC | 35,278 | 36,204 | 2.6 |
| Winchester, VA-WV | 37,035 | 38,127 | 2.9 |
| Winston-Salem, NC | 39,770 | 39,874 | 0.3 |
| Worcester, MA | 45,955 | 45,743 | -0.5 |
| Yakima, WA | 30,821 | 31,366 | 1.8 |
| Yauco, PR | 19,821 | 20,619 | 4.0 |
| York-Hanover, PA | 39,379 | 39,798 | 1.1 |
| Youngstown-Warren-Boardman, OH-PA | 34,403 | 33,704 | -2.0 |
| Yuba City, CA | 36,538 | 37,289 | 2.1 |
| Yuma, AZ | 31,351 | 32,474 | 3.6 |

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

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

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

⁴ Totals do not include the six MSAs within Puerto Rico.

27. Annual data: Employment status of the population

[Numbers in thousands]

| Employment status | 2000 ¹ | 2001 ¹ | 2002 ¹ | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|-------------------|-------------------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Civilian noninstitutional population..... | 212,577 | 215,092 | 217,570 | 221,168 | 223,357 | 226,082 | 228,815 | 231,867 | 233,788 | 235,801 | 237,830 |
| Civilian labor force..... | 142,583 | 143,734 | 144,863 | 146,510 | 147,401 | 149,320 | 151,428 | 153,124 | 154,287 | 154,142 | 153,889 |
| Labor force participation rate..... | 67.1 | 66.8 | 66.6 | 66.2 | 66.0 | 66.0 | 66.2 | 66.0 | 66.0 | 65.4 | 64.7 |
| Employed..... | 136,891 | 136,933 | 136,485 | 137,736 | 139,252 | 141,730 | 144,427 | 146,047 | 145,362 | 139,877 | 139,064 |
| Employment-population ratio..... | 64.4 | 63.7 | 62.7 | 62.3 | 62.3 | 62.7 | 63.1 | 63.0 | 62.2 | 59.3 | 58.5 |
| Unemployed..... | 5,692 | 6,801 | 8,378 | 8,774 | 8,149 | 7,591 | 7,001 | 7,078 | 8,924 | 14,265 | 14,825 |
| Unemployment rate..... | 4.0 | 4.7 | 5.8 | 6.0 | 5.5 | 5.1 | 4.6 | 4.6 | 5.8 | 9.3 | 9.6 |
| Not in the labor force..... | 69,994 | 71,359 | 72,707 | 74,658 | 75,956 | 76,762 | 77,387 | 78,743 | 79,501 | 81,659 | 83,941 |

¹ Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

| Industry | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total private employment..... | 110,995 | 110,708 | 108,828 | 108,416 | 109,814 | 111,899 | 114,113 | 115,380 | 114,281 | 108,252 | 107,337 |
| Total nonfarm employment..... | 131,785 | 131,826 | 130,341 | 129,999 | 131,435 | 133,703 | 136,086 | 137,598 | 136,790 | 130,807 | 129,818 |
| Goods-producing..... | 24,649 | 23,873 | 22,557 | 21,816 | 21,882 | 22,190 | 22,531 | 22,233 | 21,334 | 18,557 | 17,755 |
| Natural resources and mining..... | 599 | 606 | 583 | 572 | 591 | 628 | 684 | 724 | 767 | 694 | 705 |
| Construction..... | 6,787 | 6,826 | 6,716 | 6,735 | 6,976 | 7,336 | 7,691 | 7,630 | 7,162 | 6,016 | 5,526 |
| Manufacturing..... | 17,263 | 16,441 | 15,259 | 14,510 | 14,315 | 14,226 | 14,155 | 13,879 | 13,406 | 11,847 | 11,524 |
| Private service-providing..... | 86,346 | 86,834 | 86,271 | 86,600 | 87,932 | 89,709 | 91,582 | 93,147 | 92,947 | 89,695 | 89,582 |
| Trade, transportation, and utilities..... | 26,225 | 25,983 | 25,497 | 25,287 | 25,533 | 25,959 | 26,276 | 26,630 | 26,293 | 24,906 | 24,605 |
| Wholesale trade..... | 5,933 | 5,773 | 5,652 | 5,608 | 5,663 | 5,764 | 5,905 | 6,015 | 5,943 | 5,587 | 5,456 |
| Retail trade..... | 15,280 | 15,239 | 15,025 | 14,917 | 15,058 | 15,280 | 15,353 | 15,520 | 15,283 | 14,522 | 14,414 |
| Transportation and warehousing..... | 4,410 | 4,372 | 4,224 | 4,185 | 4,249 | 4,361 | 4,470 | 4,541 | 4,508 | 4,236 | 4,184 |
| Utilities..... | 601 | 599 | 596 | 577 | 564 | 554 | 549 | 553 | 559 | 560 | 552 |
| Information..... | 3,630 | 3,629 | 3,395 | 3,188 | 3,118 | 3,061 | 3,038 | 3,032 | 2,984 | 2,804 | 2,711 |
| Financial activities..... | 7,687 | 7,808 | 7,847 | 7,977 | 8,031 | 8,153 | 8,328 | 8,301 | 8,145 | 7,769 | 7,630 |
| Professional and business services..... | 16,666 | 16,476 | 15,976 | 15,987 | 16,394 | 16,954 | 17,566 | 17,942 | 17,735 | 16,579 | 16,688 |
| Education and health services..... | 15,109 | 15,645 | 16,199 | 16,588 | 16,953 | 17,372 | 17,826 | 18,322 | 18,838 | 19,193 | 19,564 |
| Leisure and hospitality..... | 11,862 | 12,036 | 11,986 | 12,173 | 12,493 | 12,816 | 13,110 | 13,427 | 13,436 | 13,077 | 13,020 |
| Other services..... | 5,168 | 5,258 | 5,372 | 5,401 | 5,409 | 5,395 | 5,438 | 5,494 | 5,515 | 5,367 | 5,364 |
| Government..... | 20,790 | 21,118 | 21,513 | 21,583 | 21,621 | 21,804 | 21,974 | 22,218 | 22,509 | 22,555 | 22,482 |

30. Continued—Employment Cost Index, compensation,¹ by occupation and industry group

[December 2005 = 100]

| Series | 2008 | 2009 | | | | 2010 | | | | | Percent change | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-----------------|-----------|
| | Dec. | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | 3 months ended | 12 months ended | |
| | | | | | | | | | | | | Dec. 2010 |
| Wholesale trade..... | 106.8 | 107.1 | 106.9 | 106.8 | 107.0 | 108.0 | 108.9 | 108.7 | 109.5 | 0.7 | 2.3 | |
| Retail trade..... | 108.1 | 108.3 | 108.8 | 109.7 | 110.0 | 110.9 | 111.9 | 112.0 | 112.0 | .0 | 1.8 | |
| Transportation and warehousing..... | 106.9 | 107.4 | 107.9 | 108.3 | 108.2 | 109.0 | 110.0 | 110.9 | 111.3 | .4 | 2.9 | |
| Utilities..... | 108.9 | 109.6 | 110.9 | 111.2 | 112.0 | 115.3 | 117.0 | 117.8 | 117.5 | -3 | 4.9 | |
| Information..... | 107.4 | 107.7 | 107.5 | 108.0 | 108.3 | 109.0 | 109.8 | 110.2 | 110.0 | -2 | 1.6 | |
| Financial activities..... | 107.1 | 106.8 | 107.9 | 108.3 | 108.6 | 109.8 | 110.5 | 110.6 | 111.4 | .7 | 2.6 | |
| Finance and insurance..... | 107.2 | 106.9 | 108.1 | 108.6 | 108.8 | 110.0 | 111.0 | 111.0 | 111.8 | .7 | 2.8 | |
| Real estate and rental and leasing..... | 106.6 | 106.6 | 106.9 | 107.4 | 107.7 | 109.0 | 108.4 | 108.8 | 109.4 | .6 | 1.6 | |
| Professional and business services..... | 111.6 | 111.9 | 111.9 | 112.0 | 112.4 | 113.0 | 113.4 | 114.0 | 114.6 | .5 | 2.0 | |
| Education and health services..... | 110.6 | 111.5 | 111.9 | 112.6 | 112.8 | 113.3 | 113.7 | 114.3 | 114.7 | .3 | 1.7 | |
| Education services..... | 111.3 | 111.9 | 112.0 | 113.2 | 113.2 | 113.2 | 113.3 | 114.7 | 115.0 | .3 | 1.6 | |
| Health care and social assistance..... | 110.5 | 111.5 | 111.9 | 112.5 | 112.8 | 113.3 | 113.7 | 114.2 | 114.6 | .4 | 1.6 | |
| Hospitals..... | 110.7 | 111.5 | 112.0 | 112.6 | 113.2 | 113.9 | 114.5 | 115.0 | 115.6 | .5 | 2.1 | |
| Leisure and hospitality..... | 111.4 | 112.2 | 112.0 | 112.7 | 112.7 | 113.4 | 113.4 | 113.9 | 114.1 | .2 | 1.2 | |
| Accommodation and food services..... | 112.1 | 113.0 | 112.6 | 113.4 | 113.5 | 114.0 | 114.1 | 114.6 | 114.8 | .2 | 1.1 | |
| Other services, except public administration..... | 109.9 | 110.8 | 110.8 | 111.8 | 111.5 | 112.1 | 112.7 | 113.3 | 113.2 | -1 | 1.5 | |
| State and local government workers..... | 111.6 | 112.3 | 112.8 | 113.9 | 114.2 | 114.5 | 114.7 | 115.9 | 116.2 | .3 | 1.8 | |
| Workers by occupational group | | | | | | | | | | | | |
| Management, professional, and related..... | 111.6 | 112.0 | 112.5 | 113.6 | 113.8 | 114.0 | 114.2 | 115.3 | 115.5 | .2 | 1.5 | |
| Professional and related..... | 111.4 | 111.9 | 112.4 | 113.6 | 113.9 | 114.0 | 114.2 | 115.3 | 115.5 | .2 | 1.4 | |
| Sales and office..... | 111.3 | 112.4 | 112.8 | 114.1 | 114.4 | 115.0 | 115.2 | 116.4 | 116.6 | .2 | 1.9 | |
| Office and administrative support..... | 111.8 | 112.8 | 113.1 | 114.4 | 114.7 | 115.3 | 115.6 | 116.8 | 116.9 | .1 | 1.9 | |
| Service occupations..... | 112.4 | 113.4 | 113.8 | 114.7 | 115.3 | 115.8 | 116.2 | 117.6 | 118.0 | .3 | 2.3 | |
| Workers by industry | | | | | | | | | | | | |
| Education and health services..... | 111.5 | 111.9 | 112.4 | 113.7 | 113.9 | 114.0 | 114.2 | 115.4 | 115.6 | .2 | 1.5 | |
| Education services..... | 111.2 | 111.8 | 112.1 | 113.5 | 113.7 | 113.8 | 113.9 | 115.1 | 115.3 | .2 | 1.4 | |
| Schools..... | 111.2 | 111.8 | 112.1 | 113.5 | 113.7 | 113.8 | 113.9 | 115.1 | 115.3 | .2 | 1.4 | |
| Elementary and secondary schools..... | 111.4 | 112.0 | 112.2 | 114.0 | 114.1 | 114.1 | 114.3 | 115.6 | 115.6 | .0 | 1.3 | |
| Health care and social assistance..... | 113.2 | 113.3 | 114.6 | 115.1 | 115.4 | 115.9 | 116.3 | 117.2 | 117.9 | .6 | 2.2 | |
| Hospitals..... | 111.3 | 112.4 | 113.4 | 113.9 | 114.3 | 115.1 | 115.6 | 116.1 | 117.0 | .8 | 2.4 | |
| Public administration ³ | 112.0 | 113.0 | 113.4 | 114.2 | 114.6 | 115.1 | 115.4 | 116.6 | 116.8 | .2 | 1.9 | |

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

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

³ 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. Continued—Employment Cost Index, wages and salaries, by occupation and industry group

[December 2005 = 100]

| Series | 2008 | | 2009 | | | | 2010 | | | | Percent change | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|-----------------|--|
| | Dec. | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | 3 months ended | 12 months ended | |
| | Dec. 2010 | | | | | | | | | | | |
| Wholesale trade..... | 106.4 | 106.8 | 106.5 | 106.2 | 106.4 | 107.1 | 108.1 | 107.7 | 108.5 | 0.7 | 2.0 | |
| Retail trade..... | 108.1 | 108.3 | 108.9 | 110.0 | 110.4 | 111.0 | 112.0 | 112.0 | 112.0 | .0 | 1.4 | |
| Transportation and warehousing..... | 106.9 | 107.2 | 107.9 | 108.3 | 108.3 | 108.7 | 109.5 | 110.6 | 111.0 | .4 | 2.5 | |
| Utilities..... | 109.6 | 111.0 | 112.0 | 112.2 | 113.3 | 113.9 | 114.7 | 115.4 | 115.6 | .2 | 2.0 | |
| Information..... | 107.5 | 107.8 | 108.1 | 108.7 | 109.1 | 109.6 | 110.3 | 110.8 | 110.5 | -.3 | 1.3 | |
| Financial activities..... | 107.2 | 106.8 | 107.9 | 108.5 | 108.9 | 109.8 | 111.0 | 111.1 | 112.0 | .8 | 2.8 | |
| Finance and insurance..... | 107.6 | 107.1 | 108.5 | 109.0 | 109.4 | 110.2 | 111.9 | 112.0 | 113.0 | .9 | 3.3 | |
| Real estate and rental and leasing..... | 105.7 | 105.6 | 105.8 | 106.3 | 106.8 | 108.0 | 107.2 | 107.5 | 108.1 | .6 | 1.2 | |
| Professional and business services..... | 111.9 | 112.3 | 112.2 | 112.3 | 112.7 | 113.3 | 113.6 | 114.3 | 115.0 | .6 | 2.0 | |
| Education and health services..... | 110.6 | 111.4 | 111.8 | 112.5 | 112.8 | 113.2 | 113.5 | 114.1 | 114.5 | .4 | 1.5 | |
| Education services..... | 110.8 | 111.1 | 111.2 | 112.2 | 112.6 | 112.5 | 112.6 | 114.2 | 114.5 | .3 | 1.7 | |
| Health care and social assistance..... | 110.6 | 111.5 | 111.9 | 112.5 | 112.8 | 113.3 | 113.7 | 114.1 | 114.4 | .3 | 1.4 | |
| Hospitals..... | 111.1 | 111.8 | 112.3 | 112.9 | 113.4 | 113.7 | 114.3 | 114.7 | 115.2 | .4 | 1.6 | |
| Leisure and hospitality..... | 112.3 | 113.1 | 112.8 | 113.7 | 113.8 | 114.5 | 114.3 | 114.8 | 115.0 | .2 | 1.1 | |
| Accommodation and food services..... | 112.8 | 113.7 | 113.2 | 114.2 | 114.3 | 114.7 | 114.6 | 115.1 | 115.3 | .2 | .9 | |
| Other services, except public administration..... | 110.4 | 111.4 | 111.4 | 112.5 | 112.1 | 112.3 | 112.7 | 113.4 | 113.2 | -.2 | 1.0 | |
| State and local government workers..... | 110.4 | 110.9 | 111.4 | 112.2 | 112.5 | 112.7 | 112.9 | 113.6 | 113.8 | .2 | 1.2 | |
| Workers by occupational group | | | | | | | | | | | | |
| Management, professional, and related..... | 110.4 | 110.7 | 111.1 | 112.0 | 112.2 | 112.4 | 112.6 | 113.3 | 113.5 | .2 | 1.2 | |
| Professional and related..... | 110.3 | 110.6 | 111.0 | 112.0 | 112.3 | 112.4 | 112.6 | 113.3 | 113.6 | .3 | 1.2 | |
| Sales and office..... | 109.7 | 110.5 | 111.0 | 111.9 | 112.1 | 112.5 | 112.5 | 113.1 | 113.2 | .1 | 1.0 | |
| Office and administrative support..... | 110.1 | 111.0 | 111.4 | 112.3 | 112.5 | 113.0 | 113.0 | 113.5 | 113.6 | .1 | 1.0 | |
| Service occupations..... | 110.9 | 112.0 | 112.4 | 113.1 | 113.5 | 114.0 | 114.2 | 114.9 | 115.1 | .2 | 1.4 | |
| Workers by industry | | | | | | | | | | | | |
| Education and health services..... | 110.5 | 110.7 | 111.1 | 112.0 | 112.3 | 112.5 | 112.6 | 113.4 | 113.6 | .2 | 1.2 | |
| Education services..... | 110.1 | 110.4 | 110.7 | 111.7 | 111.9 | 112.1 | 112.2 | 113.0 | 113.2 | .2 | 1.2 | |
| Schools..... | 110.1 | 110.4 | 110.7 | 111.7 | 111.9 | 112.1 | 112.2 | 113.0 | 113.2 | .2 | 1.2 | |
| Elementary and secondary schools..... | 110.1 | 110.3 | 110.5 | 112.0 | 112.1 | 112.3 | 112.5 | 113.4 | 113.5 | .1 | 1.2 | |
| Health care and social assistance..... | 113.4 | 113.1 | 114.6 | 115.0 | 115.2 | 115.5 | 115.8 | 116.2 | 116.8 | .5 | 1.4 | |
| Hospitals..... | 112.1 | 112.8 | 113.9 | 114.2 | 114.7 | 115.2 | 115.5 | 115.7 | 116.3 | .5 | 1.4 | |
| Public administration ² | 110.4 | 111.3 | 111.9 | 112.5 | 112.8 | 113.2 | 113.4 | 113.8 | 114.0 | .2 | 1.1 | |

¹ Consists of private industry workers (excluding farm and household workers) and State and local government (excluding Federal Government) workers.

² 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 | 2008 | 2009 | | | | 2010 | | | | Percent change | |
|---|-----------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|-----------------|
| | Dec. | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | 3 months ended | 12 months ended |
| | Dec. 2010 | | | | | | | | | | |
| Civilian workers..... | 109.1 | 109.7 | 110.0 | 110.5 | 110.7 | 112.1 | 112.7 | 113.6 | 113.9 | 0.3 | 2.9 |
| Private industry workers..... | 107.7 | 108.2 | 108.4 | 108.7 | 108.7 | 110.4 | 111.0 | 111.7 | 111.9 | .2 | 2.9 |
| Workers by occupational group | | | | | | | | | | | |
| Management, professional, and related..... | 108.5 | 108.8 | 108.8 | 108.9 | 108.8 | 110.2 | 110.5 | 111.0 | 111.2 | .2 | 2.2 |
| Sales and office..... | 107.8 | 108.0 | 108.1 | 108.5 | 108.7 | 110.2 | 111.1 | 111.6 | 111.8 | .2 | 2.9 |
| Natural resources, construction, and maintenance..... | 107.7 | 108.2 | 108.8 | 109.2 | 109.5 | 111.5 | 112.4 | 113.0 | 113.2 | .2 | 3.4 |
| Production, transportation, and material moving..... | 105.1 | 106.4 | 106.8 | 107.1 | 107.4 | 110.0 | 110.8 | 111.8 | 112.0 | .2 | 4.3 |
| Service occupations..... | 108.8 | 109.7 | 110.0 | 110.4 | 110.5 | 111.7 | 112.5 | 113.2 | 113.5 | .3 | 2.7 |
| Workers by industry | | | | | | | | | | | |
| Goods-producing..... | 104.7 | 105.4 | 105.7 | 105.7 | 105.8 | 108.4 | 109.0 | 110.0 | 110.1 | .1 | 4.1 |
| Manufacturing..... | 102.5 | 103.5 | 103.6 | 103.4 | 103.6 | 106.6 | 107.4 | 108.7 | 108.8 | .1 | 5.0 |
| Service-providing..... | 108.9 | 109.3 | 109.5 | 109.9 | 109.9 | 111.3 | 111.9 | 112.3 | 112.6 | .3 | 2.5 |
| State and local government workers..... | 114.2 | 115.2 | 115.7 | 117.4 | 117.7 | 118.1 | 118.6 | 120.7 | 121.1 | .3 | 2.9 |

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 | 2008 | 2009 | | | | 2010 | | | | Percent change | |
|---|-----------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|-----------------|
| | Dec. | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | 3 months ended | 12 months ended |
| | Dec. 2010 | | | | | | | | | | |
| COMPENSATION | | | | | | | | | | | |
| Workers by bargaining status¹ | | | | | | | | | | | |
| Union..... | 108.0 | 109.1 | 109.8 | 110.5 | 111.1 | 112.8 | 113.7 | 114.6 | 114.8 | 0.2 | 3.3 |
| Goods-producing..... | 106.9 | 108.0 | 108.9 | 109.5 | 110.0 | 111.9 | 112.6 | 113.8 | 113.9 | .1 | 3.5 |
| Manufacturing..... | 102.8 | 104.4 | 104.8 | 105.3 | 105.8 | 108.6 | 109.1 | 110.5 | 110.5 | .0 | 4.4 |
| Service-providing..... | 108.8 | 109.9 | 110.6 | 111.3 | 111.9 | 113.4 | 114.5 | 115.2 | 115.5 | .3 | 3.2 |
| Nonunion..... | 109.1 | 109.4 | 109.6 | 109.9 | 110.1 | 110.9 | 111.4 | 111.8 | 112.1 | .3 | 1.8 |
| Goods-producing..... | 107.7 | 107.9 | 108.0 | 108.0 | 108.2 | 109.1 | 109.5 | 110.1 | 110.2 | .1 | 1.8 |
| Manufacturing..... | 106.8 | 107.1 | 107.3 | 107.3 | 107.5 | 108.5 | 109.2 | 109.9 | 110.0 | .1 | 2.3 |
| Service-providing..... | 109.4 | 109.8 | 110.0 | 110.4 | 110.6 | 111.3 | 111.9 | 112.3 | 112.7 | .4 | 1.9 |
| Workers by region¹ | | | | | | | | | | | |
| Northeast..... | 109.5 | 109.8 | 110.2 | 110.7 | 111.0 | 111.8 | 112.7 | 113.1 | 113.6 | .4 | 2.3 |
| South..... | 109.3 | 109.8 | 110.1 | 110.6 | 110.7 | 111.5 | 112.0 | 112.5 | 112.8 | .3 | 1.9 |
| Midwest..... | 107.6 | 107.9 | 108.1 | 108.4 | 108.6 | 109.9 | 110.4 | 111.0 | 111.3 | .3 | 2.5 |
| West..... | 109.4 | 109.9 | 110.0 | 110.3 | 110.6 | 111.3 | 111.7 | 112.3 | 112.5 | .2 | 1.7 |
| WAGES AND SALARIES | | | | | | | | | | | |
| Workers by bargaining status¹ | | | | | | | | | | | |
| Union..... | 108.1 | 108.8 | 109.6 | 110.2 | 110.9 | 111.5 | 112.1 | 112.7 | 112.9 | .2 | 1.8 |
| Goods-producing..... | 107.7 | 108.2 | 108.8 | 109.5 | 109.8 | 110.2 | 110.7 | 111.1 | 111.2 | .1 | 1.3 |
| Manufacturing..... | 105.5 | 106.0 | 106.4 | 107.0 | 107.3 | 107.8 | 108.2 | 108.6 | 108.7 | .1 | 1.3 |
| Service-providing..... | 108.3 | 109.2 | 110.1 | 110.8 | 111.6 | 112.4 | 113.1 | 113.8 | 114.2 | .4 | 2.3 |
| Nonunion..... | 109.6 | 110.0 | 110.2 | 110.6 | 110.9 | 111.4 | 111.9 | 112.4 | 112.7 | .3 | 1.6 |
| Goods-producing..... | 109.3 | 109.5 | 109.7 | 109.9 | 110.1 | 110.6 | 111.0 | 111.6 | 111.7 | .1 | 1.5 |
| Manufacturing..... | 108.2 | 108.6 | 108.9 | 109.1 | 109.3 | 109.8 | 110.5 | 111.1 | 111.2 | .1 | 1.7 |
| Service-providing..... | 109.7 | 110.1 | 110.3 | 110.8 | 111.0 | 111.6 | 112.2 | 112.6 | 113.0 | .4 | 1.8 |
| Workers by region¹ | | | | | | | | | | | |
| Northeast..... | 109.6 | 109.9 | 110.3 | 110.8 | 111.1 | 111.7 | 112.6 | 112.9 | 113.4 | .4 | 2.1 |
| South..... | 110.0 | 110.4 | 110.7 | 111.3 | 111.5 | 111.9 | 112.4 | 112.9 | 113.4 | .4 | 1.7 |
| Midwest..... | 108.0 | 108.4 | 108.6 | 108.9 | 109.2 | 109.9 | 110.4 | 110.9 | 111.2 | .3 | 1.8 |
| West..... | 110.1 | 110.5 | 110.8 | 111.2 | 111.6 | 112.0 | 112.4 | 112.9 | 113.0 | .1 | 1.3 |

¹ 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 ¹ |
| All retirement | | | | | |
| Percentage of workers with access | | | | | |
| All workers..... | 57 | 59 | 60 | 60 | 61 |
| White-collar occupations ² | 67 | 69 | 70 | 69 | - |
| Management, professional, and related..... | - | - | - | - | 76 |
| Sales and office..... | - | - | - | - | 64 |
| Blue-collar occupations ² | 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 |
| Percentage of workers participating | | | | | |
| All workers..... | 49 | 50 | 50 | 51 | 51 |
| White-collar occupations ² | 59 | 61 | 61 | 60 | - |
| Management, professional, and related..... | - | - | - | - | 69 |
| Sales and office..... | - | - | - | - | 54 |
| Blue-collar occupations ² | 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 |
| Take-up rate (all workers)³..... | - | - | 85 | 85 | 84 |
| Defined Benefit | | | | | |
| Percentage of workers with access | | | | | |
| All workers..... | 20 | 21 | 22 | 21 | 21 |
| White-collar occupations ² | 23 | 24 | 25 | 23 | - |
| Management, professional, and related..... | - | - | - | - | 29 |
| Sales and office..... | - | - | - | - | 19 |
| Blue-collar occupations ² | 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 ¹ |
| Percentage of workers participating | | | | | |
| All workers..... | 20 | 21 | 21 | 20 | 20 |
| White-collar occupations ² | 22 | 24 | 24 | 22 | - |
| Management, professional, and related | - | - | - | - | 28 |
| Sales and office | - | - | - | - | 17 |
| Blue-collar occupations ² | 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 |
| Take-up rate (all workers)³..... | - | - | 97 | 96 | 95 |
| Defined Contribution | | | | | |
| Percentage of workers with access | | | | | |
| All workers..... | 51 | 53 | 53 | 54 | 55 |
| White-collar occupations ² | 62 | 64 | 64 | 65 | - |
| Management, professional, and related | - | - | - | - | 71 |
| Sales and office | - | - | - | - | 60 |
| Blue-collar occupations ² | 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 |
| Percentage of workers participating | | | | | |
| All workers..... | 40 | 42 | 42 | 43 | 43 |
| White-collar occupations ² | 51 | 53 | 53 | 53 | - |
| Management, professional, and related | - | - | - | - | 60 |
| Sales and office | - | - | - | - | 47 |
| Blue-collar occupations ² | 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 |
| Take-up rate (all workers)³..... | - | - | 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 ¹ |
| Employee Contribution Requirement | | | | | |
| Employee contribution required..... | - | - | 61 | 61 | 65 |
| Employee contribution not required..... | - | - | 31 | 33 | 35 |
| Not determinable..... | - | - | 8 | 6 | 0 |
| Percent of establishments | | | | | |
| 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 |

¹ 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.

² The white-collar and blue-collar occupation series were discontinued effective 2007.

³ 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 ¹ |
| Medical insurance | | | | | |
| Percentage of workers with access | | | | | |
| All workers..... | 60 | 69 | 70 | 71 | 71 |
| White-collar occupations ² | 65 | 76 | 77 | 77 | - |
| Management, professional, and related | - | - | - | - | 85 |
| Sales and office..... | - | - | - | - | 71 |
| Blue-collar occupations ² | 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 |
| Percentage of workers participating | | | | | |
| All workers..... | 45 | 53 | 53 | 52 | 52 |
| White-collar occupations ² | 50 | 59 | 58 | 57 | - |
| Management, professional, and related | - | - | - | - | 67 |
| Sales and office..... | - | - | - | - | 48 |
| Blue-collar occupations ² | 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 |
| Take-up rate (all workers)³..... | - | - | 75 | 74 | 73 |
| Dental | | | | | |
| Percentage of workers with access | | | | | |
| All workers..... | 40 | 46 | 46 | 46 | 46 |
| White-collar occupations ² | 47 | 53 | 54 | 53 | - |
| Management, professional, and related | - | - | - | - | 62 |
| Sales and office..... | - | - | - | - | 47 |
| Blue-collar occupations ² | 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 ¹ |
| Percentage of workers participating | | | | | |
| All workers..... | 32 | 37 | 36 | 36 | 36 |
| White-collar occupations ² | 37 | 43 | 42 | 41 | - |
| Management, professional, and related | - | - | - | - | 51 |
| Sales and office..... | - | - | - | - | 33 |
| Blue-collar occupations ² | 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 |
| Take-up rate (all workers)³..... | - | - | 78 | 78 | 77 |
| Vision care | | | | | |
| Percentage of workers with access..... | 25 | 29 | 29 | 29 | 29 |
| Percentage of workers participating..... | 19 | 22 | 22 | 22 | 22 |
| Outpatient Prescription drug coverage | | | | | |
| Percentage of workers with access..... | - | - | 64 | 67 | 68 |
| Percentage of workers participating..... | - | - | 48 | 49 | 49 |
| Percent of establishments offering healthcare benefits | 58 | 61 | 63 | 62 | 60 |
| Percentage of medical premium paid by Employer and Employee | | | | | |
| Single coverage | | | | | |
| Employer share..... | 82 | 82 | 82 | 82 | 81 |
| Employee share..... | 18 | 18 | 18 | 18 | 19 |
| Family coverage | | | | | |
| Employer share..... | 70 | 69 | 71 | 70 | 71 |
| Employee share..... | 30 | 31 | 29 | 30 | 29 |

¹ 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.

² The white-collar and blue-collar occupation series were discontinued effective 2007.

³ 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 | | 2010 | | | | | | | | | | | 2011 | |
|--|----------------|-------|------|------|------|------|------|-------|------|-------|------|------|------|------|-------------------|
| | 2009 | 2010 | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ^P |
| Number of stoppages: | | | | | | | | | | | | | | | |
| Beginning in period..... | 5 | 11 | 0 | 1 | 3 | 1 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| In effect during period..... | 5 | 11 | 0 | 1 | 4 | 1 | 3 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| Workers involved: | | | | | | | | | | | | | | | |
| Beginning in period (in thousands)..... | 12.5 | 44.5 | 0.0 | 1.5 | 5.4 | 1.7 | 13.8 | 15.0 | 0.0 | 4.5 | 1.5 | 0.0 | 1.1 | 0.0 | 0.0 |
| In effect during period (in thousands). | 16.9 | 47.7 | 0.0 | 1.5 | 6.9 | 1.7 | 15.5 | 15.0 | 0.0 | 4.5 | 1.5 | 0.0 | 1.1 | 0.0 | 0.0 |
| Days idle: | | | | | | | | | | | | | | | |
| Number (in thousands)..... | 124.1 | 302.3 | 0.0 | 1.5 | 44.5 | 23.8 | 36.8 | 180.0 | 0.0 | 9.0 | 4.5 | 0.0 | 2.2 | 0.0 | 0.0 |
| Percent of estimated working time ¹ ... | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

¹ 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.

40. Annual data: Consumer Price Index, U.S. city average, all items and major groups

[1982-84 = 100]

| Series | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|-------|-------|-------|-------|-------|-------|-------|---------|---------|---------|---------|
| Consumer Price Index for All Urban Consumers: | | | | | | | | | | | |
| All items: | | | | | | | | | | | |
| Index..... | 172.2 | 177.1 | 179.9 | 184.0 | 188.9 | 195.3 | 201.6 | 207.342 | 215.303 | 214.537 | 218.056 |
| Percent change..... | 3.4 | 2.8 | 1.6 | 2.3 | 2.7 | 3.4 | 3.2 | 2.8 | 3.8 | -0.4 | 1.6 |
| Food and beverages: | | | | | | | | | | | |
| Index..... | 168.4 | 173.6 | 176.8 | 180.5 | 186.6 | 191.2 | 195.7 | 203.300 | 214.225 | 218.249 | 219.984 |
| Percent change..... | 2.3 | 3.1 | 1.8 | 2.1 | 3.3 | 2.5 | 2.4 | 3.9 | 5.4 | 1.9 | 0.8 |
| Housing: | | | | | | | | | | | |
| Index..... | 169.6 | 176.4 | 180.3 | 184.8 | 189.5 | 195.7 | 203.2 | 209.586 | 216.264 | 217.057 | 216.256 |
| Percent change..... | 3.5 | 4.0 | 2.2 | 2.5 | 2.5 | 3.3 | 3.8 | 3.1 | 3.2 | 0.4 | -0.4 |
| Apparel: | | | | | | | | | | | |
| Index..... | 129.6 | 127.3 | 124.0 | 120.9 | 120.4 | 119.5 | 119.5 | 118.998 | 118.907 | 120.078 | 119.503 |
| Percent change..... | -1.3 | -1.8 | -2.6 | -2.5 | -4 | -7 | .0 | -0.4 | -0.1 | 1.0 | -0.5 |
| Transportation: | | | | | | | | | | | |
| Index..... | 153.3 | 154.3 | 152.9 | 157.6 | 163.1 | 173.9 | 180.9 | 184.682 | 195.549 | 179.252 | 193.396 |
| Percent change..... | 6.2 | 0.7 | -9 | 3.1 | 3.5 | 6.6 | 4.0 | 2.1 | 5.9 | -8.3 | 7.9 |
| Medical care: | | | | | | | | | | | |
| Index..... | 260.8 | 272.8 | 285.6 | 297.1 | 310.1 | 323.2 | 336.2 | 351.054 | 364.065 | 375.613 | 388.436 |
| Percent change..... | 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..... | 271.1 | 282.6 | 293.2 | 298.7 | 304.7 | 313.4 | 321.7 | 333.328 | 345.381 | 368.586 | 381.291 |
| Percent change..... | 5.0 | 4.2 | 3.8 | 1.9 | 2.0 | 2.9 | 2.6 | 3.6 | 3.6 | 6.7 | 3.4 |
| Consumer Price Index for Urban Wage Earners and Clerical Workers: | | | | | | | | | | | |
| All items: | | | | | | | | | | | |
| Index..... | 168.9 | 173.5 | 175.9 | 179.8 | 184.5 | 191.0 | 197.1 | 202.767 | 211.053 | 209.630 | 213.967 |
| Percent change..... | 3.5 | 2.7 | 1.4 | 2.2 | 5.1 | 1.1 | 3.2 | 2.9 | 4.1 | -0.7 | 2.1 |

43. Annual data: Producer Price Indexes, by stage of processing

[1982 = 100]

| Index | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Finished goods | | | | | | | | | | | |
| Total..... | 138.0 | 140.7 | 138.9 | 143.3 | 148.5 | 155.7 | 160.4 | 166.6 | 177.1 | 172.5 | 179.9 |
| Foods..... | 137.2 | 141.3 | 140.1 | 145.9 | 152.7 | 155.7 | 156.7 | 167.0 | 178.3 | 175.5 | 182.5 |
| Energy..... | 94.1 | 96.7 | 88.8 | 102.0 | 113.0 | 132.6 | 145.9 | 156.3 | 178.7 | 146.9 | 167.3 |
| Other..... | 148.0 | 150.0 | 150.2 | 150.5 | 152.7 | 156.4 | 158.7 | 161.7 | 167.2 | 171.5 | 173.5 |
| Intermediate materials, supplies, and components | | | | | | | | | | | |
| Total..... | 129.2 | 129.7 | 127.8 | 133.7 | 142.6 | 154.0 | 164.0 | 170.7 | 188.3 | 172.5 | 183.6 |
| Foods..... | 119.2 | 124.3 | 123.2 | 134.4 | 145.0 | 146.0 | 146.2 | 161.4 | 180.4 | 165.1 | 174.5 |
| Energy..... | 101.7 | 104.1 | 95.9 | 111.9 | 123.2 | 149.2 | 162.8 | 174.6 | 208.1 | 162.5 | 188.4 |
| Other..... | 136.6 | 136.4 | 135.8 | 138.5 | 146.5 | 154.6 | 163.8 | 168.4 | 180.9 | 173.4 | 180.8 |
| Crude materials for further processing | | | | | | | | | | | |
| Total..... | 120.6 | 121.0 | 108.1 | 135.3 | 159.0 | 182.2 | 184.8 | 207.1 | 251.8 | 175.2 | 212.0 |
| Foods..... | 100.2 | 106.1 | 99.5 | 113.5 | 127.0 | 122.7 | 119.3 | 146.7 | 163.4 | 134.5 | 152.3 |
| Energy..... | 122.1 | 122.3 | 102.0 | 147.2 | 174.6 | 234.0 | 226.9 | 232.8 | 309.4 | 176.8 | 216.4 |
| Other..... | 118.0 | 101.5 | 101.0 | 116.9 | 149.2 | 176.7 | 210.0 | 238.7 | 308.5 | 211.1 | 280.7 |

44. U.S. export price indexes by end-use category

[2000 = 100]

| Category | 2011 | | | | | | | | | | | 2011 | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. |
| ALL COMMODITIES..... | 120.3 | 121.2 | 122.5 | 123.1 | 122.2 | 122.0 | 123.0 | 123.7 | 124.7 | 126.6 | 127.5 | 129.0 | 130.8 |
| Foods, feeds, and beverages..... | 160.8 | 163.4 | 162.6 | 165.1 | 164.5 | 164.0 | 171.1 | 174.6 | 178.8 | 189.4 | 191.1 | 197.3 | 203.1 |
| Agricultural foods, feeds, and beverages..... | 162.9 | 165.7 | 164.6 | 167.4 | 166.7 | 166.1 | 173.9 | 177.6 | 181.9 | 193.4 | 194.6 | 200.8 | 208.4 |
| Nonagricultural (fish, beverages) food products..... | 144.8 | 145.9 | 147.8 | 147.3 | 147.2 | 147.7 | 147.2 | 149.4 | 152.8 | 153.3 | 161.1 | 166.8 | 151.6 |
| Industrial supplies and materials..... | 152.6 | 155.1 | 160.0 | 162.2 | 159.8 | 158.8 | 161.2 | 162.6 | 165.3 | 169.5 | 172.6 | 177.0 | 182.3 |
| Agricultural industrial supplies and materials..... | 150.4 | 155.7 | 157.1 | 159.1 | 162.5 | 163.9 | 166.6 | 173.2 | 181.5 | 206.3 | 223.0 | 227.9 | 247.5 |
| Fuels and lubricants..... | 190.4 | 197.0 | 209.2 | 215.2 | 208.0 | 203.7 | 214.7 | 213.1 | 219.6 | 227.4 | 233.9 | 245.1 | 253.9 |
| Nonagricultural supplies and materials, excluding fuel and building materials..... | 150.5 | 152.2 | 156.2 | 157.8 | 155.8 | 155.2 | 156.2 | 158.0 | 159.9 | 162.5 | 164.4 | 167.5 | 171.6 |
| Selected building materials..... | 115.8 | 116.0 | 117.8 | 118.2 | 118.7 | 117.9 | 117.3 | 117.1 | 116.9 | 117.2 | 116.2 | 116.2 | 115.7 |
| Capital goods..... | 103.6 | 103.8 | 103.9 | 103.8 | 103.5 | 103.4 | 103.4 | 103.5 | 103.4 | 103.7 | 103.9 | 104.0 | 103.9 |
| Electric and electrical generating equipment..... | 110.0 | 109.8 | 108.8 | 109.1 | 109.3 | 108.5 | 108.6 | 108.7 | 109.3 | 109.8 | 109.8 | 110.3 | 110.7 |
| Nonelectrical machinery..... | 94.5 | 94.7 | 95.0 | 94.7 | 94.3 | 94.2 | 94.2 | 94.3 | 94.1 | 94.3 | 94.4 | 94.2 | 93.9 |
| Automotive vehicles, parts, and engines..... | 108.7 | 108.6 | 108.5 | 108.5 | 108.5 | 108.5 | 108.6 | 108.7 | 108.9 | 109.1 | 109.1 | 109.2 | 109.2 |
| Consumer goods, excluding automotive..... | 110.0 | 110.2 | 110.9 | 110.8 | 110.4 | 110.8 | 110.7 | 111.8 | 112.5 | 112.9 | 112.7 | 112.7 | 113.3 |
| Nondurables, manufactured..... | 111.9 | 111.9 | 112.3 | 112.2 | 111.5 | 111.6 | 112.2 | 112.9 | 113.4 | 114.2 | 114.0 | 113.6 | 113.9 |
| Durables, manufactured..... | 107.5 | 107.7 | 108.1 | 108.0 | 108.2 | 109.1 | 108.2 | 109.9 | 111.0 | 111.1 | 110.9 | 111.0 | 112.0 |
| Agricultural commodities..... | 160.2 | 163.3 | 162.7 | 165.3 | 165.3 | 165.0 | 172.0 | 176.1 | 181.0 | 194.7 | 198.5 | 204.5 | 213.9 |
| Nonagricultural commodities..... | 117.4 | 118.1 | 119.6 | 120.0 | 119.1 | 118.9 | 119.5 | 120.0 | 120.7 | 121.7 | 122.4 | 123.6 | 124.8 |

45. U.S. import price indexes by end-use category

[2000 = 100]

| Category | 2011 | | | | | | | | | | | 2011 | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. |
| ALL COMMODITIES | 125.8 | 126.3 | 127.7 | 126.7 | 125.2 | 125.2 | 125.7 | 125.7 | 127.1 | 129.2 | 131.0 | 133.0 | 134.9 |
| Foods, feeds, and beverages..... | 145.3 | 147.4 | 149.0 | 151.1 | 148.7 | 149.2 | 152.4 | 153.3 | 156.5 | 160.6 | 162.7 | 166.9 | 168.1 |
| Agricultural foods, feeds, and beverages..... | 163.1 | 165.8 | 167.4 | 169.8 | 166.1 | 166.3 | 170.3 | 171.1 | 174.9 | 180.3 | 182.6 | 187.7 | 189.6 |
| Nonagricultural (fish, beverages) food products..... | 104.7 | 105.6 | 107.3 | 108.7 | 109.2 | 110.6 | 111.9 | 113.0 | 115.0 | 116.0 | 117.4 | 119.7 | 119.5 |
| Industrial supplies and materials..... | 202.8 | 205.0 | 210.7 | 205.6 | 199.5 | 199.7 | 201.0 | 200.1 | 206.6 | 214.5 | 222.6 | 230.1 | 237.5 |
| Fuels and lubricants..... | 258.8 | 262.4 | 269.3 | 255.6 | 245.8 | 248.2 | 250.8 | 247.1 | 257.7 | 270.1 | 285.2 | 297.0 | 309.6 |
| Petroleum and petroleum products..... | 277.4 | 284.2 | 294.5 | 278.9 | 267.4 | 269.6 | 273.4 | 269.8 | 282.4 | 296.6 | 313.0 | 324.8 | 337.8 |
| Paper and paper base stocks..... | 106.4 | 107.6 | 109.5 | 112.7 | 115.5 | 116.5 | 116.2 | 117.5 | 116.9 | 117.5 | 117.5 | 117.7 | 115.5 |
| Materials associated with nondurable supplies and materials..... | 142.9 | 144.6 | 147.8 | 148.4 | 146.2 | 146.0 | 146.5 | 147.7 | 150.5 | 154.1 | 157.0 | 160.6 | 163.2 |
| Selected building materials..... | 124.7 | 127.6 | 130.1 | 133.7 | 131.9 | 126.3 | 125.0 | 124.6 | 125.3 | 126.6 | 127.0 | 129.5 | 129.9 |
| Unfinished metals associated with durable goods... | 233.7 | 233.4 | 246.5 | 253.8 | 244.6 | 238.8 | 239.2 | 244.2 | 251.4 | 262.8 | 266.0 | 274.2 | 279.5 |
| Nonmetals associated with durable goods..... | 106.7 | 107.1 | 107.4 | 107.5 | 107.2 | 107.5 | 107.6 | 107.7 | 107.9 | 108.5 | 108.7 | 110.4 | 111.3 |
| Capital goods..... | 91.7 | 91.4 | 91.5 | 91.6 | 91.5 | 91.4 | 91.6 | 91.8 | 91.9 | 91.9 | 92.0 | 92.0 | 92.3 |
| Electric and electrical generating equipment..... | 111.8 | 111.0 | 111.4 | 111.2 | 111.4 | 111.6 | 112.2 | 112.7 | 112.8 | 113.6 | 113.7 | 114.5 | 114.7 |
| Nonelectrical machinery..... | 86.1 | 85.9 | 85.9 | 86.1 | 86.0 | 85.8 | 86.0 | 86.1 | 86.3 | 86.2 | 86.2 | 86.2 | 86.4 |
| Automotive vehicles, parts, and engines..... | 108.3 | 108.2 | 108.5 | 108.5 | 108.5 | 108.9 | 109.1 | 109.3 | 109.4 | 109.6 | 109.4 | 109.5 | 109.7 |
| Consumer goods, excluding automotive..... | 104.3 | 104.5 | 104.5 | 104.6 | 104.4 | 104.2 | 104.1 | 104.2 | 103.7 | 104.1 | 104.2 | 104.5 | 105.0 |
| Nondurables, manufactured..... | 108.5 | 109.0 | 109.1 | 109.2 | 109.3 | 109.7 | 109.9 | 110.0 | 109.5 | 110.0 | 110.4 | 110.5 | 111.0 |
| Durables, manufactured..... | 100.3 | 100.1 | 100.2 | 100.3 | 99.8 | 99.1 | 98.6 | 98.7 | 98.1 | 98.5 | 98.2 | 98.7 | 98.9 |
| Nonmanufactured consumer goods..... | 102.4 | 102.5 | 102.0 | 103.0 | 102.4 | 101.9 | 103.1 | 103.0 | 103.6 | 103.6 | 103.7 | 106.0 | 107.3 |

46. U.S. international price indexes for selected categories of services

[2000 = 100, unless indicated otherwise]

| Category | 2008 | 2009 | | | | 2010 | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Dec. | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. |
| Import air freight..... | 138.5 | 132.9 | 132.8 | 134.8 | 163.9 | 158.3 | 162.5 | 163.2 | 169.2 |
| Export air freight..... | 135.0 | 124.1 | 117.4 | 121.6 | 122.9 | 124.0 | 126.3 | 125.7 | 127.9 |
| Import air passenger fares (Dec. 2006 = 100)..... | 157.3 | 134.9 | 147.3 | 137.9 | 152.3 | 149.8 | 175.3 | 160.9 | 169.9 |
| Export air passenger fares (Dec. 2006 = 100)..... | 164.6 | 141.7 | 138.2 | 141.3 | 156.1 | 157.7 | 176.3 | 172.2 | 166.7 |

47. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted

[2005 = 100]

| Item | 2007 | 2008 | | | | 2009 | | | | 2010 | | | |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV |
| Business | | | | | | | | | | | | | |
| Output per hour of all persons..... | 103.8 | 103.6 | 103.9 | 103.5 | 103.5 | 104.4 | 106.7 | 108.4 | 110.2 | 111.4 | 110.9 | 111.6 | 112.3 |
| Compensation per hour..... | 109.8 | 111.0 | 111.0 | 111.9 | 112.1 | 111.2 | 113.8 | 114.7 | 115.3 | 115.2 | 116.1 | 116.8 | 117.4 |
| Real compensation per hour..... | 101.8 | 101.8 | 100.6 | 99.8 | 102.5 | 102.2 | 104.1 | 104.0 | 103.8 | 103.4 | 104.3 | 104.6 | 104.4 |
| Unit labor costs..... | 105.7 | 107.1 | 106.9 | 108.1 | 108.4 | 106.5 | 106.7 | 105.8 | 104.6 | 103.4 | 104.6 | 104.7 | 104.5 |
| Unit nonlabor payments..... | 106.5 | 105.0 | 108.1 | 109.6 | 107.4 | 110.8 | 110.0 | 112.0 | 113.4 | 116.0 | 115.9 | 117.3 | 117.4 |
| Implicit price deflator..... | 106.1 | 106.3 | 107.3 | 108.7 | 108.0 | 108.2 | 108.0 | 108.2 | 108.1 | 108.4 | 109.1 | 109.7 | 109.6 |
| Nonfarm business | | | | | | | | | | | | | |
| Output per hour of all persons..... | 103.9 | 103.5 | 103.9 | 103.4 | 103.4 | 104.4 | 106.7 | 108.4 | 110.1 | 111.4 | 110.9 | 111.5 | 112.2 |
| Compensation per hour..... | 109.7 | 110.9 | 110.9 | 111.8 | 112.1 | 111.2 | 113.8 | 114.6 | 115.3 | 115.2 | 116.1 | 116.8 | 117.4 |
| Real compensation per hour..... | 101.8 | 101.8 | 100.5 | 99.7 | 102.5 | 102.2 | 104.1 | 103.9 | 103.8 | 103.4 | 104.3 | 104.6 | 104.4 |
| Unit labor costs..... | 105.6 | 107.2 | 106.8 | 108.1 | 108.4 | 106.5 | 106.7 | 105.8 | 104.7 | 103.5 | 104.7 | 104.7 | 104.6 |
| Unit nonlabor payments..... | 106.1 | 104.2 | 107.5 | 109.1 | 107.3 | 111.2 | 110.4 | 112.6 | 113.5 | 116.2 | 116.0 | 117.3 | 116.9 |
| Implicit price deflator..... | 105.8 | 106.0 | 107.1 | 108.5 | 108.0 | 108.4 | 108.2 | 108.5 | 108.2 | 108.5 | 109.2 | 109.7 | 109.5 |
| Nonfinancial corporations | | | | | | | | | | | | | |
| Output per hour of all employees..... | 102.6 | 101.8 | 101.5 | 102.4 | 102.7 | 101.7 | 103.0 | 104.3 | 107.8 | 110.3 | 110.4 | 109.5 | — |
| Compensation per hour..... | 108.1 | 108.9 | 109.5 | 110.5 | 111.4 | 110.5 | 112.6 | 113.6 | 114.3 | 114.3 | 114.9 | 115.8 | — |
| Real compensation per hour..... | 100.4 | 99.9 | 99.2 | 98.6 | 101.8 | 101.6 | 103.0 | 103.0 | 102.9 | 102.5 | 103.3 | 103.7 | — |
| Total unit costs..... | 107.0 | 108.6 | 109.9 | 110.3 | 111.4 | 112.2 | 112.4 | 111.4 | 108.6 | 106.2 | 106.3 | 107.6 | — |
| Unit labor costs..... | 105.4 | 107.0 | 107.9 | 108.0 | 108.5 | 108.7 | 109.3 | 108.9 | 106.0 | 103.6 | 104.1 | 105.8 | — |
| Unit nonlabor costs..... | 111.1 | 112.8 | 115.1 | 116.2 | 119.2 | 121.4 | 120.4 | 117.8 | 115.3 | 112.7 | 111.8 | 112.5 | — |
| Unit profits..... | 93.0 | 84.1 | 82.8 | 97.2 | 86.6 | 85.5 | 80.3 | 84.2 | 91.2 | 103.3 | 108.0 | 108.3 | — |
| Unit nonlabor payments..... | 104.9 | 103.0 | 104.1 | 109.7 | 108.0 | 109.1 | 106.6 | 106.3 | 107.0 | 109.5 | 110.5 | 111.1 | — |
| Implicit price deflator..... | 105.2 | 105.5 | 106.5 | 108.6 | 108.3 | 108.8 | 108.4 | 107.9 | 106.4 | 105.8 | 106.5 | 107.7 | — |
| Manufacturing | | | | | | | | | | | | | |
| Output per hour of all persons..... | 106.4 | 106.3 | 104.6 | 104.1 | 103.4 | 103.1 | 105.1 | 109.3 | 111.4 | 112.5 | 114.1 | 114.5 | 116.1 |
| Compensation per hour..... | 106.9 | 107.6 | 108.5 | 110.0 | 111.8 | 113.2 | 115.5 | 116.4 | 117.6 | 116.3 | 117.7 | 118.5 | 119.4 |
| Real compensation per hour..... | 99.2 | 98.7 | 98.3 | 98.1 | 102.2 | 104.0 | 105.7 | 105.5 | 105.9 | 104.4 | 105.8 | 106.1 | 106.2 |
| Unit labor costs..... | 100.5 | 101.2 | 103.8 | 105.7 | 108.2 | 109.8 | 109.9 | 106.5 | 105.6 | 103.4 | 103.2 | 103.5 | 102.8 |

NOTE: Dash indicates data not available.

48. Annual indexes of multifactor productivity and related measures, selected years

[2005 = 100, unless otherwise indicated]

| Item | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Private business | | | | | | | | | | | | | |
| Productivity: | | | | | | | | | | | | | |
| Output per hour of all persons..... | 77.1 | 79.5 | 82.3 | 85.2 | 87.9 | 91.9 | 95.5 | 98.3 | 100.0 | 101.0 | 102.9 | 105.0 | 109.0 |
| Output per unit of capital services..... | 107.6 | 106.4 | 105.2 | 103.1 | 99.2 | 97.8 | 98.2 | 99.8 | 100.0 | 100.0 | 99.3 | 96.7 | 92.3 |
| Multifactor productivity..... | 86.6 | 87.9 | 89.5 | 91.0 | 91.7 | 93.9 | 96.4 | 99.0 | 100.0 | 100.5 | 101.0 | 101.1 | 101.9 |
| Output..... | 75.3 | 79.2 | 83.6 | 87.4 | 88.2 | 90.0 | 92.8 | 96.7 | 100.0 | 103.1 | 105.5 | 105.4 | 101.7 |
| Inputs: | | | | | | | | | | | | | |
| Labor input..... | 95.5 | 97.7 | 100.0 | 101.2 | 99.5 | 97.5 | 97.1 | 98.1 | 100.0 | 102.3 | 103.5 | 102.0 | 95.0 |
| Capital services..... | 70.0 | 74.4 | 79.5 | 84.8 | 89.0 | 92.0 | 94.5 | 96.9 | 100.0 | 103.1 | 106.2 | 109.1 | 110.3 |
| Combined units of labor and capital input..... | 87.0 | 90.1 | 93.4 | 96.0 | 96.2 | 95.8 | 96.2 | 97.7 | 100.0 | 102.6 | 104.4 | 104.3 | 99.9 |
| Capital per hour of all persons..... | 71.7 | 74.7 | 78.2 | 82.6 | 88.6 | 94.0 | 97.3 | 98.5 | 100.0 | 101.0 | 103.6 | 108.7 | 118.2 |
| Private nonfarm business | | | | | | | | | | | | | |
| Productivity: | | | | | | | | | | | | | |
| Output per hour of all persons..... | 77.6 | 80.0 | 82.6 | 85.4 | 88.1 | 92.2 | 95.7 | 98.4 | 100.0 | 101.0 | 102.9 | 105.0 | 109.0 |
| Output per unit of capital services..... | 108.7 | 107.3 | 105.9 | 103.5 | 99.5 | 98.0 | 98.2 | 99.9 | 100.0 | 99.8 | 98.9 | 96.1 | 91.6 |
| Multifactor productivity..... | 87.1 | 88.4 | 89.9 | 91.3 | 91.9 | 94.2 | 96.5 | 99.0 | 100.0 | 100.4 | 100.9 | 101.0 | 101.7 |
| Output..... | 75.3 | 79.3 | 83.7 | 87.5 | 88.4 | 90.1 | 92.8 | 96.7 | 100.0 | 103.2 | 105.6 | 105.5 | 101.6 |
| Inputs: | | | | | | | | | | | | | |
| Labor input..... | 94.9 | 97.2 | 99.8 | 101.0 | 99.4 | 97.4 | 97.0 | 98.1 | 100.0 | 102.5 | 103.7 | 101.9 | 94.9 |
| Capital services..... | 69.3 | 73.9 | 79.1 | 84.5 | 88.8 | 91.9 | 94.5 | 96.8 | 100.0 | 103.4 | 106.8 | 109.7 | 111.0 |
| Combined units of labor and capital input..... | 86.5 | 89.7 | 93.2 | 95.8 | 96.1 | 95.7 | 96.2 | 97.7 | 100.0 | 102.8 | 104.7 | 104.4 | 100.0 |
| Capital per hour of all persons..... | 71.4 | 74.5 | 78.0 | 82.5 | 88.6 | 94.1 | 97.4 | 98.5 | 100.0 | 101.2 | 104.0 | 109.3 | 119.1 |
| Manufacturing [1996 = 100] | | | | | | | | | | | | | |
| Productivity: | | | | | | | | | | | | | |
| Output per hour of all persons..... | 69.5 | 73.3 | 77.0 | 80.4 | 81.9 | 87.9 | 93.4 | 95.5 | 100.0 | 100.8 | 105.0 | 104.7 | — |
| Output per unit of capital services..... | 101.2 | 101.7 | 102.1 | 102.3 | 95.9 | 94.6 | 95.3 | 97.2 | 100.0 | 100.6 | 101.9 | 96.4 | — |
| Multifactor productivity..... | 104.6 | 107.3 | 110.5 | 110.0 | 105.9 | 102.3 | 99.8 | 97.9 | 100.0 | 99.3 | 96.8 | 93.2 | — |
| Output..... | 87.4 | 92.1 | 95.9 | 98.9 | 94.2 | 93.9 | 94.9 | 96.6 | 100.0 | 101.5 | 104.0 | 99.4 | — |
| Inputs: | | | | | | | | | | | | | |
| Hours of all persons..... | 125.8 | 125.5 | 124.7 | 123.1 | 115.0 | 106.9 | 101.6 | 101.1 | 100.0 | 100.7 | 99.0 | 95.0 | — |
| Capital services..... | 86.4 | 90.5 | 93.9 | 96.7 | 98.3 | 99.2 | 99.6 | 99.3 | 100.0 | 100.9 | 102.1 | 103.2 | — |
| Energy..... | 68.7 | 72.1 | 75.4 | 78.6 | 85.4 | 92.9 | 98.0 | 98.3 | 100.0 | 100.2 | 103.1 | 108.6 | — |
| Nonenergy materials..... | 92.4 | 95.4 | 117.7 | 128.4 | 140.3 | 108.6 | 97.0 | 90.8 | 100.0 | 92.2 | 97.7 | 95.2 | — |
| Purchased business services..... | 96.1 | 102.3 | 108.7 | 106.7 | 100.0 | 101.0 | 99.3 | 98.5 | 100.0 | 98.3 | 91.3 | 86.4 | — |
| Combined units of all factor inputs..... | 104.5 | 104.1 | 105.1 | 103.7 | 102.0 | 98.7 | 98.1 | 91.8 | 100.0 | 98.4 | 97.6 | 92.3 | — |

NOTE: Dash indicates data not available.

49. Annual indexes of productivity, hourly compensation, unit costs, and prices, selected years

[2005 = 100]

| Item | 1965 | 1975 | 1985 | 1995 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Business | | | | | | | | | | | | | |
| Output per hour of all persons..... | 43.1 | 54.8 | 63.8 | 74.1 | 92.1 | 95.6 | 98.4 | 100.0 | 100.9 | 102.5 | 103.6 | 107.4 | 111.6 |
| Compensation per hour..... | 10.3 | 21.4 | 44.1 | 64.7 | 88.8 | 93.0 | 96.2 | 100.0 | 103.8 | 108.1 | 111.5 | 113.7 | 116.4 |
| Real compensation per hour..... | 58.2 | 70.8 | 76.3 | 82.3 | 96.3 | 98.7 | 99.5 | 100.0 | 100.5 | 101.8 | 101.1 | 103.5 | 104.2 |
| Unit labor costs..... | 23.9 | 39.0 | 69.1 | 87.4 | 96.4 | 97.3 | 97.8 | 100.0 | 102.8 | 105.4 | 107.6 | 105.9 | 104.3 |
| Unit nonlabor payments..... | 21.4 | 34.9 | 62.4 | 81.6 | 88.0 | 90.0 | 95.4 | 100.0 | 103.1 | 106.0 | 107.5 | 111.5 | 116.6 |
| Implicit price deflator..... | 22.9 | 37.4 | 66.4 | 85.1 | 93.1 | 94.4 | 96.9 | 100.0 | 102.9 | 105.7 | 107.6 | 108.1 | 109.2 |
| Nonfarm business | | | | | | | | | | | | | |
| Output per hour of all persons..... | 45.3 | 56.3 | 64.5 | 75.0 | 92.4 | 95.7 | 98.4 | 100.0 | 100.9 | 102.5 | 103.6 | 107.4 | 111.5 |
| Compensation per hour..... | 10.6 | 21.6 | 44.5 | 65.2 | 88.9 | 93.1 | 96.2 | 100.0 | 103.8 | 107.9 | 111.4 | 113.7 | 116.4 |
| Real compensation per hour..... | 59.7 | 71.6 | 76.9 | 82.9 | 96.5 | 98.8 | 99.4 | 100.0 | 100.5 | 101.6 | 101.0 | 103.5 | 104.2 |
| Unit labor costs..... | 23.3 | 38.4 | 68.9 | 87.0 | 96.2 | 97.2 | 97.8 | 100.0 | 102.8 | 105.3 | 107.6 | 105.9 | 104.4 |
| Unit nonlabor payments..... | 20.9 | 33.4 | 61.3 | 81.3 | 88.4 | 89.9 | 94.8 | 100.0 | 103.3 | 105.8 | 107.0 | 111.9 | 116.6 |
| Implicit price deflator..... | 22.4 | 36.4 | 65.9 | 84.8 | 93.1 | 94.3 | 96.6 | 100.0 | 103.0 | 105.5 | 107.4 | 108.3 | 109.2 |
| Nonfinancial corporations | | | | | | | | | | | | | |
| Output per hour of all employees..... | 46.0 | 54.5 | 64.2 | 74.2 | 91.7 | 95.3 | 98.3 | 100.0 | 101.5 | 101.8 | 102.1 | 104.2 | – |
| Compensation per hour..... | 12.1 | 24.0 | 48.2 | 67.8 | 90.7 | 94.7 | 96.9 | 100.0 | 102.8 | 106.4 | 110.1 | 112.7 | – |
| Real compensation per hour..... | 68.3 | 79.4 | 83.3 | 86.3 | 98.4 | 100.6 | 100.2 | 100.0 | 99.6 | 100.2 | 99.8 | 102.6 | – |
| Total unit costs..... | 24.6 | 43.0 | 74.1 | 89.9 | 98.4 | 98.7 | 97.8 | 100.0 | 101.8 | 105.7 | 110.0 | 111.1 | – |
| Unit labor costs..... | 26.2 | 44.1 | 75.0 | 91.5 | 98.9 | 99.5 | 98.6 | 100.0 | 101.3 | 104.5 | 107.8 | 108.2 | – |
| Unit nonlabor costs..... | 20.3 | 40.3 | 71.5 | 85.8 | 97.0 | 96.8 | 95.7 | 100.0 | 103.0 | 109.0 | 115.8 | 118.7 | – |
| Unit profits..... | 38.7 | 37.8 | 62.4 | 85.4 | 59.4 | 66.0 | 88.0 | 100.0 | 111.6 | 99.8 | 87.7 | 85.3 | – |
| Unit nonlabor payments..... | 26.6 | 39.4 | 68.4 | 85.7 | 84.1 | 86.2 | 93.1 | 100.0 | 105.9 | 105.9 | 106.2 | 107.3 | – |
| Implicit price deflator..... | 26.4 | 42.4 | 72.6 | 89.3 | 93.5 | 94.6 | 96.6 | 100.0 | 103.0 | 105.0 | 107.2 | 107.9 | – |
| Manufacturing | | | | | | | | | | | | | |
| Output per hour of all persons..... | – | – | – | 63.6 | 87.8 | 93.4 | 95.5 | 100.0 | 100.8 | 105.0 | 104.6 | 107.2 | 114.3 |
| Compensation per hour..... | – | – | – | 65.2 | 88.9 | 96.0 | 96.8 | 100.0 | 102.0 | 105.3 | 109.4 | 115.6 | 118.0 |
| Real compensation per hour..... | – | – | – | 83.0 | 96.5 | 101.9 | 100.0 | 100.0 | 98.8 | 99.2 | 99.2 | 105.3 | 105.6 |
| Unit labor costs..... | – | – | – | 102.6 | 101.2 | 102.8 | 101.4 | 100.0 | 101.2 | 100.3 | 104.6 | 107.9 | 103.2 |
| Unit nonlabor payments..... | – | – | – | 87.3 | 83.4 | 84.9 | 91.3 | 100.0 | 104.4 | 107.6 | 116.0 | – | – |
| Implicit price deflator..... | – | – | – | 91.5 | 88.2 | 89.8 | 94.1 | 100.0 | 103.6 | 105.6 | 112.9 | – | – |

Dash indicates data not available.

55. Fatal occupational injuries by event or exposure, 1996-2005

| Event or exposure ¹ | 1996-2000 (average) | 2001-2005 (average) ² | 2005 ³ | |
|---|------------------------|-------------------------------------|-------------------|---------|
| | | | Number | Percent |
| All events | 6,094 | 5,704 | 5,734 | 100 |
| Transportation incidents | 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 |
| Assaults and violent acts | 1,015 | 850 | 792 | 14 |
| Homicides | 766 | 602 | 567 | 10 |
| Shooting | 617 | 465 | 441 | 8 |
| Suicide, self-inflicted injury | 216 | 207 | 180 | 3 |
| Contact with objects and equipment | 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 |
| Falls | 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 |
| Exposure to harmful substances or environments | 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 Oxygen deficiency | 112 | 114 | 136 | 2 |
| | 92 | 74 | 59 | 1 |
| Fires and explosions | 196 | 174 | 159 | 3 |
| Fires--unintended or uncontrolled | 103 | 95 | 93 | 2 |
| Explosion | 92 | 78 | 65 | 1 |

¹ Based on the 1992 BLS Occupational Injury and Illness Classification Manual.

² Excludes fatalities from the Sept. 11, 2001, terrorist attacks.

³ 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.