

## A portrait of the youth labor market in 13 countries, 1980-2007

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Measuring time spent in unpaid household work Nonfamily youth temporarily employed in agriculture

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## The July Review

Summertime is generally the peak period of labor market activity for young workers in the United States. July, in fact, is the traditional peak of employment for workers age 16-24. The number of people from this age group who are in the labor force grows sharply each summer, as large volumes of high school and college students take or search for summer jobs and many recent graduates enter the job market to search for more permanent forms of employment.
The lead article this month, by Gary Martin, provides a portrait of the youth labor market in 13 countries from 1980 to 2007. Examining data primarily compiled by the Organization for Economic Cooperation and Development for industrialized nations ranging from the United States and Canada to Japan and Korea, Martin examines trends for youth in terms of population, participation in the labor force, unemployment, schooling, and work experience. He places emphasis particularly on unemployment and long-term joblessness trends, finding that unemployment during the period studied tended to be higher than in the 1960s and 1970s.
The July issue in recent years has been the vehicle for taking a look back at developments in producer prices during the previous calendar year. As Joseph Kowal depicts, 2008 was a year full of abrupt and striking movements, particularly in relation to the previous year. After the Producer Price Index (PPI) surged in 2007-by 6.2 percent, the largest calendar-year advance since 1981-it ended 2008 with a decline of 0.9 percent, the first over-the-year drop since 2001. The 2007 increase carried over into the first half of 2008 and was primarily driven by the prices of crude energy
materials (such as crude petroleum, natural gas, and coal), which rose nearly 60 percent during the first 7 months of 2008. Prices for intermediate and finished energy goods followed a similar pattern, rising 25 percent and 19 percent, respectively, through July. All 3 indexes subsequently declined sharply, as did the overall PPI. Producer prices for other goods, such as food, acted in a similar way, rising sharply in the first half of the year and then declining later.
One question frequently asked in households, particularly, perhaps, in the middle of an exasperating plumbing repair, is "Should I do this myself or hire someone else?" The article by Rachel Krantz-Kent examines the time Americans spend performing unpaid household work, or, in other words, undertaking services for themselves or their families that could be purchased from outside the home. "Unlike work that is done for pay," the author notes, "about which there are a number of timely statistical measures-persons employed, hours worked, earnings generated, and others-the resources involved in doing unpaid household work are less frequently quantified." She examines data gathered over the 2003-2007 period from the American Time Use Survey to shed light on the extent of these activities, including cooking, cleaning, lawn care, grocery shopping, and the like. Differences in who performs these activities, broken down by age and sex, are one of the article's specific focuses.
The July issue is rounded out with an examination of new data on the nature of the 12- to 20-year-old farm workforce that is employed by people other than the youths' parents-in other words, nonfamily youths. The authors shed light on the characteristics of farm or ranch operators who temporarily hire such people, how
they find the employees, the nature of the tasks they expect them to perform, and the skills they believe are necessary to get a variety of agricultural tasks done.

## A BLS milestone anniversary-continued

It was noted in this column last month that the Bureau of Labor Statistics has been celebrating its 125 th anniversary. On June 26 at its national office in Washington, D.C., BLS hosted a number of distinguished luminaries at a commemorative event attended by hundreds of employees and watched via streaming video by more in the Bureau's network of Regional Offices. The speakers, introduced by BLS Commissioner Keith Hall, included Secretary of Labor Hilda Solis; Christina Romer, Chair of the President's Council of Economic Advisers; and Congresswoman Carolyn Maloney, chair of the Joint Economic Committee. Two former Commissioners, Janet Norwood and Kathleen Utgoff, also participated in the proceedings. Another guest was Ben S. Bernanke, Chairman of the Board of Governors of the Federal Reserve System, who, as part of his remarks, said the following: "Over its 125 years, the BLS has built a reputation for providing timely and accurate economic information. The close relationship that the Bureau's economists and statisticians maintain with researchers-both those in government and in academia-cultivates that exemplary performance. Researchers' insights have led to better analysis and higher quality data. Moreover, the Bureau is committed to undertaking the innovations and improvements necessary to ensure that its economic statistics effectively measure and provide insight into an ever-changing economy."

# A portrait of the youth labor market in 13 countries, 1980-2007 

A relatively bigh unemployment rate for young people has been a persistent problem in industrialized countries in recent decades; still, the number of youtbs who are unemployed has been falling with declining youth populations and more years spent in education

## Gary Martin

In most industrialized countries, relatively high rates of joblessness among young persons have persisted for many years, although with considerable variation across the countries. In recent decades, the unemployment rate for persons under the age of 25 in France regularly has been greater than 20 percent, while in Italy it rose to more than 30 percent, and in Spain it has surpassed 40 percent. Germany and Japan had very low youth unemployment rates at the beginning of the 1980saround 4 percent. However, more recently, even Germany, with its apprenticeship system, and Japan, with its close cooperation between schools and businesses, have had youth unemployment rates similar to those in the United States, in or near the 10-percent range. The box on this page presents the various definitions of "youth" in the countries examined in this article.

In the first years of the 21st century, youths in the United States experienced a small decline in unemployment rates, whereas their counterparts in Japan, France, Germany, and Sweden saw a sharp increase. Young people in Italy and Spain had very high unemployment rates throughout the 1980-2007 period. These trends generally follow the trends in each country's overall unemployment rate.

This article analyzes the youth unemployment picture in a selected group of industrialized countries over the 1980-2007 period. The data are primarily from a database compiled by the Organization for Economic Cooperation and Development (OECD) and, with few exceptions, are annual averages based on national labor force surveys. In one case, Canada, BLS makes adjustments to the country's national data to enhance comparability with U.S. definitions. Besides allowing comparisons of unemployment by age group, the OECD database

## Definitions of "youth" in the 13 countries

For employment and unemployment purposes, "youth" is generally defined as the period from the age when mandatory schooling ends through age 24 . For most countries, that means the time span from 15 years old through 24 years old. Of the countries in the current study, Spain, Sweden, the United Kingdom, and the United States have the youngest youth age: 16 years. In Italy, it was 14 before 1990, but has been 16 years old from that year forward. These ages, then, are the actual earliest ones referred to in the table headings "15-19 years" and "under 25 years."
permits comparisons of labor force participation rates and of the proportion that young people constitute of unemployment, the labor force, and the population. In addition, the surveys provide statistics on the duration of unemployment by age group. The portrait of the youth labor market situation is filled in further with less widely available statistics-with regard to both time and place-on combining school and work, youth living arrangements, and job turnover rates. Finally, an indicator of "idleness" tracks trends and levels for the number of young people who are neither in school nor at work.

The topic of international comparisons of youth unemployment was last addressed in this Review in 1981, in an article that compared the experiences of nine advanced industrial countries from 1960 to 1979. ${ }^{1}$ At the beginning of the 1960s, only the United States and Canada had dou-ble-digit youth unemployment rates. Italy soon joined the group, and by the end of the period Australia, France, and Great Britain also experienced rates of youth unemployment that reached two digits.

Of the four additional countries chosen for the current article-Spain, Ireland, the Netherlands, and the Republic of Korea (simply, Korea hereafter)—only Spain had youth unemployment rates in recent years higher than those in the United States. The relatively low youth unemployment rates of Ireland and the Netherlands are of recent vintage; rates in those countries were greater than 20 percent in the mid-1980s. Korea has had youth unemployment rates that fairly closely track those of the United States. The inclusion of these additional countries affords a greater perspective on the youth unemployment phenomenon in industrialized countries and also reflects the wide availability of comparable measures of unemployment compiled from periodic labor force surveys.

## Data sources and comparability

We may generally rule out differences in definitions and measurement methods as an explanation for the sharply differing rates of youth unemployment among countries. Increasingly, statistical agencies are using a monthly or quarterly labor force survey to measure employment and unemployment. The greatest departures from this methodology are for the earliest years for Germany (West Germany before 1991 in the data) and the Netherlands. Before 1984 for Germany and before 1983 for the Netherlands, unemployment estimates were based upon the registered unemployed, for the month of September for Germany and annual averages of monthly registrations for the Netherlands. Since 1984, Germany's annual un-
employment estimates have been derived from its April microcensus (household survey) and the European Union Labor Force Survey compiled by the Statistics Office of the European Communities (EUROSTAT). The data for the Netherlands are from the latter source exclusively.

Perhaps the next-greatest departure from the methodological norm is that for the United Kingdom, whose employment and unemployment statistics since 1992 come from a combination of a quarterly labor force survey and administrative sources. Before 1992, they were from the Census of Employment and the Annual Labor Force Survey. France's employment and unemployment data are primarily from the Labor Force Survey, which has been quarterly only since 2003. Prior to that time, it was conducted annually in March.

The OECD data for Ireland, Italy, and Spain also are from quarterly national labor force surveys. Before 1998, Ireland conducted an annual survey in April. Since 1986, Sweden has conducted a monthly survey, as have the remaining five countries for the entire period. Although it now conducts a monthly survey, Sweden is unique in a couple of ways. First, it has excluded from its unemployment statistics full-time students who are seeking work and who are available for work. The OECD, however, adjusts the unemployment statistics for Sweden to include such students. Beginning in October 2008, those adjustments no longer have been necessary, because Sweden's unemployment criteria now include students looking for a job. Second, Sweden's labor force statistics also apply only to those aged 16 through 64 years. Before 1986, it was 16 through 74. For the other countries, the population range is open ended after the year that compulsory schooling ends. The OECD makes no adjustment for this difference in age limits.

Data for Canada are adjusted by BLS to include full-time students who are seeking, and are available for, full-time work, but whom Canada omits from the country's labor force. ${ }^{2}$

## Long-term unemployment trends

Economic growth in the advanced industrial economies slackened in the mid-seventies while the proportion of young people in the labor force grew, increasing the competition for jobs. The proportion of youths in the workforce since that time has been reduced by declining birthrates and by a general increase in the number of years spent in formal schooling. ${ }^{3}$ Nevertheless, with youth unemployment rates in the United States and Canada hardly changed from what they were in the early 1960s, they are now surpassed by those of several other industrial countries.

Overall unemployment rates have been higher in recent
decades than they were in the 1960 s and 1970s, especially in Sweden, Japan, Germany, Italy, and France, while the rates for the United States and Canada-apart from busi-ness-cycle fluctuations-had hardly changed through 2007. In the 1960s and 1970s, the overall unemployment rate in the two North American countries was generally in the 5percent to 7 -percent range; in Sweden and Japan it never reached 3 percent, in Germany it rarely surpassed 3 percent, and in Italy and France it had climbed only to 4.4 percent and 6.1 percent, respectively, by the end of the period. ${ }^{4}$

Table 1 shows the trend of the unemployment rate since 1980. Only in Sweden, Germany, and Japan has there been a noticeable upward trend. For most of the 13 countries examined, a big unemployment jump came between 1980 and 1985, with Korea, the United States and the United Kingdom notable exceptions. In general, in all 13 countries youth unemployment rate trends have tracked those of the rest of the workforce.

Although, except in Germany, the trends may be much the same, the level of youth unemployment rates has been substantially higher across the board than those for persons aged 25 years and older, usually by a multiple between 2 and 3. (See table 2.) Italy is the exception on the high side, where the multiple has been around 4 in recent years.

Whereas the conventional method of comparing youth and adult unemployment rates-that is, using the ratio of the former to the latter-might be convenient for comparison purposes, it does not tell the whole story. ${ }^{5}$ The historical example of Sweden shows why. In Sweden, the numbers of unemployed youths increased much more than did the numbers of unemployed adults, but from the ratio alone, it appears that the relative unemployment situation of youths was the same in 2007 as in 1980. Adult unemployment was extremely low in 1980, so the few percentage points higher that youth unemployment rates were resulted in a relatively large ratio between the two. The ratio remained large in 2007, but with the adult unemployment rate much higher than it was in 1980 in both countries, the numbers involved were much greater. ${ }^{6}$

In table 3, the unemployment rates of those 25 years and older are subtracted from the various youth unemployment rates for the purpose of comparison. In 2007, Italy and Sweden still exhibited, by far, the highest relative rates of youth unemployment among the countries compared, but the degree to which the youth unemployment situation had worsened in Sweden is clearly shown, while the improvement in Italy was not as great as comparisons of the ratios of youth to adult unemployment rates would indicate. According to the table, the relative youth unemployment situation in France also was worse in 2007 than in 1980, not
better, as would be indicated by the change in the ratios of youth to adult unemployment rates.

## Why higher youth unemployment?

In almost all instances, the unemployment rate for teenagers (aged 15 or 16 years to 19 years) is consistently higher than that for 20- to 24 -year-olds. Germany is the lone exception. All the reasons that make youth unemployment higher than the norm could be expected to make those who are the youngest within the youth range have the higher unemployment rate.

Youth unemployment rates are relatively higher for a number of reasons. ${ }^{7}$ First, young people are among the most vulnerable during an economic downturn when workers are being laid off and there are hiring slowdowns or freezes. Youths typically have the least seniority, the least work experience, and the least amount of company training invested in them, and they are more likely to be working on a short-term contract. ${ }^{8}$ They are, therefore, the most likely to be let go. Indeed, even if, on the one hand, there were no layoffs at all, but only a general hiring freeze, unemployment among young people would still grow as they attempted to move from school into the labor force upon completing their education; and if, on the other hand, employers were forced by economic conditions simply to be more discriminating in their hiring, those with no experience or with very little experience would be the least likely to be hired, and these, too, are most likely to be the young. Numerous studies have shown that youth unemployment rates are more sensitive to the business cycle than are adult unemployment rates. ${ }^{9}$

Second, whatever the state of the economy, young people simply have less experience in looking for work. Lack of experience at work is counteracted to a degree by the willingness and ability of youths to work for less money, but lack of experience in the process of finding a job is not.

Third, young people, generally with fewer resources than older workers and a stronger financial attachment to family, tend to be less mobile. Consequently, they are somewhat less able or willing to move to places where more jobs might be available. This is especially true for those in the 15 - to 19-year-old category, and in countries where attachment to home is particularly strong, the more important that factor would be.

Fourth, young people, with fewer financial obligations and often with family support, can typically afford to take immediate employment less seriously-especially as family sizes have shrunk and the pressure to get a job to help support the family has subsided. The younger the prospective

Table 1. Unemployment rate, by age, 13 countries, selected years, 1980-2007
[In percent]

| Country and year | Total | Under 25 years | 15-19 years | 20-24 years | $\begin{array}{\|c} 25 \text { years } \\ \text { and } \\ \text { older } \end{array}$ | Country and year | Total | Under 25 years | 15-19 years | 20-24 <br> years | $\begin{array}{\|c} 25 \text { years } \\ \text { and } \\ \text { older } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States |  |  |  |  |  | Ireland |  |  |  |  |  |
| 1980.............................. | 7.1 | 13.8 | 17.8 | 11.5 | 5.1 | 1981 ............................ | 10.5 | 14.7 | 19.3 | 11.7 | 8.8 |
| 1985............................... | 7.2 | 13.6 | 18.6 | 11.1 | 5.6 | 1985 ............................ | 16.7 | 23.4 | 31.4 | 19.2 | 14.2 |
| 1990............................... | 5.6 | 11.2 | 15.5 | 8.8 | 4.4 | 1990 ............................. | 13.0 | 17.7 | 26.1 | 13.8 | 11.7 |
| 1995............................... | 5.6 | 12.1 | 17.3 | 9.1 | 4.3 | 1995 ............................ | 12.2 | 19.1 | 28.4 | 15.9 | 10.5 |
| 2000.............................. | 4.0 | 9.3 | 13.1 | 7.2 | 3.0 | 2000 ............................ | 4.3 | 6.4 | 10.0 | 4.9 | 3.8 |
| 2007............................... | 4.6 | 10.5 | 15.7 | 8.2 | 3.6 | 2007 ............................. | 4.6 | 8.6 | 13.7 | 7.2 | 3.8 |
| Canada |  |  |  |  |  | Italy |  |  |  |  |  |
| 1980............................... | 7.3 | 12.7 | 16.3 | 10.4 | 5.3 | 1980 ............................. | 7.6 | 25.2 | 31.5 | 21.1 | 3.5 |
| 1985.............................. | 10.2 | 15.9 | 18.8 | 14.5 | 8.5 | 1985 ............................ | 10.3 | 33.9 | 43.8 | 28.9 | 5.1 |
| 1990............................... | 7.7 | 12.0 | 13.8 | 10.9 | 6.7 | 1990 ............................ | 11.4 | 31.5 | 39.0 | 28.6 | 7.0 |
| 1995............................... | 8.6 | 13.9 | 17.1 | 12.0 | 7.6 | 1995 ............................ | 11.5 | 31.9 | 37.1 | 30.3 | 8.2 |
| 2000............................... | 6.1 | 11.7 | 15.4 | 9.4 | 5.1 | 2000 ............................. | 10.5 | 29.7 | 36.2 | 27.9 | 8.1 |
| 2007............................... | 5.3 | 10.1 | 13.6 | 8.0 | 4.3 | 2007 ............................. | 6.1 | 20.3 | 31.5 | 17.9 | 4.9 |
| Australia |  |  |  |  |  | Netherlands |  |  |  |  |  |
| 1980............................... | 6.1 | 12.5 | 17.1 | 8.9 | 3.7 | 1980 ............................. | 4.6 | 9.3 | - | - | 3.3 |
| 1985.............................. | 8.3 | 15.2 | 20.3 | 11.5 | 5.9 | 1985 ............................ | 13.1 | 22.9 | - | - | 10.4 |
| 1990............................... | 6.9 | 13.0 | 16.9 | 10.2 | 5.1 | 1990 ............................. | 7.4 | 11.1 | 15.1 | 9.3 | 6.4 |
| 1995.............................. | 8.5 | 15.4 | 20.6 | 12.0 | 6.6 | 1995 ............................ | 7.0 | 12.8 | 18.5 | 10.0 | 5.8 |
| 2000............................... | 6.3 | 12.1 | 16.1 | 9.1 | 4.9 | 2000 ............................ | 3.0 | 6.1 | 9.1 | 3.9 | 2.4 |
| 2007.............................. | 4.4 | 9.4 | 13.8 | 6.3 | 3.2 | 2007 ............................ | 3.6 | 7.3 | 10.9 | 4.5 | 2.9 |
| Japan |  |  |  |  |  | Spain |  |  |  |  |  |
| 1980............................... | 2.0 | 3.6 | 4.1 | 3.4 | 1.8 | 1980 ............................. | 11.1 | 25.3 | 33.2 | 20.3 | 6.9 |
| 1985.............................. | 2.6 | 4.8 | 7.3 | 4.1 | 2.3 | 1985 ............................. | 21.0 | 43.8 | 51.4 | 39.9 | 14.6 |
| 1990............................... | 2.1 | 4.3 | 6.6 | 3.7 | 1.8 | 1990 ............................ | 16.0 | 30.2 | 31.6 | 29.7 | 12.3 |
| 1995.............................. | 3.2 | 6.1 | 8.2 | 5.7 | 2.7 | 1995 ............................ | 22.7 | 40.4 | 44.7 | 39.0 | 19.0 |
| 2000............................... | 4.8 | 9.2 | 12.1 | 8.6 | 4.2 | 2000 ............................. | 13.9 | 25.3 | 32.4 | 23.2 | 12.0 |
| 2007.............................. | 3.9 | 7.7 | 8.7 | 7.5 | 3.5 | 2007 ............................. | 8.3 | 18.2 | 28.7 | 15.1 | 7.0 |
| Korea, Republic of |  |  |  |  |  | Sweden |  |  |  |  |  |
| 1980............................... | 5.2 | 11.5 | 13.3 | 10.3 | 3.4 | 1980 ............................ | 2.2 | 6.3 | 10.5 | 3.9 | 1.4 |
| 1985............................... | 4.0 | 10.0 | 11.1 | 9.6 | 2.8 | 1985 ............................ | 3.1 | 7.2 | 8.3 | 6.7 | 2.3 |
| 1990............................... | 2.5 | 7.0 | 9.2 | 6.3 | 1.7 | 1990 ............................. | 1.8 | 4.6 | 7.3 | 3.4 | 1.3 |
| 1995.............................. | 2.1 | 6.3 | 7.9 | 6.0 | 1.4 | 1995 ............................. | 9.1 | 19.5 | 20.6 | 19.2 | 7.7 |
| 2000............................... | 4.4 | 10.8 | 14.5 | 9.9 | 3.7 | 2000 ............................. | 5.8 | 11.9 | 17.9 | 9.4 | 5.1 |
| 2007.............................. | 3.2 | 8.8 | 9.1 | 8.8 | 2.8 | 2007 ............................ | 6.1 | 18.9 | 29.6 | 13.7 | 4.3 |
| France |  |  |  |  |  | United Kingdom |  |  |  |  |  |
| 1980............................... | 6.1 | 15.1 | 24.5 | 12.2 | 4.3 | 1984 ............................ | 11.8 | 19.7 | 22.3 | 17.9 | 9.5 |
| 1985.............................. | 10.2 | 25.6 | 34.0 | 23.7 | 7.4 | 1985 ............................ | 11.3 | 17.8 | 19.8 | 16.4 | 9.3 |
| 1990............................... | 9.2 | 19.1 | 19.0 | 19.2 | 7.8 | 1990 ............................ | 6.8 | 10.1 | 11.6 | 9.2 | 5.9 |
| 1995............................... | 11.6 | 25.9 | 24.3 | 26.1 | 10.1 | 1995 ............................. | 8.6 | 15.3 | 17.2 | 14.2 | 7.3 |
| 2000.............................. | 10.0 | 20.7 | 22.2 | 20.5 | 9.0 | 2000 ............................ | 5.5 | 11.7 | 15.5 | 9.1 | 4.4 |
| 2007................................. | 8.0 | 18.7 | 25.6 | 16.8 | 6.7 | 2007 ............................... | 5.2 | 14.4 | 20.7 | 10.7 | 3.6 |
| Germany |  |  |  |  |  |  |  |  |  |  |  |
| 1980.............................. | 3.2 | 4.1 | 3.8 | 4.4 | 2.9 |  |  |  |  |  |  |
| 1985................................... | 7.2 | 10.0 | 11.2 | 9.3 | 6.4 |  |  |  |  |  |  |
| 1990.............................. | 4.7 | 4.4 | 4.7 | 4.3 | 4.8 |  |  |  |  |  |  |
| 1995.............................. | 8.1 | 8.2 | 7.0 | 8.7 | 8.1 |  |  |  |  |  |  |
| 2000............................... | 7.7 | 8.4 | 8.0 | 8.6 | 7.7 |  |  |  |  |  |  |
| 2007.............................. | 8.6 | 11.7 | 12.8 | 11.2 | 8.2 |  |  |  |  |  |  |

Note: Dash indicates data not available.
"Labor Force Statistics MEI: Harmonized Unemployment Rates and Levels
(HURS)," stats.oecd.org/WBOS/Index.aspx?QueryName=251\&QueryType=
View; Statistics Canada (unpublished).

Table 2. Ratio of youth unemployment rate to unemployment rate for those 25 years and older, 13 countries, selected years, 1980-2007

| Country and year | Under 25 years | 15-19 years | $20-24$ <br> years | Country and year | Under 25 years | 15-19 years | $\begin{gathered} 20-24 \\ \text { years } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States |  |  |  | Ireland |  |  |  |
| 1980................................................... | 2.7 | 3.5 | 2.3 | 1981 ............................................. | 1.7 | 2.2 | 1.3 |
| 1985.................................................. | 2.4 | 3.3 | 2.0 | 1985 ............................................. | 1.6 | 2.2 | 1.3 |
| 1990.................................................. | 2.5 | 3.5 | 2.0 | 1990 ............................................. | 1.5 | 2.2 | 1.2 |
| 1995................................................... | 2.8 | 4.0 | 2.1 | 1995 ............................................. | 1.8 | 2.7 | 1.5 |
| 2000.................................................. | 3.1 | 4.4 | 2.4 | 2000 ............................................. | 1.7 | 2.7 | 1.3 |
| 2007................................................... | 2.9 | 4.3 | 2.3 | 2007 .............................................. | 2.3 | 3.6 | 1.9 |
| Canada |  |  |  | Italy |  |  |  |
| 1980...................................................... | 2.4 | 3.1 | 2.0 | 1980 ................................................ | 7.2 | 9.0 | 6.0 |
| 1985.................................................. | 1.9 | 2.2 | 1.7 | 1985 .............................................. | 6.7 | 8.6 | 5.7 |
| 1990................................................... | 1.8 | 2.1 | 1.6 | 1990 ............................................. | 4.5 | 5.6 | 4.1 |
| 1995................................................... | 1.8 | 2.3 | 1.6 | 1995 ............................................. | 3.9 | 4.5 | 3.7 |
| 2000................................................... | 2.3 | 3.0 | 1.8 | 2000 ............................................. | 3.7 | 4.5 | 3.5 |
| 2007.................................................. | 2.4 | 3.2 | 1.9 | 2007 ............................................ | 4.1 | 6.4 | 3.6 |
| Australia |  |  |  | Netherlands |  |  |  |
| 1980................................................... | 3.3 | 3.9 | 3.0 | 1980 .............................................. | 2.9 | - | - |
| 1985................................................... | 3.6 | 4.0 | 3.5 | 1985 .............................................. | 2.2 | - | - |
| 1990.................................................. | 4.1 | 5.4 | 3.7 | 1990 ............................................. | 1.7 | 2.3 | 1.4 |
| 1995................................................... | 4.4 | 5.5 | 4.2 | 1995 ............................................. | 2.2 | 3.2 | 1.7 |
| 2000.................................................. | 2.9 | 3.9 | 2.7 | 2000 .............................................. | 2.5 | 3.7 | 1.6 |
| 2007...................................................... | 3.1 | 3.2 | 3.1 | 2007 ................................................. | 2.5 | 3.7 | 1.5 |
| Japan |  |  |  | Spain |  |  |  |
| 1980.................................................. | 3.4 | 4.6 | 2.4 | 1980 ............................................. | 3.7 | 4.8 | 2.9 |
| 1985................................................... | 2.6 | 3.4 | 2.0 | 1985 ............................................. | 3.0 | 3.5 | 2.7 |
| 1990................................................... | 2.6 | 3.3 | 2.0 | 1990 ............................................. | 2.5 | 2.6 | 2.4 |
| 1995................................................... | 2.3 | 3.1 | 1.8 | 1995 ............................................. | 2.1 | 2.4 | 2.1 |
| 2000.................................................. | 2.5 | 3.3 | 1.9 | 2000 ............................................. | 2.1 | 2.7 | 1.9 |
| 2007.................................................. | 2.9 | 4.3 | 1.9 | 2007 ............................................. | 2.6 | 4.1 | 2.1 |
| Korea, Republic of |  |  |  | Sweden |  |  |  |
| 1980...................................................... | 2.0 | 2.3 | 1.9 | 1980 ................................................. | 4.4 | 7.4 | 2.7 |
| 1985.................................................. | 2.0 | 3.1 | 1.8 | 1985 ............................................ | 3.1 | 3.6 | 2.9 |
| 1990................................................... | 2.4 | 3.8 | 2.1 | 1990 ............................................. | 3.6 | 5.6 | 2.6 |
| 1995.................................................. | 2.3 | 3.0 | 2.1 | 1995 ............................................. | 2.5 | 2.7 | 2.5 |
| 2000................................................... | 2.2 | 2.9 | 2.0 | 2000 ............................................. | 2.3 | 3.5 | 1.9 |
| 2007.................................................. | 2.2 | 2.5 | 2.1 | 2007 ............................................. | 4.4 | 6.9 | 3.2 |
| France |  |  |  | United Kingdom |  |  |  |
| 1980.................................................. | 3.5 | 5.7 | 2.8 | 1984 ............................................. | 2.1 | 2.4 | 1.9 |
| 1985....................................................... | 3.5 | 4.6 | 3.2 | 1985 ................................................. | 1.9 | 2.1 | 1.8 |
| 1990.................................................. | 2.5 | 2.4 | 2.5 | 1990 ............................................. | 1.7 | 1.9 | 1.6 |
| 1995................................................... | 2.6 | 2.4 | 2.6 | 1995 ............................................. | 2.1 | 2.4 | 1.9 |
| 2000.................................................. | 2.3 | 2.5 | 2.3 | 2000 ............................................. | 2.7 | 3.5 | 2.1 |
| 2007.......................................................... | 2.8 | 3.8 | 2.5 | 2007 ................................................... | 4.0 | 5.7 | 2.9 |
| Germany |  |  |  |  |  |  |  |
| 1980.................................................. | 1.4 | 1.3 | 1.5 |  |  |  |  |
| 1985.................................................. | 1.6 | 1.7 | 1.5 |  |  |  |  |
| 1990.................................................. | . 9 | 1.0 | . 9 |  |  |  |  |
| 1995.................................................. | 1.0 | . 9 | 1.1 |  |  |  |  |
| 2000................................................... | 1.1 | 1.0 | 1.1 |  |  |  |  |
| 2007.................................................. | 1.4 | 1.6 | 1.4 |  |  |  |  |
| Note: Dash indicates data not av | able. | and D | opment, | "Labor Force Statistics MEl: Harmonized Unemployment Rates and Levels (HURs)," stats.oecd.org/wBOS/Index.aspx?QueryName=251\&QueryType= View; Statistics Canada (unpublished). |  |  |  |


| Table 3. Youth unemployme years, 1980-2007 <br> [Difference, in percentage points] | t rate mi | unem | ment | for those 25 years and old |  | , sel |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country and year | Under 25 years | 15-19 <br> years | $\begin{gathered} 20-24 \\ \text { years } \end{gathered}$ | Country and year | Under 25 years | 15-19 years | 20-24 years |
| United States |  |  |  | Ireland |  |  |  |
| 1980 .................................................... | 8.8 | 12.7 | 6.5 | 1981 .............................................. | 5.9 | 10.5 | 3.0 |
| 1985 ................................................... | 8.0 | 13.0 | 5.5 | 1985 .............................................. | 9.2 | 17.2 | 5.0 |
| 1990 ................................................... | 6.8 | 11.2 | 4.4 | 1990 .............................................. | 6.0 | 14.4 | 2.1 |
| 1995 ................................................... | 7.7 | 13.0 | 4.7 | 1995 .............................................. | 8.6 | 17.9 | 5.5 |
| 2000 .................................................. | 6.4 | 10.1 | 4.2 | 2000. .............................................. | 2.7 | 6.2 | 1.1 |
| 2007 ........................................................ | 6.9 | 12.1 | 4.5 | 2007 .............................................. | 4.8 | 9.9 | 3.3 |
| Canada |  |  |  | Italy |  |  |  |
| 1980 ................................................. | 7.4 | 11.0 | 5.1 | 1980 .............................................. | 21.7 | 28.0 | 17.5 |
| 1985 ................................................... | 7.4 | 10.3 | 6.0 | 1985 .............................................. | 28.8 | 38.7 | 23.9 |
| 1990 ................................................... | 5.3 | 7.1 | 4.2 | 1990 .............................................. | 24.5 | 32.1 | 21.6 |
| 1995 .................................................... | 6.3 | 9.5 | 4.4 | 1995 .............................................. | 23.7 | 28.9 | 22.1 |
| 2000 .................................................. | 6.6 | 10.3 | 4.3 | 2000 ............................................. | 21.6 | 28.1 | 19.9 |
| 2007 ....................................................... | 5.8 | 9.3 | 3.7 | 2007 .................................................. | 15.4 | 26.6 | 13.0 |
| Australia |  |  |  | Netherlands |  |  |  |
| 1980 .................................................. | 8.0 | 9.9 | 6.9 | 1980 .............................................. | 6.1 | - | - |
| 1985 .................................................... | 7.3 | 8.3 | 6.9 | 1985 .............................................. | 12.6 | - | - |
| 1990 ................................................... | 5.3 | 7.5 | 4.6 | 1990 .............................................. | 4.7 | 8.6 | 2.8 |
| 1995 ................................................... | 4.8 | 6.4 | 4.5 | 1995 .............................................. | 7.0 | 12.6 | 4.2 |
| 2000 .................................................... | 7.2 | 10.8 | 6.3 | 2000 .............................................. | 3.7 | 6.7 | 1.5 |
| 2007 ................................................... | 6.0 | 6.2 | 5.9 | 2007 .............................................. | 4.4 | 8.0 | 1.6 |
| Japan |  |  |  | Spain |  |  |  |
| 1980 ....................................................... | 8.8 | 13.4 | 5.2 | 1980 .............................................. | 18.4 | 26.3 | 13.4 |
| 1985 ................................................... | 9.3 | 14.4 | 5.6 | 1985 ............................................. | 29.2 | 36.8 | 25.3 |
| 1990 .................................................... | 7.9 | 11.8 | 5.1 | 1990 .............................................. | 18.0 | 19.3 | 17.4 |
| 1995 ................................................... | 8.7 | 14.0 | 5.4 | 1995 .............................................. | 21.4 | 25.7 | 20.0 |
| 2000 .................................................... | 7.2 | 11.2 | 4.2 | 2000 .............................................. | 13.3 | 20.5 | 11.3 |
| 2007 ............................................................ | 6.1 | 10.5 | 3.0 | 2007 .................................................... | 11.1 | 21.7 | 8.1 |
| Korea, Republic of |  |  |  | Sweden |  |  |  |
| 1980 .................................................... | 1.8 | 2.3 | 1.6 | 1980 .............................................. | 4.8 | 9.1 | 2.5 |
| 1985 ................................................................ | 2.4 | 5.0 | 1.8 | 1985 .................................................... | 4.9 | 5.9 | 4.4 |
| 1990 ................................................... | 2.6 | 4.9 | 1.9 | 1990 .............................................. | 3.3 | 6.0 | 2.1 |
| 1995 .................................................... | 3.4 | 5.5 | 3.0 | 1995 .............................................. | 11.9 | 13.0 | 11.5 |
| 2000 ................................................... | 5.0 | 7.9 | 4.4 | 2000 ............................................. | 6.8 | 12.8 | 4.3 |
| 2007 ................................................... | 4.2 | 5.2 | 4.0 | 2007 .............................................. | 14.7 | 25.3 | 9.4 |
| France |  |  |  | United Kingdom |  |  |  |
| 1980 ....................................................... | 10.8 | 20.2 | 7.9 | 1984 .............................................. | 10.2 | 12.8 | 8.5 |
| 1985 ................................................... | 18.2 | 26.6 | 16.3 | 1985 .............................................. | 8.4 | 10.5 | 7.0 |
| 1990 ................................................... | 11.4 | 11.2 | 11.4 | 1990 ............................................. | 4.2 | 5.6 | 3.3 |
| 1995 ................................................... | 15.8 | 14.2 | 16.0 | 1995 .............................................. | 8.0 | 9.9 | 6.9 |
| 2000 ................................................... | 11.7 | 13.1 | 11.4 | 2000 ............................................. | 7.3 | 11.1 | 4.7 |
| 2007 .......................................................... | 12.0 | 18.9 | 10.1 | 2007 .................................................... | 10.8 | 17.1 | 7.0 |
| - Germany |  |  |  |  |  |  |  |
| 1980 ................................................... | 1.2 | . 9 | 1.4 |  |  |  |  |
| 1985 .......................................................... | 3.6 | 4.8 | 2.9 |  |  |  |  |
| 1990 ................................................... | -. 4 | -. 1 | -. 5 |  |  |  |  |
| 1995 ................................................... | . 1 | -1.2 | . 5 |  |  |  |  |
| 2000 ................................................................ | . 7 | . 4 | . 9 |  |  |  |  |
| 2007 ................................................. | 3.5 | 4.6 | 3.0 |  |  |  |  |
| Note: Dash indicates data not available. "Labor Force Statistics MEI: Harmonized Unemployment Rates and Levels <br> Source: Organization for Economic Cooperation and Development, (HURs)," stats.oecd.org/WBOS/Index.aspx?QueryName=251\&QueryType= <br> View; Statistics Canada (unpublished).   |  |  |  |  |  |  |  |

workers, the less serious they tend to be about paid work. If they are students, the jobs they are likely to get, or to lose, are typically not full-time, career-track jobs, and they usually pay very little. Young people sacrifice less by passing up such jobs than do older people, whose search for employment is typically for career-type jobs. Whether the jobs are career track jobs or not, young people with financial support from parents can usually afford to wait longer for just the right job to come along. Thus, in this instance, a higher rate of unemployment actually may reflect economic strength, rather than economic weakness, for youths. ${ }^{10}$

## Schooling on the rise

A common phenomenon throughout much of the industrialized world has been a steady increase in the average number of years spent in formal schooling, causing a rise in the average age in which serious, full-time employment begins. The following tabulation shows the percentage of 18 - and 22 -yearolds in 10 countries who were attending school in 1984 (1983 for the Netherlands and 1986 for Spain) and 1997 (1994 for Australia and 1996 for Canada, Germany, and Ireland): ${ }^{11}$

| Country | 18-year-olds |  | 22-year-olds |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1984 | 1997 | 1984 | 1997 |
| United States ............... | 58.6 | 70.5 | 22.5 | 35.6 |
| Canada ....................... | 59.1 | 73.0 | 20.9 | 38.1 |
| Australia ..................... | 27.5 | 46.4 | 10.5 | 18.8 |
| France........................ | 58.0 | 83.5 | 15.9 | 43.7 |
| Germany..................... | 40.2 | 45.0 | 21.8 | 24.9 |
| Ireland ....................... | 46.1 | 69.8 | 9.7 | 22.2 |
| Italy .......................... | 55.3 | 71.8 | 21.9 | 34.8 |
| Netherlands ................ | 67.0 | 75.6 | 31.9 | 48.3 |
| Spain ......................... | 49.1 | 73.1 | 21.5 | 44.2 |
| United Kingdom ......... | 30.3 | 38.2 | 12.0 | 18.2 |

The rise in the average age of schooling may be due to increasing educational requirements at the workplace, either because doing the work actually requires more education or because employers increasingly are using education as a screening device. Increased schooling also might be related to shrinking family size, making higher education more affordable. Outside the United States, in particular, it could be a reaction to the general deterioration of the job market for young people. ${ }^{12}$

The result of the increased number of years of formal schooling is a delay in labor force participation: despite overall increases in the rate of labor force participation in most countries, the rate of youth labor force participation has fallen in almost all of the countries. (See table 4.) Youths in Korea,

Sweden, Italy, and France have experienced at least doubledigit declines in participation rates since 1980. The doubledigit decline in the United Kingdom is since 1984. Young persons in the United States, Germany, Ireland, and Spain all had large declines in labor force activity. With the exception of the Netherlands, which saw a considerable increase over the 1980-2007 period, the remaining countries either had slightly declining or virtually level youth participation rates.

The decline in participation rates for youths was occurring while total participation rates were increasing in every country but Japan, Italy, and France, in each of which there were very small overall decreases. The Netherlands countered the general trend, with an even greater increase in its youth participation rate than in its overall participation rate. The Netherlands also is experiencing a sizeable increase in the percentage of young people pursuing formal education. The apparent contradiction is resolved by noting that in recent years part-time employment in that country has become a common feature of the labor market. Part-time employment is particularly suited to the schedules of students. ${ }^{13}$

The level of participation in the labor force by young people under 25 years varied greatly among countries in 2007, from a rate of 71 percent in Australia and the Netherlands to 28 percent in Korea. The 13 countries examined in this article can be divided rather clearly into three categories: high, medium, and low youth labor force participation. In the English-speaking countries, for the most part it is expected that one will begin work for pay rather early in life, and that outlook is reflected in the fact that 4 (the United States, Canada, Australia, and the United Kingdom) of the 5 English-speaking countries have teenage labor force participation rates greater than 40 percent and young adult rates greater than 59 percent. These 4 countries are joined by the Netherlands in the high category. Ireland is the one English-speaking country that falls into the middle group, where it is joined by Sweden, Spain, and Germany. The countries with low youth labor force participation are Korea, Italy, France, and Japan.

There are substantial differences among the countries with respect to the degree to which students combine school and work. Chart 1 shows the percentage of employed students out of the total population of students in 10 countries in 2006. In Italy, Spain, and France, a student is quite unlikely to have a job on the side; in the Netherlands and Canada, the likelihood is much greater. In the United States, about one-third of students combine school and work.

The Dutch example illustrates how the increase in schooling of persons aged 15 to 24 years has changed the youth labor picture across the board. Chart 1 shows that, except in Germany and France, much of the employment of students is part-time employment.

## Table 4. Labor force participation rate, by age, 13 countries, selected years, 1980-2007

[In percent]

| Country and year | Total | Under 25 years | 15-19 years | $\begin{aligned} & 20-24 \\ & \text { years } \end{aligned}$ | $\begin{array}{\|c} 25 \text { years } \\ \text { and } \\ \text { older } \end{array}$ | Country and year | Total | Under 25 years | 15-19 years | 20-24 <br> years | $\begin{array}{\|c\|} \hline 25 \text { years } \\ \text { and } \\ \text { older } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States |  |  |  |  |  | Ireland |  |  |  |  |  |
| 1980............................... | 63.7 | 68.1 | 56.7 | 77.2 | 62.5 | 1981 .............................. | 53.0 | 60.6 | 43.6 | 80.6 | 50.4 |
| 1985............................... | 64.8 | 68.3 | 54.5 | 78.2 | 64.0 | 1985.............................. | 52.7 | 58.5 | 38.1 | 81.3 | 50.8 |
| 1990............................ | 66.5 | 67.3 | 53.7 | 77.8 | 66.4 |  | 52.0 | 50.3 | 28.6 | 77.2 | 52.6 |
| 1995.............................. | 66.6 | 66.3 | 53.5 | 76.6 | 66.7 | 1995.............................. | 53.7 | 46.1 | 21.9 | 74.0 | 56.0 |
| 2000.............................. | 67.1 | 65.8 | 52.0 | 77.8 | 67.3 | 2000 .............................. | 58.9 | 51.6 | 30.3 | 73.4 | 61.0 |
| 2007............................... | 66.0 | 59.4 | 41.3 | 74.4 | 67.3 | 2007 .............................. | 63.7 | 53.5 | 27.1 | 75.2 | 66.0 |
| Canada |  |  |  |  |  | Italy |  |  |  |  |  |
| 1980......... | 65.0 | 72.6 | 62.4 | 80.8 | 62.6 | 1980.............................. | 50.1 | 45.3 | 31.1 | 65.1 | 51.4 |
| 1985................................. | 65.9 | 71.7 | 58.9 | 80.1 | 64.4 | 1985................................ | 49.6 | 43.8 | 26.3 | 65.7 | 51.1 |
| 1990............................... | 67.4 | 72.8 | 62.8 | 80.3 | 66.2 | 1990 .............................. | 49.7 | 43.5 | 23.1 | 66.6 | 51.3 |
| 1995............................... | 64.9 | 66.5 | 55.0 | 75.6 | 64.6 | 1995.............................. | 47.6 | 40.1 | 21.0 | 56.6 | 49.0 |
| 2000.............................. | 66.0 | 68.1 | 57.7 | 76.6 | 65.6 | 2000.............................. | 48.5 | 39.5 | 18.5 | 57.0 | 49.9 |
| 2007............................... | 67.7 | 70.4 | 60.9 | 77.8 | 67.2 | 2007 .............................. | 48.9 | 30.9 | 11.0 | 49.8 | 51.4 |
| Australia |  |  |  |  |  | Netherlands |  |  |  |  |  |
| 1980............................... | 61.3 | 72.2 | 63.4 | 81.2 | 58.0 | 1980 .............................. | 49.0 | 48.4 | 26.6 | 71.1 | 49.2 |
| 1985.............................. | 60.8 | 71.2 | 59.9 | 82.3 | 57.9 | 1985.............................. | 49.8 | 49.8 | 26.4 | 72.5 | 49.8 |
| 1990.............................. | 63.7 | 72.1 | 60.4 | 84.2 | 61.6 | 1990 ............................. | 66.7 | 61.4 | 43.1 | 76.9 | 68.3 |
| 1995............................ | 63.7 | 71.8 | 59.2 | 83.2 | 61.8 | 1995.............................. | 59.9 | 64.5 | 47.6 | 78.2 | 59.0 |
| 2000............................... | 63.3 | 70.6 | 59.3 | 82.3 | 61.8 | 2000 .............................. | 63.1 | 70.8 | 60.6 | 80.7 | 61.7 |
| 2007.............................. | 65.0 | 70.8 | 59.5 | 81.9 | 63.8 | 2007 .............................. | 64.7 | 70.6 | 61.0 | 80.5 | 63.7 |
| Japan |  |  |  |  |  | Spain |  |  |  |  |  |
| 1980.............................. | 63.2 | 43.4 | 17.9 | 69.8 | 67.6 | 1980............................. | 51.4 | 59.3 | 48.7 | 68.7 | 49.5 |
| 1985.............................. | 63.0 | 42.9 | 17.0 | 71.0 | 67.4 | 1985.............................. | 50.0 | 54.9 | 40.6 | 66.9 | 48.7 |
| 1990............................... | 63.4 | 44.1 | 18.1 | 73.4 | 67.9 | 1990 .............................. | 51.6 | 54.9 | 37.2 | 69.4 | 50.8 |
| 1995.............................. | 63.4 | 47.6 | 17.0 | 74.1 | 66.8 | 1995.............................. | 51.5 | 48.0 | 28.5 | 63.0 | 52.2 |
| 2000.............................. | 62.4 | 47.0 | 17.5 | 72.7 | 65.1 |  | 53.8 | 48.5 | 27.6 | 62.3 | 54.8 |
| 2007................................. | 60.4 | 44.9 | 16.3 | 69.7 | 62.6 | 2007 ................................ | 58.9 | 52.4 | 29.7 | 67.4 | 59.8 |
| Korea, Republic of |  |  |  |  |  | Sweden |  |  |  |  |  |
| 1980............................... | 59.0 | 45.1 | 30.6 | 63.1 | 64.6 | 1980 .............................. | 71.7 | 71.7 | 57.4 | 83.1 | 71.7 |
| 1985............................... | 56.6 | 35.6 | 17.5 | 58.5 | 64.1 | 1985.............................. | 72.5 | 66.9 | 48.3 | 82.2 | 73.7 |
| 1990.............................. | 60.0 | 35.0 | 14.6 | 62.8 | 68.2 | 1990.............................. | 74.4 | 69.1 | 51.4 | 82.3 | 75.5 |
| 1995............................... | 61.9 | 36.9 | 12.0 | 63.1 | 69.1 | 1995.............................. | 70.5 | 52.8 | 31.0 | 68.0 | 73.8 |
| 2000.............................. | 61.2 | 33.0 | 12.1 | 57.8 | 67.9 | 2000.............................. | 70.8 | 52.2 | 34.7 | 65.9 | 73.9 |
| 2007................................. | 61.8 | 28.1 | 7.2 | 52.6 | 67.8 | 2007 ................................ | 72.3 | 57.1 | 39.6 | 73.1 | 75.1 |
| France |  |  |  |  |  | United Kingdom |  |  |  |  |  |
| 1980............................... | 57.0 | 47.5 | 22.1 | 74.0 | 59.5 | 1984.............................. | 62.0 | 75.6 | 68.9 | 81.0 | 58.9 |
| 1985.............................. | 55.9 | 43.9 | 16.2 | 71.8 | 58.9 | 1985.............................. | 62.2 | 76.4 | 70.2 | 81.2 | 58.9 |
| 1990............................... | 54.8 | 36.4 | 11.4 | 61.3 | 58.9 | 1990 .............................. | 64.0 | 78.0 | 70.9 | 83.1 | 61.2 |
| 1995.............................. | 54.5 | 29.5 | 6.6 | 51.0 | 59.5 | 1995.............................. | 62.1 | 69.6 | 59.8 | 76.3 | 60.9 |
| 2000............................... | 54.8 | 29.3 | 8.7 | 51.2 | 59.5 | 2000 .............................. | 62.7 | 69.7 | 62.8 | 75.4 | 61.6 |
| 2007.............................. | 56.3 | 37.0 | 15.3 | 61.8 | 60.0 | 2007 .............................. | 62.9 | 65.3 | 53.2 | 75.4 | 62.5 |
| Germany |  |  |  |  |  |  |  |  |  |  |  |
| 1980................................................................... | 55.5 54.9 | 59.2 59.2 | 43.9 44.4 | 76.3 73.0 | 54.6 53.8 |  |  |  |  |  |  |
| 1990.............................. | 57.4 | 60.4 | 39.8 | 74.3 | 56.8 |  |  |  |  |  |  |
| 1995.............................. | 57.4 | 53.5 | 31.9 | 72.8 | 58.0 |  |  |  |  |  |  |
| 2000.............................. | 57.6 | 51.5 | 33.2 | 71.4 | 58.5 |  |  |  |  |  |  |
| 2007................................ | 59.2 | 52.0 | 32.5 | 71.3 | 60.3 |  |  |  |  |  |  |

[^0]"Labor Force Statistics MEI: Harmonized Unemployment Rates and Levels
(HURs)," stats.oecd.org/wBOS/Index.aspx?QueryName=251\&QueryType=
View; Statistics Canada (unpublished).

Chart 1. Employed students as a percent of the student population, 10 countries, 2006


NOTE: Data for students who are employed part time are not available for Ireland. Students are defined as persons aged 15 to 24 years who are enrolled in education.

Source: Employment Outlook (Paris, OECD, 2008), p. 34.

Although the increased participation in formal education might be associated with higher unemployment rates for young people, the achievement of more education, by contrast, should make young people more employable in the years ahead. Large increases in the percentages of those who have completed at least upper secondary-level education have occurred in Korea, Ireland, Spain, France, Italy, and Australia. The following tabulation shows the percentage of the population in 2004 (2003 for Japan) which had attained at least that level of education in the 13 countries examined: ${ }^{14}$

|  | Age group, years |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country | 25-34 | 35-44 | 45-54 | 55-64 |
| United States.............. | 87 | 88 | 90 | 86 |
| Canada ...................... | 91 | 88 | 83 | 73 |
| Australia | 77 | 65 | 62 | 49 |
| Japan.......................... | 94 | 94 | 82 | 65 |
| Korea, Republic of ....... | 97 | 86 | 57 | 34 |
| France. | 80 | 70 | 59 | 49 |
| Germany.................... | 85 | 86 | 84 | 79 |
| Ireland | 79 | 68 | 54 | 39 |
| Italy ........................... | 64 | 52 | 44 | 28 |
| Netherlands ................ | 80 | 74 | 68 | 59 |
| Spain ......................... | 61 | 50 | 36 | 21 |
| Sweden. ..................... | 91 | 89 | 81 | 71 |
| United Kingdom.......... | 70 | 65 | 64 | 59 |

Little difference in attainment by age group is observed if the level is tertiary, as opposed to upper secondary, education. ${ }^{15}$ (For any given country, tertiary education is the equivalent of a college degree or higher in the United States; upper secondary is equivalent to a U.S. high school degree.)

## The falling proportion of youths

Although the record of youth unemployment rates over recent decades is mixed, the trends of the youth proportion of the population, labor force, and unemployment have been almost uniformly downward. (See table 5.) Generally, in countries where the youth proportion of the population was highest at the beginning of the period, the fall has been the greatest. In Korea, for example, the youth proportion of the population fell from 29 percent in 1980 to 15 percent in 2007; in Canada, the fall was from 24 percent to 15 percent. In Sweden, by contrast, where the youth proportion of the population was already the lowest, the decline in the proportion was very small. In every country except Japan and, to a somewhat lesser extent, Sweden, the combination of a falling youth population relative to the adult population and increasing proportions of young people in formal education resulted in notable declines in the proportion of young people in the labor force. In Korea, the youth proportion of the labor force fell by 15

percentage points; in Ireland (since 1981), by 13 percentage points; in Spain, by 12 percentage points; in Italy and Canada, by 11 percentage points; and in Germany and the United States, by 9 percentage points.

Largely as a consequence of falling youth labor force participation, the proportion of the unemployed who are under 25 years fell in every country but the United Kingdom. In some cases, the drop was considerable. In Italy, for instance, 62 percent of the unemployed were under 25 years in 1980, whereas 25 percent were in 2007. Similarly, the proportion of the unemployed in Spain who were young people fell from 53 percent to 24 percent over the period, and large declines also occurred in Korea and France.

An examination of the anomalous case of the United Kingdom is revealing, particularly when contrasted with France. A consideration of just the youth unemployment rate would appear to indicate that the United Kingdom is substantially better off economically than France: in 2007, the U.K. youth unemployment rate was approximately 14 percent, down from 18 percent in 1985, whereas in France the youth unemployment rate was 19 percent in 2007-down from 26 percent in 1985, but still above that of the United Kingdom. (See table 1.) As a relative social problem, however, the youth unemployment situation might be said to be worse in the United Kingdom than in France: not only did young people make up a far higher percentage, 41 percent (the highest of the 13 countries), of the total unemployed in the United Kingdom in 2007, compared with 25 percent in France, but the trends in the two countries were in opposite directions. (See table 5.)

Two factors loom large in the United Kingdom. First, by 2007 the unemployment rate for adults 25 years and older had fallen to less than 4 percent, among the lowest of the countries covered. (See table 1.) Second, at the same time, the participation rate of young people in the United Kingdom in 2007 was a relatively high 65 percent. (See table 4.) The country's unemployed youths came from a comparatively larger pool of young wouldbe workers.

The importance of participation rates is seen by noting that, in 2000, the youth unemployment rate in the United Kingdom was 12 percent, while it was 21 percent in France. (See table 1.) Even though France had more young people in the age group comprising 15 - to 24 -year-olds- 7.4 million, compared with 6.2 million in the United Kingdom-the total number of unemployed youths in the United Kingdom was 505,000 , as opposed to 452,000 in France. ${ }^{16}$

## The"idleness" rate

The fact that youths between the ages of 15 and 24 are much more likely to be in school than are older groups, together with the further fact that the percentage of such young people has varied to a considerable degree by time and place, clearly clouds the relative labor market picture for this younger age category. Another perspective is gained by looking at the proportion of young people who are neither in school nor employed-that is to say, the rate of "idleness." (See table 6; the term "idleness" is not intended to imply anything about the character of the person-that he or she is lazy, unambitious, shiftless, or anything else of the sort; it simply means that the individual is neither in school nor employed, for whatever reason-caring for a family member, being ill, or any number of reasons.)

In contrast to unemployment rates, idleness rates are consistently greater for persons aged 20 to 24 years than for teenagers, suggesting that the rate of unemployment might be misleading as a measure of societal distress. Members of the younger group are far more likely to be in school, and whether or not they have gainful employment at that stage of their lives is generally less important than when they are in their early twenties.

Among the 11 countries listed in table 6, unemployment rates for the under- 25 youth category track that group's idleness fairly closely. The countries with the highest youth unemployment rates, Italy and Spain, are also the ones with the highest idleness rates, and the countries that have the lowest youth unemployment rates, the Netherlands and Ireland, also have the lowest youth idleness rates.

The period covered begins with 1995, and the idleness trend from then until 2004 is a decidedly mixed record. For the most part, reductions in idleness have occurred in those countries where rates were the highest, and increases have taken place where rates were the lowest. The result has been a youth idleness rate that varies a good deal less among countries than does the youth unemployment rate.

## Youths living with parents

Besides participation in education, another factor making the youth labor market different from the general labor market is the usually large degree of financial support by parents that young people experience. A good proxy for the degree of financial support received by young people is whether or not they live with their parents. (See table 7.)

Table 6. Percent of age group neither in education nor employed, 11 countries, 1995, 2000, and 2004

| Country | 15-19 years |  |  | 20-24 years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1995 | 2000 | 2004 | 1995 | 2000 | 2004 |
| United States ........................... | 7.8 | 7.0 | 6.9 | 17.8 | 14.4 | 16.9 |
| Canada ................................ | 7.6 | 7.2 | 7.5 | 17.4 | 14.3 | 13.0 |
| Australia................................. | 9.9 | 6.8 | 7.5 | 16.9 | 13.3 | 12.3 |
| France.................................... | 2.5 | 3.3 | 5.4 | 17.5 | 14.1 | 17.6 |
| Germany.................................. | '3.4 | 5.7 | 3.6 | 15.0 | 16.9 | 17.5 |
| Ireland................................. | ${ }^{2} 5.2$ | 4.4 | 8.5 | 10.8 | 9.7 | 12.2 |
| Italy .......................................... | ${ }^{1} 15.2$ | 13.1 | 9.7 | 30.1 | 27.5 | 21.1 |
| Netherlands ......................... | '2.7 | 3.7 | 3.3 | 7.5 | 8.2 | 9.1 |
| Spain....................................... | 11.5 | 8.0 | 10.4 | 25.8 | 15.0 | 16.2 |
| Sweden ........................... | 5.6 | 3.6 | 5.9 | 17.5 | 10.7 | 13.7 |
| United Kingdom...................... | - | 8.0 | 10.3 | - | 15.4 | 13.8 |
| ${ }^{1} 1998$. | Note: Dash indicates data not available. <br> Source: Education at a Glance: OECD Indicators, 2006 (Paris, OECD, Sept. 12, 2006), pp. 329-32. |  |  |  |  |  |
| ${ }^{2} 1999$. |  |  |  |  |  |  |

Table 7. Percent of young people living with their parents, by age and sex, 10 countries, 1985 and 1996 (15-19-year-olds) and 1985 and 1997 (20-24-year olds)

| Country | 15-19 years |  |  |  | 20-24 years |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men |  | Women |  | Men |  | Women |  |
|  | 1985 | 1996 | 1985 | 1996 | 1985 | 1997 | 1985 | 1997 |
| United States ............................ | ${ }^{1} 89.9$ | 87.9 | ${ }^{185.4}$ | 83.7 | ${ }^{1} 49.5$ | ${ }^{2} 50.0$ | ${ }^{1} 36.3$ | ${ }^{2} 38.0$ |
| Canada ..................................... | 88.9 | 90.8 | 82.2 | 84.7 | 49.8 | ${ }^{2} 53.4$ | 30.4 | ${ }^{2} 39.1$ |
| Australia.................................... | 187.4 | 87.3 | ${ }^{1} 83.1$ | 81.9 | ${ }^{1} 49.6$ | ${ }^{2} 50.2$ | ${ }^{130.5}$ | ${ }^{2} 36.5$ |
| France...................................... | 94.9 | 94.1 | 88.8 | 91.1 | 55.8 | 62.4 | 35.7 | 44.1 |
| Germany ................................... | 95.1 | 95.5 | 91.8 | 92.1 | 64.3 | 65.1 | 42.9 | 45.1 |
| Ireland ...................................... | 95.3 | 91.1 | 93.4 | 88.0 | 73.0 | 66.3 | 56.0 | 49.5 |
| Italy ......................................... | 97.2 | 96.6 | 95.9 | 95.8 | 87.4 | 92.7 | 67.7 | 85.1 |
| Netherlands .............................. | ${ }^{3} 95.6$ | 96.7 | ${ }^{3} 92.4$ | 93.3 | ${ }^{3} 64.0$ | 61.3 | ${ }^{3} 39.6$ | 37.2 |
| Spain ........................................ | ${ }^{3} 95.4$ | 95.1 | ${ }^{3} 94.1$ | 94.0 | ${ }^{3} 89.0$ | 92.4 | ${ }^{3} 77.8$ | 88.2 |
| United Kingdom...................... | 94.4 | 92.9 | 87.2 | 87.3 | 56.9 | 55.0 | 33.8 | 35.8 |

${ }^{1} 1986$.
${ }^{2} 1996$.
${ }^{3} 1988$.

Source: Norman Bowers, Anne Sonnet, and Laura Bardone, "Background Report, Giving Young People a Good Start: the Experience of oECD Countries," in Preparing Youth for the 21st Century: The Transition from Education to the Labour Market (Paris, OECD, 1999), p. 62.

By this measure, there is a good deal less uniformity among the countries, and less of a trend toward greater uniformity, than in the idleness rate or even in the unemployment rate, particularly with respect to young adults (20- to 24 -year-olds). Spain and Italy, which consistently exhibit the highest unemployment rates, also had the highest percentages, by far, of young adults living with their parents. Both countries had close to 9 of every 10 young adult men living with their parents in the earlier year, while the next country in the group was Ireland, with

7 of 10 young adult men living at home. By 1997, the gap had widened in Spain and Italy, while it had fallen somewhat in Ireland. The gap in Spain and Italy widened even more in the case of women. Noteworthy, as well, is the fact that France, Australia, Canada, Germany, and the United States also showed increases in the percentages of young adults of both sexes living with parents, and some of the increases were substantial, but the levels remained much lower than in the other nations.

It is clear from these data that there is a cultural dif-
ference between Spain and Italy, on the one hand, and all the other countries studied, on the other, when it comes to the tendency of young people to continue to live with their parents well into their twenties. This tendency can be seen as both an effect and a cause of the higher youth unemployment rates in those countries. If they are unemployed, youths are more likely to be dependent upon their parents for housing. If they and their parents simply have a higher preference for them to live at home, then a couple of reasons previously mentioned for youth unemployment to exceed the unemployment of adults come into play: (1) youths become less mobile in their availability for employment, and (2) with parental financial support, they can afford to wait longer and pass up job opportunities that are not to their liking.

In Korea and Japan, the role of family support also appears quite strong in delaying employment until just the right job can be found. The term NEET, an acronym for what is called "idleness" in this article, first coined in Britain and standing for "not in education, employment, or training," has come into common usage in both countries. Protective parents of ever fewer children per family are seen as partial enablers of the phenomenon. As one commentator says,

NEET's parents have worked tirelessly to give opportunities to their children, as family bonds in East Asian societies are very strong. They invest their earnings in their children's success and take care of them until marriage. Children's long-term dependency on their parents is accepted, and is expected to help them in the future. ${ }^{17}$

## Educational attainment and transition to work

Table 8 shows data on unemployment by educational attainment for 12 countries. In the United States in 1996, the average unemployment rate for young men who likely had completed formal education-those aged 25 to 29 years-fell rapidly as education rose. For U.S. women, the difference in unemployment rates for the least formally educated and the most educated was even greater. In other countries, the employment payoff to education is clearly not so apparent as it is in the United States and most of the remaining countries. In countries such as Italy and Spain, this phenomenon has been attributed to "credential inflation," or so-called overeducation owing to formal labor markets that are difficult to enter and a weak tradition of vocational education within the secondary education system. ${ }^{18}$ Also, the stronger role played by parents in these
countries permits college graduates to take more time in finding an ideal initial job. The higher unemployment rates for the educated do not continue past the late twenties in either Italy or Spain: from 1991 to 2004, unemployment rates among 25 - to 64 -year-olds were consistently lower for each level of education attained, although they did not fall as much as in the other countries, with the exception of Korea. ${ }^{19}$ In Korea, another country with strong parental support and a shrinking family size, the low level of unemployment for that age group is hardly affected by the degree of formal education.

In contrast to the United States, where most technical and vocational training comes after high school, Germany has a dual system of education in which a substantial percentage of students are identified as they approach their teen years as better suited for training for a specific vocation. While still engaged in formal education at the secondary level, they become apprentices on 3- or 4-year contracts with employers. Each year, they also spend several weeks in training at a vocational school. The cost is borne by both employers and the government, and the nation's labor unions are parties to the arrangement. The cost also is borne, to a degree, by the apprentices themselves, because they are paid wages that are well below the wages of regular employees doing similar work. ${ }^{20}$

The fruits of this arrangement readily exhibit themselves statistically. According to an OECD survey, the level of employed youths with no more than a minimal command of basic mathematics in Germany is very low compared with the U.S. level. ${ }^{21}$ German youths who are most likely to have shortcomings in mathematics also are most likely to be in an apprenticeship, and their handicap in the subject is thus an early concern. Clearly, both external and internal pressure is brought to bear upon the young person to learn the basic skills necessary for fruitful employment before he or she completely leaves formal education behind.

Germany also stands out throughout the period as the one country among those studied whose youth unemployment rate is little or no higher than its overall unemployment rate. At the same time, along with France, Germany is the only other country in the group to have higher unemployment rates for 20- to 24 -year-olds than for 15 - to 19 -year-olds in some years. This fact suggests that some of those teenagers who easily find jobs in the form of apprenticeships or through continuing briefly to work in the companies with which they apprenticed go on to lose them in the years ahead. In effect, their years of greatest vulnerability are being postponed.

The German apprenticeship system also has been criti-

| [In percent] |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Men |  |  | Women |  |  |
|  | Less than upper secondary | Upper secondary | University or tertiary | Less than upper secondary | Upper secondary | University or tertiary |
| United States ............................. | 15.7 | 7.6 | 4.1 | 17.3 | 6.6 | 1.3 |
| Canada ................................ | 20.2 | 12.5 | 7.8 | 23.6 | 10.8 | 7.4 |
| Australia.................................... | 13.4 | 6.6 | 5.6 | 10.4 | 7.8 | 4.1 |
| Korea, Republic of.................... | 3.5 | 3.6 | 5.2 | 1.7 | 1.9 | 2.1 |
| France....................................... | 21.1 | 12.1 | 11.1 | 32.4 | 18.4 | 12.9 |
| Germany................................... | 18.6 | 7.4 | 6.2 | 15.8 | 7.7 | 5.6 |
| Ireland................................... | 24.7 | 8.5 | 5.6 | 24.5 | 7.3 | 4.5 |
| Italy ........................................... | 14.1 | 15.4 | 27.3 | 22.0 | 20.2 | 34.0 |
| Netherlands ............................... | 9.0 | 4.0 | 6.9 | 8.0 | 5.1 | 6.3 |
| Spain.......................................... | 26.3 | 19.9 | 24.7 | 41.3 | 30.9 | 32.7 |
| Sweden.................................. | 20.0 | 13.9 | 7.1 | 26.4 | 13.1 | 6.6 |
| United Kingdom....................... | 23.6 | 10.5 | 5.0 | 17.8 | 8.3 | 3.3 |

Source: Norman Bowers, Anne Sonnett, and Laura Bardone, "Background Report, Giving Young People a Good Start: the Experience of OECD

Countries," in Preparing Youth for the 21st Century: The Transition from Education to the Labour Market (Paris, OECD, 1999), p. 67.
cized for its rigidity, requiring important career decisions to be made too early in life and tying young people to particular employers for long periods at the expense of a more careful consideration of job searches and career matching. ${ }^{22}$

Studies tracking work experience between the ages of 16 and 24 years and covering the 1979-88 period for the United States and the 1974-84 period for West Germany found that U.S. men held an average of 8.6 jobs while West German men held 2.9 jobs, on average. For women, the figures were 7.6 jobs in the United States and 2.2 jobs in Germany. ${ }^{23}$ No doubt, some of those U.S. jobs had little to do with career matching; rather, they were low-paying, short-term jobs that young persons engaged in when they were mainly students. Similarly, some of the U.S. youths' German counterparts took such jobs when they were tied to apprenticeships. In both countries, however, other jobs that youths took were more likely to have been related to career advancement.

Now that German youth unemployment rates equal or exceed those of many other countries, especially in the more crucial 20- to 24-year-old range, and with the inherent difficulties of adapting the system to other cultural settings, it would seem unlikely that the German apprenticeship system would be seen as much of a role model for other countries in the foreseeable future. Even so, several of the countries in the group have expanded their own apprenticeship programs in recent years. Among them are Australia, Ireland, the United Kingdom, and France.. ${ }^{24}$

The country with the lowest youth unemployment rate at the beginning of the period was Japan, and as in Germany, the Japanese rate of youth unemployment had historically been very low. Also as in Germany, the low rate in Japan came about through a low overall unemployment rate produced by vigorous economic growth and a relatively rigid early-employment system.

In Japan, there is a close working relationship between larger companies and secondary schools. ${ }^{25}$ With admission to schools based on competitive exams, companies vie for the graduates of the top schools. Academic performance is important in getting the best jobs, even for those in vocational high schools, who account for about a third of all students. Employers tend to recruit from specific high schools year after year, with some degree of trust established between companies and school officials.

Even at vocational high schools, some two-thirds of the courses are academic in nature. Young workers are hired more on the basis of their perceived "trainability" rather than because of any particular skills they might have. Workers are encouraged to develop a variety of skills, and changing of jobs and work assignments within companies is encouraged. By changing jobs for the same employer, the typical Japanese worker gets the variety of experience that the U.S. worker might get from changing employers. The tendency of young workers in Japan to leave one employer for another, either voluntarily or involuntarily, is even less than in Germany. In a retrospective survey ending in 1985, Japanese workers up to age 30 were found to
have had an average of 1.7 employers per decade. ${ }^{26}$
In addition to Japan's relatively smooth and structured transition from school to work, comparatively low and flexible wages for young people and a lesser tendency to lay off recently hired workers during economic hardship than in most other countries tend to keep youth unemployment down. Still, in spite of these factors, the long Japanese recession of the 1990s caused the youth unemployment rate to rise almost to the same level as that of the United States by the end of the decade. As an indicator of the strain on the system, the average number of jobs offered to the typical job applicant newly graduating from senior high school fell from a peak of 3.3 in 1992 to 1.8 in $1997 .{ }^{27}$ The recruitment of new graduates from high school declined from a high of 1.67 million in 1992 to 220,000 in 2003. ${ }^{28}$

Like Germany, Japan has a relatively large share of youths who are among the long-term unemployed, as detailed in the next section. Young people who find themselves derailed in the structured systems of Japan and Germany apparently have a considerable amount of difficulty getting back on track.

In between those recruited for regular jobs and the unemployed among the young, there has arisen a category for which the Japanese have coined a new term: freeters. Although the term has a variety of definitions, encompassing a lifestyle different from the traditional Japanese lockstep from school, to one large company, and on to retirement, a common feature among the definitions is engagement in casual or part-time work. By one definition, the number of such freeters approximately doubled, to 2.09 million, in the decade ending in the early 2000s. ${ }^{29}$

In spite of the worsening youth employment situation in Japan, the Government spends virtually nothing on special programs for young people. ${ }^{30}$ A likely reason is that the youth unemployed make up a relatively low percentage of the total unemployed and, with birthrates low and declining while life expectancy continues to rise, the percentage of the population that is 15 to 24 years old is not expected to rise in the future. The decreasing supply of young people should increase their employment chances, unless there is a dramatic worsening of the economy.

## Long-term unemployment for youths

Wide variation among the countries also can be found in the duration of unemployment for young persons. (See table 9.) The expression "long-term unemployed" commonly refers to persons who have been unemployed for
a year or longer. A given level of unemployment might be deemed more acceptable, particularly among young people, to the extent that the unemployment of the individuals involved is brief. Those not sure of what livelihoods they want to pursue and those without a lot of time invested in training and experience in a particular vocation can be expected to try out several different jobs early in their careers, and these tryouts might well involve periods of unemployment. Such unemployment can be regarded as frictional, the cost of having a dynamic, flexible economy.

Not surprisingly, in every one of the countries and in every year examined, except for Italy in 1985 and Sweden in 1990, the percentage of the unemployed in the long-term category is lower for young people than for all working ages-in most cases, considerably so. The trend of the proportion of long-term youth unemployment to all youth unemployment is clearly downward in five of the countries-Ireland, Italy, the Netherlands, Spain, and the United Kingdom - and moving upward in only one of the countries: Japan. From a proportion of long-duration youth unemployment that was among the lowest early in the period, Japan has moved into the middle ranks.

The high proportion of unemployment that is long-term unemployment, both for young people and for the general population, is striking in many European countries. Italy is the extreme case, with proportions that are hardly lower for the young than for everyone else and with only a small trend downward. Germany and France have persistently high rates as well, although they are much lower for young people than for their elders. The United Kingdom, by contrast, had a higher proportion of long-term unemployed young people than either Germany or France had in 1985, but by 2007 the proportion had become much lower than in those countries.

At the other end of the spectrum are Korea and Canada, along with the United States and, most recently, Sweden. Because Korea only began a modest unemployment insurance program in 1995, and because the United States provides a good deal less financial support for the unemployed than the average for the 13 countries combined, the relative generosity of a country's unemployment compensation is suggested as one factor in the prevalence of long-term unemployment. ${ }^{31}$ The following unpublished estimates from Wayne Vroman of The Urban Institute show the types of unemployment systems (unemployment insurance, unemployment assistance, or both) and the generosities of unemployment compensation (the product of the average percentage of the unemployed receiving benefits and the percentage of the wage replaced)

Table 9. Share of unemployment that is long-term unemployment, ${ }^{1} 13$ countries, selected years, 1980-2007

| [In percent] |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Country and year | Under 25 years | All ages | Country and year | Under 25 years | All ages |
| United States |  |  | Ireland |  |  |
| 1980........................................................... | 2.6 | 4.3 | 1980 ............................................... | - | - |
| 1985.................................................... | 5.1 | 9.5 | 1985 ............................................... | 56.8 | 66.5 |
| 1990.................................................... | 2.3 | 5.5 | 1990 ............................................... | 58.3 | 70.5 |
| 1995.................................................... | 5.2 | 9.7 | 1995 ............................................... | 43.0 | 58.2 |
| 2000.................................................... | 3.8 | 6.0 | 1999 ............................................... | 29.4 | 48.0 |
| 2007.............................................................. | 6.5 | 9.9 | 2007 ..................................................... | 21.5 | 29.9 |
| Canada |  |  | Italy |  |  |
| 1980..................................................... | 3.3 | 5.1 | 1980 ............................................... | - | - |
| 1985................................................... | 6.4 | 12.0 | 1985 .............................................. | 60.2 | 59.4 |
| 1990.................................................... | 3.0 | 7.1 | 1990 ............................................... | 58.2 | 58.4 |
| 1995.................................................... | 7.1 | 16.3 | 1995 ............................................... | 63.2 | 63.5 |
| 2000................................................... | 3.8 | 10.7 | 2000 ............................................... | 58.0 | 62.0 |
| 2007........................................................ | 2.1 | 7.1 | 2007 ................................................... | 40.4 | 46.3 |
| Australia |  |  | Netherlands |  |  |
| 1980.................................................... | 15.9 | 19.2 | 1980 ............................................... | - | - |
| 1985......................................................... | 22.8 | 30.8 | 1985 ................................................... | 31.6 | 45.5 |
| 1990.................................................... | 13.7 | 21.1 | 1990 ............................................... | 26.8 | 49.7 |
| 1995.................................................... | 20.6 | 32.0 | 1995 ............................................... | 24.7 | 43.7 |
| 2000................................................... | 14.7 | 25.5 | 1999 ............................................... | 13.0 | 38.7 |
| 2007.............................................................. | 10.0 | 15.5 | 2007 ..................................................... | 11.9 | 36.9 |
| Japan |  |  | Spain |  |  |
| 1980.................................................... | 8.0 | 16.7 | 1980 ............................................... | 33.5 | 32.6 |
| 1985................................................................ | 2.9 | 13.4 | 1985 .................................................... | 55.6 | 56.2 |
| 1990................................................... | 11.1 | 20.1 | 1990 .............................................. | 49.3 | 53.2 |
| 1995.................................................... | 11.1 | 17.1 | 1995 ............................................... | 48.5 | 56.6 |
| 2000.................................................... | 20.0 | 25.4 | 2000 ............................................... | 34.3 | 46.1 |
| 2007.............................................................. | 19.1 | 30.5 | 2007 .................................................... | 13.2 | 23.7 |
| Korea, Republic of |  |  | Sweden |  |  |
| 1980.................................................... | - | - | 1980 ............................................... | 1.1 | 4.9 |
| 1985.................................................... | - | - | 1985 ............................................... | 1.0 | 10.3 |
| 1990..................................................... | 1.1 | 2.5 | 1990 ............................................... | 11.8 | 11.7 |
| 1995.................................................... | 3.3 | 4.4 | 1995 ............................................... | 14.8 | 27.9 |
| 2000................................................... | 1.0 | 2.3 | 2000 ............................................... | 8.9 | 26.3 |
| 2007................................................... | . 4 | . 6 | 2007 .............................................. | 3.4 | 12.3 |
| France |  |  | United Kingdom |  |  |
| 1980.................................................... | 23.2 | 34.6 | 1980 ............................................... | - | - |
| 1985........................................................ | 30.7 | 39.7 | 1985 .................................................. | 42.6 | 50.9 |
| 1990................................................... | 17.8 | 35.2 | 1990 .............................................. | 21.1 | 34.8 |
| 1995.................................................... | 21.3 | 39.6 | 1995 ............................................... | 28.1 | 44.6 |
| 2000................................................... | 19.3 | 40.1 | 2000 .............................................. | 15.0 | 29.0 |
| 2007.................................................... | 23.2 | 39.0 | 2007 ............................................... | 15.4 | 24.3 |
| Germany |  |  |  |  |  |
| 1980. .................................................. | - | - |  |  |  |
| 1985.................................................... | 30.7 | 45.4 |  |  |  |
| 1990.................................................... | 29.0 | 48.1 |  |  |  |
| 1995................................................... | 25.6 | 48.0 |  |  |  |
| 2000........................................................ | 21.4 | 51.3 |  |  |  |
| 2007.................................................... | 32.3 | 55.4 |  |  |  |
| ${ }^{1}$ Long-term unemployment is unemployment for 1 year or longer. "Labor Force Statistics MEI: Harmonized Unemployment Rates and Levels <br> NOTE: Dash indicates data not available. (HURs)," stats.oecd.org/WBOS/Index.aspx?QueryName=251\&QueryType= <br> SOURCE: Organization for Economic Cooperation and Development, View; Statistics Canada (unpublished). |  |  |  |  |  |

in the 13 countries studied in this article:

| Country | Unemployment compensation system | Unemployment compensation generosity |
| :---: | :---: | :---: |
| United States ........ | Unemployment insurance | 0.11 |
| Canada ................. | Unemployment insurance | . 27 |
| Australia .............. | Unemployment assistance | . 27 |
| Japan................... | Unemployment insurance | . 15 |
| Korea, Republic of. | Unemployment insurance, 1998-2003 | . 04 |
| France................. | Unemployment insurance and unemployment assistance | . 40 |
| Germany.............. | Unemployment insurance and unemployment assistance | . 36 |
| Ireland ................. | Unemployment insurance and unemployment assistance | . 38 |
| Italy .................... | Unemployment insurance | . 09 |
| Netherlands .......... | Unemployment insurance and unemployment asssistance | . 84 |
| Spain .................. | Unemployment insurance and unemployment assistance | . 22 |
| Sweden ................ | Unemployment insurance and unemployment assistance | . 68 |
| United Kingdom .. | Unemployment insurance and unemployment assistance | . 13 |

However, correlating unemployment compensation with the proportion of long-term unemployment for 1995 produces coefficients close to zero for young people and a coefficient of only 0.22 for all working ages. Countries such as Italy, with the highest long-term unemployment and low unemployment generosity, and Sweden, with lower longterm unemployment and the greatest unemployment gene-
rosity, undermine the relative-generosity hypothesis.
Clearly, other factors are at work to influence the prevalence of long-term unemployment. For Italy and Spain, more closely knit families that provide support to unemployed family members, as well as the existence of large "underground" or "informal" economies, have been offered as an explanation of higher unemployment of all durations, particularly for young people. ${ }^{32}$ A large informal economy, however, should hardly be a sufficient reason all by itself for labor force surveys to overreport the percentage of the unemployed-that is to say, to report as unemployed people who actually are working in the underground economy. Interestingly, in Mexico the presence of a large informal sector is given as a primary reason for that country's unusually low reported unemployment rates. ${ }^{33}$ The difference, perhaps, is that Mexico has no unemployment compensation program, so a person working in the informal sector has no incentive to tell employment enumerators that he or she is unemployed. Italy and Spain, by contrast, have unemployment compensation programs, although Italy's is next lowest to Korea's in generosity among the countries covered in this article.

Spain and Italy also have active labor market programs, some of which are aimed specifically at young people. (See table 10.) Public expenditures on active labor market programs correlate much better with the prevalence of longterm unemployment than does unemployment compensation generosity. The coefficient for expenditures for all working ages in 2002, measured against the prevalence of long-term unemployment in 2000, was 0.54 . It was 0.45 for the percentage of GDP spent on youth measures, compared with the share of youth unemployment that was long-term unemployment.

Table 10 also shows a very wide range, among the countries listed, in the relative national resources devoted to active labor market measures, whether for the general public or for young people in particular. France was by far the leader in the latter, with twice the percentage of its gross domestic product devoted to such programs for young people as the next-nearest country. Following France were Italy, Ireland, and the United Kingdom. The United States ranked last in the percentage of GDP spent on active labor market measures generally. Japan was lowest in its relative expenditure on youth measures, at only 0.01 percent of GDP, although Canada, Korea, and Sweden spent little more, at 0.02 percent of GDP, and the U.S. figure was just a bit higher, 0.03 percent of GDP.

The unemployment rate among young people in most advanced industrial countries has been generally

| Table 10. Active la <br> tures on | market prog ths, 13 co | $\begin{aligned} & \text { ms and pi } \\ & e s, 2002 \end{aligned}$ | expendi- |
| :---: | :---: | :---: | :---: |
| [In percent of GDP] |  |  |  |
| Country | Total active measures ${ }^{1}$ | Youth measures ${ }^{2}$ | Youth measures :total active measures, percent |
| United States ${ }^{3}$..... | . 15 | . 03 | 20.0 |
|  | . 42 | . 02 | 4.8 |
|  | . 45 | . 08 | 17.8 |
| Japan ${ }^{6}$........................ | . 28 | . 01 | 3.6 |
| Korea, Republic of........ | . 27 | . 02 | 7.4 |
| France ........................ | 1.25 | . 40 | 32.0 |
| Germany ...................... | 1.18 | . 10 | 8.5 |
| Ireland ${ }^{6}$........................ | 1.14 | . 18 | 15.8 |
| Italy ${ }^{7}$........................... | . 57 | . 20 | 35.1 |
| Netherlands................. | 1.85 | . 04 | 2.2 |
| Spain .......................... | . 87 | . 06 | 6.9 |
| Sweden ...................... | 1.40 | . 02 | 1.4 |
| United Kingdom ${ }^{8} . .$. ..... | . 36 | . 12 | 33.3 |
| ${ }^{1}$ Consists of public employment services and administration, labor market training, youth measures, subsidized employment, and measures for the disabled. <br> ${ }^{2}$ Consists of measures for unemployed and disadvantaged youths and support of apprenticeship and related forms of general youth training. <br> ${ }^{3}$ Fiscal year beginning October 1, 2001. <br> ${ }^{4}$ Fiscal year beginning April 1, 2001. <br> ${ }^{5}$ Fiscal year beginning July 1, 2001. <br> ${ }^{6} 2001$. <br> ${ }^{7}$ Public employment services and administration not included in active measures. <br> ${ }^{8}$ Fiscal year beginning April 12, 2001; excludes Northern Ireland. <br> Source: Employment Outlook (Paris, OECD, 2004, 2004), Annex Table H . |  |  |  |
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higher in recent decades than it was in the 1960s and 1970s. This development owes mainly to the fact that in Western Europe and Japan overall unemployment has been higher than it was in the earlier period. The increase
in unemployment occurred mainly in the early 1980s, and the trend, with some few exceptions, has been essentially level since that time.

A number of factors virtually ensure that, in the absence of extraordinary programs such as Germany's apprenticeships, the level of unemployment among the young will remain higher than among the general labor force. Almost all of the countries have exhibited youth unemployment problems of one sort or another. Spain and Italy consistently have had the highest overall unemployment rates, but youth unemployment rates have declined in both countries in recent years. France has shown similar levels of youth unemployment, but with no downward trend; its youth unemployment rate was among the highest of the 13 countries in 2007.

In the Netherlands, Sweden, and the English-speaking countries, young people make up a relatively high percentage of the unemployed. In Sweden, the high percentage is related to recent high youth unemployment rates and somewhat high youth participation rates. In the Englishspeaking countries and the Netherlands, high youth participation rates are the main factor.

The low and declining proportions of youth unemployment in most of the countries are a result of both a falling proportion of the youth population and declining participation of young people in the labor force.

Most of the European countries have relatively high proportions of youths who are among the long-term unemployed, but the proportions are lower than for the general population, and they have been on the decline. However, the proportions of unemployment that are longterm unemployment have been on the rise in Japan and, to a lesser degree, the United States; still, the proportions remains relatively low in those countries.

## Notes

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[^1]1960-2007" (Bureau of Labor Statistics, Oct. 21, 2008), on the Internet at www.bls.gov/fls/flscomparelf.htm (visited July 9, 2009); click on "Technical Notes."
${ }^{3}$ On declining birthrates, see Gary Martin and Vladimir Kats, "Families and work in transition in 12 countries, 1980-2001, Monthly Labor Review, September 2003, pp. 3-31, table 1, p. 4; on the Internet at www.bls.gov/opub/ $\mathbf{m l r}$ /2003/09/art1full.pdf (visited July 9, 2009).
${ }^{4}$ Table 2, "Civilian labor force, employment, and unemployment approximating U.S. concepts, 1960-2007" (Bureau of Labor Statistics, no date), on the Internet at ftp.bls.gov/pub/special.requests/ForeignLabor/lfcompendiumt02. txt (visited July 9, 2009). Overall unemployment data from OECD and from BLS are generally comparable.

[^2]${ }^{6}$ Perhaps the point may be more easily understood by looking at the change in one measure of unemployment, as opposed to comparing two unemployment rates. A rise in the national unemployment rate from, say, 10 percent to 20 percent is clearly a much more serious matter than a rise from 1 percent to 2 percent, because a much greater percentage of the population has become unemployed in the former instance than in the latter, although in each case there was the same 100-percent increase in the unemployment rate. Finally, the point may be driven home with the following ditty of mine, titled "Welfare Theory in Verse" (assuming a labor force of 100):

Rita, the second to lose her job,
Claimed a greater importance than Floyd.
For he was only number ten
In the line of the unemployed.
She doubled the unemployment rate,
Though that was not her intent,
While Floyd only managed to raise the rate
By eleven point one percent.
"But wait," said the seriously slighted Floyd,
"Her importance is not so great.
Please notice how my being laid off
Changed the employment rate."
${ }^{7}$ Global Employment Trends for Youth, 2006 (International Labor Office, 2006), p. 19.
${ }^{8}$ Olivier Marchand, "Youth Unemployment in OECD Countries: How Can the Disparities Be Explained?" in Preparing Youth for the 21st Century: The Transition from Education to the Labour Market (Paris, OECD, 1999), pp. 336-44. According to Marchand, 23 percent of employed young people in the European Union in 1995 worked on fixed-term contracts, as opposed to 7 percent of employed persons over the age of 30 . The practice, says Marchand, is much more prevalent in Sweden, France, and Spain than in the United Kingdom or Italy.
${ }^{9}$ Employment Outlook (Paris, OECD, 2008), p. 33.
${ }^{10}$ The apparent greater natural facility of young people to adapt to new computer-related work should have worked as a counterbalance to these labor market disadvantages to a degree, as information and communication technologies changed rapidly in recent years. (See Peter Morris, "A Survey of the Implications of Information and Communication Technologies (ICTs) on Youth Employment," issues paper prepared for the International Labor Organization, November 2000, on the Internet at www.telesis.com.au/docs/ICTs_\&_Youth_ Employment.doc (visited, July 9, 2009).)
${ }^{11}$ Norman Bowers, Anne Sonnet, and Laura Bardone, "Giving Young People a Good Start: The Experience of OECD Countries," in Preparing Youth for the 21st Century: The Transition from Education to the Labour Market (Paris, OECD, 1999), pp. 7-86. (See especially p. 71.)
${ }^{12}$ Richard B. Freeman, "The Youth Job Market Problem at Y2K," Preparing Youth for the 21st Century, pp. 89-100. Some economists argue that the United States should be included among those countries in which increased schooling and lower labor participation rates by young people are caused, at least partially, by a softening job market. (See Sudeep Reddy, "Teen Behavior Offers Clue to Why Jobless Rate Stays Low Despite Slowing Growth," The Wall Street Journal, June 18, 2007, p. A2.)
${ }^{13}$ Peter van der Meer and Rudi Wielers, "The Increased Labour Market Participation of Dutch Students," Work, Employment E ${ }^{\text {S Society, vol. 15, no. 1, 2001, }}$ pp. 55-71; on the Internet at wes.sagepub.com/cgi/content/abstract/15/1/55 (visited July 9, 2009). The Netherlands has by far the highest percentage of parttime employment among the 30 countries of the OECD, 35.7 percent of total
employment in 2005. (See "Part-Time Employment," in OECD Factbook 2007 (Paris, OECD, 2007), pp. 128-29; on the Internet at fiordiliji.sourceoecd.org/ pdf//fact2007pdf//06-01-03.pdf (visited July 9, 2009).)
${ }^{14}$ Education at a Glance: OECD Indicators 2006 (Paris, OECD, Sept. 12, 2006), p. 38 .
${ }^{15}$ Ibid., p. 39.
${ }^{16}$ OECD.StatExtracts, on the Internet at stats.oecd.org/wbos/Index.aspx (visited July 9, 2009).
${ }^{17}$ Hyejin Kim, "A neet Trick: Living on Familial Love," Asia Times Online, Feb. 17, 2006, on the Internet at www.atimes.com/atimes/Asian_Economy/ HB17Dk01.html (visited July 9, 2009).
${ }^{18}$ Employment Outlook (Paris, OECD, 2002). (See also Education at a Glance, pp. 118-19.)
${ }^{19}$ Ibid.
${ }^{20}$ Niall O'Higgins, Youth Unemployment and Employment Policy: A Global Perspective (Geneva, International Labor Office, 2001), pp. 100-05.
${ }^{21}$ A 1995 OECD literacy survey found that 20.3 percent of employed 16to 24 -year-olds in the United States had only minimal mathematical skills, while the figure was 8.2 percent for Canada, 5.7 percent for the Netherlands, 5.2 percent for Sweden, and 2.3 percent for Germany. (See Lisa M. Lynch, "The Transition from Initial Education to the Labour Market: Recent Experience in the United States," in Preparing Youth for the 21st Century, pp. 289-301.)

22 O’Higgins, Youth Unemployment and Employment Policy, p. 104.
${ }^{23}$ Paul Ryan, "The School-to-Work Transition: A Cross-National Perspective," Journal of Economic Literature, March 2001, p. 57.
${ }^{24}$ Robert I. Lerman, "Improving Career Outcomes for Youth: Lessons from the U.S. and oEcD Experience" (The Urban Institute and U.S. Department of Labor, 2000 and 2001), on the Internet at wdr.doleta.gov/opr/fulltext/01-oecd. pdf(visited July 10, 2009).
${ }^{25}$ Naoki Mitani, "The Japanese Employment System and Youth Labor Market," in Preparing Youth for the 21st Century, pp. 305-28.
${ }^{26}$ Ryan, "The School-to-Work Transition," p. 57.
${ }^{27}$ Mitani, "The Japanese Employment System," p. 306.
${ }^{28}$ Reiko Kosugi, "The Transition from School to Work in Japan: Understanding the Increase in Freeter and Jobless Youth," Japan Labor Review, winter 2004, pp. 52-67-see especially p. 53; on the Internet at www.jil.go.jp/english/ JLR/2004bi.htm\#no1.htm (visited July 10, 2009).
${ }^{29}$ Ibid., p. 52.
${ }^{30}$ Ryan, "The School-to-Work Transition," p. 68.
${ }^{31}$ Annette H. K. Son, "Social Insurance Programs in South Korea and Taiwan: A Historical Overview," Uppsala Papers in Economic History, Research Report No. 50 (Uppsala, Sweden, Uppsala University, 2002), p. 15; on the Internet at 66.102.1.104/scholar?q=cache:pKpNvU-P35Q: scholar.google.com/\&hl=en (visited July 10, 2009).
${ }^{32}$ Marchand, "Youth Unemployment in OECD Countries," p. 332; Torild Hammer, ed., "Introduction," Youth Unemployment and Social Exclusion in Europe: A Comparative Study (Bristol, U.K., The Policy Press, 2003), pp. 10, 13.
${ }^{33}$ Gary Martin, "Employment and Unemployment in Mexico in the 1990s," Monthly Labor Review, November 2000, pp. 3-18; see especially pp. 8-11; on the Internet at www.bls.gov/opub/mlr/2000/11/art1full.pdf (visited July 7, 2009)

# Producer prices reverse course in 2008 

After surging in 2007 and the first 7 months of 2008, prices for energy goods plummeted during the final 5 months of the year; similarly, inflation in food prices slowed significantly in 2008, following a steep runup in 2007 and early-to-mid 2008

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In a turnaround, the Producer Price Index (PPI) for finished goods fell 0.9 percent in 2008 after having risen 6.2 percent in 2007. ${ }^{1}$ The 2007 increase was the largest calendar-year advance since a 7.1 -percent jump in 1981, and the 2008 decline was the first year-over-year decrease since a 1.6 -percent drop in 2001. Similarly, the index for intermediate materials, supplies, and com-ponents-which reflects selling prices for goods produced at earlier stages of process-ing-moved down 2.3 percent in 2008 after having climbed 7.1 percent in $2007 .{ }^{2}$ The index for crude materials for further pro-cessing-that is, unprocessed goods and raw materials-dropped 24.6 percent in 2008 following a 19.8 -percent rise in 2007 . The decreases at the earlier stages of processing also were the largest calendar-year declines since 2001, when the intermediate goods index moved down 4.0 percent and crude goods prices fell 32.5 percent. The reversals in 2008 are primarily attributable to prices for energy goods, which plummeted after having increased sharply a year earlier. In addition, prices for foods within the finished and intermediates goods stages advanced at much slower rates than they had in 2007, while the crude foodstuffs and feedstuffs index turned down in 2008.

Changes in the PPIs for services were not consistent with those of the mining and manufacturing sectors. Price increases for total transportation and warehousing industries slowed to 3.1 percent in 2008 from 6.6
percent in the previous year, and the index for total traditional services industries rose 0.3 percent following a 1.8 -percent increase in 2007. By contrast, margins received by total trade industries rose 7.3 percent in 2008 after having gone up by 3.9 percent a year earlier.

## Stages of processing

Table 1 displays annual percentage changes in PPIs for selected stages of processing. In early-to-mid 2008, broad-based price increases that had begun accelerating in 2007 remained widespread across all stages of processing. The reversal that followed is most vividly demonstrated by price changes in the energy sector. (See chart 1.) Prices for crude energy materials climbed 58.6 percent during the first 7 months of 2008, only to fall 57.3 percent over the final 5 months of the year. (Crude energy materials include crude petroleum, natural gas, and coal.) Prices for intermediate energy goods surged 25.1 percent during the first 7 months of 2008, only to drop 37.4 percent over the remainder of the year, while the finished energy goods index jumped 19.2 percent though July and decreased by 33.9 percent during the rest of 2008. ${ }^{3}$ Within the energy sector, changes in prices moved through successive processing stages almost instantaneously. ${ }^{4}$

In the foods and feeds sector, PPIs exhibited similar, though less extreme, price movements. (See chart 2.) After having

Table 1. Annual percentage changes in Producer Price Indexes for selected stages of processing, 2004-08

| Index |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

${ }^{1}$ Datum is unavailable.
Note: Year-over-year percentage changes for stages of processing, and all service industry percentage changes, are not seasonally adjusted.

The 7-month and 5-month percentage changes for stages of processing are seasonally adjusted.
climbed 24.9 percent in 2007 and another 8.5 percent during the first 7 months of 2008, prices for crude foodstuffs and feedstuffs fell 20.7 percent during the final 5 months of the year. The earlier increases, while rather broad-based, were particularly strong for grains and soybeans. The subsequent reversal also was widespread, with decreasing prices for raw fluid milk, grains, soybeans, and slaughter cattle leading the turnaround. Further down the production chain, the index for intermediate foods and feeds surged 17.8 percent in the first 7 months of 2008 , outpacing a 17.2 -percent jump in all of 2007. These gains were driven by rising prices for grain-based and soybean-based processed goods, such as prepared animal feeds, flour, and oils. In a sharp turnaround, a 13.4 -percent retreat in intermediate foods and feeds prices during the last 5 months of 2008 mainly was due to falling prices for prepared animal feeds, flour, and
dairy products. Index movements for finished consumer foods were less extreme. Led by higher prices for cereal and bakery products, beef, and oils, this index advanced 4.9 percent during the first 7 months of 2008 . Over the final 5 months of 2008, prices for finished consumer foods declined 1.4 percent in response to falling prices for dairy products and for fruits and melons.

In contrast to the energy and food sectors, the 2008 index movements for the "core" sectors (sectors comprising goods other than foods and energy) ${ }^{5}$ were not consistent throughout the various stages of processing. (See chart 3.) Within the category of crude nonfood materials less energy, price increases accelerated from 15.6 percent in 2007 to 31.8 percent in the first 7 months of 2008 . Over the remainder of the year, however, this index tumbled 42.4 percent. The turnaround can be traced primarily to metals prices. After prices

## Chart 1. Energy goods by stage of processing, 2007 and 2008



Chart 2. Foods and feeds by stage of processing, 2007 and 2008


Chart 3. Goods excluding foods and energy by stage of processing, 2007 and 2008

for iron and steel scrap, nonferrous scrap, and nonferrous metal ores surged 90.6 percent, 13.7 percent, and 14.5 percent, respectively, in the first 7 months of 2008, prices for the same goods dropped 66.0, 49.7, and 42.1 percent, respectively, during the remainder of the year. Further down the production line, prices for intermediate goods other than foods and energy moved up at roughly the same rate in 2008 as they had in 2007. A more in-depth review, however, shows that the indexes for intermediate materials for manufacturing reversed course during the year 2008, ${ }^{6}$ whereas price increases for components and supplies ${ }^{7}$ accelerated in 2008, compared with the prior year. Similarly, prices for finished goods other than foods and energy rose more in 2008 than they had a year earlier. Examples of price acceleration in 2008 within intermediate core goods include fabricated structural metal products, plastic products, and agricultural chemicals. For finished core goods, an upturn in motor vehicle prices, as well as larger gains in civilian aircraft and pharmaceutical prices, led the faster rate of advance in 2008. More highly processed goods commonly exhibit price movements that are somewhat different from price movements for less processed goods, since basic material costs tend to be a smaller portion of total costs for producers of more highly processed goods than for manufacturers of less processed goods. Also, contracts and escalation agreements can delay or mitigate the passthrough effect of early-stage price volatility at successive stages of processing. ${ }^{8}$

## Economic downturn and shifting producer prices

The 2008 downturn in producer prices can be traced to sluggish demand for both extracted and manufactured goods. The earlier runup in prices did not have traction because of-at least in part-this underlying weakness, as demonstrated by United States Gross Domestic Product (GDP) figures. As economic malaise spread worldwide, the dropoff in production deepened and business demand continued to weaken. Following a 3.6 -percent rise in 2004, U.S. GDP growth steadily slowed. ${ }^{9}$ From 2005 through 2008, the annual growth rates for U.S. GDP were $2.9,2.8,2.0$ and 1.1 percent, respectively. Quarterly data for 2006 through 2008 provide additional insight into this slowdown. (See table 2.) Beginning in mid-2006, business spending on gross private domestic investment entered a general state of decline. In 2008, a drop in personal consumption expenditures was particularly noteworthy in that goods expenditures fell precipitously, while expenditures on services continued to inch higher.
U.S. exports of goods also decreased at a sharp rate in the latter half of 2008, as an appreciating dollar made American goods more expensive in export markets. ${ }^{10}$

The economies of many other countries also performed poorly in 2008. ${ }^{11}$ GDP in Japan fell at 3.6-, 2.3-, and 12.7 -percent seasonally adjusted annualized rates in the second, third, and fourth quarters of 2008, respectively. In the Euro Area (EA15), GDP moved down 0.3 percent in each of the second and third quarters and 1.6 percent in the final quarter of 2008. After a flat second quarter, GDP in the United Kingdom declined 0.7 percent and 1.5 percent in the third and fourth quarters, respectively. In China, GDP growth slowed from 10.4 percent in the second quarter to 9.0 percent in the final quarter of 2008. Among developing countries as a whole, GDP growth was projected to be 6.3 percent for all of 2008, compared with 7.9 percent in 2007.

The economic downturn is reflected also in weaker U.S. industrial production and capacity utilization data from the Federal Reserve. ${ }^{12}$ In the final quarter of 2007 and first quarter of 2008, industrial production barely inched forward. Then, over the final three quarters of 2008, industrial production decreased sharply: 3.4 percent in the second quarter, 8.8 percent in the third, and 12.1 percent in the fourth. Similarly, capacity utilization, which was 81.3 percent in the third quarter of 2007, fell in each of the next five quarters to 74.9 percent at the end of 2008.

## Energy goods

The PPI for crude energy materials tumbled 32.5 percent in 2008, following a 16.2 -percent rise a year earlier. This downturn can be traced primarily to crude petroleum prices, which decreased 57.7 percent after having increased 51.7 percent in 2007. In addition, the natural gas index moved down 17.2 percent in 2008 subsequent to a 4.9 -percent decline in the prior year. In contrast, coal prices surged 28.8 percent following a 3.2 -percent advance in 2007. Further along the production chain, retreating gasoline prices led the reversals in both the intermediate and finished energy goods indexes. Prices for other refined petroleum products-jet fuel, diesel fuel, heating oil, and residual fuel-also turned down in 2008. In contrast, prices for utility natural gas climbed after having decreased in 2007. The indexes for both residential and commercial electric power moved up more in 2008 than they had a year earlier, while prices for industrial electric power rose slightly less than they had in 2007. (See table 3.)

## 2008 price highlights for the finance industry

The sharp decline in the equity markets during 2008 was primarily the result of the financial crisis, a problem that was triggered by the collapse of the housing boom and the resulting devaluation of mortgage-backed securities and other related securities held by large financial institutions.

Throughout most of the last decade, low mortgage rates combined with lower lending standards and broadened offerings of subprime mortgages spurred increased demand for housing. ${ }^{1}$ The rise in demand was supported by a robust secondary mortgage market in which mortgages were pooled together and securitized into mortgage-backed securities. These securities were then purchased by large financial institutions and, in many cases, were financed with borrowed funds at lower interest rates than the securities were yielding. Data published by the Securities Industry and Financial Markets Association show that the total value of outstanding mortgage-backed securities increased by approximately 150 percent between 2000 and 2007. ${ }^{2}$ The increased consumer demand for housing and institutional demand for mortgage-backed debt caused a significant and ultimately unsustainable appreciation in housing values. According to the S\&P/Case-Shiller U.S. National Home Price Index, housing prices increased 83 percent from the first quarter of 2000 through the second quarter of 2007.

In 2007 and 2008, the housing market deteriorated significantly. The S\&P/Case-Shiller U.S. National Home Price Index decreased 24 percent between the second quarter of 2007 and the fourth quarter of 2008. As home values declined and adjustable-rate mortgages reset at higher levels, many borrowers defaulted on their mortgage payments. According to RealtyTrac, the number of foreclosure filings increased 194 percent between May 2006 and May 2008. These defaults led to large losses for the financial institutions holding mortgage-backed securities. Since many large insti-
tutions had purchased these securities with borrowed funds, the decline in the value of mortgage-backed securities led to an exponential decline in the value of these banks' assets.

As the extent of these losses gradually became more apparent in 2008, other banks began to question the viability of financial institutions that had bought mortgage-backed securities with borrowed money. As a result, the financial institutions that had made the risky purchases were unable to secure the short-term lending that is essential to their daily operations. The first major example of this was the collapse of Bear Stearns in March of 2008, which caused the Federal Reserve to broker the sale of the firm to JP Morgan Chase as a last-ditch effort to avoid bankruptcy. Similar resolutions occurred for other troubled financial institutions in the summer and fall of 2008, when Merrill Lynch, Wachovia, and Washington Mutual also were sold with the assistance of the Federal Reserve; Fannie Mae and Freddie Mac were placed into conservatorship; and American International Group became a company in which the Federal Government had an 80-percent stake.

When Lehman Brothers also neared collapse in September 2008, the government declined to intervene. The resulting bankruptcy was the largest in U.S. history. ${ }^{3}$ Although the U.S. equities market had largely withstood the series of crises that had occurred earlier in the year, the unimpeded bankruptcy of Lehman Brothers introduced wider systemic risk to the financial markets. Following this collapse, the shortterm credit markets froze almost completely and there was a dramatic flight of capital out of equities and other riskbearing securities and into U.S. Treasuries. ${ }^{4}$ The Dow Jones Wilshire 5000 index declined more than 23 percent in the fourth quarter of 2008 alone. Not only did the severity of the financial crisis become more apparent throughout the year, but also it worsened from the beginning to the end of 2008.

## Notes

${ }^{1}$ Markus K. Brunnermeier, "Deciphering the Liquidity and Credit Crunch 2007-2008," Journal of Economic Perspectives, Winter 2009, pp. 77-100, on the Internet at www.princeton.edu/~markus/research/papers/liquidity_credit_crunch.pdf (visited July 6, 2009).
${ }^{2}$ "Outstanding U.S. Bond Market Debt," Securities Industry and Financial Markets Association, 2009, on the Internet at www.sifma.org/research/pdf/ Overall_Outstanding.pdf (visited July 6, 2009).
${ }^{3}$ Sam Mamudi, "Lehman folds with record $\$ 613$ billion debt," MarketWatch, Sept. 15, 2008, on the Internet at www.marketwatch.com/story/lehman-folds-with-record-613-billion-debt (visited July 6, 2009).
${ }^{4}$ Steven Mufson, "Flight to U.S. Treasury Bonds Is Bad News for the Economy," The Washington Post, Dec. 2, 2008, on the Internet at www.wash-ingtonpost.com/wp-dyn/content/article/2008/12/01/AR2008120103084. html (visited July 6, 2009).

Petroleum products. At the close of 2007, U.S. field production of crude oil was nearly flat and crude oil stocks had fallen 8.4 percent compared with the end of 2006. Supply was down to 19.0 production days from 20.6 days a year earlier. ${ }^{13}$ In early-to-mid 2007, the Organization of Petroleum Exporting Countries (OPEC) cut output to roughly 92.5 percent of capacity. ${ }^{14}$ As recently as the summer of 2005, OPEC had been producing at over 97
percent of capacity. The curtailments in production contributed to a 51.7 -percent surge in the PPI for crude petroleum in 2007, as well as a 55.7 -percent jump in the first 7 months of 2008. In response, OPEC once again boosted production to nearly 97 percent of total capacity by July 2008. The uncertain supply situation also fueled a speculative runup in prices in the crude oil futures market. Buyers of New York Mercantile Exchange crude oil contracts for

Table 2. Annual rates of change of GDP, selected components of GDP, and components of personal consumption expenditures, first quarter 2005 through fourth quarter 2008

| Year and quarter | Gross Domestic Product (GDP) | Selected components of GDP |  |  | Components of personal consumption expenditures |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Personal consumption expenditures | Gross private domestic investment | Exports of goods | Durable goods | Nondurable goods | Services |
| 2005 |  |  |  |  |  |  |  |
| Quarter $1 . . . . . . . . . . . . . . .$. | 3.0 | 1.7 | 9.1 | 7.1 | 0.6 | 2.4 | 1.7 |
| Quarter 2................ | 2.6 | 3.6 | -5.1 | 14.5 | 12.1 | 4.2 | 1.7 |
| Quarter 3................. | 3.8 | 3.7 | 4.0 | -. 8 | 5.4 | 3.0 | 3.8 |
| Quarter 4................ | 1.3 | 1.4 | 12.2 | 13.2 | -11.7 | 4.7 | 2.5 |
| 2006 |  |  |  |  |  |  |  |
| Quarter $1 . . . . . . . . . . . . . . .$. | 4.8 | 4.3 | 6.2 | 18.1 | 18.9 | 4.4 | 1.6 |
| Quarter 2................ | 2.7 | 2.8 | -. 4 | 6.7 | 1.8 | 3.1 | 2.8 |
| Quarter 3............... | . 8 | 2.2 | -5.3 | 3.6 | 3.5 | 2.3 | 2.0 |
| Quarter 4................. | 1.5 | 3.7 | -15.0 | 10.4 | 4.2 | 3.1 | 3.9 |
| 2007 |  |  |  |  |  |  |  |
| Quarter 1............... | . 1 | 3.9 | -9.6 | 2.1 | 9.2 | 3.5 | 3.1 |
| Quarter 2............... | 4.8 | 2.0 | 6.2 | 6.9 | 5.0 | 1.9 | 1.4 |
| Quarter 3............... | 4.8 | 2.0 | 3.5 | 21.8 | 2.3 | 1.2 | 2.4 |
| Quarter 4................ | -. 2 | 1.0 | -11.9 | 5.1 | . 4 | . 3 | 1.4 |
| 2008 |  |  |  |  |  |  |  |
| Quarter $1 . . . . . . . . . . . . . . .$. | . 9 | . 9 | -5.8 | 4.5 | -4.3 | -. 4 | 2.4 |
| Quarter 2............... | 2.8 | 1.2 | -11.5 | 16.3 | -2.8 | 3.9 | . 7 |
| Quarter 3............... | -. 5 | -3.8 | . 4 | 3.7 | -14.8 | -7.1 | -. 1 |
| Quarter 4................ | -6.3 | -4.3 | -23.0 | -32.0 | -22.1 | -9.4 | 1.5 |

Table 3. Annual percentage changes in Producer Price Indexes for selected energy goods, 2004-08

| Index |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

NOTE: Year-over-year percentage changes are not seasonally adjusted. The 7 -month and 5 -month percentage changes are seasonally adjusted.
delivery 3 months forward, hedging against even larger price increases, bid up futures prices from early 2007 through mid-2008. ${ }^{15}$ After falling to $\$ 50.58$ on January

18, 2007, the future price for a barrel of light, sweet crude oil steadily climbed to $\$ 78.21$ by July 31 and $\$ 95.98$ to close out 2007. After a brief respite to start 2008 ( $\$ 88.11$
on February 7), futures prices surged to a peak of $\$ 145.18$ on July 14.

In mid-2008, the underlying weakness of the U.S. economy and economies across the globe began to weigh heavily on the crude oil market. In an abrupt reversal, crude petroleum prices dropped 72.8 percent in the final 5 months of 2008 to end the year 57.7 percent below their December 2007 level. Despite a 4.3 -percent decline in 2008 U.S. crude oil field production, crude oil ending inventories grew 13.3 percent and supply expanded to 21.9 production days. Because of the steep drop in crude oil prices, OPEC once again curtailed production, which was just over 90 percent of capacity at the end of 2008. By that time, however, the spot price for Cushing, OK/ West Texas intermediate crude oil had tumbled by over 73 percent from its mid-July high, while the spot price for European Brent Sea crude oil decreased by more than 75 percent. The reversal in the New York Mercantile Exchange future price for crude oil was similarly sharp: the price dropped 76.7 percent from July 14 (the day of the peak price) to December 19, with a price of $\$ 33.87$ per barrel on the latter date.

In addition to events in the crude oil market, the economic slowdown in the U.S. drove down prices for refined petroleum products. Data from the U.S. Energy Information Administration for "total product supplied" ${ }^{16}$ show that total refined petroleum product consumption, at a year-over-year rate, began declining as early as mid2007. ${ }^{17}$ The early stages of this downturn were led by lower demand for distillate fuel (heating oil and diesel) and jet fuel. By early 2008, gasoline consumption also was falling. At the close of 2008 , total product supplied was down 6.5 percent for refined petroleum products as a whole, on a year-over-year basis, with gasoline, distillate fuel, and jet fuel supplied falling $3.6,9.8$, and 13.0 percent, respectively. As a result, despite lower production in 2008 and mixed data on stocks compared with a year earlier, the average price of gasoline fell 59.5 percent in the final 5 months of 2008 to close the year 51.4 percent lower than it was at the end of 2007. In a similar fashion, the indexes for heating oil, diesel fuel, jet fuel, and residual fuel all declined sharply over the last 5 months of 2008 to end the year well below 2007 levels.

Natural gas products. On a calendar-year basis, the PPI for wellhead and pipeline natural gas has moved down in each of the past 3 years. Starting in September 2007 and running through July 2008, however, wellhead and pipeline natural gas prices surged over 125 percent. The subsequent reversal in prices was similarly strong;
a 50.6 -percent decline to close out 2008 left the index for wellhead and pipeline natural gas 17.2 percent lower than in December 2007. (In price terms, the average dollar price per thousand cubic feet went from $\$ 5.32$ in September 2007 to $\$ 10.62$ in July 2008 and returned to $\$ 5.87$ in December. ${ }^{18}$ ) In contrast, the indexes for utility natural gas-natural gas that is distributed to electric utilities and industrial, commercial, and residential buy-ers-all increased in 2008 after having fallen in 2007. Natural gas utilities also raised prices significantly in the first portion of 2008, but price reductions in the final 5 months of the year were smaller than they were in the wellhead and pipeline market. The differential between the wellhead and pipeline price changes and the utility natural gas price changes can be attributed to supply contracts between wellhead and pipeline producers and purchasing utilities, to contracts between natural gas utilities and their customers, and to regulated rates in the utility sector. These agreements influence both the timing and the magnitude of price pass-through-that is, the amount of a price increase or decrease that is passed on to a subsequent level in the supply chain-in the natural gas market.

The abrupt shifts in wellhead and pipeline natural gas prices can be traced partly to changing levels of working gas in underground storage. ${ }^{19}$ In September 2007, working gas in underground storage was near the top of its 5 -year historical range and essentially identical to its September 2006 level, at 3,315 billion cubic feet (Bcf). By March 2008, storage was near the lower end of its 5 -year range at 1,247.5 Bcf, about 22.2 percent below its March 2007 level. At the close of 2008, working gas in underground storage was once again nearing the top of its 5 -year range, at 2,840.4 Bcf. During the runup in prices, both U.S. production of natural gas and U.S. consumption of natural gas grew; however, a large dropoff in natural gas imports occurred during the same period. ${ }^{20}$ This reduction drove the decline in the quantity of working natural gas in underground storage. Market speculation for crude petroleum also contributed to the rapid swings in wellhead and pipeline natural gas prices, since commodity traders of crude petroleum look to wellhead and pipeline natural gas investments as a less expensive substitute for their crude petroleum positions. Consequently, large shifts in crude oil prices influenced prices for wellhead and pipeline natural gas.

Liquefied petroleum gas. The index for liquefied petroleum gas fell 64.1 percent in 2008 after having risen 59.1 percent in 2007. As was the case with most other energy
products, a large gain in the first part of 2008 was outweighed by significant decreases during the remainder of the year. The category for liquefied petroleum gases includes products such as propane, ethane, butane, and isobutane. Liquefied petroleum gases can be derived from either natural gas or crude petroleum, and the downswing in prices for both crude oil and natural gas led to the fall in the liquefied petroleum gas price index. ${ }^{21}$

Coal and electric power. The PPI for coal jumped 28.8 percent in 2008. A majority of this advance occurred during the first 7 months the year, when coal prices increased 25.4 percent. Since natural gas and coal are the two most common fuel inputs for electric power generation and sometimes are substituted for each other, this rise in coal prices can be linked-at least in part-to higher prices for wellhead and pipeline natural gas. ${ }^{22}$ Longer term contracts between coal producers and elec-tricity-generating firms are common; therefore, higher coal prices often do not translate into higher electricity prices until contract renewals are implemented. Also, domestic supplies were negatively affected by coal exports, which surged 37.8 percent in 2008 to 81.5 million short tons, as well as coal imports, which edged down 5.9 percent to 34.2 million short tons. ${ }^{23}$

Further down the chain of production, the PPI for electric power moved up 5.8 percent in 2008 after hav-
ing risen 4.9 percent a year earlier. Prices for residential and commercial electric power advanced at faster rates in 2008, while the index for industrial electric power increased at a modestly slower rate than it had in 2007. Higher prices for coal and volatility in the crude petroleum and natural gas markets resulted in reduced electricity generated from petroleum and natural gas. ${ }^{24}$ Overall, net electricity generation fell 1.0 percent in 2008. Interestingly, net generation from renewable sources ${ }^{25}$ jumped 17.3 percent to account for 3.0 percent of total net generation at the end of 2008. Over the last 3 calendar years, total electricity generation from renewable resources has climbed 41.7 percent. ${ }^{26}$

## Foods and related products

The PPI for finished consumer foods rose 3.2 percent in 2008 following a 7.6 -percent advance in 2007. Accounting for this slowdown, the indexes for natural, processed, and imitation cheese; fresh vegetables, except potatoes; eggs for fresh use; fluid milk products; and fresh fruits and melons turned down in 2008. In contrast, price increases accelerated from 2007 to 2008 for beef and veal, bakery products, and confectionery end products. (See table 4.)

At the earlier stages of processing, prices for intermediate foods and feeds increased 2.0 percent in 2008

| Table 4. Annual percentage changes in Producer Price Indexes for selected foods and related products, 2004-08 |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: |
| Index |  |  |  |

## Wild ride for milled rice in 2008

Milled rice prices faced a roller coaster of a year in 2008. The PPI for milled rice set an all-time record in February that it then broke in each of the next 5 succeeding months, reaching its peak in July. After the runup in prices during the first half of the year, record production helped push prices lower over the final 5 months of 2008, but by the end of the year the PPI for milled rice had only dropped 15 percent from its midyear high, mainly because of restrictive trade policies.

In the overall U.S. agricultural economy, rice is a relatively minor crop. It is usually ranked eighth among field crops in regard to both value of production and planted acreage. ${ }^{1}$ However, it is an important crop both locally and regionally; the production and milling of rice are concentrated in four main regions. ${ }^{2}$ One interesting aspect of U.S. rice is how international prices, mainly those from Thailand and Vietnam, affect domestic prices. Although the United States is not a significant producer of rice, it also is not a significant consumer of rice, so almost half of the rice produced in the country is exported; U.S. rice exports consist of between 12 and 14 percent of world rice trade, which usually ranks the United States as the third or fourth largest exporter of milled rice. ${ }^{3}$ Domestic prices, therefore, are affected substantially by international events, particularly those in Asia, which accounts for 90 percent of global rice consumption according to the U.S. Department of Agriculture (USDA). In Asia, rice is the staple food for billions of people, and worldwide it is the second-most consumed cereal grain after maize.

One major factor contributing to higher rice prices in the first half of 2008 was the increase in fuel and fertilizer prices, both of which reached then-record highs during the planting cycle in early 2008. ${ }^{4}$ Relative to other domestically grown field crops, rice is especially fuel- and fertilizer-intensive, making producers particularly vulnerable to rising crude oil costs. ${ }^{5}$ Another factor that pushed up rice prices was the increase in the prices of other agricultural commodities such as wheat, corn, and soybeans. In some areas, rice competes for acreage with these crops; as a result, rice price increases kept pace with those of other agricultural commodities. Additionally, in many parts of the world, consumers shift between rice-based and wheat-based foods according to price and availability. ${ }^{6}$ However, of greater importance for rice prices in early 2008 was the declining value of the dollar throughout that period. ${ }^{7}$ According to the USDA, most of the rice trade is denominated in dollars, meaning that a drop in the value of the dollar increases most rice prices. It is important to note that, despite the rapid increases in the price of rice, world rice production in 2008 was projected by both the USDA and the Food and Agriculture Organization of the United Nations to be at record levels, and U.S. production was projected to hit a 3 -year high. ${ }^{8}$

Although higher production costs, increased prices for other agricultural commodities, and the devaluation of the dollar were all underlying contributors to the increase in world rice prices, the main factor was a combination of export bans and regulations put in place by the major rice-producing nations. Rice has traditionally been a commodity that is consumed in the country where it is produced, usually with no more than 10 percent of its production marked for export. In 2008, worldwide rice exports as a percentage of world rice production were 6.7 percent, which was below the corresponding figures for corn ( $10-12$ percent), wheat ( 18 percent), and soybeans ( 30 percent). ${ }^{9}$ The fact that such a small percentage of rice is sold on the international market leads to increased price volatility, especially in the face of supply shocks generated by export bans and regulations. After India and Vietnam imposed partial export bans in October 2007, China, Egypt, and Cambodia all announced programs to restrict their exports in order to make more rice available in their domestic markets at relatively stable prices. Thailand, the world's largest rice exporter, recorded lower exports in early 2008 due to the government's domestic procurement and storage program. ${ }^{10}$ By late April 2008, price quotes for Thailand's high-quality long-grain rice had more than doubled from the beginning of the year to $\$ 993$ per ton, a record in nominal dollar terms (that is, without adjusting for inflation). ${ }^{11}$ The various export bans led to panic buying by a number of large importers, most notably the Philippines and flood-ravaged Bangladesh.

The beginnings of the worldwide financial crisis in August resulted not only in a precipitous drop in agricultural prices effected primarily by reduced demand, but also in an appreciation of the U.S. dollar, which put further downward pressure on rice prices. In November, the Food and Agriculture Organization announced that in 2008, for the fourth consecutive year the size of the world's rice crop would hit a record high. ${ }^{12}$ The Food and Agriculture Organization projected production increases for Bangladesh, China, Pakistan, Vietnam, Thailand, India, the Philippines, and several countries in Sub-Saharan Africa. These robust forecasts helped to soothe the international rice market, in which prices continued their downward trend and arrived at levels more in line with historical norms. ${ }^{13}$ This slide in prices was dampened, however, primarily by trade restraints in Egypt and India and by government stockpiling in Thailand. ${ }^{14}$ As such, through the end of the year prices for milled rice remained higher than those of other agricultural commodities.

## Notes

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    Notes-Continued -Wild ride for milled rice in 2008
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${ }^{3}$ Ibid, p. 6-8.
4 "What's Behind the Surge in Global Rice Prices?" Amber Waves, U.S. Department of Agriculture, September 2008, p. 3.
${ }^{5}$ Rice Backgrounder, RCS-2006-01.
6 "What's Behind the Surge in Global Rice Prices?"
${ }^{7}$ Donald Greenlees, "As the Dollar Slides, Two Continents Feel the Side Effects in Divergent Ways," The New York Times, March 27, 2008, B1.
${ }^{8}$ Rice Outlook, RCS-08k (U.S. Department of Agriculture, December 2008).
${ }^{9}$ U.S. Rice Industry: Background Statistics and Information (U.S. Department of Agriculture, April 2008).
${ }^{10}$ Food Outlook (United Nations Food and Agriculture Organization, November 2008), p. 23, on the Internet at www.fao.org/docrep/011/ ai474e/ai474e05.htm (visited July 17, 2009).
${ }^{11}$ Thailand Weekly Rice Price Update (U.S. Department of Agriculture, May 2, 2008).
${ }^{12}$ Food Outlook, www.fao.org/docrep/011/ai474e/ai474e05.htm.
${ }^{13}$ Ibid.
${ }^{14}$ Ibid.
after having climbed 17.2 percent in the previous year. The indexes for prepared animal feeds and for shortening and cooking oils also rose less than they had in 2007. Prices for flour; fluid milk products; natural, processed, and imitation cheese; and processed eggs turned down in 2008. By contrast, prices for refined sugar and byproducts turned up in 2008, and the indexes for beef and veal and milled rice increased more than they had in 2007.

The PPI for crude foodstuffs and feedstuffs fell 14.5 percent in 2008, compared with a 24.9 -percent gain in 2007. This reversal is attributable to downturns in prices for raw fluid milk, wheat, soybeans, corn, and slaughter cattle. In contrast, prices for slaughter chickens advanced more in 2008 than a year earlier, and the index for slaughter hogs turned up after having fallen in 2007.

Raw fluid milk and processed dairy products. Raw fluid milk prices fell 27.4 percent in 2008 after having surged 52.4 percent in the previous year. Milk production per dairy cow rose 1.0 percent from 2007 to $2008 .{ }^{27}$ After milk prices rose to record levels in 2007, ${ }^{28}$ milk producers increased their dairy herd sizes in an attempt to take advantage of the higher prices. However, the increased numbers of dairy cattle, producing more milk on average per cow than in 2007, resulted in increased supply and lower milk prices in 2008. ${ }^{29}$ Additionally, raw milk prices declined in the latter half of 2008 as a result of the worldwide financial crisis, as demand from dairy product manufacturers such as bottled milk, cheese, and butter producers declined late in the year.

The index for processed fluid milk products moved down 7.7 percent in 2008 after having jumped 25.9 percent in the previous year, and prices for natural, processed, and imitation cheese declined 5.9 percent subsequent to having advanced 32.1 percent in 2007. Prices for processed fluid milk products closely follow the price
of the primary raw material, raw fluid milk. Larger milk supplies also translated into lower prices in 2008 for natural, processed, and imitation cheese.

Vegetables and fruits. The PPI for fresh vegetables, except potatoes, dropped 23.8 percent in 2008, following a 14.6 -percent increase a year earlier. This index was volatile throughout 2008 in response to fluctuating weather conditions throughout the United States. A January freeze in Florida damaged tomato, eggplant, and squash crops, severely reducing crop yields. ${ }^{30}$ The freeze drove prices higher when these crops were due for harvest in March. By late spring, however, prices had declined as growing conditions became favorable in both the East and the West. The index for fresh vegetables, except potatoes, moved up again in June because of higher prices for lettuce in California caused by high temperatures that reduced yields in the Salinas and Santa Maria growing areas. ${ }^{31}$ Above-average temperatures also hit the Southeast, decreasing quality (mainly by causing some heavy scarring) and lowering yields of eggplant, squash, and cucumbers. In July and August, vegetable prices dropped roughly 25 percent in response to falling tomato prices, which declined by over 50 percent during this period. A salmonella warning from the Food and Drug Administration advised consumers not to eat raw red Roma, raw red plum, or raw red round tomatoes, or products that contain these types of raw red tomatoes. ${ }^{32}$ Consequently, demand for tomatoes and tomato products fell shortly after the announcement; and by August, vegetable prices had reached their lowest point for the year. Prices rose from September to November as the fall growing season took over and vegetable supplies shrank. Finally, prices declined in December because of weak demand for lettuce, broccoli, cauliflower, and carrots following Thanksgiving.

The PPI for fresh fruits and melons fell 20.3 percent in 2008, after having increased by 6.5 percent a year earlier. In December 2007, the index for fresh fruits and melons had reached its highest level since July 1991, ${ }^{33}$ a phenomenon led by a steep runup in strawberry prices. After increasing in January 2008, the fresh fruits and melons index fell for 3 consecutive months (by 14.4 percent in total) as California crops of navel oranges, grapefruits, tangerines, tangelos, and lemons recovered from a devastating freeze that had occurred in January 2007. ${ }^{34}$ After rising in May 2008, prices again decreased for the next 3 months-by 16.1 percent in all-an event driven by price declines for stone fruits (especially peaches, plums, prunes, nectarines, and cherries) and berries (especially strawberries, raspberries, blueberries, and blackberries). After bottoming in October, the index for fresh fruits and melons increased in November and December, mainly because of higher strawberry prices, as the transition from the west coast crop to the east coast crop was delayed by cool temperatures in Florida. ${ }^{35}$

Grains, soybeans, and prepared animal feeds. Prices for grains fell 29.1 percent in 2008 after having risen 59.2 percent in 2006 and 40.8 percent in 2007. The 2008 decline was primarily the result of a 45.5 -percent decrease in wheat prices and a 24.0 -percent drop in corn prices. On March 31, 2008, the U.S. Department of Agriculture (USDA) report Prospective Plantings estimated that the total area of planted wheat would be six percent higher in 2008 compared with $2007 .{ }^{36}$ Later projections from the USDA and the Food and Agriculture Organization of the United Nations estimated that worldwide wheat production would be a record 684 million tons in $2008 .{ }^{37}$ The weakening economy, which led to an overall decline in prices of other commodities (corn, soybeans, and oil, among others), and a stronger U.S. dollar also contributed to lower wheat prices. In late 2008, the global economic crisis pushed wheat prices down further as international demand fell by over 50 percent. ${ }^{38}$

Similar to wheat prices, corn prices also turned down-falling 24.0 percent in 2008. Prices began dropping in midsummer because of an increase in the projected size of the harvest, and they gained downward momentum in September as the global economic crisis began to take hold. Along with stock prices, commodities prices fell as the financial meltdown gripped the world, and a strengthened dollar reduced demand in other countries for goods imported from the United States. Also, corn prices tend to fall in the fourth quarter of the year after the U.S. harvest is complete, when
supply levels are typically at their highest. ${ }^{39}$
The PPI for soybeans fell 29.8 percent in 2008, after having climbed 76.8 percent a year earlier. Soybean prices declined for the same reasons as corn prices. Although they rose during the first of half of 2008, soybean prices started to fall sharply midyear when USDA production and supply data came into focus. ${ }^{40}$ In September, prices plummeted when the global financial turmoil began in earnest.

The rate of increase in the prepared animal feeds index slowed to 7.3 percent in 2008 from 20.1 percent in 2007. This slowdown was the result of lower prices for principal feed ingredients-corn, soybeans, and wheat-which were passed on to producers of prepared animal feeds.

Slaughter cattle and beef and veal. The index for slaughter cattle turned down 10.0 percent in 2008, following an 8.2-percent advance a year earlier. Most of the 2008 decline occurred late in the year, because prices were supported through August by strong export demand for both beef and cattle, largely because of the weak dollar. In August 2008, beef and veal exports were up 66.5 percent over 2007 year-to-date levels. ${ }^{41}$ Additionally, the effects of the weak dollar made foreign beef more expensive for U.S. consumers, decreasing import demand and bolstering prices in the U.S. beef and cattle markets. After posting a 5 -year high in August, ${ }^{42}$ the slaughter cattle index tumbled-falling 2.1 percent in September, 10.3 percent in October, and 8.9 percent in December. This downturn in prices was attributable to the strengthening of the U.S. dollar and to the economic crisis that occurred in the latter half of 2008. Unfavorable global economic conditions caused an overall decrease in global demand for beef, pushing prices even lower. According to the U.S. Meat Export Federation, after enjoying strong growth in a number of foreign markets (notably Japan, Vietnam, and Russia in addition to traditional partners Mexico and Canada) through August 2008, U.S. beef and pork exports faced slackening demand conditions by autumn due to "limited credit availability, volatile currency exchange rates, and global economic uncertainty." ${ }^{43}$

The PPI for beef and veal advanced 6.2 percent in 2008 after having risen 2.6 percent in 2007. As with the slaughter cattle index, prices for beef and veal increased steadily through early and mid-2008, driven by high export and low import demand. ${ }^{44}$ The weakness of the U.S. dollar increased foreign demand for beef and other agricultural products, allowing trade partners to enjoy favorable terms of trade and cheaper prices. Similar to slaughter cattle prices, the beef and veal index experienced late-year declines in conjunction with the global
economic turmoil. As opposed to the decrease in the slaughter cattle index, however, the decrease in the beef and veal index was not enough to offset the increases from earlier in 2008.

Chicken eggs. Prices for eggs for fresh use declined 25.8 percent in 2008, following a 56.4-percent jump in 2007. Likewise, the index for processed eggs edged down 0.7 percent in 2008 after having risen 48.2 percent a year earlier. Prices for feed corn and prepared poultry feed began a steep downturn in the latter portion of 2008. Feed costs, which represent more than half of the cost of egg production, are typically passed on to buyers. Corn supplies remained strong in 2008 because of a combination of high inventory levels at the start of the year and the second-highest level of planted acreage on record. ${ }^{45}$

Flour. The index for flour fell 20.9 percent after having climbed 55.6 percent in 2007. Flour prices hit their peak in March 2008 and steadily declined over the remainder of the year. Trends in the price of flour usually mirror price trends of wheat. World wheat production was estimated to have increased by 12.0 percent in 2008, a record. ${ }^{46}$ As a result, wheat prices dropped from their record level and dragged down flour prices with them. The high level of worldwide wheat production decreased U.S. trade opportunities, which kept more supplies of wheat and flour in the domestic market.

Cooking oils. Prices for shortening and cooking oils advanced 4.3 percent in 2008 after having climbed 25.4 percent in the previous year. Prices for oilseed commodities such soybeans, cottonseeds, and sunflowers jumped dramatically in the first part of the year. Farmers switched acreage previously reserved for oilseeds to corn in order to profit from historically high corn prices. In the second half of the year, however, the prospects for a good harvest put downward pressure on oilseed commodity prices. Additionally, the global financial crisis caused commodity prices to fall even further and caused demand (both domestic and foreign) for cooking oil products to diminish. This resulted in a rapid decline in prices in the second half of the year, although not enough to completely offset the gains from early in the year.

## Finished goods other than foods and energy

The advance in the PPI for finished goods other than foods and energy, commonly known as the finished core index, accelerated to 4.5 percent in 2008 from 2.0 per-
cent in 2007. (See table 5.) In 2008, the index for motor vehicles turned up 3.6 percent after having fallen 0.7 percent in the previous year. Prices for malt beverages also rose following decreases in 2007. The indexes for civilian aircraft, soap and synthetic detergents, consumer plastic products, household furniture, and pet food increased more than they had in the prior year. By contrast, the rise in the index for cigarettes slowed to 2.8 percent from 9.2 percent in 2007.

Motor vehicles. The index for motor vehicles moved up 3.6 percent in 2008 following a 0.7 -percent decline in 2007. Leading the upturn, prices for passenger cars and light trucks increased 3.7 and 3.5 percent, respectively, after having decreased in the previous year. Motor vehicle prices dropped 3.0 percent from December 2007 to September 2008, as manufacturers discounted 2008 model-year vehicle prices prior to introducing 2009 model-year vehicles. When new models were introduced into the index in October, prices for motor vehicles jumped 7.7 percent. With this introduction, the index for passenger cars rose 4.2 percent and the index for light trucks increased 11.4 percent. Much of this increase was the result of automakers' input material supply contracts, which locked them into purchasing steel and aluminum at the relatively high prices reached in late summer of 2008. Additionally, late in the year, the appeal of cargo space and power, combined with lower fuel prices and improved efficiency, renewed demand for trucks and placed upward pressure on prices. The motor vehicle price increases were considered surprising by some, given an overall 18.1 percent drop in domestic vehicle sales for 2008, but automakers, desperate for cash to cover their fixed costs, kept prices at relatively high levels in order to capture as much revenue as possible. ${ }^{47}$

Civilian aircraft. Civilian aircraft price increases accelerated to 7.3 percent in 2008 from 3.3 percent in the prior year. In 2007, airlines began updating fleets, most of which had been aging since 2001. ${ }^{48}$ At the beginning of 2008, it was reported that aircraft manufacturers had enough production orders to last 5 years. ${ }^{49}$ In addition to strong demand, rising input costs for steel and aluminum placed upward pressure on civilian aircraft prices. Aircraft manufacturers tend to engage in long-term contracts, so higher input prices earlier in the year continued to have an effect on aircraft manufacturers even as the economy declined and market prices for steel and aluminum fell later in the year.

Table 5. Annual percentage changes in Producer Price Indexes for selected finished goods other than foods and energy, 2004-08

| Index | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Finished goods other than foods and energy ............. | 2.3 | 1.4 | 2.0 | 2.0 | 4.5 |
| Pet food ................................................................... | 7.3 | 1.0 | 3.3 | 6.0 | 17.4 |
| Soap and synthetic detergents................................ | 1.1 | 1.6 | 6.6 | 1.0 | 11.1 |
|  | 8.3 | 8.4 | 3.6 | 3.3 | 9.3 |
| Civilian aircraft ....................................................... | 7.1 | 3.9 | 5.3 | 3.3 | 7.3 |
| Household furniture................................................ | 3.5 | 3.7 | 2.1 | 1.2 | 6.2 |
| Malt beverages......................................................... | . 1 | 6.0 | -. 4 | -. 8 | 5.5 |
| Cigarettes................................................................. | 1.1 | 4.8 | . 8 | 9.2 | 2.8 |
| Motor vehicles............................................................. | 1.5 | -3.8 | . 9 | -. 7 | 3.6 |

${ }^{1}$ Currently PPI code 072B. Formerly PPI code 0728.

Soap and synthetic detergents. The index for soap and synthetic detergents jumped 11.1 percent following a 1.0-percent gain in 2007. Higher export demand due to the weak U.S. dollar, and a slow reaction to declining energy costs, drove the steady increase in this index. Chemical production is an energy-intensive process; therefore, soap and detergent inputs were affected by the peak in energy prices in mid-2008. As a result of longterm contracts, high energy prices early in the year caused larger-than-average increases later in the year. Prices for alkalies and chlorine, prime ingredients in cleaners used to remove dirt without excess scrubbing, climbed 47.3 percent. The index for surfactants-ingredients used to amplify the spreading and wetting properties of waterrose 11.1 percent.

Cigarettes. The index for cigarettes moved up 2.8 percent in 2008, compared with a 9.2 -percent advance in the previous year. After no change in the first 3 months of 2008, cigarette prices increased in April and May mainly because of tobacco companies concluding their annual Master Settlement Agreement payments for 2008. ${ }^{50}$ Master Settlement Agreement payments are mandated compensation that tobacco companies must pay to help Federal and State governments cover tobacco-related health-care costs and smoking prevention efforts. The index also edged up in September because some States crafted legislation that blocks illegal online sales of tobacco to minors, sales that were undercutting tobacco prices in stores. ${ }^{51}$

## Intermediate goods other than foods and energy

The PPI for intermediate materials less foods and energy rose 2.9 percent in 2008, slightly less than its 2007 increase of 3.3 percent. In 2008, higher prices for materi-
als and components for construction outweighed lower prices for materials for both durable and nondurable manufacturing. (See table 6.) The 2008 increase in intermediate core prices was the smallest calendar-year advance since a 2.1-percent rise in 2003.

Materials and components for construction. The rise in the PPI for materials and components for construction accelerated to 7.5 percent in 2008 from 2.0 percent in 2007. The index for fabricated structural metal products increased 12.7 percent after having advanced 2.3 percent in the previous year. Prices for paving mixtures and blocks, asphalt felts and coatings, plastic products, and cast iron pressure and soil pipe and fittings also rose more than in 2007. The index for gypsum products turned up in 2008 after having fallen in the prior year. By contrast, the index for nonferrous metals turned down 21.6 percent after having risen 3.9 percent in 2007. Despite a 9.8 -percent drop in private construction in 2008, public construction increased 7.2 percent, to a record $\$ 307.8$ billion. ${ }^{52}$

The index for fabricated structural metal products rose steadily during the first 9 months of 2008 before declining in the final 3 months of the year. This index is mainly influenced by prices for steel, the main input. Steel prices typically affect the fabricated structural metal products index with a lag because of the time it takes steel to move through the stages of production. Steel prices surged in the first half of the year because of high demand for construction, especially in developing nations. In recent years, countries such as China, India, and Thailand have been building up infrastructure to support their expanding industrial sectors. China, the largest consumer of steel, accounts for 35 percent of total world steel use, according to the International Iron and Steel Institute. ${ }^{53}$ This institute also reported that at least 3 million tons of

Table 6. Annual percentage changes in Producer Price Indexes for selected intermediate goods other than foods and energy, 2004-08

| Index | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Intermediate goods other than foods and energy ............. | 8.3 | 4.8 | 4.5 | 3.3 | 2.9 |
| Materials and components for construction.................... | 10.1 | 6.1 | 4.3 | 2.0 | 7.5 |
| Asphalt felts and coatings ............................................. | 4.1 | 15.3 | 5.0 | 1.4 | 57.8 |
| Cast iron pressure and soil pipe and fittings .................. | 21.6 | 3.7 | 9.4 | 3.1 | 35.7 |
| Paving mixtures and blocks .......................................... | 4.3 | 14.3 | 27.6 | 1.6 | 34.3 |
| Prefabricated metal buildings....................................... | 35.5 | 2.0 | 5.5 | 2.0 | 25.5 |
| Fabricated structural metal products ............................ | 17.6 | 2.9 | 4.7 | 2.3 | 12.7 |
| Gypsum products......................................................... | 20.0 | 18.8 | 5.5 | -22.1 | 7.2 |
| Plastic products ............................................................ | 6.1 | 11.0 | 1.1 | 1.6 | 6.0 |
| Materials for nondurable manufacturing........................ | 13.7 | 8.9 | 1.2 | 12.8 | -5.2 |
| Industrial chemicals ...................................................... | 24.6 | 13.6 | 4.0 | 16.3 | -10.5 |
| Primary basic organic chemicals................................ | 44.0 | 22.3 | -1.6 | 27.8 | -51.2 |
| Basic inorganic chemicals .......................................... | 7.3 | 17.7 | 16.4 | 10.4 | 49.1 |
| Inedible fats and oils ..................................................... | -15.6 | 11.9 | 12.4 | 48.9 | -19.3 |
| Plastic resins and materials ........................................... | 28.6 | 10.8 | -7.8 | 9.7 | -8.3 |
| Paper ............................................................................. | 6.1 | 5.0 | 4.7 | 1.6 | 9.7 |
| Rubber and rubber products........................................ | 5.1 | 6.2 | 4.0 | 2.7 | 14.0 |
| Medicinal and botanical chemicals ............................... | -1.8 | 2.3 | 1.2 | 1.1 | 14.6 |
| Agricultural chemicals and chemical products ............. | 8.2 | 8.9 | -3.0 | 24.1 | 44.4 |
| Materials for durable manufacturing................................ | 18.3 | 5.9 | 12.5 | 1.7 | -5.1 |
| Nonferrous metals ........................................................ | 17.8 | 18.4 | 26.1 | 3.9 | -21.6 |
| Steel mill products........................................................ | 48.8 | -3.8 | 11.6 | . 9 | 4.8 |
| Steel pipe and tube .................................................... | 66.0 | 1.2 | 5.5 | -1.3 | 28.6 |
| Semifinished steel mill products................................ | 83.6 | 3.5 | 3.9 | 9.4 | 4.0 |
| Hot rolled steel bars, plates, and structural shapes ... | 53.8 | -1.0 | 7.5 | 8.1 | 3.3 |
| Hot rolled steel sheet and strip .................................. | 28.8 | -13.9 | 8.3 | 2.0 | 1.7 |
| Cold rolled steel sheet and strip................................ | 35.5 | -1.2 | 41.2 | -9.1 | -10.5 |
| Prepared paint.............................................................. | 4.0 | 7.9 | 5.3 | 3.8 | 11.7 |

steel were used to build the stadiums and make necessary infrastructure improvements for the 2008 Summer Olympics in Beijing. ${ }^{54}$ By the end of the year, slowdowns in the construction and automotive sectors caused demand for steel to greatly diminish. Consequently, the index for fabricated structural metal products declined over the last 3 months of 2008, although not enough to offset record-high prices reached earlier in the year.

Materials for durable manufacturing. The index for materials for durable manufacturing turned down 5.1 percent in 2008 after having risen 1.7 percent in 2007. The index for nonferrous metals dropped 21.6 percent following a 3.9 -percent increase in the previous year. Prices for plastic resins and materials and primary basic organic chemicals also turned down in 2008 after having advanced a year earlier. The index for cold rolled steel sheet and strip fell more than it had in 2007 , while prices for semifinished steel, hot rolled steel sheet and strip, and hot rolled steel bars, plates, and structural shapes rose less than in the prior year. In 2008, the slowing economy led to lower demand for many materials for
durable manufacturing, negatively affecting prices.
The index for primary nonferrous metals fell 29.8 percent in 2008 subsequent to a 3.9 -percent increase in 2007. ${ }^{55}$ This was a dramatic downward turn from the annual gains of the preceding 6 years. Mainly because of production-cost pressure, primary nonferrous metal prices increased 17.5 percent from December 2007 to May 2008. According to the U.S. Geological Survey's annual Mineral Commodity Summaries report, recordlow inventories and labor issues in the beginning of the year led to higher prices for copper and a ramping up of copper production. ${ }^{56}$ Aluminum prices jumped early in the year because of rising energy costs linked to updated electric power contracts affecting aluminum producers in China-the world's largest producer. ${ }^{57}$ These new contracts had a significant impact on prices because energy is a major input to aluminum production. Later, the index fell rapidly because of pressure from surplus materials and slumping demand. When energy prices turned down, signaling an economic slowdown, Chinese aluminum producers attempted to prevent a surplus by making major production cuts in October, but to no avail. ${ }^{58}$

Falling demand from the construction sector and motor vehicle manufacturers, the main users of primary nonferrous metal products, pushed prices lower through the end of 2008.

Materials for nondurable manufacturing. The index for materials for nondurable manufacturing turned down 5.2 percent in 2008 after having risen 12.8 percent in 2007. The index for primary basic organic chemicals dropped 51.2 percent after having increased 27.8 percent in the prior year. Prices for plastic resins and materials and for inedible fats and oils also fell in 2008 after having risen a year earlier. By contrast, prices for basic inorganic chemicals, agricultural chemicals and chemical products, paper, medicinal and botanical chemicals, and rubber and rubber products rose more than in the prior year.

The downturn in the index for primary basic organic chemicals can be attributed to falling crude petroleum prices, since primary basic organic chemicals are made from a petroleum refining process. Prices for crude petroleum, like those of other energy materials in 2008, grew substantially in the first half of the year before falling at a rapid rate in the second half of the year. In addition, chemicals are purchased as inputs by manufacturers of plastics, rubber, and fibers. Demand for organic chemicals was severely affected by the economic downturn, with the resulting buildup of chemical inventories placing severe pressure on prices.

## Crude nonfood materials less energy

The PPI for crude nonfood materials less energy turned down 24.1 percent in 2008 after having risen 15.6 percent in 2007. (See table 7.) The 2008 decrease for basic industrial materials was the first calendar-year decline since a 9.9 -percent drop in 2001. The slowing economy contributed significantly to the downturn in prices for
basic industrial materials by eroding demand. In 2008, the index for iron and steel scrap fell 35.2 percent after having increased 29.4 percent in the preceding year. Prices for nonferrous metal ores, wastepaper, soybeans, and raw cotton also turned down in 2008 after having gone up in the prior year. By contrast, the rise in the index for phosphates jumped to 87.3 percent from 52.0 percent in 2007. Prices for wood chips also advanced more than they had in the prior year.

Iron and steel scrap. Prices for iron and steel scrap turned down 35.2 percent in 2008 after having risen 29.4 percent in 2007. Prices for iron and steel scrap, like those of many commodities, experienced a bubble that grew quickly through the first half of 2008. When this trend reversed course, rapid declines dominated the latter half of the year. Before the downturn began, the index rose 90.6 percent over the first 7 months of 2008. Iron and steel scrap prices then plummeted in September, October, and November-69.7 percent in total-mainly because of the retracting global economy. Iron and steel scrap are melted and reformed into new steel products that are used primarily by the construction and automotive industries. These sectors succumbed to the economic malaise of the latter half of 2008, leading to a dramatic drop in demand for steel. The U.S. Geological Survey reported that buyers in Asia and Europe cancelled many orders, leading to oversupply. Despite an attempt to relieve oversupply by slashing steel mill utilization to 71 percent in October, which led to an increase in ferrous scrap prices in December, the index closed 2008 well below its level from the end of 2007. ${ }^{59}$

Wastepaper. Wastepaper prices moved down 55.1 percent in 2008 , compared with a 53.4 -percent jump in the previous year. Products in this index are recycled and later sold as recycled paper and cardboard. China, as well

| Index | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Crude nonfood materials less energy ............................ | 20.5 | 5.2 | 17.0 | 15.6 | -24.1 |
| Wastepaper ............................................................. | 17.3 | -9.1 | 19.1 | 53.4 | -55.1 |
| Iron and steel scrap ............................................. | 50.8 | -10.8 | 2.9 | 29.4 | -35.2 |
| Soybeans................................................................. | -29.7 | 7.0 | 7.9 | 76.8 | -29.8 |
| Nonferrous metal ores .............................................. | 49.9 | 26.2 | 31.3 | 10.8 | -33.7 |
| Raw cotton ... | -35.5 | 16 | 2.9 | 20.1 | -12.3 |
| Pulpwood.................................................................. | -3.0 | -. 3 | 5.0 | -1.3 | 4.7 |
| Construction sand, gravel, and crushed stone .......... | 4.3 | 7.7 | 9.3 | 8.4 | 6.7 |
| Wood chips............................................................... | 2.4 | 3.9 | 26.7 | . 8 | 8.9 |
| Phosphates............................................................... | 12.7 | 5.0 | 1.2 | 52.0 | 87.3 |

# The unbearable lightness of demand: a survey of the ferrous scrap market in 2008 

The importance of recycling to the steel industry should not be understated. In 2007, more than three quarters of domestic steel production was derived from recycled scrap. ${ }^{1}$ Typically, the savings achieved by using scrap for steel manufacturing are substantial. For this reason, in the 1990s there was a revolution in steel production brought about by the adaptation of Electric Arc Furnace (EAF) technology for the manufacture of flat rolled steel products. The superior cost structure of EAFs over traditional blast furnaces (EAFs are smaller and, because they rely upon ferrous scrap, also cheaper to operate) led to an expansion of steel production around the world.

A variety of forces pushed world steel production to record levels in 2008. Some trends had been emerging for more than a decade; the collapse of the Soviet Union, for example, resulted in the birth of a massive ferrous scrap export industry. However, between 2002 and 2007, Russia enacted several policies both to reduce scrap exports and to channel exports through port facilities in Russia instead of those in Ukraine. ${ }^{2}$ The result was a sizable cut in Russian scrap exports at the same time that Middle Eastern steel production was taking off in such places as Egypt and Turkey, servicing the oil-state construction booms.

Meanwhile, American steel makers, who had been unified in predictions of bankruptcy and pleas for Federal protection in 2001, began seeing healthy profits. Industry optimism was boosted by increasing consolidation that provided much needed pricing power. A vital factor giving heart to American ferrous scrap producers was the sharp depreciation of the American dollar relative to other major currencies. The dollar's depreciation made American scrap metal more attractive to foreign buyers, which in turn helped spur production of U.S. steel. Thus, both steel and ferrous scrap producers were confident striding into 2008, even in the face of warning signs in such sectors as housing and automobiles. In December 2007, the Producer Price Index for iron and steel scrap stood at an all-time high, a level that was then exceeded in each of the first 7 months of 2008; the index soared 91 percent from January to July.

During this period ferrous scrap markets saw extreme price hikes due to tight global supplies, as demand for steel grew faster than the supply of ferrous scrap inputs. As the U.S. dollar fell to almost 60 percent of the value of the Euro, American steel makers not only managed to push imports (mostly Chinese) out of the American market, but they came close in July 2008 to exporting more steel than the country imported for the first time in decades. Another factor that helped U.S. steel exports to rise was the relative self-sufficiency of American steel producers. Asian steel producers are
much more dependent upon imported iron ore than American producers, who tend to own ore-producing properties.
In January 2008, Rio Tinto (the world's largest iron-ore mining firm) led other companies in an effort to lift the approximately $\$ 80 /$ ton of iron ore that Asian firms were paying to a level closer to that of the world iron-ore spot price (around $\$ 180 /$ ton in January 2008). ${ }^{3}$ By late February, Rio Tinto had succeeded in raising the price that Japanese and Korean steel makers paid by about 65 percent. By June, the Chinese firms finally had capitulated, agreeing to 80 -percent price hikes. ${ }^{4}$ U.S. ferrous scrap exports during the first three quarters of 2008 increased almost 40 percent compared with the same period in $2007 .{ }^{5}$
During mid-August and early September 2008, the economic downturn signaled a turning point for steel and ferrous scrap exports. The Producer Price Index for iron and steel scrap fell 22 percent in September. This was followed by a decline of 39 percent in October and 36 percent in November. From August to November the ferrous scrap index tumbled 70 percent from its high.
Ore exporters, flush from hard-won price hikes, were stunned when ore and scrap, after having been shipped halfway across the world, were turned away at the gates of Asian steel mills. ${ }^{6}$ The construction boom in the oil states-and its resulting demand for steel-retreated as oil prices dropped almost as fast as ferrous scrap prices. This price collapse was compounded by a corresponding collapse in production: domestic steel output was cut almost in half over this time frame. ${ }^{7}$
The suddenness of the drop in the price of steel exacerbated the effect of the price changes for scrap. In contrast to steel mills with blast furnaces that plan production months in advance, steel producers that used mostly EAFs were able to respond quickly in the face of collapsing steel demand. Demand for scrap dropped drastically, some EAFs fell silent, and steel mills worked through stockpiled scrap and prepurchased ore while producing steel that fewer people wanted to buy.

By the end of the year, steel producers presided over mills that had drastically cut back production. Demand for scrap in the world economy was almost as low as demand for new steel, as firms and consumers averse to spending money delayed junking cars and other aging machines, waiting for signs of an uptick in the economy.

## Notes

1 "Steel recycling rates at a glance," on the Internet at www.recycle-steel. org/pdfs/2007Graphs.pdf (visited July 17, 2009).

## Notes-Continued -The unbearable lightness of demand: a survey of the ferrous scrap market in 2008

${ }^{2}$ Dan Sandoval, "The Russian bear roars: discussions of global markets typically revolve around China; however, Russia is growing in prominence," on the Internet at www.entrepreneur.com/tradejournals/article/ 169458968 .html (visited July 6, 2009).

Robert Matthews, "Rio Tinto to Lift Ore Prices," The Wall Street Journal, Jan. 17, 2008, A13.
${ }^{4}$ Alex Wilson, "BHP, China Reach Iron-ore Deal," The Wall Street Journal, July 4, 2008; see http://online.wsj.com/article/SB121515896854028845. html (visited July 20, 2009).
${ }^{5}$ Institute of Scrap Recycling Industries Friday Report, Jan. 16, 2009. Visit www.isri.org to obtain contact information and request a copy of the report.
${ }^{6}$ Robert Matthews, "Steelmakers Squeeze Suppliers," The Wall Street Journal, Nov. 18, 2008, B2.
${ }^{7}$ Institute of Scrap Recycling Industries Friday Report, Nov. 21, 2008. Visit www.isri.org to obtain contact information and request a copy of the report.
as other parts of Asia, is the main importer of recycled materials from the United States because it has no indigenous source of fiber supply. In the first 3 months of 2008, wastepaper prices rose 3.8 percent because of increased demand for exports in the wake of a weak U.S. dollar. Prices began to turn down in April when the U.S. dollar started showing signs of recovery. The index fell dramatically in the final quarter of $2008,54.4$ percent, as the global economic slowdown led to weak demand and a surplus of unsold waste products. Low volume makes recycling wastepaper more expensive than using landfills, a phenomon which exacerbated an already existing weakness in demand.

Raw cotton. Prices for raw cotton declined 12.3 percent in 2008 following an increase of 20.1 percent in 2007. The index rose slightly through April and fell over the remainder of the year, other than when it made a moderate jump in September. Prices for cotton rose slowly early in the year as farmers switched to planting more profitable crops, especially soybeans. Soybean prices were up 76.8 percent in 2007, and they increased an additional 26.0 percent during the first half of 2008. As a result, the number of acres on which cotton was harvested was 26.3 percent lower in 2008 than in $2007 .{ }^{60}$ Fear of a shortage of cotton intensified when hurricanes Gustav and Ike damaged crops in early September, causing a 4.4-percent spike in the index. Initial reporting estimated that more than 47 percent of the cotton crop had been destroyed. ${ }^{61}$ By October, prices were declining again as it became clear the predicted crop damage had been overstated. By the end of 2008, undersupply worries were overshadowed by the reality of a surplus due to the slowing global economy. Falling demand from developing countries, major consumers of cotton that were particularly vulnerable to the global economic downturn, forced cotton prices down. ${ }^{62}$ The initial undersupply of cotton somewhat worked in favor of cotton prices when the economy crashed. Although the cotton index de-
clined 8.9 percent in 2008, prices did not fall as much as those of corn and soybeans, which dropped 24.0 and 29.8 percent, respectively.

Construction sand, gravel, and crushed stone. Subsequent to an 8.4 -percent increase in 2007, the index for construction sand, gravel, and crushed stone rose 6.7 percent in 2008, moving steadily higher in every month of the year. While growth slowed in this index, continued investment in nonresidential construction and government infrastructure projects supported the increase in prices. According to the U.S. Department of Commerce, spending in the nonresidential-construction sector increased 15.3 percent in $2008 .{ }^{63}$ Demand was also bolstered by publicly funded construction projects and government expenses, such as road construction, beach upkeep, and snow and ice control. According to the U.S. Geological Survey, 23 percent of construction sand, gravel, and crushed stone in the U.S. was used for road construction in $2008 .{ }^{64}$

## Services

Total trade industries. The Producer Price Index for the net output of total trade industries rose 7.3 percent in 2008 after having increased by 3.9 percent a year earlier. PPIs for trade industries measure changes in marginsthat is, the difference between the selling price and acquisition cost of an item-received by wholesalers and retailers. The majority of trade industry indexes benefited from falling prices in late 2008, as acquisition costs fell faster than the selling prices of products. In 2008, the margin indexes for merchant wholesalers of durable and nondurable goods, grocery stores, and discount department stores increased more than they had a year earlier. By contrast, margins received by new car dealers turned down in 2008. (See table 8.)

The margin index for merchant wholesalers of nondurable goods climbed 17.3 percent in 2008 compared

Table 8. Annual percentage changes in Producer Price Indexes for selected services industries, 2004-08

| Index | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (1) | (1) | 3.9 | 7.3 |
| Wholesale trade industries....................................................... | ${ }^{(1)}$ | (') | (') | 3.0 | 11.2 |
| Durable goods wholesalers ..................................................... | ${ }^{(1)}$ | 1.7 | 5.8 | 4.0 | 7.1 |
| Nondurable goods wholesalers................................................. | ${ }^{(1)}$ | 4.6 | 7.6 | 1.6 | 17.3 |
| Discount department stores...................................................... | 8.5 | . 1 | -3.6 | 4.7 | 14.6 |
| Supermarkets and grocery stores ............................................... | 7.4 | 6.3 | -. 4 | 4.5 | 8.9 |
| New car dealers.......................................................................... | 2.4 | 3.9 | 4.4 | 4.2 | -3.7 |
| Transportation and warehousing industries ............................................ | $\left.{ }^{1}\right)$ | $\left.{ }^{1}\right)$ | ${ }^{1}$ ) | 6.6 | 3.1 |
| Couriers ....................................................................................... | 9.1 | 8.2 | 3.0 | 12.3 | 1.2 |
| Scheduled passenger air transportation ........................................... | -1.5 | 7.7 | -1.1 | 9.0 | 4.7 |
|  | 0.0 | 0.0 | 6.3 | 6.6 | 2.8 |
| General freight trucking............................................................ | 6.3 | 5.3 | 2.3 | 4.2 | -. 3 |
| Long-distance general freight trucking, by the truckload............... | 4.8 | 5.9 | 1.2 | 3.1 | -. 6 |
| Long-distance general freight trucking, less than truckload........... | 8.0 | 5.3 | 3.7 | 5.2 | -2.3 |
| Local general freight trucking................................................... | 8.9 | 3.1 | 3.8 | 6.9 | 1.9 |
| Line-haul railroads ................................................................... | 7.4 | 13.1 | 1.9 | 9.2 | 3.8 |
| Rail transport of freight, by the carload....................................... | 9.3 | 13.8 | 1.1 | 9.2 | 4.6 |
| Rail transport of freight, intermodal ............................................. | -. 8 | 10.4 | 5.5 | 11.4 | -2.3 |
| Passenger rail transportation ...................................................... | . 5 | 9.4 | 4.8 | 3.1 | 3.3 |
| Total traditional services industries................................................. | ${ }^{1}$ ) | ${ }^{(1)}$ | ${ }^{1}$ ) | 1.8 | . 3 |
| General medical and surgical hospitals ......................................... | 4.6 | 4.2 | 3.9 | 3.8 | 2.1 |
| Portfolio management .................................................................. | 9.9 | 10.1 | 5.8 | 9.8 | -16.8 |
| Securities brokerages............................................................................................ | 1.6 | 1.2 | 5.2 | 1.6 | -10.5 |
| Commercial banking................................................................. | 1.3 | 11.5 | 1.3 | -5.5 | -9.3 |
| 1 Datum is unavailable. |  |  |  |  |  |

with a 1.6 -percent advance in the prior year. This index rose early in the year as margins were affected by low inventories for groceries and strong sales of chemical products. In the second half of 2008, wholesale margins continued to expand, reflecting a rapid collapse in the prices of commodities used in food products. U.S. Census Bureau data tracking nondurable goods in December 2008 showed wholesale inventories 4.1 percent below 2007 levels and a 6.9 -percent increase in shipments. ${ }^{65}$

Margins received by merchant wholesalers of durable goods advanced 7.1 percent in 2008 subsequent to a 4.0 -percent gain in the prior year. Margins for durable goods rose because bloated inventories at the factory level resulted in wholesalers' acquisition costs decreasing faster than selling prices. The November 2008 University of Michigan consumer confidence sentiment index reading of 55.3 was near its record low set in April and May of 1980, as declining employment, falling incomes, and evaporating household wealth left consumers in their most pessimistic state in 50 years-stifling demand for big-ticket items. ${ }^{66}$ December data from the U.S. Census Bureau showed wholesale inventories 7.0 percent above 2007 levels and a 2.7 -percent annual de-
cline in shipments in 2008. ${ }^{67}$
Margins received by supermarkets and grocery stores moved up 8.9 percent in 2008 following a 4.5 -percent rise in 2007. Expanding margins were broad based in this industry. Margins turned up or rose more in 2008 for meats, produce, frozen foods, nonedible groceries, and general merchandise. Most of the margin growth occurred in the second half of the year, as fuel prices-a major factor in food prices-plummeted. Nevertheless, margins began eroding around the holiday season because grocers were forced to lower prices in response to weak demand.

The margin index for discount department stores moved up 14.6 percent in 2008 compared with a 4.7 percent gain in the previous year. Consumers, faced with historical declines in wealth due to the collapse of the stock and housing markets, avoided upscale, high-end stores and rediscovered discount department stores. They sought less expensive, store-branded products, resulting in higher margins for discount stores. Through this increase in foot traffic and attention to acquisition costs, discount stores found they could prosper in the weak economic environment.

By contrast, the margin index for new car dealers moved down 3.7 percent in 2008 compared with a 4.2 percent advance a year earlier. Most of the 2008 decline in margins was due to a 16.8 -percent decrease in margins for new vehicle sales, as well as a drop in financing and insurance prices. ${ }^{68}$ From its inception in December 1999 though December 2008, the index for the margin on new vehicle sales fell 22.6 percent. Dealer margins on used vehicle sales also fell in 2008, by 11.9 percent. Margins received by car dealers were negatively affected by higher fuel prices early in the year, which shifted demand away from SUVs and sport models (which typically have higher margins than most other vehicles), and by the deterioration in consumer confidence and wealth that occurred later in the year.

Total transportation and warehousing industries. The Producer Price Index for the net output of total transportation and warehousing industries rose 3.1 percent in 2008 after having advanced 6.6 percent in the preceding year. The majority of the indexes included in this category peaked in the third quarter of 2008 and then fell sharply, due to the economic slowdown and the effect of diminishing fuel surcharges. In 2008, the indexes for couriers, scheduled passenger air transportation, the U.S. Postal Service, and line-haul railroads increased at slower rates compared with 2007. Prices received by the general freight trucking industry group declined following gains in the prior year.

The index for couriers edged up 1.2 percent in 2008 subsequent to a 12.3 -percent increase in 2007 . Prices in this industry peaked in September at a level 9.3 percent higher than the start of the year; during the final quarter of 2008 , the index retreated 8.5 percent. Some companies in this industry downsized their operations by limiting delivery areas, in response to the weak economic climate and a poor business outlook. Demand is price sensitive in this industry, and soaring fuel surcharges early in the year caused some buyers to pursue alternatives to help lower costs, including buying from local businesses and lengthening delivery times.

Prices received by the scheduled passenger air transportation industry moved up 4.7 percent in 2008 compared with a 9.0 -percent advance a year earlier. Fuel surcharges boosted this index in the first half of the year, although these gains were moderated by weak demand in subsequent months. According to Bloomberg News,"U.S. airline traffic fell in 2008 for only the fifth time since the government began tracking the data 35 years ago as the global economy weakened and carriers slashed schedules. ${ }^{" 9}$

The U.S. Postal Service index increased 2.8 percent in 2008 subsequent to advances of 6.6 percent in 2007 and 6.3 percent in 2006. As a result of the Postal Accountability and Enhancement Act of 2006, the U.S. Postal Service can increase rates with 45 days notice as long as the increase falls within the CPI rate of inflation for the prior 12 months. Through January 2008, the CPI increased 2.9 percent. The resulting increase in U.S. postal rates on May 12, 2008, was broad based, covering all mailing classes, domestic and international, as well as special services. ${ }^{70}$

The line-haul railroads index rose 3.8 percent following a 9.2 -percent jump in 2007. Within this industry, the indexes for freight rail transportation by the carload and passenger rail transportation posted increases, while prices for intermodal freight transportation declined in 2008. As noted in a January 2009 press release from the Association of American Railroads, although 2008 freight rail traffic was the fourth highest in history, total ton-miles shipped by domestic railroads decreased 1.3 percent from 2007, and 15 of the 19 commodities followed by the association experienced a decrease in volume shipped in 2008. ${ }^{71}$

Prices received by the general freight trucking industry edged down 0.3 percent in 2008. Calendar-year declines of 0.6 percent and 2.3 percent, respectively, for truckload and less-than-truckload long-distance general freight trucking, were at or near record levels, and the 1.9-percent advance in the index for local general freight trucking was the index's smallest increase since 2002. Operational costs, affected greatly by volatile diesel fuel prices and lower freight volumes brought about by the weakened economy, made for an especially challenging environment in 2008 for the trucking industry. The American Trucking Association's for-hire truck tonnage index fell 14.1 percent in 2008, retreating to its lowest level since December 2000. ${ }^{72}$

Total traditional service industries. The Producer Price Index for the net output of total traditional service industries edged up 0.3 percent in 2008 following a 1.8 -percent rise in the prior year. Prices received by the general medical and surgical hospitals industry increased at slower rates compared with 2007, whereas the indexes for portfolio management and securities brokerages turned down in 2008. Prices received by the commercial banking industry fell more than they had a year earlier.

The general medical and surgical hospitals index rose 2.1 percent in 2008 subsequent to a 3.8 -percent gain a
year earlier. Each year, two factors account for the majority of the annual movement of this index. In January, adjustments are made to reflect changes in insurance companies' reimbursements and modifications in hospital billings. These adjustments resulted in a 0.2 -percent advance in the hospital index in January 2008, compared with 0.8 -percent gains in the prior two Januarys. Medicare and Medicaid reimbursement rates are usually revised in October, at the start of the Federal Government's fiscal year. For fiscal year 2009, the Centers for Medicare and Medicaid Services issued a final rule that increased Inpatient Prospective Payment System rates by 3.6 percent ( 1.6 percent for hospitals that do not submit quality data). The effect of this revision was a 1.2 -percent rise in the October PPI for hospitals. For fiscal year 2009, hospitals are required to report 43 quality measures on their claims for Medicare inpatient services to qualify for a full update to their fiscal year 2009 payment rates. Overall, the final rule is estimated to increase Medicare payments to acute care hospitals by nearly $\$ 4.75$ billion. ${ }^{73}$

In 2008, the index for portfolio management declined 16.8 percent compared with a 9.8 -percent gain in 2007. The movement of this index reflects the fees paid to fund managers on the basis of the value of assets under management, assets which for the most part were reduced in 2008's historic bear market. Major market indexes like the Standard and Poor's 500 and the Wilshire 5000 registered 40 percent declines for the year, as asset prices were hammered by a deflating credit bubble and the associated
economic contraction. In December 2008, the National Bureau of Economic Research reported that the U.S. economy had been in recession since December 2007. ${ }^{74}$

The index for securities brokerages dropped 10.5 percent in 2008 compared with a 1.6 -percent gain a year earlier. Brokerage commissions are based on the asset value in stock or mutual fund transactions; consequently, the bear market in 2008 had a negative impact on pricing in this industry. Additionally, prices received by securities brokerages for margin lending were adversely affected when the Federal Reserve lowered the Federal funds rate to 0.25 percent in response to the weak economic environment.

Prices received by the commercial banking industry dropped 9.3 percent in 2008 after having fallen 5.5 percent in 2007. The banking sector had a very difficult year in 2008: annual earnings dropped to their lowest levels since 1989 , with interest income falling 16.8 percent. The first full-year trading loss was a factor in the 11-percent decline in noninterest income. ${ }^{75}$ Credit losses surged because of deteriorating asset quality in real estate portfolios. Problems in the credit market also led to lowered demand and pricing power for securitized products, items which are typically a major source of revenue for the commercial banking industry. According to the Federal Deposit Insurance Corporation's (FDIC's) quarterly banking profile, the percentage of unprofitable FDIC-insured commercial banks rose from 10.7 percent in 2007 to 22.1 percent in 2008 despite strong growth in domestic deposits. ${ }^{76}$

## Notes

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[^4]finished core, intermediate core, and crude core indexes. Also, the index for crude goods other than foods and energy sometimes is referred to as the index for crude nonfood materials less energy or the index for basic industrial materials.
${ }^{6}$ See the indexes for materials for durable manufacturing and materials for
nondurable manufacturing. These two indexes composed nearly 24 percent of
the intermediate goods index at the start of 2008 .
${ }^{7}$ See the indexes for materials and components for construction, components for manufacturing, and supplies to nonmanufacturing industries (less feeds). These three indexes composed nearly 43 percent of the intermediate goods index at the start of 2008.
${ }^{8}$ Jonathan Weinhagen, "An empirical analysis of price transmission by stage of processing," and "Consumer gasoline prices: an empirical investigation."
${ }^{9}$ Gross Domestic Product: Fourth Quarter 2008 (Final), BEA 09-11 (Bureau of Economic Analysis, Mar. 26, 2009).
${ }^{10}$ Ibid; and Strong dollar's downside, The Hawk Eye, online at www.thehawk-eye.com/Story/mm-090908 (visited June 5, 2009).
${ }^{11}$ Prospects for the Global Economy, Global Economic Prospects 2009: Commodity Markets at the Crossroads, The International Bank for Reconstruction and Development/The World Bank, December 9, 2008, pp. 24-35. For additional GDP data, go to www.esri.cao.go.jp/en/sna/menu.html (visited June 30, 2009) for
data from the Economic and Social Research Institute (ESRI) of Japan, http:// epp.eurostat.ec.europa.eu (visited June 30, 2009) for data from EUROSTAT, and www.stats.gov.cn/enGliSH/ (visited June 30, 2009) for data from the National Bureau of Statistics of China.
${ }^{12}$ Federal Reserve Statistical Release, Industrial Production and Capacity Utilization, G. 17 (419), Table 11: "Historical Statistics for Industrial Production, Capacity, and Utilization: Total Industry" (Board of Governors of the Federal Reserve System, Mar. 16, 2009).
${ }^{13}$ The crude and refined petroleum products production, stocks, and consumption data included in this section come from databases of the Energy Information Administration (EIA) of the U.S. Department of Energy. These data are most easily accessed either by visiting the EIA online publication titled This Week in Petroleum at http://tonto.eia.doe.gov/oog/info/twip/twip. asp (visited June 30, 2009), or by visiting the EIA webpage for U.S. petroleum data at www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html (visited June 30, 2009).
${ }^{14}$ Short-Term Energy Outlook, Table 3C (Energy Information Administration, June 2009), online report available at www.eia.doe.gov/emeu/steo/pub/contents.html (visited June 30, 2009).
${ }^{15}$ See "International Petroleum (Oil) Prices and Crude Oil Import Costs," Energy Information Administration, at www.eia.doe.gov/emeu/international/oilprice.html (visited June 30, 2009).
${ }^{16}$ The EIA defines the term product supplied as follows: "[Product supplied] approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas processing plants, blending plants, pipelines, and bulk terminals. In general, product supplied of each product in any given period is computed as follows: field production, plus refinery production, plus imports, plus unaccounted for crude oil, (plus net receipts when calculated on a PAD District basis), minus stock change, minus crude oil losses, minus refinery inputs, minus exports." The EIA glossary is located at www.eia.doe.gov/glossary/index.html (visited June 30, 2009).

## ${ }^{17}$ See http://tonto.eia.doe.gov/dnav/pet/pet_cons_psup_dc_nus_mbbl_ m.htm (visited June 30, 2009). <br> ${ }^{18}$ Natural Gas Prices, Energy Information Administration, online report

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# Measuring time spent in unpaid household work: results from the American Time Use Survey 


#### Abstract

Time-use data show that on average Americans spend more than 20 hours per week working for their own household without pay on tasks that might be done by a paid worker; women spend more time at such unpaid household work


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Individuals often perform services for themselves or their households rather than purchasing those services. For example, they fix leaky faucets rather than hiring plumbers, grocery shop instead of using a grocery delivery service, and prepare meals rather than eating at restaurants. Such unpaid services that are produced for immediate consumption by one's own household, and for which market substitutes exist, are referred to as unpaid household work. Unlike work that is done for pay, about which there are a number of timely statistical mea-sures-persons employed, hours worked, earnings generated, and others-the resources involved in doing unpaid household work are less frequently quantified.

Time-use data can be used to learn more about the resources involved in doing unpaid work because the data contain information about the full range of productive activities individuals do, and not merely those for which they receive pay. The focus of this article is on the time resources involved in doing unpaid household work. Some findings from the 200307 American Time Use Survey (ATUS) show how much time individuals spent doing unpaid household work, the types of unpaid household work they did, and
characteristics of persons who most frequently did this work. Data about how much time individuals spend doing unpaid household work provide insight about the labor-time resources involved in these activities. Time-use data also are an important element in determining a monetary value for unpaid household work, although doing so is not within the scope of this article. ${ }^{1}$

## Data

The ATUS is a federally sponsored survey about how individuals ages 15 and older living in the United States spend their time. The core of the computer-assisted telephone ATUS interview is a time diary in which survey respondents are asked how they spent their time over a $24-$ hour period, starting at $4 \mathrm{a} . \mathrm{m}$. on the day before the interview and ending at $4 \mathrm{a} . \mathrm{m}$. on the day of the interview. Respondents are asked to report their primary activities for this 24-hour period, and those who report doing more than one activity at a time are asked to specify their main activity. ${ }^{2}$ In addition to the time diary, the ATUS data also include information about each respondent's household composition, demographics, employment status, and other characteristics.

Activities reported in the ATUS time diary
are assigned codes using an extensive coding lexicon and set of rules. The coding lexicon was designed to capture the full range of activities people do, with codes grouped into the 17 major categories shown in exhibit 1 . In addition to these major groups, there are hundreds of more detailed activity sub-categories. ${ }^{3}$ ATUS interviews were conducted nearly every day in 2003-07, and in total over this 5-year period there were more than 70,000 completed interviews. Unless stated otherwise, the results appearing in this article are representative of the civilian noninstitutional population ages 15 and older for 2003-07. ${ }^{4}$

## Defining unpaid household work

As a first step in this analysis, it was necessary to define unpaid household work: that is, to identify which activities in the ATUS activity lexicon are unpaid, economically productive, and done for one's own household. During the ATUS interview, survey respondents are asked to identify which of the activities reported in the time diary were done as a part of their job(s) or for which they will be paid. ${ }^{5}$ Following the coding rules, this information is used to classify all paid activities as work or income-generating activities (such as making crafts that will be sold and lawn mowing done for pay). Because they are activities done for pay, work and income-generating activities were automatically excluded from the definition of unpaid household work.

For unpaid activities, Margaret Reid's third-person criterion ${ }^{6}$ was used to identify those that are economically productive. A National Academy of Sciences expert panel

| Exhib | 1. Major activity categories in the ATUS coding lexicon |
| :---: | :---: |
| 1 | Personal care (mostly sleep) |
| 2 | Household activities |
| 3 | Caring for and helping household children |
| 4 | Caring for and helping nonhousehold children |
| 5 | Work and work-related activities |
| 6 | Education |
| 7 | Consumer services |
| 8 | Professional and personal care services |
| 9 | Household services |
| 10 | Government services and civic obligations |
| 11 | Eating and drinking |
| 12 | Socializing, relaxing, and leisure |
| 13 | Sports, exercise, and recreation |
| 14 | Religious and spiritual activities |
| 15 | Volunteer activities |
| 16 | Telephone calls |
| 17 | Traveling |

study on the design of nonmarket accounts describes Reid's criterion:
"One approach that has been used to define nonmarket output (particularly in household production applications) is Margaret Reid's (1934) third-party criterion: is the output in question something that a person could have hired someone else to produce for him?" ${ }^{7}$

Applying Reid's third-person criterion, all activities that can be accomplished using readily available market substitutes for a person's unpaid time are considered economically productive. For example, a market-based alternative to unclogging one's kitchen drain is to hire a plumber to provide the service. In addition to being unpaid and having a readily available market substitute, the activities classified as unpaid household work are those that are done for one's own household. For example, time spent painting one's home is included in the definition of unpaid household work because the activity is not done for pay, someone could have been hired to paint the home, and it is done for one's own household. Time spent caring for a neighbor's child may be unpaid and have a marketbased alternative, but because the service is done for a neighbor's household instead of one's own household, it is not included in the definition of unpaid household work.

Travel, when it is associated with an unpaid household work activity, is included in the definition. The activity meets Reid's criterion because people can use delivery services or employ others to do the task and thus eliminate the need for travel. For example, one can spend time traveling to and from the grocery store to purchase groceries, or one can hire a delivery service to assemble the groceries and drop them off at one's door. A broad range of shop-ping-type activities also are classified as unpaid household work. Activities such as banking or using veterinary services may not intuitively seem to fit Reid's third-person criteria, but they do because one could hire a personal assistant to handle these activities. Sleeping, eating, watching television, volunteering, and other activities are not included in the definition of unpaid household work because they fail to meet at least one of the three criteria. Of the 434 unique activity categories in the 2003-07 ATUS coding lexicon, 127 were identified as unpaid household work.

Unpaid household work can be grouped into four main activity categories: Household activities, which includes a wide array of activities done to maintain one's household, such as food and drink preparation, laundry, and lawn
care; Caring for and helping household members; Purchasing goods and services; and Travel related to unpaid household work. See the appendix for a complete list of activities included in the definition of unpaid household work, as well as for information about how the activities are grouped into categories.

## Time spent in unpaid household work

People's skill levels and motivations are factors in how much time and effort they spend doing unpaid household work. For example, someone who enjoys cooking may take a more leisurely approach to the activity or spend more time doing it to produce more elaborate meals than someone who dislikes cooking. On the other hand, a more skilled person may complete home maintenance and repair tasks more quickly, efficiently, and happily than a less skilled person. The ATUS data do not include information about people's effort, skill, or motivation for doing unpaid household work, and so here the focus is on the time involved in the tasks. The analysis accounts for a range of ability levels and motivations by looking at the average times people spend doing unpaid household work.

Individuals aged 15 and older spent an average of 21.5 hours per week doing unpaid household work in 2003-07. (See table 1.) Most of this time ( 12.4 hours) was spent doing household activities, such as food and drink preparation, cleaning, laundry and sewing, and maintenance and repair. Household activities also were the type of unpaid household work that people were most likely to do on an average day. ${ }^{8}$ About three-fourths of individuals aged 15 and older did household activities on an average day in 2003-07, with one-half of the population engaging in food and drink preparation and one-fourth cleaning. (See table 2.) Those 15 and older spent 2.9 hours per week caring for and helping household children ${ }^{9}$ as a primary activity (this is an average across all individuals, whether or not they lived with children), 3.1 hours per week purchasing goods and services, and 2.7 hours per week engaging in travel related to unpaid household work. Time spent doing unpaid household work varied by the sex, age, employment status, number of household children, and other characteristics of individuals and households.

## Results by gender

Traditionally, many unpaid household work activities have been considered women's work and have most often been done by women. Gender persists as a factor in who did these activities in 2003-07; for example, women spent an
average of 10.8 hours more per week doing unpaid household work than did men. One factor driving this gender difference was women's greater likelihood of doing unpaid household work on an average day ( 91 percent of women compared to 78 percent of men).

Chart 1 shows the average hours per week men and women spent doing the four main types of unpaid household work. Women spent more time doing each of the activities than did men, although the greatest gender differences were in the times women spent doing household activities and caring for and helping household members. Women spent an average of 6.3 hours more per week doing household activities than did men ( 15.5 versus 9.2 hours) and 2.4 hours more per week providing care to household members ( 4.4 versus 2.0 hours). Chart 2 shows the main household activities and the average hours per week men and women spent doing each of them. The influence of traditional gender roles is apparent in that women spent more time doing food and drink preparation, cleaning, and laundry and sewing than did men, while men spent more time doing maintenance and repair and lawn and garden care than did women. The average times men and women spent doing household activities are to some extent driven by the share of men and women who did these activities on an average day. Women were nearly five times as likely as men to do laundry; three times as likely as men to clean; and almost twice as likely as men to prepare food on an average day. By contrast, men were twice as likely as women to do maintenance and repair on an average day. (See table 2.)

Gender also is a factor related to who does paid work. Women were less likely than men to be employed ( 72 percent of men versus 59 percent of women), and among those who were employed, women were more likely to work part time than were men ( 31 percent of employed women and 14 percent of employed men were employed part time). ${ }^{10,11}$ Persons who were not employed spent more hours per week doing unpaid household work (26.0 hours) than did those employed part time ( 22.0 hours) who, in turn, did more unpaid household work than did those employed full time ( 18.2 hours). On average across all persons age 15 and older, including those who were employed and those who were not employed, men spent 31.4 hours per week doing paid work and women spent 21.0 hours per week doing paid work. (See table 1.) Although there is variation by sex and employment status in the times individuals spent doing unpaid household work, and there are gender differences in time spent doing paid work, at an aggregate level-one that includes both paid work and unpaid household work-there is evidence of a

Table 1. Average hours per week spent doing unpaid household work and paid work by age and sex, 2003-07

| Type of work | Age |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Total,15 } \\ \text { and } \\ \text { older } \end{gathered}$ | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75 and older |
| Unpaid household work (total) |  |  |  |  |  |  |  |  |
|  | 21.5 | 12.4 | 23.8 | 25.8 | 22.0 | 22.2 | 24.3 | 21.6 |
|  | 12.4 | 5.8 | 10.7 | 13.1 | 14.0 | 15.3 | 17.4 | 16.5 |
| Food and drink preparation. $\qquad$ Cleaning $\qquad$ | 3.6 | 1.5 | 3.5 | 4.2 | 3.9 | 4.1 | 4.9 | 5.1 |
|  | 2.6 | 1.6 | 2.7 | 2.9 | 2.7 | 2.8 | 3.3 | 3.3 |
| Laundry and sewing ..................................... | 1.5 | . 6 | 1.3 | 1.7 | 1.8 | 1.7 | 2.1 | 2.0 |
| Household management................................ | 1.0 | . 6 | . 7 | . 9 | 1.1 | 1.2 | 1.4 | 1.4 |
| Lawn and garden care .................................. | 1.4 | . 4 | . 8 | 1.2 | 1.6 | 2.3 | 2.7 | 2.4 |
| Maintenance and repair................................ | 1.5 | . 9 | 1.2 | 1.6 | 1.9 | 2.1 | 2.1 | 1.3 |
| Caring for and helping household members $\qquad$ Caring for and helping household children....... | 3.2 | 1.9 | 6.9 | 6.1 | 2.1 | . 9 | . 7 | . 6 |
|  | 2.9 | 1.7 | 6.7 | 5.9 | 1.7 | . 4 | . 2 | . 1 |
|  | 3.1 | 2.6 | 3.2 | 3.2 | 3.1 | 3.4 | 3.6 | 2.8 |
|  | . 7 | . 4 | . 7 | . 8 | . 7 | . 8 | 1.0 | . 9 |
| Grocery shopping $\qquad$ Travel related to unpaid household work $\qquad$ | 2.7 | 2.1 | 3.0 | 3.4 | 2.8 | 2.6 | 2.6 | 1.8 |
| Paid work (total).............................................. | 26.1 | 19.2 | 33.8 | 34.4 | 34.7 | 25.8 | 7.8 | 2.0 |
| Work and work-related activities $\qquad$ Travel related to work and work-related activities .. | 24.0 | 17.7 | 31.2 | 31.6 | 32.1 | 23.8 | 7.2 | 1.8 |
|  | 2.0 | 1.5 | 2.6 | 2.7 | 2.6 | 1.9 | . 5 | . 1 |
| Total paid work and unpaid household work........ | 47.5 | 31.6 | 57.6 | 60.2 | 56.7 | 48.0 | 32.1 | 23.6 |
| Men |  |  |  |  |  |  |  |  |
| Unpaid household work (total) ............................. | 15.9 | 8.9 | 15.8 | 18.3 | 17.0 | 17.8 | 19.9 | 18.1 |
| Household activities $\qquad$ Food and drink preparation. $\qquad$ | 9.2 | 4.6 | 7.4 | 9.1 | 10.6 | 12.3 | 13.4 | 12.8 |
|  | 1.9 | . 8 | 1.7 | 2.2 | 2.1 | 2.2 | 2.3 | 3.0 |
| Cleaning..................................................... | 1.2 | . 9 | 1.2 | 1.3 | 1.2 | 1.2 | 1.2 | 1.4 |
| Laundry and sewing................................... | . 4 | . 3 | . 5 | . 5 | . 5 | . 4 | . 4 | . 4 |
| Household management............................... | . 8 | . 4 | . 6 | . 8 | . 9 | 1.1 | 1.2 | 1.2 |
| Lawn and garden care ....................................... | 1.9 | . 5 | 1.0 | 1.5 | 2.2 | 3.2 | 3.9 | 3.6 |
| Maintenance and repair.................................. | 2.4 | 1.4 | 1.8 | 2.3 | 2.8 | 3.2 | 3.5 | 2.3 |
| Caring for and helping household members $\qquad$ Caring for and helping household children....... | 2.0 | . 7 | 3.4 | 4.1 | 1.6 | . 6 | . 6 | . 7 |
|  | 1.7 | . 6 | 3.3 | 3.9 | 1.4 | . 3 | . 1 | . 0 |
|  | 2.4 | 1.9 | 2.5 | 2.4 | 2.2 | 2.6 | 3.3 | 2.7 |
|  | . 5 | . 3 | . 5 | . 5 | . 5 | . 6 | . 8 | . 9 |
| Grocery shopping......................................... | 2.4 | 1.8 | 2.4 | 2.7 | 2.5 | 2.3 | 2.6 | 1.9 |
| Paid work (total)................................................ | 31.4 | 20.9 | 41.4 | 41.7 | 40.6 | 30.1 | 10.3 | 3.1 |
| Work and work-related activities $\qquad$ Travel related to work and work-related activities .. | 28.9 | 19.2 | 38.0 | 38.2 | 37.4 | 27.7 | 9.5 | 2.9 |
|  | 2.6 | 1.8 | 3.4 | 3.5 | 3.2 | 2.4 | . 8 | . 2 |
| Total paid work and unpaid household work....... | 47.4 | 29.9 | 57.2 | 60.0 | 57.6 | 47.9 | 30.2 | 21.2 |
| Women |  |  |  |  |  |  |  |  |
| Unpaid household work (total) ............................ | 26.7 | 15.9 | 31.7 | 33.1 | 26.7 | 26.2 | 28.1 | 23.8 |
| Household activities. $\qquad$ Food and drink preparation. $\qquad$ | 15.5 | 7.1 | 13.9 | 17.0 | 17.3 | 18.1 | 20.9 | 18.8 |
|  | 5.3 | 2.2 | 5.3 | 6.1 | 5.6 | 5.9 | 7.0 | 6.4 |
| Cleaning ....................................................... | 4.0 | 2.3 | 4.2 | 4.4 | 4.0 | 4.3 | 5.0 | 4.5 |
| Laundry and sewing......................................... | 2.5 | . 9 | 2.0 | 2.8 | 3.0 | 2.9 | 3.6 | 3.1 |
| Household management................................... | 1.1 | . 8 | . 8 | 1.1 | 1.2 | 1.3 | 1.6 | 1.5 |
| Lawn and garden care .................................... | . 9 | . 2 | . 5 | . 8 | 1.1 | 1.5 | 1.7 | 1.6 |
| Maintenance and repair................................. | . 8 | . 4 | . 5 | . 8 | 1.1 | 1.1 | . 9 | . 7 |
| Caring for and helping household members ......... | 4.4 | 3.1 | 10.3 | 8.1 | 2.4 | 1.1 | . 8 | . 5 |
| Caring for and helping household children....... | 4.1 | 3.0 | 10.1 | 7.8 | 2.0 | . 5 | . 3 | . 1 |
| Purchasing goods and services. Grocery shopping. | 3.7 | 3.3 | 3.8 | 4.1 | 3.8 | 4.1 | 3.9 | 2.8 |
|  | . 9 | . 5 | 1.0 | 1.1 | 1.0 | 1.0 | 1.1 | 1.0 |
| Travel related to unpaid household work.............. | 3.1 | 2.4 | 3.7 | 4.0 | 3.1 | 2.9 | 2.5 | 1.7 |
| Paid work (total) .................................................. | 21.0 | 17.4 | 26.3 | 27.3 | 29.1 | 21.8 | 5.7 | 1.2 |
|  | 19.5 | 16.2 | 24.4 | 25.3 | 27.0 | 20.3 | 5.3 | 1.2 |
| Work and work-related activities. $\qquad$ Travel related to work and work-related activities | 1.5 | 1.2 | 1.9 | 2.0 | 2.1 | 1.5 | . 4 | . 1 |
| Total paid work and unpaid household work....... | 47.7 | 33.4 | 58.0 | 60.4 | 55.8 | 48.0 | 33.7 | 25.1 |

Note: The subcategories shown in the table are not an ex- noninstitutional population ages 15 and older. haustive list of all subcategories. Data are for persons in the civilian,

Table 2. Percent of persons doing unpaid household work and paid work on an average day by age and sex, 2003-07


Chart 1. Average hours per week spent doing unpaid household work by sex and type of work done, 2003-07


NOTE: Data refer to the civilian noninstitutional population ages 15 and older.
Chart 2. Average hours per week spent doing household actvities by sex and type of work done, 2003-07


NOTE: The subcategories shown in the chart are not an exhaustive list of all unpaid household work subcategories. Data refer to the civilian noninstitutional population ages 15 and older.
more equitable time distribution between the sexes. While women spent more time doing unpaid household work than did men, men spent more time doing paid work than did women. Taking paid and unpaid work activities together, men and women each spent about the same number of hours per week working; men spent 47.4 hours per week and women spent 47.7 hours per week doing such activities. ${ }^{12}$ (See chart 3.)

## Results by age

Age also is a factor in the time individuals spent doing unpaid household work and paid work. (See table 1.) The total amount of time that individuals spent doing unpaid household work and paid work peaked at about 60 hours per week for both men and women aged 35 to 44 . The average hours per week that individuals spent doing unpaid household work also peaked for this age group, at 25.8 hours. Those aged 35 to 44 spent more hours per week in several unpaid household work activities than the overall average, but the largest difference is in the time they spent providing childcare. Individuals in this age group spent
5.9 hours per week caring for and helping household children as a primary activity, second only to those aged 25 to 34. This corresponds to a greater likelihood of being parents; those aged 35 to 44 were more likely to be parents, and more likely to be parents of two or more children than were people in the other age groups. ${ }^{13}$ Individuals aged 35 to 44 spent 34.4 hours per week doing paid work; this average is among the highest for all age groups. The time 35 - to 44-year-olds spent doing paid work reflects that they have one of the highest rates of employment among the various age groups- 82 percent were employed.

The peak in time spent doing unpaid household work occurred at different ages for men and women. Women aged 35 to 44 spent an average of 33.1 hours per week doing unpaid household work, more than women in the other age groups. They spent 17.0 hours per week doing household activities and 8.1 hours providing care to household members. For men, those aged 65 to 74 spent more time doing unpaid household work than did men in the other age groups; this peak (at 19.9 hours per week) coincides with ages when men traditionally move out of the labor force and into retirement. The data support this

Chart 3. Average hours per week spent doing unpaid household and paid work by sex, 2003-07


NOTE: Data refer to persons who were employed (on days they did and did not work) as well as persons who were not employed; all persons represented in the chart are members of the civilian noninstitutional population ages 15 and older.
movement out of the labor force: 68 percent of men aged 55 to 64 were employed compared to 29 percent of men aged 65 to $74 .{ }^{14}$ Much of the time that men aged 65 to 74 spent doing unpaid household work involved doing lawn and garden care ( 3.9 hours per week), maintenance and repair (3.5 hours per week), and purchasing goods and services (3.3 hours per week). (See table 1.)

Much like men in the same age group, women aged 65 to 74 were less likely to be employed and spent more time doing unpaid household work than did women aged 55 to 64. The estimates for persons aged 50 and older coincide with what one would expect to observe when individuals depart the labor force-even though these data represent a cross-section of the population and do not track individuals' time use longitudinally. (See chart 4.) ${ }^{15}$ Theory suggests that after individuals depart the labor force they will spend more time doing unpaid household work because both their incomes and the opportunity cost of their time are lower than when they were employed. ${ }^{16}$ People who have exited the labor force would thus substitute household production for some purchased goods and services. For example, they may spend more time preparing and eating meals at home and eat at restaurants less often, or they may clean their own homes rather than hiring a cleaning service.

For people aged 50 and older, the average hours per week individuals spent doing unpaid household work edged up as age increased, until leveling off around age 66. By contrast, the hours people aged 50 and older spent doing paid work shrank as age increased, coinciding with a decline in the share of the population that was employed and a decrease in work hours for those who were employed. Two of the major activity categories that make up unpaid household work are household activities, and caring for and helping household members. Growth in time spent doing household activities drove the increase in unpaid household work time for individuals older than 50; this contrasts with the earlier peak in time spent doing unpaid household work, in which caring for and helping household members was an important component. (See chart 5.) ${ }^{17}$ People aged 65 to 74 spent more time doing a variety of household activities than did those aged 55 to 64 , including more time spent in food and drink preparation, cleaning, lawn and garden care, and laundry and sewing. Individuals at the top end of the age range, those aged 75 and older, spent less time doing unpaid household work than did individuals aged 65 to 74 and less time overall doing unpaid household work and paid work than did people in the younger age groups; declining health may be one reason for this decrease. ${ }^{18}$ (See table 1.)

## Results for parents living with their children

For individuals aged 25 to 44 , a major component of the total time they spent doing unpaid household work was spent caring for and helping household children. About 60 percent of individuals in this age group were parents living with their children. ${ }^{19}$ A closer look at the time parents spent doing unpaid household work and paid work for those living with one, two, three, and four or more of their own children finds some systematic variation. The time parents spent doing several unpaid household work activities increased with the presence of additional chil-dren-time spent in food and drink preparation, cleaning, laundry and sewing, caring for and helping household children, and travel related to unpaid household work all increased with the number of children. In total, parents living with 4 or more of their own children spent nearly 11 additional hours per week doing unpaid household work than did parents living with 1 child. (See table 3.)

The time mothers spent doing unpaid household work increased by an average of almost 6 hours per week with the presence of one additional child; the difference was greatest between mothers of one child and those with two children, and shrank slightly with the presence of each additional child. Nearly one-half of this gain was in the time mothers spent providing childcare. Corresponding with an increase in the number of children was a drop in mothers' labor force ${ }^{20}$ participation and the average time they spent doing paid work. Seventy-eight percent of mothers with one child were in the labor force, compared to 56 percent of mothers of four or more children. (See table 4.) The share of mothers who were employed full time steadily declined with the presence of each additional child, while the percent of mothers who were employed part time remained about the same. The time mothers spent doing paid work decreased from an average of 26.2 hours per week for mothers of one child to 15.0 hours for those with four or more children.

The presence of additional children was less of a factor in the time fathers spent doing unpaid household work and paid work than it was in the time mothers spent doing these activities. Fathers of two children spent 2.5 hours more per week doing unpaid household work than did fathers of one child, but fathers of three and four or more children spent about the same amount of time doing these activities as did those with two children present (about 22 hours per week). Fathers were more likely to be in the labor force and employed full time than were mothers, and on average they spent almost twice as much time doing paid work as did mothers ( 42.5 hours per week versus 22.9 hours per week).

Chart 4. Average hours per week spent doing unpaid household and paid work and percent employed by age, 2003-07


NOTE: Data are averages for a 3-year age range, centered on the age shown; this was done to smooth the lines. The averages are for the civilian noninstitutional population; this includes persons who were employed full time, employed part time, and persons who were not employed.

Chart 5. Average hours per week spent doing unpaid household work and two of the major activities included in household work by age, 2003-07


NOTE: Data are averages for a 3-year age range, centered on the age shown; this was done to smooth the lines. The averages are for the civilian noninstitutional population; this includes persons who were employed full time, employed part time, and persons who were not employed.

Table 3. Average weekly hours parents spent doing unpaid household work by number of own household children, 2003-07

| Type of work | Number of own household children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total, 1 or more children | 1 child | 2 children | 3 children | 4 or more children |
| Total |  |  |  |  |  |
| Unpaid household work.. | 30.4 | 26.8 | 31.3 | 34.8 | 37.5 |
| Household activities ................................................................. | 13.8 | 12.6 | 14.0 | 15.5 | 16.8 |
| Food and drink preparation ........................................................ | 4.8 | 4.1 | 4.8 | 5.7 | 6.6 |
| Cleaning................................................................................ | 3.2 | 2.8 | 3.3 | 3.9 | 4.3 |
| Laundry and sewing............................................................. | 1.8 | 1.7 | 1.7 | 2.0 | 2.5 |
| Household management ....................................................... | . 8 | . 9 | . 9 | . 8 | . 8 |
| Lawn and garden care ........................................................... | 1.1 | 1.1 | 1.2 | 1.1 | 1.0 |
| Maintenance and repair. | 1.5 | 1.4 | 1.6 | 1.4 | 1.2 |
| Caring for and helping household members ............................. | 9.3 | 7.3 | 10.1 | 11.6 | 13.0 |
| Caring for and helping household children ........................... | 9.1 | 7.1 | 9.8 | 11.4 | 12.9 |
| Purchasing goods and services.................................................. | 3.4 | 3.4 | 3.5 | 3.5 | 3.3 |
| Grocery shopping ................................................................. | . 9 | . 9 | . 9 | . 9 | . 9 |
| Travel related to unpaid household work .................................. | 3.8 | 3.5 | 3.8 | 4.2 | 4.3 |
| Paid work...................................................................................... | 31.7 | 32.6 | 32.4 | 29.1 | 27.4 |
| Work and work-related activities.............................................. | 29.2 | 30.1 | 29.8 | 26.7 | 25.2 |
| Travel related to work and work-related activities ....................... | 2.5 | 2.5 | 2.6 | 2.3 | 2.2 |
| Total paid work and unpaid household work........................... | 62.0 | 59.4 | 63.7 | 63.9 | 64.8 |
| Fathers |  |  |  |  |  |
| Unpaid household work.................................................................... | 20.9 | 19.3 | 21.8 | 22.0 | 22.1 |
| Household activities ................................................................. | 9.2 | 9.0 | 9.4 | 9.5 | 9.0 |
| Food and drink preparation .................................................. | 2.2 | 2.1 | 2.3 | 2.5 | 2.6 |
| Cleaning................................................................................. | 1.3 | 1.1 | 1.3 | 1.4 | 1.4 |
| Laundry and sewing.............................................................. | . 5 | . 5 | . 4 | . 4 | . 5 |
| Household management ....................................................... | . 7 | . 7 | . 8 | . 6 | . 6 |
| Lawn and garden care ........................................................... | 1.6 | 1.6 | 1.7 | 1.7 | 1.3 |
| Maintenance and repair......................................................... | 2.4 | 2.4 | 2.5 | 2.4 | 2.2 |
| Caring for and helping household members ............................ | 6.0 | 4.7 | 6.7 | 7.3 | 7.7 |
| Caring for and helping household children ........................... | 5.9 | 4.5 | 6.5 | 7.1 | 7.5 |
| Purchasing goods and services........................................................ | 2.5 | 2.6 | 2.6 | 2.3 | 2.2 |
| Grocery shopping .................................................................. | . 5 | . 6 | . 5 | . 6 | . 4 |
| Travel related to unpaid household work .................................. | 3.1 | 3.1 | 3.1 | 3.0 | 3.3 |
| Paid work ........................................................................................ | 42.5 | 40.8 | 43.8 | 43.8 | 42.3 |
| Work and work-related activities........................................... | 38.9 | 37.4 | 39.9 | 40.0 | 38.7 |
| Travel related to work and work-related activities ................. | 3.6 | 3.4 | 3.8 | 3.8 | 3.6 |
| Total paid work and unpaid household work............................ | 63.4 | 60.1 | 65.5 | 65.8 | 64.4 |
| Mothers |  |  |  |  |  |
| Unpaid household work ............................................................. | 38.1 | 32.6 | 39.5 | 45.1 | 50.2 |
| Household activities .................................................................. | 17.6 | 15.4 | 17.9 | 20.4 | 23.3 |
| Food and drink preparation ..................................................... | 6.8 | 5.6 | 7.0 | 8.3 | 9.9 |
| Cleaning................................................................................ | 4.8 | 4.1 | 4.9 | 5.9 | 6.7 |
| Laundry and sewing.......................................................................... | 2.9 | 2.6 | 2.9 | 3.3 | 4.2 |
| Household management ...................................................... | . 9 | 1.0 | . 9 | 1.0 | . 9 |
| Lawn and garden care ............................................................... | . 7 | . 7 | . 7 | . 6 | . 8 |
| Maintenance and repair........................................................ | . 7 | . 7 | . 8 | . 7 | . 3 |
| Caring for and helping household members ............................. | 12.0 | 9.2 | 12.9 | 15.1 | 17.4 |
| Caring for and helping household children ........................... | 11.8 | 9.1 | 12.7 | 14.9 | 17.3 |
| Purchasing goods and services................................................. | 4.2 | 4.0 | 4.2 | 4.4 | 4.2 |
| Grocery shopping ................................................................. | 1.1 | 1.1 | 1.2 | 1.2 | 1.4 |
| Travel related to unpaid household work ................................. | 4.4 | 3.8 | 4.5 | 5.2 | 5.2 |
| Paid work.................................................................................................... | 22.9 | 26.2 | 22.7 | 17.2 | 15.0 |
| Work and work-related activities.................................................. | 21.3 | 24.4 | 21.2 | 16.0 | 13.9 |
| Travel related to work and work-related activities..................... | 1.6 | 1.8 | 1.5 | 1.2 | 1.1 |
| Total paid work and unpaid household work.......................... | 61.0 | 58.8 | 62.2 | 62.3 | 65.1 |

Note: Data refer to parents ages 15 and older who were living in the same household as their biological, step-, or adopted children under age 18. The subcategories shown in the table are not an exhaustive list of all unpaid household work subcategories.

|  | Number of own household children |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Status | 1 child | 2 children | 3 children | 4 or more children |
| Labor force ${ }^{1}$ |  |  |  |  |
| Fathers ..................... | 93 | 96 | 96 | 95 |
| Mothers ..................... | 78 | 73 | 63 | 56 |
| Employed <br> Fathers | 89 | 93 | 93 | 91 |
| Mothers ........................................................ | 73 | 67 | 57 | 50 |
| Employed full time Fathers. $\qquad$ | 84 | 90 | 89 | 87 |
| Mothers....................... | 53 | 46 | 34 | 29 |
| Employed part time Fathers $\qquad$ | 5 | 3 | 4 | 5 |
| Mothers ......................... | 19 | 22 | 23 | 22 |

${ }^{1}$ The labor force refers to all persons who are employed or looking for work.
Note: Data refer to parents ages 15 and older who were living in the same household as their biological, step-, or adopted children under age 18. These estimates do not correspond to published ratios from the Current Population Survey (CPS) for several reasons. First, the reference population for the atus is age 15 years and older, whereas it is age 16 years and older for the CPS. Second, ATUS data are collected continuously, the employment reference period being the 7 days prior to the interview. By contrast, CPS data refer to employment during the week containing the $12^{\text {th }}$ of the month. Finally, the CPS accepts answers from household members about other household members whereas such proxy responses are not allowed in the ATUS.
employment status, and the number of own household children in the time individuals spent doing unpaid household work. Traditional gender roles prevailed in 2003-07-women spent more hours per week doing unpaid household work than did men; however, men spent more time doing paid work than did women. Overall, the total time that men and women aged 15 and older spent doing either paid work or unpaid household work was about the same.

The time individuals spent doing unpaid household work, and the type of household work they did, varied by age. Time spent in many unpaid household work activities increased with age for those 50 to 66 years old (see chart 4 ), and coincided with a decline in the share of the population who were employed. The peak in unpaid household work time, however, occurred for those in their mid-thirties, and largely was driven by the time they spent caring

## Conclusion

Time-use data are instrumental in quantifying the economic contributions of unpaid household labor. In this article, results from the 2003-07 ATUS were tabulated to show the time individuals spent doing unpaid household work and thus quantify the labor time resources involved in household production. The data show differences by gender, age,
for and helping household children. Taking a look specifically at parents of one, two, three, or four or more children showed that when more children were present in a household, mothers were less likely to be employed, spent less time doing paid work, and spent more time doing unpaid household work; the time fathers spent in these activities and their labor force participation were less responsive to the number of children living in their household.

## Notes

[^5]more than one job also are asked, "Were there any activities that were done as a part of your other job?" All survey respondents are asked a variant of the following question, "Were there any other activities that you were paid for or will be paid for?" For this final question, the interviewer instructs employed respondents not to include paid breaks at work or paid time off.
${ }^{6}$ Margaret G. Reid, Economics of Household Production (New York, John Wiley and Sons, Inc., 1934).
${ }^{7}$ See page 171 of Katharine G. Abraham and Christopher Mackie, Framework for Nonmarket Accounting, a chapter in Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, eds., A New Architecture for the U.S. National Accounts (University of Chicago Press, May 2006); on the Internet at www.nber.org/books/jorg06-1 (visited Jan. 12, 2009).
${ }^{8}$ An "average day" is an average across all 7 days of the week.
${ }^{9}$ The term "children," as used in the atus and in this article, refers to individuals under age 18. "Household children" refers to all children living in the
household, whether or not they were related to the individual who was interviewed about his use of time.
${ }^{10}$ These estimates do not correspond to published ratios from the Current Population Survey (CPS) for several reasons. First, the reference population for the ATUS is age 15 years and older, whereas it is 16 years and older for the CPS. Second, ATUS data are collected continuously, the employment reference period being the 7 days prior to the interview. By contrast, CPS data refer to employment during the week containing the 12th of the month. Finally, the CPS accepts answers from household members about other household members whereas such proxy responses are not allowed in the ATUS.
${ }^{11}$ Persons employed part time usually work less than 35 hours per week; persons employed full time usually work 35 or more hours per week.
${ }^{12}$ The difference between these estimates is not statistically significant at a 90 percent confidence level.
${ }^{13}$ These statements refer specifically to parents who were living in the same household as their biological, step-, or adopted children under age 18.
${ }^{14}$ The labor force consists of all persons who are employed and unemployed.

There was little difference in the percent of men aged 55 to 64 and 65 to 74 who were unemployed.
${ }^{15}$ Note also that chart 4 shows averages for a 3-year age range, centered on the age shown. This was done to smooth the lines.
${ }^{16}$ Gary S. Becker. "A Theory of the Allocation of Time." The Economic Journal, 1965, vol. 75, No. 299, pp. 493-517.
${ }^{17}$ Note also that chart 5 shows averages for a 3-year age range, centered on the age shown. This was done to smooth the lines.
${ }^{18}$ Results from the 2006 and 2007 atus Eating and Health modules show that persons aged 75 and older were more likely to describe their general health as "fair" or "poor" and less likely to describe it as "excellent" or "very good" than were persons aged 65 to 74 or younger.
${ }^{19}$ These data refer specifically to parents who were living in the same household as their biological, step-, or adopted children under age 18.
${ }^{20}$ The labor force is comprised of all persons who are employed, looking for work, or on temporary layoff from a job.

## APPENDIX: 2003-07 ATUS activity categories classified as unpaid household work

| Name of unpaid household work category |  | 6-digit activity code ${ }^{1}$ | 6-digit activity code name |
| :---: | :---: | :---: | :---: |
| Household activities | Cleaning | 020101 | Interior cleaning |
|  | Laundry and sewing | $\begin{aligned} & 020102 \\ & 020103 \end{aligned}$ | Laundry Sewing, repairing, and maintaining textiles |
|  | Other housework | $\begin{aligned} & 020104 \\ & 020199 \\ & \hline \end{aligned}$ | Storing interior household items, inc. food Housework, n.e.c. ${ }^{2}$ |
|  | Food and drink preparation | $\begin{aligned} & 020201 \\ & 020202 \\ & 020203 \\ & 020299 \end{aligned}$ | Food and drink preparation <br> Food presentation <br> Kitchen and food clean-up <br> Food and drink prep, presentation, and clean-up, n.e.c. ${ }^{2}$ |
|  | Maintenance and repair | $\begin{aligned} & \hline 020301 \\ & 020302 \\ & 020303 \\ & 020399 \\ & 020401 \\ & 020402 \\ & 020499 \\ & 020701 \\ & 020799 \\ & 020801 \\ & 020899 \end{aligned}$ | Interior arrangement, decoration, and repairs <br> Building and repairing furniture <br> Heating and cooling <br> Interior maintenance, repair, and decoration, n.e.c. ${ }^{2}$ <br> Exterior cleaning <br> Exterior repair, improvements, and decoration <br> Exterior maintenance, repair and decoration, n.e.c. ${ }^{2}$ <br> Vehicle repair and maintenance (by self) <br> Vehicles, n.e.c. ${ }^{2}$ <br> Appliance, tool, and toy set-up, repair, and maintenance (by self) Appliances and tools, n.e.c. ${ }^{2}$ |
|  | Lawn and garden care | $\begin{aligned} & 020501 \\ & 020502 \\ & 020599 \end{aligned}$ | Lawn, garden, and houseplant care Ponds, pools, and hot tubs Lawn and garden, n.e.c. ${ }^{2}$ |
|  | Pet care | $\begin{aligned} & 020601 \\ & 020699 \end{aligned}$ | Care for animals and pets (not veterinary care) Pet and animal care, n.e.c. ${ }^{2}$ |
|  | Household management | $\begin{aligned} & 020901 \\ & 020902 \\ & 020905 \\ & 020999 \end{aligned}$ | Financial management <br> Household and personal organization and planning <br> Home security <br> Household management, n.e.c. ${ }^{2}$ |
|  | Household activities, n.e.c. ${ }^{2}$ | 029999 | Household activities, n.e.c. ${ }^{2}$ |
| Caring for and helping household members | Caring for and helping household children | $\begin{aligned} & 030101 \\ & 030102 \\ & 030103 \\ & 030104 \\ & 030105 \\ & 030186 \\ & 030108 \\ & 030109 \\ & 030110 \\ & 030111 \\ & 030112 \\ & 030199 \\ & 030201 \\ & 030202 \\ & 030203 \\ & 030204 \\ & 030299 \\ & 030301 \\ & 030302 \\ & 030303 \\ & 030399 \\ & \hline \end{aligned}$ | Physical care for household children <br> Reading to/with household children <br> Playing with household children, not sports <br> Arts and crafts with household children <br> Playing sports with household children <br> Talking with/listening to household children <br> Organization and planning for household children <br> Looking after household children (as a primary activity) <br> Attending household children's events <br> Waiting for/with household children <br> Picking up/dropping off household children <br> Caring for and helping household children, n.e.c. ${ }^{2}$ <br> Homework (household children) <br> Meetings and school conferences (household children) <br> Home schooling of household children <br> Waiting associated with household children's education <br> Activities related to household child's education, n.e.c. ${ }^{2}$ <br> Providing medical care to household children <br> Obtaining medical care for household children <br> Waiting associated with household children's health <br> Activities related to household child's health, n.e.c. ${ }^{2}$ |
|  | Caring for and helping household adults | $\begin{aligned} & 030401 \\ & 030402 \\ & 030403 \\ & 030404 \\ & 030405 \\ & 030499 \\ & 030501 \\ & 030502 \\ & 030503 \\ & 030504 \\ & 030599 \end{aligned}$ | Physical care for household adults <br> Looking after household adult (as a primary activity) <br> Providing medical care to household adult <br> Obtaining medical and care services for household adult <br> Waiting associated with caring for household adults <br> Caring for household adults, n.e.c. ${ }^{2}$ <br> Helping household adults <br> Organization and planning for household adults <br> Picking up/dropping off household adult <br> Waiting associated with helping household adults <br> Helping household adults, n.e.c. ${ }^{2}$ |
|  | Caring for and helping household members, n.e.c. ${ }^{2}$ | 039999 | Caring for and helping household members, n.e.c. ${ }^{2}$ |


| APPENDIX: Continued-2003-07 ATUS activity categories classified as unpaid household work |  |  |
| :---: | :---: | :---: |
| Name of unpaid household work category | 6-digit activity code ${ }^{1}$ | 6-digit activity code name |
| Purchasing goods and services | 070101 070102 070103 070104 070105 070199 070201 070299 070301 079999 080101 080102 080201 080202 080203 080299 080601 080699 080701 080702 080799 090102 090103 090104 090199 090201 090202 090299 090301 090399 090401 090499 090501 090502 090599 099999 100103 100302 160104 160106 160107 160108 | Grocery shopping <br> Purchasing gas <br> Purchasing food (not groceries) <br> Shopping, except groceries, food and gas <br> Waiting associated with shopping <br> Shopping, n.e.c. ${ }^{2}$ <br> Comparison shopping <br> Researching purchases, n.e.c. ${ }^{2}$ <br> Security procedures related to consumer purchases <br> Security procedures related to consumer purchases, n.e.c. ${ }^{2}$ <br> Consumer purchases, n.e.c. ${ }^{2}$ <br> Using paid childcare services <br> Waiting associated with purchasing childcare services <br> Using paid childcare services, n.e.c. ${ }^{2}$ <br> Banking <br> Using other financial services <br> Waiting associated with banking/financial services <br> Using financial services and banking, n.e.c. ${ }^{2}$ <br> Activities related to purchasing/selling real estate <br> Waiting associated with purchasing/selling real estate <br> Using real estate services, n.e.c. ${ }^{2}$ <br> Using veterinary services <br> Waiting associated with veterinary services <br> Using veterinary services, n.e.c. ${ }^{2}$ <br> Using interior cleaning services <br> Using meal preparation services <br> Using clothing repair and cleaning services <br> Waiting associated with using household services <br> Using household services, n.e.c. ${ }^{2}$ <br> Using home maint/repair/décor/construction services <br> Waiting associated with home main/repair/décor/construction <br> Using home maint/repair/décor/construction services, n.e.c. ${ }^{2}$ <br> Using pet services <br> Waiting associated with pet services <br> Using pet services, n.e.c. ${ }^{2}$ <br> Using lawn and garden services <br> Waiting associated with using lawn and garden services <br> Using lawn and garden services, n.e.c. ${ }^{2}$ <br> Using vehicle maintenance or repair services <br> Waiting associated with vehicle maint. or repair services <br> Using vehicle maint. and repair services, n.e.c. ${ }^{2}$ <br> Using household services, n.e.c. ${ }^{2}$ <br> Obtaining licenses and paying fines, fees, taxes <br> Waiting associated with obtaining licenses <br> Telephone calls to/from salespeople <br> Telephone calls to/from household services providers <br> Telephone calls to/from paid child or adult care providers <br> Telephone calls to/from government officials |
| Travel related to unpaid household work | 180280 180381 180382 180399 180701 180782 180801 180802 180806 180807 180901 180902 180903 180904 180905 180999 | Travel related to household activities <br> Travel related to caring for and helping household children <br> Travel related to caring for and helping household adults <br> Travel related to caring for and helping household members, n.e.c. ${ }^{2}$ <br> Travel related to grocery shopping <br> Travel related to shopping (except grocery shopping) <br> Travel related to using childcare services <br> Travel related to using financial services and banking <br> Travel related to using real estate services <br> Travel related to using veterinary services <br> Travel related to using household services <br> Travel related to using home main./repair/décor./construction services <br> Travel related to using pet services (not veterinary) <br> Travel related to using lawn and garden services <br> Travel related to using vehicle maintenance and repair services <br> Travel related to using household services, n.e.c. ${ }^{2}$ |
| These 6-digit activity codes correspond to the atus 2003-07 pooled ${ }^{2}$ N.E.C. refers to "not elsewhere classified." lexicon (www.bls.gov/tus/lexiconnoex0307.pdf). |  |  |

# Nonfamily youths temporarily employed in agriculture 

John C. Becker, Fern K. Willits, Anastasia Snyder, Dennis J. Murphy, James Hilton, Andrea Ryan, and Prem Bahandari

The study presented in this research summary was undertaken to increase researchers' understanding of the nature of the 12 - to 20 -year-old farm workforce that is employed by people other than youths' parents. The focus of the research was, on the one hand, the characteristics and perspectives of the agricultural employers who hire youth workers, and on the other hand, the attributes and views of the youth workers themselves. The aim was to answer a series of questions: How well do these young workers meet the needs and expectations of their employers? What are the effects of the farmwork experience on the youth workers? What are their reasons for seeking agricultural employment? What are these youths' perceptions of farming after their labor? and, finally, Do these youths show any interest in later employment in agriculture? Answering these questions is important because the answers may lead

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to knowledge about the role these workers will play in the future of U.S. agriculture.

The study was made possible by a grant to researchers at The Pennsylvania State University from the Youth Farm Safety Education and Certification Program, Cooperative State Research, Education, and Extension Service of the U.S. Department of Agriculture. Data from surveys of a sample of agricultural employers and their young employees were used to address the following general objectives:

1. Create a national profile of (a) the characteristics of agricultural producers who employ youths in the $12-20$-years age group, (b) the work responsibilities required of these young workers, and (c) the employers' perceptions of the skills that are most desirable in their young employees.
2. Identify (a) the characteristics of youth workers in the target age group, (b) their demographic characteristics, (c) their current skills, (d) the source(s) of their training, (e) their future plans for working in agriculture, and (f) the barriers they perceive to future agricultural employment.

## Methodology

Names and addresses of farm businesses throughout the United States were obtained from a commercial sampling organization (Survey Sampling, Inc.) and from a national farming publication (Farm Journal). During 2004-05, letters were mailed to 32,119 of these businesses, requesting information on whether they had hired any workers (other than
dependents of the farm operator) between 12 and 20 years of age for less than 6 months during the preceding 12 -month period. A total of 1,777 of the letters were returned as undeliverable. Of the remaining 30,342 businesses, 16,921 reported that they had not hired any youths meeting the study's criteria. Sequential mailings of survey materials, a postcard reminder, and a duplicate questionnaire at 2 -week intervals resulted in the return of 1,440 completed survey forms from employers.

In each case, the employer was asked to provide names and contact information for up to five youth workers meeting the criteria of the study. A total of 879 of the 1,440 employers who responded to the survey complied with this request and provided the names and addresses of 1,875 employees. Questionnaires mailed to these youths resulted in the return of 694 completed forms from the young employees.

## Agricultural employers of youths

The study dealt only with agricultural employers of youths between the ages of 12 and 20 who were not the dependents of the farm or ranch operator and who were employed for less than 6 months of the previous year. Excluded were the many farm operators whose sons and daughters worked, either for compensation or as unpaid family labor, on the home farms. Others who were excluded were employers who hired youths for more than 6 months and those who employed youth workers younger than 12 years or older than 20 years. The data provided information that would be useful for developing a generalized
profile of the targeted population of agricultural employers who hire temporary nonfamily youth workers.

## A generalized profile of agricultural

 employers of youths. In developing a generalized profile of agricultural employers of youths, it is important to recognize that statistical averages and general descriptions focus on the broad picture, ignoring the variety and diversity of these employers, the types of work responsibilities they require of their young workers, and the skills they want them to possess. The employers studied in this research summary varied widely in the characteristics of their farming operations. Some of the larger combination farm-ranch establishments consisted of thousands of acres; others comprised less than 100 acres. Some had millions of dollars in farm sales; others sold less than $\$ 10,000$ a year in farm products. Some dealt almost exclusively with crops, others were primarily livestock operations, and still others had both crop and animal enterprises. Many hired only a single youth worker; others hired hundreds. Given the pre-ceding caveat, what do the following data allow us to conclude concerning a generalized profile of agricultural employers who hired nonfamily temporary youth workers? ${ }^{1}$

- The farming operations of agricultural employers of youth workers had more acres and more farm sales than the average of all farms in the United States. (See table 1.)
- Agricultural employers of youth workers were likely to have crops only or both crops and animals as major enterprises, rather than only animal enterprises. (See table 2.)
- Employers of youth employees tended to hire only one or two such workers; few hired as many as five employees who were less than 20 years of age.
- Employers generally hired youth workers to help with seasonal tasks, rather than to catch up with ongoing work that was behind schedule or to obtain workers with needed skills.

Table 1. Comparison of farms and ranches in the employer sample with all U.S. farms as reported in the $\mathbf{2 0 0 2}$ Census of Agriculture
[In percent]

| Farm or ranch characteristic | $\begin{aligned} & \text { Employer } \\ & \text { sample } \\ & (N=1,440) \end{aligned}$ | U.S. Census of Agriculture ${ }^{1}$ ( $N=2,128,982$ ) |
| :---: | :---: | :---: |
| Acreage: |  |  |
| Less than 50 acres................................... | 12.0 | 34.8 |
| 50-179 acres........................................... | 15.7 | 31.0 |
| 180-499 acres ......................................... | 24.0 | 18.3 |
| 500-999 acres ......................................... | 15.5 | 7.6 |
| 1,000 or more acres ................................ | 32.8 | 8.3 |
| Farm sales: |  |  |
| Less than \$10,000 ................................... | 3.5 | 59.3 |
| \$10,000-\$49,999.................................... | 11.6 | 19.5 |
| \$50,000-\$99,999..................................... | 12.5 | 6.6 |
| \$100,000 or more .................................... | 72.4 | 14.6 |

[^6]- Employers tended to locate youth workers through informal channels-the youths were referred by friends or relatives of the employer and by other farm-workers-or through the youth's directly applying for work.
- Most of these employers hired youths to perform general chores and maintenance activities around the farm or ranch, to do crop-related hand labor, or to carry out various machine-related tasks, including driving tractors and other farm vehicles, maintaining and repairing machines, and hitching and unhitching equipment. (See table 3.)
- Employers believed that possessing good work habits-including following directions, using time well, making simple work-related decisions, and working well with others-were more important than having academic skills or specialized knowledge of agriculture. (See table 4.)
- Overall, these agricultural employers were satisfied with the skills that their youth employees brought to the job.


## Explicating the diversity of agricultural

 employers. Although the preceding profile provides a generalized summary of agricultural employers who hire temporary youth workers (other than their own dependents), it is important to recognize the heterogeneity within this employer population. Substantial proportions of the employers surveyed held opinions that differed from those described by the foregoing data, depending upon region, farm size, sales, major enterprises, number of youths hired, and other factors. Thus,- Although, overall, the farming operations of agricultural employers

Table 2. Characteristics of agricultural employers $(\mathbf{N}=1,440)^{1}$

| Characteristic | Percent of employers reporting |
| :---: | :---: |
| Major farm enterprise: |  |
| Crop.... | 43.3 |
| Animal ............................................................................. | 13.4 |
| Both crop and animal ...................................................... | 43.3 |
| Number of youths hired: |  |
| 1 ............................................................................................ | 36.3 |
| 2......................................................................................... | 23.8 |
| 3 or 4.................................................................................. | 20.9 |
| 5 to 9................................................................................. | 12.1 |
| 10 or more ......................................................................... | 6.9 |
| Reason for hiring youth worker: ${ }^{2}$ |  |
| Needed help with seasonal tasks... | 79.9 |
| Needed help with catchup work that was behind schedule $\qquad$ | 21.5 |
| Wanted to provide youth with farm experience or training $\qquad$ | 33.0 |
| Asked by friend to hire youth ............................................ | 17.2 |
| Needed special skills that youth had ................................. | 7.4 |
| How youth worker was located: ${ }^{2}$......................................... |  |
| Referred by friend or relative ............................................ | 53.4 |
| Employed in previous year ............................................... | 34.4 |
| Youth applied directly ....................................................... | 31.5 |
| Referred by another farmworker...................................... | 22.8 |
| Advertised in newspaper or bulletin board ....................... | 2.9 |
| Contacted employment agency........................................ | 1.0 |
| Referred by labor contractor............................................. | 1.9 |

${ }^{1}$ Numbers of cases used in calculating percentages may vary from totals because some employees failed to respond to some survey questions.
${ }^{2}$ Percentages do not add to 100 because employers provided multiple responses to these questions.
of youth workers had more acres and more farm sales than the average of all farms in the United States, more than one-fourth of the farms and ranches in the employer sample had less than 180 acres, and another fourth had farm sales of less than $\$ 100,000$.

- Whereas agricultural employers of youth workers were likely to have crops only or both crops and animals as major enterprises, rather than only animal enterprises, the percentage of cropsonly farms in a region varied from 71 percent of west coast farms to 27 percent of those in the south, and the incidence of animal-only operations varied from 8 percent on the west coast to 20 percent in the southwest and 23 percent in the northeast. ${ }^{2}$
- Although employers of youth employees tended to hire only 1 or 2 such workers, and few hired as many as 5 employees who were less than 20 years of age, nearly 1 in 5 employers did hire more than 5 workers, and a small per-

Table 3. Employer reports of tasks performed by youth workers, by age of worker
[Percent of employers reporting]

| Task category | Age of worker |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 18-20 years | 16-17 years | 14-15 years | 12-13 years |
| Chores or maintenance................................................... | 83.8 | 85.9 | 81.2 | 78.4 |
| Machinery related........................................................... | 77.4 | 74.4 | 68.8 | 39.8 |
| Animal related................................................................. | 39.7 | 40.7 | 37.1 | 39.8 |
| Crop related .................................................................... | 71.0 | 66.8 | 63.8 | 72.4 |
| Business related.............................................................. | 16.3 | 15.4 | 17.0 | 12.2 |

[^7]cows or goats.
Crop-related tasks: Harvesting tree crops; harvesting ground crops; handworking or picking rocks; sorting or grading fruits or vegetables; landscaping, planting, pruning trees, shrubs, or vines; scouting for pests and diseases; applying fertilizers or protectants.

Note: An employer was designated as having workers engaged in a task category if the employer reported that one or more employees performed any of the specific tasks in the category.

Table 4. Employers' evaluations of the importance of various youth workers' skills and work habits, by age of worker ${ }^{1}$

| Characteristic | 18-20 years | 16-17 years | 14-15 years | 12-13 years |
| :---: | :---: | :---: | :---: | :---: |
| Academic skills: |  |  |  |  |
| Reading and writing........................................................ | 52.7 | 53.5 | 45.8 | 36.0 |
| Animal related....................................................... | 50.9 | 51.0 | 44.9 | 40.0 |
| Work habits: |  |  |  |  |
| Following directions ........................................................ | 97.2 | 95.4 | 93.2 | 87.6 |
|  | 90.7 | 89.5 | 87.0 | 80.0 |
| Working well with others ......................................... | 85.8 | 86.1 | 84.0 | 76.7 |
| Working independently........................................... | 83.1 | 82.7 | 74.7 | 65.0 |
| Making simple work-related decisions ......................... | 78.8 | 79.7 | 74.7 | 64.4 |
| Machinery skills: |  |  |  |  |
| Knowing how to care for tools or machinery ............... | 66.5 | 61.4 | 45.4 | 41.4 |
| Knowing how to use tools or machinery ...................... | 65.8 | 61.0 | 45.0 | 39.8 |
| Knowing what tools or machinery to use ..................... | 56.8 | 57.9 | 38.2 | 31.8 |
| Skills in working with crops.................................... | 55.1 | 47.8 | 40.5 | 41.4 |
| Skills in working with animals ................................... | 41.0 | 42.3 | 34.1 | 38.9 |

${ }^{1}$ Percent of employers reporting that the skill or work habit was essential or very important.
centage ( 7 percent) hired 10 or more workers. Youths hired by the latter employers accounted for nearly half (48 percent) of all of the youth workers reported in the survey.

- Whereas most employers who hired youth workers for less than 6 months during the year hired White, non-Hispanic young persons, more than 1 in 4 of the employers of 18 - to 20 -year-olds reported hiring Hispanic or Afri-can-American youths or youths of other ethnic or racial backgrounds, and about 1 in 6 of the employers of workers younger than 18 years also did so.
- The statement that employers generally hired youth workers to help with seasonal tasks, rather than to catch up with ongoing work that was behind schedule or to obtain workers with needed skills was true, but more than 1 in 5 employers did hire these workers to help with catchup work, and a third reported that
one reason for hiring youths was to provide them with farm experience and training. Reasons for hiring also varied by major farm enterprise and number of youth employees hired, with those hired to work on crop farms and on farms with more youth workers the most likely to be hired to help with seasonal tasks. Farms and ranches that had major animal enterprises were more likely than employers on crop farms to hire youths to help with catchup work.
- The statement that employers tended to locate youth workers through informal channels or through the youth's directly applying for work also was true, although some employers, depending upon region, size of operation, major farm enterprise, and number of workers hired, used more formal labor sources. Employers hiring 10 or more workers were much more likely than those employing fewer youths to use labor contractors, advertisements, or
referrals from other workers to locate youth employees.
- Although most of the employers who hired youths hired them to perform general chores and maintenance activities around the farm or ranch, to do crop-related hand labor, or to carry out various machine-related tasks, about 40 percent of employers of youths in all age groups also reported that their young employees worked in animal-related tasks, and nearly 1 in 6 reported that their workers older than 13 years performed at least some business-related tasks, such as working at a farm stand or sales area or doing businessrelated computer tasks. Moreover, youths performing some tasks-for example, milking cows or caring for animals-spent most of their time carrying out those tasks rather than working on more general maintenance, crop-related, or machinery tasks.
- Employers did believe that possessing good work habits were
more important than having academic skills or specialized knowledge of agriculture, but such a belief should not be construed to mean that employers felt that agricultural skills were unimportant for their youth workers. Indeed, the majority of employers indicated that agricultural skills were important, if not essential, to the youths' carrying out the tasks they were assigned. These employers placed special emphasis on the importance of machinery-related skills, such as knowing what tools to use and how to use and care for them.
- Although, overall, these agricultural employers were satisfied with the skills that their youth employees brought to the job, sizeable proportions of employers expressed less than high levels of satisfaction with certain of their young workers' skill areas. More than 1 in 3 employers were less than highly satisfied with their employees as regards each of the following: use of time, ability to make simple work-related decisions, skill in working independently, skill in caring for tools and machinery, and knowledge of what tools to use and how to use them. Moreover, the levels of satisfaction varied by major farm enterprise and by number of workers employed.


## Youth agricultural workers

Data bearing on the characteristics of the youth workers were available from both the employer survey and the employee survey. The information obtained was used to address the second general objective of the project: to identify (a) the demographic characteristics of youth workers in the
target age group, (b) other characteristics, (c) their current skills, (d) the source(s) of their training, (e) their future plans for working in agriculture, and (f) the barriers they perceive to future agricultural employment.

Demographic characteristics of youth workers: employer responses. Employers were asked to indicate, by gender, age, ethnicity, and full-time or part-time work status, the number of youths fitting the criteria of the study whom they had employed during the preceding year. Information on 6,111 targeted youth workers was obtained:

- Overall, 75 percent of the youths were males; only 25 percent were females.
- Youths between 18 and 20 years accounted for nearly half (47 percent) of all youth workers, with an additional 31 percent between 16 and 17 years. Just 17 percent were between 14 and 15 years, and only 5 percent were younger than 14 years.
- Sixty-four percent of all youth workers were White, non-Hispanic youths; about 1 in 3 was Hispanic; and the remaining 3 percent were Asians, African-Americans, or members of other racial or ethnic groups. Among 18- to 20-year-olds, nearly half (49 percent) of the youth workers were Hispanic. Although that percentage declined for younger workers, 23 percent of those 16 to 17 years and 18 percent of the 14 - to 15 -yearolds were Hispanic.
- Only about a third of the youths worked full time ( 35 or more hours a week), with the remaining two-thirds working only part time during their period of employment.

Youth worker characteristics: employee responses. The sample of youth employees was obtained by asking each employer to submit up to five names of their youth workers who fit the criteria of the study. Thus, if only 1 youth was employed, that individual fell within the sample. However, if an employer hired 10 or 100 youths, he or she still submitted no more than five names. As a result, youths who worked for employers who hired five or fewer workers were overrepresented in the sample. Sample bias also may have been introduced by the failure of many youths to respond to the survey. Whatever the cause, the youth employees surveyed contained somewhat greater proportions of younger, full-time workers than those reported by their employers. Moreover, although one-third of all workers reported by the employers were Hispanic, less than 5 percent of the youths who responded to the employee survey were Hispanic. (See table 5.)

Although the selective nature of the employee sample meant that generalizations concerning youth worker characteristics should be interpreted with caution, the employee survey provided additional information on the self-perceived skills of these youth workers, the source(s) of their training, their future plans for work in agriculture, and the barriers they perceived to future agricultural employment. This information was not available elsewhere.

Worker skills. Youths evaluated their own academic skills and work habits highly, with 95 percent or more reporting that they were at least somewhat skilled in reading and writing, arithmetic and mathematics, following directions, working well with others, and working independently. Although also high, their self-ratings on two categories of skills-using time well and making simple work-

| Table 5.Characteristics of youth workers reported by employers, <br> and characteristics of youths reported by employees |  |  |  |
| :--- | :--- | :--- | :--- |
| [In percent] |  |  |  |
|  | Characteristic | Employer <br> sample | Employee <br> sample |

related decisions-were somewhat lower than their ratings for the other work habits.

Like their employers, youths felt that work habits (using time wisely, making simple work-related decisions, following directions, working well with others, and working independently) were more important than any specific skills in working with crops or animals. However, they reported higher importance ratings for these agricultural skills, and attached lower importance to academic skills, than did the employers.

Worker training. Almost half (49 percent) of the youth workers surveyed reported that they had ever lived on a farm, and not all of these reported that they had received training on tasks relevant to their agricultural employment. Most youth workers reported that they learned the skills that they used on their farm or ranch work on that job. On-the-job training
was thus an important element in the employment of these youths, underscoring the importance of following directions in performing their work.

About 4 out of every 10 youth employees reported that they had taken or were taking vocational agriculture classes, and nearly three-quarters of these youths indicated that the skills they learned in those classes were at least somewhat useful in their agricultural job. That more than 1 in 4 workers who had taken such classes did not find their learning there to be useful could reflect the fact that many of the tasks they were assigned were low-skill, manual-labor tasks or that some specialized skills are not part of an agriculture curriculum. Participation in $4-\mathrm{H}$ and the National FFA Organization (formerly Future Farmers of America) accounted for other sources of training.

Plans for future agricultural employment. Although nearly 80 percent
of the youths who were surveyed reported that they were satisfied with their agricultural jobs, just 15 percent of the youths surveyed expressed an interest in being employed as an agricultural worker on a farm or ranch belonging to someone else when they would reach 30 years of age. A substantial proportion (more than 70 percent) of the youths who were surveyed reported that they planned to go to college. Hence, they likely looked upon their farm or ranch work as temporary, rather than as a source of income in adulthood.

Most viewed their farm or ranch job as a source of spending money or as a means of earning money for future educational expenses, and they felt that the pay they received was as good as or better than what they would have received from other work that they could get. Although these youths reported overwhelmingly that they had learned new skills that would benefit them in the future, the survey did not specify the nature of those skills; hence, it is unclear whether the youths perceived the skills they learned as either related to technical agriculture or relevant to their future employment. However, for the 45 percent of the youths who aspired to own a farm or ranch when they were 30 years of age, the farmwork experience may have contributed to that aspiration or to the acquisition of skills needed to achieve that goal.

## Future research

By focusing on agricultural employers as the unit of analysis, the study presented in this research summary has shed some light on the characteristics of farm or ranch operators who hire temporary nonfamily youth workers, how they locate these employees, the nature of the tasks they expect their employees to perform, the skills they
deem to be important, and how satisfied they are with their young workers. Most of these employers hired only one or two youths, recruiting them through friends and family members, involving them largely in unskilled or semiskilled tasks, and expecting minimal agricultural knowledge or skill. Most expressed satisfaction with their young workers.

However, in describing the characteristics of youth workers on the basis of the sample of the 694 young employees who answered the employee survey, it is important to underscore the fact that the sample was not representative of all youth agricultural workers in the United States. The method of sampling and the selective response of youths to the mailed questionnaire meant that those who provided data for the employee analysis consisted almost entirely of young
people employed by neighbors and friends in their home areas and by employers who hired fewer than 5 youths in a year. Moreover, these youths were almost all non-Hispanic whites, lived with both parents, had plans to attend college, and were working to acquire spending money for themselves rather than to contribute to their families' support. To the extent that the total youth agricultural labor force in the country differs from these characteristics, conclusions drawn from the employee analysis presented here must be viewed with caution.

To understand the goals, perceptions, and plans of youths working in agriculture, additional research is needed that focuses on all such youths. This means obtaining data on various types of youth workers, not just seasonal ones, who are unrelated to their
employers. Such an analysis requires developing a sampling plan that focuses on workers, not employers, so that youths who are employed in relatively large numbers by a given employer are adequately represented.

## Notes

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# The rise and fall of guaranteed income policy 

The Failed Welfare Revolution: America's Struggle over Guaranteed Income Policy. By Brian Steensland, Princeton, NJ, Princeton University Press, 2007, 316 pp., $\$ 37.50 /$ cloth.

How does one review a book such as this book without divulging so much information that a potential reader might be discouraged from buying it? The book consists of 8 chapters and 246 pages of text, the balance being notes and bibliography. It is a nicely written, interesting, and in many ways thought-provoking book, revisiting an episode in American politics and history of approximately 20 years (1960-80). It focuses on the pressing problem of poverty in America in that era and, secondarily, the acutely divisive issue of race relations. The book also provides thoughts about poverty eradication from a previous era and in today's global economy.

Brian Steensland is a sociology professor, not an economist. Consequently, The Failed Welfare Revolution is a historical and sociological interpretation of the importance of the prevailing cultural milieu in shaping and accepting revolutionary new, untried government policies. The author does include issues raised by the general public, economists, politicians, and White House advisors for and against the plans, but without the usual extravagance of economic data, charts, graphs, tables, equations, mathematical solutions, and rigorous and abstract economic analysis.

There was always in America a certain amount of concern for the poor, both inside and outside of the workforce, but programs administered by the individual states varied widely in their benefit levels. The first ma-
jor federal programs were the Social Security Act of 1935 and the Aid to Dependant Children's (ADC) program. As described in the book, "the impetus to do something real" about the problem came from Economists Milton Friedman and George Stigler who, in the mid 1940s, wrote a paper that proposed a guaranteed annual income (GAI) and a negative income tax (NIT). They thought that a more equitable tax system was an effective, efficient, libertarian, and overall better way of alleviating poverty than increasing the minimum wage; George Stigler, in particular, argued against minimum wage increases.

At issue was whether income assistance should be expected in the absence of work employment. Economist John Kenneth Galbraith answered in the affirmative. Galbraith poignantly argued that NIT was necessary because viable jobs were not available to everyone. He pointed out that labor market participation and income needed to be separated, especially in an economy that was quickly shifting its production base to high technology, luxury goods, and services, which was leaving many previously productive workers unemployed with very little chance of finding employment.

The welfare revolution began as an exploration in the John F. Kennedy administration, was seriously considered by Lyndon Johnson, then worked out and popularized during the Richard Nixon years. The guaranteed annual income part of it was most strongly promoted by government experts in the Johnson administration and most vigorously opposed by Professors Arthur Burns and Martin Anderson of Columbia University. The program was designed to provide guaranteed annual income payments to those whose income for whatever
reason fell below what was considered an adequate standard of living; equally important, it promoted freedom of choice as to how this money was spent by its recipients. It was considered "the right thing to do" in an age of affluence and increasing wealth for those who had a good education, the right job, and the right social and political connections. The program was only half-heartedly extended by Gerald Ford, however, and effectively ended during the Jimmy Carter administration in 1979.

There were a number of points of contention regarding the GAI programs: Should a distinction be drawn between the deserving and the undeserving poor and, if so, what should it be? Would providing income to the millions of low-paid workers and welfare recipients (mostly blacks, and single and unmarried mothers) distort the labor market, especially in the South where most of the labor intensive industries were located? Would GAI bring an end to the minimum wage? Would improving the conditions of the undeserving poor add a disincentive to work productively? In these contexts even the major labor unions showed little enthusiasm for GAI. The black leadership and the National Welfare Rights Organization (NWRO) actually opposed the plans because they felt the benefits weren't high enough.

Four paradigms were proposed, three of which favored eliminating the boundaries between the deserving and undeserving poor. The fourth, named the Family Assistance Act (FAA) and favored by the proponents of the rehabilitation paradigm, insisted on maintaining the categorical distinctions drawn among the poor and the stigma that reinforced these distinctions. It is this paradigm which prevailed but, according to the author,
led to the demise of the GAI. This occurred in 1975 when the Senate Finance Committee, composed mostly of Southern Democrats and chaired by Louisiana Senator Russell Long, decided not to forward the proposed GAI legislation to the Senate floor for a vote. Instead, Long proposed the Earned Income Tax Credit (EITC) to provide tax relief for the working poor by reducing their tax burden and providing a refund. It passed with a bipartisan vote of 57-21 in the Senate and also passed in the House.

The GAI proposals were not successful because they still "provided essentially the same income benefits to all families whether or not they had employable members, leading to concerns about work and deservedness." As noted by Arthur Burns and other opponents, the deserving beneficiaries should have been separated from the undeserving ones and two separate programs devised. A fact not pointed out in the book is that this anomaly could also have been remedied by a minimum wage and tax policy that compensated the employer for the higher minimum wage, allowing the business owner to remain fully staffed when supplemented by the EITC for the worker. An opposing consideration: increasing the minimum wage is an income policy more likely accepted during a booming economy,
which was not the case in the latter years of the Nixon administration.

Behind the NIT debate was the unconfirmed affirmation that higher income tax rates lower the incentive to work, while lower income tax rates raise the incentive to work and increase tax revenues. This was the underlying premise of the Laffer curve of the Ronald Reagan era and Stigler's point of view as well: "Income of the poor cannot be increased without impairing incentives." But which of the poor did Stigler have in mind: the working poor by raising their minimum wage, or the chronically poor by raising their GAI?

These are, as Steensland points out, debatable points. Poverty was an enormous problem 40 years ago and remains an enormous problem today. Without a doubt the NIT provided tangible benefits, such as streamlining the administrative costs of a minimum income program, eliminating waste, fraud, and addressing one of the major symptoms of poverty: lack of money. The "welfare revolution" in the end is a continuing debate about whether and how to identify and separate out the programs designed to help those with "moral failings" from those who, through no fault of their own, find themselves beset by circumstances that keep them poor. Despite popular support for the plan, the
welfare revolution ultimately failed under Nixon because of the influence of conservative Southern Democrats; the adamant opposition of the Chamber of Commerce; and because conservatives, liberals, and the black leadership all shared a strong dislike for Nixon.

The Failed Welfare Revolution is an interesting retelling and synthesis of what happened some 40 years ago, and anybody interested in the subject will find this work to be of value. However, what the book lacks most is support for the author's main point: that the social milieu of the time matters a great deal in the passing of legislation. In this case, that public opinion, which was supportive of assisting the poor, would prevail against the unacceptable notion that the "undeserving poor" (the chronically unemployed) receive the same treatment as the "deserving poor" (the minimum wage employed poor). As for the sociological argument of the book that culture mattered and keeps on mattering, well, it is debatable whether anything new was added to this well-known proposition.

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## The socioeconomic effects of height

Does it literally pay to be tall? It appears so, according to "Life at the top: the benefits of height," a paper by Angus S. Deaton and Raksha Arora (NBER Working Paper Series, National Bureau of Economic Research, June 2009). Deaton and Arora use data from the Gallup-Healthways Well-Being Index polling to study the effect of height on income, happiness, and other factors that enter into quality of life. The authors analyze men's and women's responses separately.

Men and women who were polled rated their life as a whole on a scale of 1 to 10 , a score of 1 representing "the worst possible life for [the respondent]," and score of 10 representing "the best possible life for [the respondent]." Each additional inch of height was found to raise the reported evaluation of life by the same amount as a 4.4-percent increase in family income for men and by the same amount as a 3.8-percent increase in family income for women. When regressions were run separately by race and ethnicity, the results of Whites and Hispanics were very similar to the overall results, but among Blacks and people of Asian descent, height was not found to improve people's evaluations of their own lives.

The poll also asked people whether they experienced much enjoyment, happiness, sadness, anger, stress, or physical pain during the previous day. Taller respondents were less likely to report pain and sadness and more likely to report happiness and enjoyment. However, taller respondents experienced more stress and anger than their shorter counterparts, although this effect is reversed when the researchers control for race and ethnicity. Whites and Blacks average about the same height, whereas Hispanics and Asians tend to be shorter. It is because white people reported more stress than Asian,
black, or Hispanic people that higher levels of stress were found among taller people.

The authors of the paper also calculated the average height of people in each of 11 categories of monthly income. On the whole, the average heights of people in the higher paying categories were greater than those of people in the lower paying categories. The researchers did a similar analysis for six categories of education level and found that a higher level of education is always associated with a greater mean height. Because controls for education and income diminish substantially most of the positive effects of height, the authors conclude that the benefits of height can be explained almost completely by the positive association between height and both education and income.

## Rising wage inequality

Many researchers have documented a rise in wage inequality in the United States over the last several decades. The research often points to the increase in low-skilled service employment during the period and the simultaneous decline in manufacturing jobs as contributing factors. In a recent paper entitled "Inequality and specialization: the growth of low-skill service jobs in the United States" (NBER Working Paper Series, National Bureau of Economic Research, July 2009), economists David H. Autor and David Dorn use Census Bureau data to study the rise in wage inequality at the level of local labor markets over the period from 1950 to 2005 .

The authors find that during the 1980s wages and employment declined sharply in low-skill occupations and increased in high-skill occupations. During the 1990 s, however, employment shares and relative earnings increased in both low-skill and high-skill occupations, leading to a "U-shaped" pattern of wage growth that has some-
times been termed "polarization." Controlling for other factors, Autor and Dorn isolate a "single proximate cause" for the change at the lower end of the wage scale: employment and wages in low-skill, "in-person" service occupations have been increasing sharply since the 1990s. These low-skill service jobs include such occupations as food service workers, security guards, janitors, gardeners, domestic workers, home health aides, childcare workers, hairdressers and beauticians, and recreation workers. As employment in these occupations grew, it declined in other "blue-collar" jobs, such as production, craft, and repair occupations and operators, fabricators, and laborers. The growth in the low-skill occupations in the 1990s parallels that of managerial and professional specialty occupations, which require the highest level of skill and education.

A key insight of the Autor-Dorn analysis is that the nature of the changes in wages and employment over the 1980-2005 period "suggests that demand shifts must play a key role in any economic explanation of the changing structure of wages and employment in both decades." Using statistical models, the authors explore several hypotheses, including the role played by technological change and automation, which varies by occupation. Some jobs, such as bookkeeping, clerical work, and repetitive production tasks, have become largely automated in recent years, whereas the physical and interpersonal skills required for "in-person" service jobs have proved much more difficult to computerize. As the authors note, the "output" from such jobs is not storable or transportable and thus cannot be outsourced. The primary focus of their empirical analysis is the rise of service employment at the level of local labor markets, with automation and technology more strongly affecting those areas that have higher concentrations of routine job activities.
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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 are revised in the March 2007 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 AllItems 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 $\$ 2$ ( $\$ 3 / 150$ $x 100=\$ 2$ ). 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 Revier. 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

$$
\begin{aligned}
\text { n.e.c. }= & \text { not elsewhere classified. } \\
\text { n.e.s. }= & \text { not elsewhere specified. } \\
\mathrm{p}= & \text { preliminary. To increase } \\
& \text { the timeliness of some series, } \\
& \text { preliminary figures are issued } \\
& \text { based on representative but } \\
& \text { incomplete returns. } \\
\mathrm{r}= & \text { revised. Generally, this revision } \\
& \text { reflects the availability of later } \\
& \text { data, but also may reflect other } \\
& \text { adjustments. }
\end{aligned}
$$

## 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 12 th 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 2002 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 ser-vice-providing industries, data are collected for nonsupervisory workers, which include most employees except those in executive, managerial, and supervisory positions. Those
workers mentioned in tables 11-16 include production workers in manufacturing and natural resources and mining; construction workers in construction; and nonsupervisory workers in all private service-providing industries. Production and nonsupervisory workers account for about four-fifths of the total employment on private nonagricultural payrolls.

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

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

The Diffusion Index represents the percent of industries in which employment was rising over the indicated period, plus one-half of the industries with unchanged employment; 50 percent indicates an equal balance between industries with increasing and decreasing employment. In line with Bureau practice, data for the 1-, 3-, and 6month 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

Establishment survey data are annually adjusted to comprehensive counts of employment (called "benchmarks"). The March 2003 benchmark was introduced in February 2004 with the release of data for January 2004, published in the March 2004 issue of the Review. With the release in June 2003, CES completed a conversion from the Standard Industrial Classification (SIC) system to the North American Industry Classification System (NAICS) and completed the transition from its original quota sample design to a probability-based sample design. The indus-try-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 published 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 ES202 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 ur 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 $401(\mathrm{k})$ 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 2001, publications presenting data from the Covered Employment and Wages program have switched to the 2002 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 coun-ty-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 million establishments compiled as part of the operations of the Quarterly Census of Em-
ployment 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 in-for-mation 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 parttime, 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 supple-mental 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 12 th 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 oncall workers may not always work during
the pay period that includes the 12 th 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 2002 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 aggre-
gations, 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 con-version 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 published 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 esti-
mated 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 stop-pages 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 pe-riod-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, shortterm 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 meaured 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 2002 North American Industry 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, allow-
ances, 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 approximating U.S. concepts for the United States, Canada, Australia, Japan, and six European countries. The Bureau adjusts the figures for these selected countries, for all known major definitional differences, to the extent that data to prepare adjustments are available. Although precise comparability may not be achieved, these adjusted figures provide a better basis for international comparisons than the figures regularly published by each country. For further information on adjustments and comparability issues, see Constance Sorrentino, "International unemployment rates: how comparable are they?" Monthly Labor Review, June 2000, pp. 3-20, available on the Internet at www. bls.gov/opub/mlr/2000/06/art1full.pdf.

## Definitions

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

## Notes on the data

Foreign country data are adjusted as closely as possible to the U.S. definitions. Primary areas of adjustment address conceptual differences in upper age limits and definitions of employment and unemployment, provided that reliable data are available to make these adjustments. Adjustments are made where applicable to include employed and unemployed persons above upper age limits; some European countries do not include persons older than age 64 in their labor force measures, because a large portion of this population has retired. Adjustments are made to exclude active duty military from employment figures, although a small
number of career military may be included in some European countries. Adjustments are made to exclude unpaid family workers who worked fewer than 15 hours per week from employment figures; U.S. concepts do not include them in employment, whereas most foreign countries include all unpaid family workers regardless of the number of hours worked. Adjustments are made to include full-time students seeking work and available for work as unemployed when they are classified as not in the labor force.

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

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

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

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

FOR ADDITIONAL INFORMATION on this series, contact the Division of Foreign Labor Statistics: (202) 691-5654 or flshelp@ bls.gov.

## Manufacturing productivity and labor costs

## Description of the series

Table 53 presents comparative indexes of manufacturing output per hour (labor productivity),output, total hours, compensation per hour, and unit labor costs for the United States, Australia, Canada, Japan, the Republic of Korea, Singapore, Taiwan, and 10 European countries. These measures are trend compari-sons-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 United States, the output measure for the manufacturing sector is a chain-weighted index of real gross product originating (deflated value added) produced by the Bureau of Economic Analysis of the U.S. Department of Commerce. Most of the other economies now also use chain-weighted as opposed to fixed-year weights that are periodically updated.

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

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

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

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

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

## Notes on the data

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national accounts and other statistics used for the long-term measures become available.

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

## Occupational Injury and IIIness Data

(Tables 54-55)

## Survey of Occupational Injuries and IIInesses

## 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 accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

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

## Definition

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

## Notes on the data

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

FOR ADDITIONAL INFORMATION on the Census of Fatal Occupational Injuries contact the BLS Office of Safety, Health, and Working Conditions at (202) 6916175, or the Internet at: www.bls.gov/iif/

1. Labor market indicators

| Selected indicators | 2007 | 2008 | 2007 |  |  |  | 2008 |  |  |  | $\frac{2009}{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | I | II | III | IV | I | II | III | IV |  |
| Employment data |  |  |  |  |  |  |  |  |  |  |  |
| Employment status of the civilian noninstitutional population (household survey): ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Labor force participation rate. | 66.0 | 66.0 | 65.9 | 66.6 | 66.0 | 65.9 | 65.7 | 66.6 | 65.9 | 65.7 | 65.4 |
| Employment-population ratio.. | 63.0 | 62.2 | 62.9 | 63.4 | 63.0 | 62.8 | 62.3 | 62.8 | 62.0 | 61.0 | 59.5 |
| Unemployment rate... | 4.6 | 5.8 | 4.5 | 4.5 | 4.7 | 4.8 | 4.9 | 5.4 | 6.0 | 6.9 | 8.1 |
| Men.. | 4.7 | 6.1 | 4.6 | 4.6 | 4.8 | 4.9 | 5.1 | 5.6 | 6.5 | 7.5 | 8.8 |
| 16 to 24 years. | 11.6 | 14.4 | 10.8 | 11.5 | 11.8 | 12.1 | 12.7 | 13.5 | 14.9 | 16.5 | 18.0 |
| 25 years and older... | 3.6 | 4.8 | 3.6 | 3.5 | 3.6 | 3.7 | 3.9 | 4.2 | 5.1 | 6.0 | 7.4 |
| Women............... | 4.5 | 5.4 | 4.4 | 4.4 | 4.6 | 4.7 | 4.8 | 5.1 | 5.6 | 6.1 | 7.2 |
| 16 to 24 years.... | 9.4 | 11.2 | 9.1 | 9.0 | 9.7 | 9.9 | 10.1 | 11.1 | 11.9 | 11.6 | 12.9 |
| 25 years and older.. | 3.6 | 4.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 4.1 | 4.5 | 5.2 | 6.2 |
| Employment, nonfarm (payroll data), in thousands: ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Total nonfarm... | 137,598 | 137,066 | 137,400 | 137,645 | 137,652 | 138,152 | 137,814 | 137,356 | 136,732 | 135,074 | 133,019 |
| Total private... | 115,380 | 114,566 | 115,250 | 115,400 | 115,389 | 115,783 | 115,373 | 114,834 | 114,197 | 112,542 | 110,481 |
| Goods-producing.. | 22,233 | 21,419 | 22,392 | 22,289 | 22,099 | 22,043 | 21,800 | 21,507 | 21,247 | 20,532 | 19,537 |
| Manufacturing.. | 13,879 | 13,431 | 13,966 | 13,889 | 13,796 | 13,777 | 13,643 | 13,505 | 13,322 | 12,902 | 12,310 |
| Service-providing... | 115,366 | 115,646 | 115,008 | 115,356 | 115,553 | 116,109 | 116,014 | 115,849 | 115,485 | 114,542 | 113,482 |
| Average hours: |  |  |  |  |  |  |  |  |  |  |  |
| Total private...... | 33.9 | 33.6 | 33.9 | 33.9 | 33.8 | 33.8 | 33.8 | 33.6 | 33.6 | 33.3 | 33.2 |
| Manufacturing. | 41.2 | 40.8 | 41.2 | 41.3 | 41.3 | 41.2 | 41.2 | 40.9 | 40.5 | 39.9 | 39.3 |
| Overtime... | 4.2 | 3.7 | 4.3 | 4.3 | 4.1 | 4.1 | 4.0 | 3.8 | 3.5 | 2.9 | 2.7 |
| Employment Cost Index ${ }^{\text {1, 2, }} 3$ |  |  |  |  |  |  |  |  |  |  |  |
| Total compensation: |  |  |  |  |  |  |  |  |  |  |  |
| Civilian nonfarm ${ }^{4}$. | 3.3 | 2.6 | . 9 | . 8 | 1.0 | . 6 | . 8 | . 7 | . 8 | . 3 | . 4 |
| Private nonfarm.. | 3.0 | 2.4 | . 8 | . 9 | . 8 | . 6 | . 9 | . 7 | . 6 | . 2 | . 4 |
| Goods-producing ${ }^{5}$. | 2.4 | 2.4 | . 4 | 1.0 | . 5 | . 6 | 1.0 | . 7 | . 4 | . 3 | . 4 |
| Service-providing ${ }^{5}$. | 3.2 | 2.5 | . 9 | . 9 | . 9 | . 6 | . 9 | . 7 | . 6 | . 3 | . 4 |
| State and local government. | 4.1 | 3.0 | 1.0 | . 6 | 1.8 | . 7 | . 5 | . 5 | 1.7 | . 3 | . 6 |
| Workers by bargaining status (private nonfarm): |  |  |  |  |  |  |  |  |  |  |  |
| Union..................... | 2.0 | 2.8 | -. 3 | 1.2 | . 5 | . 7 | . 8 | . 8 | . 7 | . 6 | 1.0 |
| Nonunion........................................... | 3.2 | 2.4 | 1.0 | . 9 | . 8 | . 6 | . 9 | . 7 | . 6 | . 2 | . 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. Serviceproviding 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 | 2007 | 2008 | 2007 |  |  |  | 2008 |  |  |  | $\begin{gathered} 2009 \\ 1 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | I | II | III | IV | I | II | III | IV |  |
| Compensation data ${ }^{1,2,3}$ |  |  |  |  |  |  |  |  |  |  |  |
| Employment Cost Index-compensation: |  |  |  |  |  |  |  |  |  |  |  |
| Civilian nonfarm................................ | 3.3 | 2.6 | 0.9 | 0.8 | 1.0 | 0.6 | 0.8 | 0.7 | 0.8 | 0.3 | 0.4 |
| Private nonfarm......................... | 3.0 | 2.4 | . 8 | . 9 | . 8 | . 6 | . 9 | . 7 | . 6 | . 2 | . 4 |
| Employment Cost Index-wages and salaries: | 3.4 | 2.7 | 1.1 | . 7 | 1.0 | . 7 | . 8 | . 7 | . 8 | . 3 | . 4 |
| Private nonfarm..... | 3.3 | 2.6 | 1.1 | . 8 | . 9 | . 6 | . 9 | . 7 | . 6 | . 3 | . 4 |
| Price data ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Consumer Price Index (All Urban Consumers): All Items..... | 2.8 | 3.8 | 1.8 | 1.5 | . 1 | . 7 | 1.7 | 2.5 | 0 | -3.9 | 1.2 |
| Producer Price Index: |  |  |  |  |  |  |  |  |  |  |  |
| Finished goods......... | 3.9 | 6.3 | 2.2 | 1.9 | . 1 | 1.8 | 2.8 | 4.2 | -. 1 | -7.4 | . 1 |
| Finished consumer goods.. | 4.5 | 7.4 | 2.8 | 2.5 | . 2 | 1.9 | 3.4 | 5.2 | -. 4 | -9.9 | .1.2 |
| Capital equipment............. | 1.8 | 2.8 | . 3 | -. 1 | -. 1 | 1.2 | . 7 | . 6 | 1.0 | 1.6 |  |
| Intermediate materials, supplies, and components.. | $\begin{array}{r} 4.1 \\ 12.1 \end{array}$ | 10.5 | 1.5 | 3.2 | . 1 | 2.0 | 5.0 | 6.9 | . 7 | -13.0 | -2.7 |
| Crude materials.... |  | 21.5 | 5.7 | 3.8 | -2.4 | 11.9 | 14.5 | 14.9 | -15.6 | -32.5 | -6.9 |
| Productivity data ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons: |  |  |  |  |  |  |  |  |  |  |  |
| Business sector.... | 1.6 | 2.7 | -. 7 | 5.7 | 7.3 | -1.1 | 2.2 | 4.7 | 2.3 | -. 5 | 1.1.8 |
| Nonfarm business sector... | 1.4.7 | 2.8 | -.6-.6 | 4.83.8 | 7.03.0 | $\begin{array}{r} -.5 \\ 1.2 \end{array}$ | 2.6-.4 | 4.78.5 | 2.26.4 | $\begin{array}{r} -6 \\ -3.9 \end{array}$ |  |
| Nonfinancial corporations ${ }^{5}$. |  |  |  |  |  |  |  |  |  |  | $-$ |

[^9]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- |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  |  |  | $\begin{gathered} 2009 \\ \hline \text { I } \end{gathered}$ | 2008 |  |  |  | $\frac{2009}{\mathrm{I}}$ |
|  | I | II | III | IV |  | I | II | III | IV |  |
| Average hourly compensation: ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| All persons, business sector... | 3.5 | 1.9 | 5.7 | 4.9 | 4.1 | 3.5 | 3.4 | 3.7 | 4.0 | 4.1 |
| All persons, nonfarm business sector... | 3.7 | 1.7 | 5.7 | 5.2 | 4.1 | 3.5 | 3.6 | 3.9 | 4.1 | 4.2 |
| Employment Cost Index-compensation: ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| Civilian nonfarm ${ }^{3}$.... | . 8 | . 7 | . 8 | . 3 | . 4 | 3.3 | 3.1 | 2.9 | 2.6 | 2.1 |
| Private nonfarm. | . 9 | . 7 | . 6 | . 2 | . 4 | 3.2 | 3.0 | 2.8 | 2.4 | 1.9 |
| Union.... | . 8 | . 8 | . 7 | . 6 | 1.0 | 3.1 | 2.7 | 2.9 | 2.8 | 3.0 |
| Nonunion................................................................... | . 9 | . 7 | . 6 | . 2 | . 3 | 3.2 | 3.0 | 2.8 | 2.4 | 1.8 |
| State and local government... | . 5 | . 5 | 1.7 | . 3 | . 6 | 3.6 | 3.5 | 3.4 | 3.0 | 3.1 |
| Employment Cost Index—wages and salaries: ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| Civilian nonfarm ${ }^{3}$..... | . 8 | . 7 | . 8 | . 3 | . 4 | 3.2 | 3.2 | 3.1 | 2.7 | 2.2 |
| Private nonfarm................ | . 9 | . 7 | . 6 | . 3 | . 4 | 3.2 | 3.1 | 2.9 | 2.6 | 2.0 |
| Union........................................................................... | . 8 | 1.1 | . 7 | . 7 | . 6 | 2.6 | 2.9 | 2.9 | 3.2 | 3.1 |
| Nonunion................................................................... | . 9 | . 7 | . 6 | . 2 | . 4 | 3.3 | 3.2 | 3.0 | 2.5 | 1.9 |
| State and local government............................................... | . 6 | . 5 | 1.8 | . 3 | . 5 | 3.5 | 3.4 | 3.5 | 3.1 | 3.0 |

[^10]4. Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted
[Numbers in thousands]

| Employment status | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| TOTAL <br> Civilian noninstitutional population ${ }^{1}$. | $\begin{array}{r} 231,867 \\ 153,124 \\ 66.0 \\ 146,047 \end{array}$ | $233,788$ | $233,405$ <br> 154,510 | $\begin{aligned} & 233,627 \\ & 154.400 \end{aligned}$ |  |  | 234,360 | 234,612 | 234,828 | 235,035 | 234,739 | 234,913 | 235,086 | 235,271 | 235,452 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Civilian labor force. |  |  |  |  | $154,506$ | $154,823$ | 154,621 | 154,878 | 154,620 | 154,447 | 153,716 | 154,214 | $\begin{array}{r} 104,040 \\ 65.5 \\ 140,887 \end{array}$ | 154,731 | $\begin{array}{r} 155,081 \\ 65.9 \\ 140,570 \end{array}$ |
| Participation rate. |  | 154,28766.0145,362 | $\begin{array}{r} 154,510 \\ 66.2 \\ 145,974 \end{array}$ | $\begin{array}{r} 154,400 \\ 66.1 \\ 145,738 \end{array}$ | $\begin{array}{r} 154,500 \\ 66.1 \\ 145,596 \end{array}$ | $\begin{array}{r} 66.1 \\ 145,273 \end{array}$ | $\begin{array}{r} 66.0 \\ 145,029 \end{array}$ | $\begin{array}{r} 66.0 \\ 144,657 \end{array}$ | $\begin{array}{r} 65.8 \\ 144,144 \end{array}$ | $\begin{array}{r} 65.7 \\ 143,338 \end{array}$ | $\begin{array}{r} 65.5 \\ 142,099 \end{array}$ | 65.6141,748 |  | 65.8141,007 |  |
| Employed. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employment-population ratio ${ }^{2}$ | 63.0 | 62.2 | 62.5 | 62.4 | 62.3 | 62.19,550 | 61.9 | 61.710,221 | 61.410,476 | 61.011,108 | 60.511,616 | 60.312,467 | 59.913,161 | $\begin{array}{r} 59.9 \\ 13,724 \end{array}$ | 59.7 |
| Unemployed. | 7,078 | 8,924 | 8,536 | 8,662 | 8,910 |  | 9,592 |  |  |  |  |  |  |  | 14,511 |
| Unemployment rate. | 4.6 | 5.8 | 5.5 | 5.6 | 5.8 | 6.2 | 6.2 | 6.6 | 6.8 | 7.2 | 7.6 | 8.1 | 8.5 | 8.9 | 9.4 |
| Not in the labor force.. | 78,743 | 79,501 | 78,895 | 79,227 | 79,358 | 79,284 | 79,739 | 79,734 | 80,208 | 80,588 | 81,023 | 80,699 | 81,038 | 80,541 | 80,371 |
| Men, 20 years and over |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Civilian noninstitutional |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 105,299 |
| Civilian labor force.... | 78,596 | 79,047 | 78,913 | $\begin{array}{r} 79,055 \\ 75.7 \end{array}$ | 79,28675.9 | 79,308 | 79,392 | 79,380 | 79,335 | 78,998 | 104,902 | 78,687 | 78,578 | 105,196 | 79,395 |
| Participation rate. | 75.9 | 75.7 | 75.7 |  |  | 75.8 | 75.8 | 75.7 | 75.6 | 75.2 | $\begin{array}{r} 78,585 \\ 74.9 \end{array}$ | 74.9 | 74.8 | 75.2 | 75.4 |
| Employed.............. | 75,337 | 74,750 | 74,992 | 74,949 | 74,973 | 74,737 | 74,503 | 74,292 | 74,045 | 73,285 | 72,613 | 72,293 | 71,655 | 71,678 | 71,593 |
| Employment-population ratio ${ }^{2}$. | 72.8 | 71.6 | 71.9 | 71.8 | 71.8 | 71.4 | 71.1 | 70.8 | 70.5 | 69.7 | 69.2 | 68.9 | 68.2 | 68.1 | 68.0 |
| Unemployed. | 3,259 | 4,297 | 3,921 | 4,106 | 4,313 | 4,572 | 4,889 | 5,088 | 5,290 | 5,714 | 5,972 | 6,394 | 6,923 | 7,403 | 7,802 |
| Unemployment rate. | 4.1 | 5.4 | 5.0 | 5.2 | 5.4 | 5.8 | 6.2 | 6.4 | 6.7 | 7.2 | 7.6 | 8.1 | 8.8 | 9.4 | 9.8 |
| Not in the labor force. | 24,959 | 25,406 | 25,345 | 25,315 | 25,204 | 25,305 | 25,349 | 25,489 | 25,643 | 26,085 | 26,318 | 26,312 | 26,516 | 26,115 | 25,904 |
| Women, 20 years and over |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Civilian noninstitutional population ${ }^{1}$ | 111,330 | 112,260 | 112,083 | 112,183 | 112,290 | 112,401 | 112,518 | 112,633 | 112,731 | 112,825 | 112,738 | 112,824 | 112,908 | 112,999 | 113,089 |
| Civilian labor force... | 67,516 | 68,382 | 68,367 | 68,421 | 68,273 | 68,666 | 68,385 | $\begin{array}{r} 68,700 \\ 61.0 \end{array}$ | $\begin{array}{r} 68,753 \\ 61.0 \end{array}$ | 68,891 | 68,584 | 68,917 | 68,977 | $\begin{array}{r} 69,148 \\ 61.2 \end{array}$ | $\begin{array}{r} 69,112 \\ 61.1 \\ 63,895 \end{array}$ |
| Participation rate. | 60.6 | 60.9 | 61.0 | 61.0 | 60.8 | 61.1 |  |  |  |  | 60.8 |  |  |  |  |
| Employed... | 64,799 | 65,039 | 65,114 | 65,169 | 65,103 | 65,003 | 65,008 | 64,975 | 64,902 | 64,860 | 64,298 | 64,271 | 64,148 | 64,226 |  |
| Employment-population ratio ${ }^{2}$ | 58.2 | 57.9 | 58.1 | 58.1 | 58.0 | 57.8 | 57.8 | 57.7 | 57.6 | 57.5 | 57.0 | 57.0 | 56.8 | 56.8 | 56.5 |
| Unemployed.. | 2,718 | 3,342 | 3,252 | 3,252 | 3,170 | 3,662 | 3,377 | 3,725 | 3,851 | 4,031 | 4,286 | 4,646 | 4,828 | 4,922 | 5,217 |
| Unemployment rate. | 4.0 | 4.9 | 4.8 | 4.8 | 4.6 | 5.3 | 4.9 | 5.4 | 5.6 | 5.9 | 6.2 | 6.7 | 7.0 | 7.1 | 7.5 |
| Not in the labor force.. | 43,814 | 43,878 | 43,716 | 43,762 | 44,017 | 43,736 | 44,133 | 43,933 | 43,978 | 43,935 | 44,154 | 43,907 | 43,931 | 43,850 | 43,976 |
| Both sexes, 16 to 19 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Civilian noninstitutional population ${ }^{1}$. | 16,982 | 17,075 | 17,064 | 17,073 | 17,084 | 17,092 | 17,101 | 17,110 | 17,118 | 17,126 | 17,098 | 17,090 | 17,083 | 17,076 | 17,064 |
| Civilian labor force.. | 7,012 | 6,858 | 7,231 | 6,924 | 6,947 | 6,849 | 6,844 | 6,799 | 6,531 | 6,557 | 6,547 | 6,610 | 6,493 | 6,501 | 6,573 |
| Participation rate. | 41.3 | 40.2 | 42.4 | 40.6 | 40.7 | 40.1 | 40.0 | 39.7 | 38.2 | 38.3 | 38.3 | 38.7 | 38.0 | 38.1 | 38.5 |
| Employed.. | 5,911 | 5,573 | 5,868 | 5,620 | 5,520 | 5,533 | 5,518 | 5,390 | 5,196 | 5,194 | 5,188 | 5,184 | 5,083 | 5,103 | 5,082 |
| Employment-population ratio ${ }^{2}$ | 34.8 | 32.6 | 34.4 | 32.9 | 32.3 | 32.4 | 32.3 | 31.5 | 30.4 | 30.3 | 30.3 | 30.3 | 29.8 | 29.9 | 29.8 |
| Unemployed... | 1,101 | 1,285 | 1,363 | 1,304 | 1,427 | 1,316 | 1,326 | 1,408 | 1,335 | 1,363 | 1,359 | 1,427 | 1,410 | 1,398 | 1,491 |
| Unemployment rate. | 15.7 | 18.7 | 18.9 | 18.8 | 20.5 | 19.2 | 19.4 | 20.7 | 20.4 | 20.8 | 20.8 | 21.6 | 21.7 | 21.5 | 22.7 |
| Not in the labor force. | 9,970 | 10,218 | 9,834 | 10,149 | 10,137 | 10,243 | 10,257 | 10,311 | 10,587 | 10,568 | 10,551 | 10,480 | 10,590 | 10,575 | 10,491 |
| White ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Civilian noninstitutional population ${ }^{1}$ | 188,253 | 189,540 | 189,281 | 189,428 | 189,587 | 189,747 | 189,916 | 190,085 | 190,221 | 190,351 | 190,225 | 190,331 | 190,436 | 190,552 | 190,667 |
| Civilian labor force. | 124,935 | 125,635 | 125,759 | 125,712 | 125,979 | 125,987 | 125,844 | 126,298 | 126,029 | 125,634 | 125,312 | 125,703 | 125,599 | 126,110 | 126,423 |
| Participation rate.. | 66.4 | 66.3 | 66.4 | 66.4 | 66.4 | 66.4 | 66.3 | 66.4 | 66.3 | 66.0 | 65.9 | 66.0 | 66.0 | 66.2 | 66.3 |
| Employed... | 119,792 | 119,126 | 119,611 | 119,417 | 119,432 | 119,082 | 118,964 | 118,722 | 118,226 | 117,357 | 116,692 | 116,481 | 115,693 | 115,977 | 115,561 |
| Employment-population ratio ${ }^{2}$ | 63.6 | 62.8 | 63.2 | 63.0 | 63.0 | 62.8 | 62.6 | 62.5 | 62.2 | 61.7 | 61.3 | 61.2 | 60.8 | 60.9 | 60.6 |
| Unemployed... | 5,143 | 6,509 | 6,148 | 6,295 | 6,547 | 6,904 | 6,880 | 7,577 | 7,803 | 8,277 | 8,621 | 9,222 | 9,906 | 10,133 | 10,862 |
| Unemployment rate. | 4.1 | 5.2 | 4.9 | 5.0 | 5.2 | 5.5 | 5.5 | 6.0 | 6.2 | 6.6 | 6.9 | 7.3 | 7.9 | 8.0 | 8.6 |
| Not in the labor force. | 63,319 | 63,905 | 63,523 | 63,716 | 63,608 | 63,761 | 64,072 | 63,787 | 64,193 | 64,718 | 64,913 | 64,628 | 64,837 | 64,441 | 64,244 |
| Black or African American ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Civilian noninstitutional population ${ }^{1}$ | 27,485 | 27,843 | 27,780 | 27,816 | 27,854 | 27,896 | 27,939 | 27,982 | 28,021 | 28,059 | 28,052 | 28,085 | 28,118 | 28,153 | 28,184 |
| Civilian labor force.... | 17,496 | 17,740 | 17,737 | 17,708 | 17,744 | 17,949 | 17,733 | 17,768 | 17,708 | 17,796 | 17,791 | 17,703 | 17,542 | 17,816 | 17,737 |
| Participation rate. | 63.7 | 63.7 | 63.8 | 63.7 | 63.7 | 64.3 | 63.5 | 63.5 | 63.2 | 63.4 | 63.4 | 63.0 | 62.4 | 63.3 | 62.9 |
| Employed.............. | 16,051 | 15,953 | 16,009 | 16,041 | 15,989 | 16,026 | 15,709 | 15,762 | 15,703 | 15,674 | 15,546 | 15,336 | 15,212 | 15,142 | 15,095 |
| Employment-population ratio ${ }^{2}$ | 58.4 | 57.3 | 57.6 | 57.7 | 57.4 | 57.4 | 56.2 | 56.3 | 56.0 | 55.9 | 55.4 | 54.6 | 54.1 | 53.8 | 53.6 |
| Unemployed....... | 1,445 | 1,788 | 1,728 | 1,667 | 1,755 | 1,923 | 2,024 | 2,006 | 2,005 | 2,122 | 2,245 | 2,368 | 2,330 | 2,673 | 2,642 |
| Unemployment rate.. | 8.3 | 10.1 | 9.7 | 9.4 | 9.9 | 10.7 | 11.4 | 11.3 | 11.3 | 11.9 | 12.6 | 13.4 | 13.3 | 15.0 | 14.9 |
| Not in the labor force. | 9,989 | 10,103 | 10,043 | 10,109 | 10,111 | 9,947 | 10,206 | 10,214 | 10,313 | 10,263 | 10,261 | 10,382 | 10,576 | 10,337 | 10,446 |

[^11]
## 4. Continued-Employment status of the population, by sex, age, race, and Hispanic origin, monthly data seasonally adjusted

[Numbers in thousands]

${ }^{1}$ 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 |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| Characteristic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employed, 16 years and older.. | 146,047 | 145,362 | 145,974 | 145,738 | 145,596 | 145,273 | 145,029 | 144,657 | 144,144 | 143,338 | 142,099 | 141,748 | 140,887 | 141,007 | 140,570 |
| Men. | 78,254 | 77,486 | 77,932 | 77,726 | 77,683 | 77,484 | 77,249 | 76,938 | 76,577 | 75,847 | 75,092 | 74,777 | 74,053 | 74,116 | 74,033 |
| Women............................ | 67,792 | 67,876 | 68,042 | 68,012 | 67,913 | 67,789 | 67,780 | 67,720 | 67,567 | 67,491 | 67,007 | 66,970 | 66,834 | 66,890 | 66,537 |
| Married men, spouse present. $\qquad$ | 46,314 | 45,860 | 45,871 | 45,902 | 46,093 | 45,804 | 45,887 | 45,787 | 45,610 | 45,182 | 44,712 | 44,502 | 44,470 | 44,469 | 44,255 |
| Married women, spouse present | 35,832 | 35,869 | 36,122 | 36,189 | 36,110 | 35,994 | 35,864 | 35,590 | 35,649 | 35,632 | 35,375 | 35,563 | 35,481 | 35,444 | 35,391 |
| Persons at work part time ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All industries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time for economic reasons. $\qquad$ | 4,401 | 5,875 | 5,290 | 5,495 | 5,813 | 5,879 | 6,292 | 6,848 | 7,323 | 8,038 | 7,839 | 8,626 | 9,049 | 8,910 | 9,084 |
| Slack work or business conditions. | 2,877 | 4,169 | 3,658 | 3,905 | 4,220 | 4,240 | 4,418 | 4,953 | 5,399 | 6,020 | 5,766 | 6,443 | 6,857 | 6,699 | 6,794 |
| Could only find part-time work $\qquad$ | 1,210 | 1,389 | 1,305 | 1,359 | 1,300 | 1,412 | 1,514 | 1,514 | 1,585 | 1,617 | 1,667 | 1,764 | 1,839 | 1,810 | 1,922 |
| Part time for noneconomic reasons $\qquad$ | 19,756 | 19,343 | 19,396 | 19,428 | 19,348 | 19,690 | 19,275 | 19,083 | 18,886 | 18,922 | 18,864 | 18,855 | 18,833 | 19,065 | 18,872 |
| Nonagricultural industries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part time for economic reasons. $\qquad$ | 4,317 | 5,773 | 5,218 | 5,390 | 5,693 | 5,802 | 6,167 | 6,742 | 7,209 | 7,932 | 7,705 | 8,543 | 8,942 | 8,826 | 8,928 |
| Slack work or business conditions $\qquad$ | 2,827 | 4,097 | 3,599 | 3,839 | 4,160 | 4,171 | 4,279 | 4,889 | 5,304 | 5,938 | 5,660 | 6,390 | 6,773 | 6,650 | 6,681 |
| Could only find part-time work | 1,199 | 1,380 | 1,297 | 1,340 | 1,287 | 1,385 | 1,541 | 1,499 | 1,579 | 1,619 | 1,658 | 1,760 | 1,850 | 1,802 | 1,909 |
| Part time for noneconomic reasons $\qquad$ | 19,419 | 19,005 | 18,997 | 19,036 | 18,992 | 19,269 | 18,930 | 18,808 | 18,635 | 18,642 | 18,567 | 18,562 | 18,493 | 18,661 | 18,502 |

${ }^{1}$ 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 J anuary 2003, data reflect revised population controls used in the household survey.

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

[Unemployment rates]

| Selected categories | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| Characteristic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total, 16 years and older.. | 4.6 | 5.8 | 5.5 | 5.6 | 5.8 | 6.2 | 6.2 | 6.6 | 6.8 | 7.2 | 7.6 | 8.1 | 8.5 | 8.9 | 9.4 |
| Both sexes, 16 to 19 years.. | 15.7 | 18.7 | 18.9 | 18.8 | 20.5 | 19.2 | 19.4 | 20.7 | 20.4 | 20.8 | 20.8 | 21.6 | 21.7 | 21.5 | 22.7 |
| Men, 20 years and older... | 4.14.0 | 5.4 |  |  | 5.4 | 5.8 | 6.2 | 6.4 | 6.7 | 7.2 | 7.6 | 8.1 | 8.8 | 9.4 | 9.8 |
| Women, 20 years and older... |  | 4.9 |  |  | 4.6 | 5.3 | 4.9 | 5.4 | 5.6 | 5.9 | 6.2 | 6.7 | 7.0 | 7.1 | 7.5 |
| White, total ${ }^{1}$. | 4.1 | 5.2 | 4.9 | 5.0 | 5.2 | 5.5 | 5.5 | 6.0 | 6.2 | 6.6 | 6.9 | 7.3 | 7.9 | 8.0 | 8.6 |
| Both sexes, 16 to 19 years. | 13.9 |  |  | 17.0 | 19.122.4 | $\begin{aligned} & 17.3 \\ & 19.5 \end{aligned}$ | 17.5 | 18.6 | 18.4 | 18.7 | 18.4 | 19.1 | 20.0 | 19.7 | $\begin{aligned} & 20.3 \\ & 24.4 \end{aligned}$ |
| Men, 16 to 19 years..... | 15.7 | 16.8 19.1 | 16.5 18.1 | 18.7 |  |  | 15.2 | 22.614.4 | 21.415.3 | 21.416.0 | $\begin{aligned} & 21.8 \\ & 14.8 \end{aligned}$ | $\begin{aligned} & 22.2 \\ & 16.0 \end{aligned}$ | $\begin{aligned} & 23.3 \\ & 16.7 \end{aligned}$ | $\begin{aligned} & 22.5 \\ & 16.9 \end{aligned}$ |  |
| Women, 16 to 19 years.. | 12.13.73.6 | 14.4 | 14.8 | 15.3 | 15.6 | 15.0 |  |  |  |  |  |  |  |  | 16.0 |
| Men, 20 years and older... |  | 4.9 | 4.5 | 4.6 | 4.8 | 5.1 | 5.5 | 5.8 | 6.1 | 6.5 | 6.8 | 7.4 | 8.0 | 8.5 | 9.0 |
| Women, 20 years and older.. |  | 4.4 | 4.1 | 4.2 | 4.2 | 4.7 | 4.2 | 4.9 | 5.1 | 5.5 | 5.8 | 6.1 | 6.5 | 6.4 | 6.9 |
| Black or African American, total ${ }^{1}$. | 8.3 | 10.1 | 9.7 | 9.4 | 9.9 | 10.7 | 11.4 | 11.3 | 11.3 | 11.9 | 12.6 | 13.4 | 13.3 | 15.0 | 14.9 |
| Both sexes, 16 to 19 years.. | $\begin{aligned} & 29.4 \\ & 33.8 \end{aligned}$ | $\begin{aligned} & 31.2 \\ & 35.9 \end{aligned}$ | $\begin{aligned} & 32.3 \\ & 39.9 \end{aligned}$ | $\begin{aligned} & 29.8 \\ & 35.4 \end{aligned}$ | $\begin{aligned} & 32.0 \\ & 37.7 \end{aligned}$ | $\begin{aligned} & 29.3 \\ & 29.8 \end{aligned}$ | $\begin{aligned} & 29.8 \\ & 32.9 \end{aligned}$ | $\begin{array}{r} 32.9 \\ 37.2 \end{array}$ | $\begin{aligned} & 32.2 \\ & 42.0 \end{aligned}$ | $\begin{aligned} & 33.7 \\ & 35.2 \end{aligned}$ | $\begin{aligned} & 36.5 \\ & 44.0 \end{aligned}$ | $\begin{aligned} & 38.8 \\ & 45.6 \end{aligned}$ | $\begin{aligned} & 32.5 \\ & 41.2 \end{aligned}$ | $\begin{aligned} & 34.7 \\ & 42.1 \end{aligned}$ | $\begin{aligned} & 39.4 \\ & 46.1 \end{aligned}$ |
| Men, 16 to 19 years..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Women, 16 to 19 years.... | $\begin{array}{r} 25.3 \\ 7.9 \end{array}$ | $\begin{aligned} & 26.8 \\ & 10.2 \end{aligned}$ | $\begin{array}{r} 25.2 \\ 9.2 \end{array}$ | $\begin{array}{r} 24.4 \\ 9.7 \end{array}$ | $\begin{aligned} & 26.8 \\ & 10.3 \end{aligned}$ | $\begin{aligned} & 28.9 \\ & 10.6 \end{aligned}$ | $\begin{aligned} & 26.7 \\ & 11.9 \end{aligned}$ | $\begin{aligned} & 27.8 \\ & 11.8 \end{aligned}$ | $\begin{aligned} & 23.2 \\ & 12.1 \end{aligned}$ | $\begin{aligned} & 32.2 \\ & 13.4 \end{aligned}$ | $\begin{aligned} & 29.8 \\ & 14.1 \end{aligned}$ | $\begin{aligned} & 32.1 \\ & 14.9 \end{aligned}$ | 25.2 | 27.2 | $\begin{aligned} & 34.0 \\ & 16.8 \end{aligned}$ |
| Men, 20 years and older......... |  |  |  |  |  |  |  |  |  |  |  |  | 15.4 | 17.2 |  |
| Women, 20 years and older... | 6.7 | 8.1 | 8.2 | 7.5 | 7.5 | 9.1 | 9.3 | 8.9 | 9.0 | 8.9 | 9.2 | 9.9 | 9.9 | 11.5 | 11.2 |
| Hispanic or Latino ethnicity.. | 5.6 | $\begin{aligned} & 7.6 \\ & 3.4 \\ & 3.6 \\ & 5.8 \\ & 5.5 \end{aligned}$ | 3.0 <br> 3.2 <br> 5.5 <br> 5.5 | $\begin{aligned} & 7.7 \\ & 3.1 \\ & 3.4 \\ & 5.6 \\ & 5.4 \end{aligned}$ | $\begin{aligned} & 7.5 \\ & 3.3 \\ & 3.4 \\ & 5.8 \\ & 5.6 \end{aligned}$ | $\begin{aligned} & 8.1 \\ & 3.7 \\ & 3.7 \\ & 6.3 \\ & 5.7 \end{aligned}$ | $\begin{aligned} & 7.9 \\ & 3.9 \\ & 3.5 \\ & 6.3 \\ & 5.9 \end{aligned}$ | $\begin{aligned} & 8.8 \\ & 4.1 \\ & 4.2 \\ & 6.8 \\ & 5.7 \end{aligned}$ | $\begin{aligned} & 8.6 \\ & 4.2 \\ & 4.3 \\ & 7.0 \\ & 5.8 \end{aligned}$ | 9.2 | 9.7 | 10.9 | 11.4 | $11.3 \quad 12.7$ |  |
| Married men, spouse present... | $\begin{aligned} & 5.6 \\ & 2.5 \\ & 2.8 \\ & 4.6 \\ & 4.9 \end{aligned}$ |  |  |  |  |  |  |  |  | 4.4 | 5.0 | 5.5 | 5.8 6.3 6.8 |  |  |
| Married women, spouse present.. |  |  |  |  |  |  |  |  |  | 4.5 | 4.7 | 5.1 | 5.4 | 5.5 | 5.710.2 |
| Full-time workers...... |  |  |  |  |  |  |  |  |  | 7.5 | 8.0 | 8.6 | 9.2 | 9.6 |  |
| Part-time workers........ |  |  |  |  |  |  |  |  |  | 5.9 | 5.9 | 5.8 | 5.9 | 6.1 | 6.0 |
| Educational attainment ${ }^{2}$ Less than a high school diploma... | 7.1 | 9.0 | 8.4 | 8.9 | 8.6 | 9.7 | 9.8 | 10.4 | 10.6 | 10.9 | 12.0 | 12.6 | 13.3 | 14.8 | 15.5 |
| High school graduates, no college ${ }^{3}$.. | 4.4 | 5.7 | 5.2 | 5.2 | 5.3 | 5.8 | 6.3 | 6.5 | 6.9 | 7.7 | 8.0 | 8.3 | 9.0 | 9.3 | 10.0 |
| Some college or associate degree. | 3.6 | 4.6 | 4.3 | 4.4 | 4.6 | 5.0 | 5.1 | 5.3 | 5.5 | 5.6 | 6.2 | 7.0 | 7.2 | 7.4 | 7.7 |
| Bachelor's degree and higher ${ }^{4}$. | 2.0 | 2.6 | 2.3 | 2.4 | 2.5 | 2.7 | 2.6 | 3.1 | 3.2 | 3.7 | 3.8 | 4.1 | 4.3 | 4.4 | 4.8 |

${ }^{1}$ 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.
2 Data refer to persons 25 years and older.

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

[Numbers in thousands]

| Weeks of unemployment | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| Less than 5 weeks. | 2,542 | 2,932 | 3,257 | 2,733 | 2,884 | 3,242 | 2,864 | 3,108 | 3,255 | 3,267 | 3,658 | 3,404 | 3,371 | 3,346 | 3,275 |
| 5 to 14 weeks. | 2,232 | 2,804 | 2,478 | 3,012 | 2,853 | 2,874 | 3,083 | 3,055 | 3,141 | 3,398 | 3,519 | 3,969 | 4,041 | 3,982 | 4,321 |
| 15 weeks and over.. | 2,303 | 3,188 | 2,808 | 2,966 | 3,168 | 3,447 | 3,662 | 4,109 | 3,964 | 4,517 | 4,634 | 5,264 | 5,715 | 6,211 | 7,002 |
| 15 to 26 weeks. | 1,061 | 1,427 | 1,238 | 1,345 | 1,450 | 1,568 | 1,621 | 1,834 | 1,757 | 1,927 | 1,987 | 2,347 | 2,534 | 2,531 | 3,054 |
| 27 weeks and over.... | 1,243 | 1,761 | 1,570 | 1,621 | 1,718 | 1,878 | 2,041 | 2,275 | 2,207 | 2,591 | 2,647 | 2,917 | 3,182 | 3,680 | 3,948 |
| Mean duration, in weeks... | 16.8 | 17.9 | 16.8 | 17.6 | 17.3 | 17.6 | 18.7 | 19.8 | 18.9 | 19.7 | 19.8 | 19.8 | 20.1 | 21.4 | 22.5 |
| Median duration, in weeks... | 8.5 | 9.4 | 8.3 | 10.1 | 9.8 | 9.3 | 10.3 | 10.6 | 10.0 | 10.6 | 10.3 | 11.0 | 11.2 | 12.5 | 14.9 |

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

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

[Numbers in thousands]

| Reason for unemployment | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| Job losers ${ }^{1}$. | 3,515 | 4,789 | 4,319 | 4,465 | 4,595 | 4,994 | 5,348 | 5,811 | 6,156 | 6,471 | 6,980 | 7,696 | 8,243 |  | $\begin{aligned} & 9,546 \\ & 1,832 \end{aligned}$ |
| On temporary layoff. | 976 | 1,176 | 1,121 | 1,106 | 1,041 | 1,279 | 1,396 | 1,367 | 1,413 | 1,524 | 1,441 | 1,488 | 1,557 | 1,625 |  |
| Not on temporary layoff. | 2,539 | 3,614 | 3,197 | 3,358 | 3,554 | 3,715 | 3,952 | 4,443 | 4,744 | 4,946 | 5,539 | 6,208 | 6,686 | 7,189 | $\begin{array}{r} 7,714 \\ 910 \end{array}$ |
| Job leavers..... | 793 | 896 | 881 | 847 | 875 | 999 | 982 | 946 | 940 | 1,007 | 917 | 820 | 887 | 890 |  |
| Reentrants. | 2,142 | 2,472 | 2,522 | 2,562 | 2,668 | 2,678 | 2,587 | 2,650 | 2,655 | 2,777 | 2,751 | 2,834 | 2,974 | 3,087 | 3,180 |
| New entrants.. | 627 | 766 | 832 | 761 | 818 | 829 | 822 | 825 | 760 | 829 | 780 | 1,005 | 868 | 900 | 956 |
| Percent of unemployed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Job losers ${ }^{1}$. | 49.713.8 | 53.713.2 | 50.513.1 | 51.7 | 51.3 | 52.6 | 54.9 | 56.8 | 58.6 | 58.4 | 61.1 | $\begin{aligned} & 62.3 \\ & 12.0 \end{aligned}$ | 63.5 | 64.411.9 | $\begin{aligned} & 65.4 \\ & 12.6 \end{aligned}$ |
| On temporary layoff.... |  |  |  | 12.8 | 11.6 | 13.5 | 14.3 | 13.4 | 13.4 | 13.8 | 12.6 |  | 12.0 |  |  |
| Not on temporary layoff. | 35.9 | 40.510.0 |  | $\begin{array}{r} 38.9 \\ 9.8 \end{array}$ | $\begin{array}{r} 39.7 \\ 9.8 \end{array}$ | $\begin{aligned} & 39.1 \\ & 10.5 \end{aligned}$ | $\begin{aligned} & 40.6 \\ & 10.1 \end{aligned}$ | $\begin{array}{r} 43.4 \\ 9.2 \end{array}$ | $\begin{array}{r} 45.1 \\ 8.9 \end{array}$ | 44.6 | 48.5 | $\begin{array}{r} 50.2 \\ 6.6 \end{array}$ | 51.5 | 52.5 | 52.9 |
| Job leavers... | 11.2 |  |  |  |  |  |  |  |  | 9.1 | 8.0 |  | 6.8 | 6.5 | 6.2 |
| Reentrants... | 30.38.9 | $\begin{array}{r} 27.7 \\ 8.6 \end{array}$ | 29.5 | 29.7 | 29.8 | 28.2 | 26.6 | 25.98.1 | 25.3 | 25.1 | 24.1 | 22.9 | 22.9 | 22.5 | 21.8 |
| New entrants. |  |  | 9.7 | 8.8 | 9.1 | 8.7 | 8.4 |  | 7.2 | 7.5 | 6.8 | 8.1 | 6.7 | 6.6 | 6.6 |
| Percent of civilian labor force |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Job losers ${ }^{1}$. | 2.3.5 | 3.1.6 | 2.8.6 | $\begin{array}{r} 2.9 \\ .5 \end{array}$ | 3.0.6 | 3.2.6 | 3.5.6 | $\begin{array}{r} 3.8 \\ .6 \end{array}$ | 4.0.6 | 4.2.7 | 4.5.6 | 5.0.5 | 5.4.6 | 5.7.62.0 | $\begin{array}{r}6.2 \\ .6 \\ 2.1 \\ .6 \\ \hline\end{array}$ |
| Job leavers.. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Reentrants... | 1.4 | 1.65 | $\begin{array}{r} 1.6 \\ .5 \\ \hline \end{array}$ | $\begin{array}{r}1.7 \\ .5 \\ \hline\end{array}$ | 1.7.5 | $\begin{array}{r} 1.7 \\ .5 \\ \hline \end{array}$ | $\begin{array}{r}1.7 \\ \hline .5 \\ \hline\end{array}$ | $\begin{array}{r}\text {. } \\ \hline\end{array}$ | $\begin{array}{r}1.7 \\ \hline .5 \\ \hline\end{array}$ | $\begin{array}{r}1.8 \\ .5 \\ \hline\end{array}$ | $\begin{array}{r}1.8 \\ .5 \\ \hline\end{array}$ | $\begin{array}{r}1.8 \\ \hline .7 \\ \hline\end{array}$ | $\begin{array}{r}1.9 \\ .6 \\ \hline\end{array}$ | $\begin{array}{r}2.0 \\ .6 \\ \hline\end{array}$ |  |
| New entrants.. | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Includes persons who completed temporary jobs.
NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.
9. Unemployment rates by sex and age, monthly data seasonally adjusted
[Civilian workers]

| Sex and age | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| Total, 16 years and older. | 4.6 | 5.8 | 5.5 | 5.6 | 5.8 | 6.2 | 6.2 | 6.6 | 6.8 | 7.2 | 7.6 | 8.1 | 8.5 | 8.9 | 9.4 |
| 16 to 24 years. | 10.5 | 12.8 | 13.1 | 12.9 | 13.5 | 13.3 | 13.4 | 13.8 | 13.9 | 14.7 | 14.8 | 15.5 | 16.3 | 16.7 | 17.3 |
| 16 to 19 years... | 15.7 | 18.7 | 18.9 | 18.8 | 20.5 | 19.2 | 19.4 | 20.7 | 20.4 | 20.8 | 20.8 | 21.6 | 21.7 | 21.5 | 22.7 |
| 16 to 17 years.. | 17.5 | 22.1 | 21.5 | 23.2 | 24.9 | 22.2 | 21.7 | 23.1 | 24.1 | 24.1 | 21.4 | 22.9 | 23.7 | 23.0 | 23.4 |
| 18 to 19 years... | 14.5 | 16.8 | 17.6 | 15.9 | 17.6 | 17.4 | 17.8 | 18.4 | 18.3 | 19.1 | 20.2 | 21.0 | 20.9 | 21.3 | 22.9 |
| 20 to 24 years... | 8.2 | 10.2 | 10.3 | 10.2 | 10.4 | 10.7 | 10.8 | 10.6 | 11.1 | 12.1 | 12.1 | 12.9 | 14.0 | 14.7 | 15.0 |
| 25 years and older.. | 3.6 | 4.6 | 4.2 | 4.4 | 4.5 | 5.0 | 5.0 | 5.3 | 5.6 | 6.0 | 6.4 | 6.9 | 7.2 | 7.5 | 8.1 |
| 25 to 54 years... | 3.7 | 4.8 | 4.5 | 4.6 | 4.7 | 5.2 | 5.3 | 5.5 | 5.8 | 6.3 | 6.7 | 7.2 | 7.6 | 7.8 | 8.4 |
| 55 years and older. | 3.1 | 3.8 | 3.3 | 3.4 | 3.7 | 4.1 | 4.2 | 4.6 | 4.8 | 4.9 | 5.2 | 5.6 | 6.2 | 6.4 | 6.7 |
| Men, 16 years and older.. | 4.7 | 6.1 | 5.7 | 5.9 | 6.2 | 6.4 | 6.8 | 7.2 | 7.4 | 7.9 | 8.3 | 8.8 | 9.5 | 10.0 | 10.5 |
| 16 to 24 years.... | 11.6 | 14.4 | 14.1 | 14.1 | 15.3 | 14.6 | 14.8 | 16.5 | 16.1 | 16.9 | 17.1 | 17.6 | 19.3 | 19.8 | 20.2 |
| 16 to 19 years... | 17.6 | 21.2 | 20.8 | 20.8 | 23.5 | 21.1 | 21.4 | 24.7 | 24.0 | 23.3 | 24.4 | 24.9 | 25.7 | 25.6 | 26.7 |
| 16 to 17 years.. | 19.4 | 25.2 | 23.7 | 26.1 | 29.3 | 24.5 | 23.2 | 27.3 | 28.8 | 27.0 | 26.5 | 26.5 | 28.2 | 26.3 | 26.1 |
| 18 to 19 years.... | 16.5 | 19.0 | 19.8 | 17.5 | 20.1 | 19.0 | 20.4 | 21.7 | 21.2 | 21.5 | 22.8 | 24.7 | 24.6 | 25.3 | 27.8 |
| 20 to 24 years.... | 8.9 | 11.4 | 11.1 | 11.2 | 11.7 | 11.7 | 11.9 | 12.9 | 12.9 | 14.2 | 14.1 | 14.6 | 16.7 | 17.5 | 17.5 |
| 25 years and older.. | 3.6 | 4.8 | 4.3 | 4.5 | 4.8 | 5.1 | 5.5 | 5.6 | 5.9 | 6.4 | 6.9 | 7.5 | 7.9 | 8.3 | 9.0 |
| 25 to 54 years.. | 3.7 | 5.0 | 4.5 | 4.7 | 5.0 | 5.3 | 5.8 | 5.8 | 6.1 | 6.7 | 7.3 | 7.9 | 8.3 | 8.8 | 9.5 |
| 55 years and older..... | 3.2 | 3.9 | 3.5 | 3.5 | 3.8 | 4.3 | 4.5 | 4.7 | 5.1 | 5.1 | 5.3 | 6.0 | 6.3 | 6.7 | 7.0 |
| Women, 16 years and older.. | 4.5 | 5.4 | 5.3 | 5.3 | 5.3 | 5.9 | 5.5 | 5.9 | 6.1 | 6.4 | 6.7 | 7.3 | 7.5 | 7.6 | 8.0 |
| 16 to 24 years...... | 9.4 | 11.2 | 11.9 | 11.5 | 11.6 | 12.0 | 11.9 | 10.7 | 11.5 | 12.4 | 12.2 | 13.3 | 13.1 | 13.3 | 14.2 |
| 16 to 19 years.. | 13.8 | 16.2 | 16.7 | 16.8 | 17.4 | 17.3 | 17.3 | 16.5 | 16.7 | 18.2 | 17.1 | 18.3 | 17.8 | 17.4 | 18.6 |
| 16 to 17 years. | 15.7 | 19.1 | 19.2 | 20.4 | 20.5 | 20.1 | 20.3 | 19.2 | 19.7 | 21.2 | 16.2 | 19.8 | 19.4 | 19.9 | 20.7 |
| 18 to 19 years... | 12.5 | 14.3 | 15.2 | 14.1 | 14.9 | 15.6 | 14.9 | 14.7 | 15.1 | 16.6 | 17.5 | 17.0 | 17.2 | 17.1 | 17.5 |
| 20 to 24 years..... | 7.3 | 8.8 | 9.5 | 8.9 | 8.9 | 9.5 | 9.4 | 8.1 | 9.2 | 9.8 | 10.0 | 10.9 | 11.0 | 11.5 | 12.2 |
| 25 years and older.... | 3.6 | 4.4 | 4.1 | 4.2 | 4.2 | 4.9 | 4.4 | 5.1 | 5.2 | 5.4 | 5.8 | 6.2 | 6.5 | 6.6 | 7.0 |
| 25 to 54 years... | 3.8 | 4.6 | 4.4 | 4.5 | 4.4 | 5.1 | 4.6 | 5.2 | 5.4 | 5.7 | 6.0 | 6.4 | 6.7 | 6.7 | 7.2 |
| 55 years and older ${ }^{\prime}$.......... | 3.0 | 3.7 | 2.8 | 3.4 | 4.3 | 4.5 | 3.9 | 4.3 | 4.3 | 4.3 | 5.4 | 5.3 | 5.8 | 5.4 | 5.8 |

${ }^{1}$ Data are not seasonally adjusted.
NOTE: Beginning in January 2003, data reflect revised population controls used in the household survey.
10. Unemployment rates by State, seasonally adjusted

| State | $\begin{aligned} & \text { Apr. } \\ & 2008 \end{aligned}$ | $\begin{aligned} & \hline \text { Mar. } \\ & 2009^{p} \end{aligned}$ | $\begin{gathered} \text { Apr. } \\ 2009^{p} \end{gathered}$ | State | $\begin{aligned} & \text { Apr. } \\ & 2008 \end{aligned}$ | $\begin{aligned} & \hline \text { Mar. } \\ & 2009^{p} \end{aligned}$ | $\begin{gathered} \text { Apr. } \\ 2009^{p} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | 4.5 | 9.0 | 9.0 | Missouri. | 5.6 | 8.7 | 8.1 |
| Alaska. | 6.6 | 8.4 | 7.9 | Montana.. | 4.2 | 6.1 | 6.0 |
| Arizona.. | 4.9 | 7.8 | 7.7 | Nebraska.. | 3.3 | 4.7 | 4.5 |
| Arkansas. | 4.9 | 6.5 | 6.5 | Nevada. | 5.8 | 10.4 | 10.6 |
| California. | 6.6 | 11.2 | 11.1 | New Hampshire. | 3.7 | 6.2 | 6.3 |
| Colorado.. | 4.7 | 7.5 | 7.4 | New J ersey... | 5.0 | 8.3 | 8.4 |
| Connecticut. | 5.2 | 7.5 | 7.9 | New Mexico.. | 3.9 | 5.9 | 5.8 |
| Delaware. | 4.2 | 7.6 | 7.4 | New York. | 5.0 | 7.8 | 7.7 |
| District of Columbia. | 6.4 | 9.7 | 9.9 | North Carolina. | 5.7 | 10.8 | 10.7 |
| Florida.. | 5.6 | 9.8 | 9.7 | North Dakota.. | 3.0 | 4.2 | 4.1 |
| Georgia. | 5.8 | 9.2 | 9.2 | Ohio.. | 6.2 | 9.7 | 10.2 |
| Hawaii.. | 3.5 | 7.1 | 6.9 | Oklahoma.. | 3.5 | 5.9 | 6.2 |
| Idaho.. | 4.3 | 7.0 | 7.0 | Oregon... | 5.6 | 11.9 | 11.8 |
| Illinois. | 6.2 | 9.0 | 9.4 | Pennsylvania.. | 5.0 | 7.8 | 7.8 |
| Indiana.. | 5.4 | 10.0 | 9.9 | Rhode Island. | 7.1 | 10.6 | 11.1 |
| Iowa. | 4.0 | 5.2 | 5.1 | South Carolina. | 6.2 | 11.4 | 11.4 |
| Kansas. | 4.2 | 6.1 | 6.5 | South Dakota. | 2.9 | 4.9 | 4.8 |
| Kentucky.. | 6.1 | 9.8 | 9.9 | Tennessee. | 6.0 | 9.6 | 9.9 |
| Louisiana. | 4.1 | 5.8 | 6.2 | Texas. | 4.6 | 6.7 | 6.6 |
| Maine. | 5.1 | 8.1 | 7.9 | Utah. | 3.3 | 5.2 | 5.2 |
| Maryland.. | 4.0 | 6.9 | 6.8 | Vermont. | 4.6 | 7.2 | 7.3 |
| Massachusetts. | 4.8 | 7.7 | 8.0 | Virginia. | 3.7 | 6.8 | 6.8 |
| Michigan. | 7.9 | 12.6 | 12.9 | W ashington. | 4.9 | 9.1 | 9.0 |
| Minnesota.. | 5.4 | 8.2 | 8.0 | West Virginia.. | 4.3 | 6.8 | 7.7 |
| Mississippi.. | 6.4 | 9.4 | 9.1 | Wisconsin.. | 4.5 | 8.5 | 8.6 |
|  |  |  |  | Wyoming............................................ | 2.9 | 4.5 | 4.5 |

${ }^{\mathrm{p}}=$ preliminary
11. Employment of workers on nonfarm payrolls by State, seasonally adjusted

| State | Apr. <br> 2008 | Mar. $2009^{p}$ | Apr. $2009^{p}$ | State | Apr. <br> 2008 | Mar. $2009^{p}$ | Apr. $2009^{\text {p }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama. | 2,165,799 | 2,142,080 | 2,131,372 | Missouri. | 3,010,406 | 3,014,046 | 3,008,361 |
| Alaska. | 356,247 | 358,322 | 358,717 | Montana. | 504,764 | 501,020 | 502,680 |
| Arizona | 3,098,178 | 3,137,010 | 3,153,411 | Nebraska. | 994,844 | 990,165 | 990,513 |
| Arkansas. | 1,367,748 | 1,359,628 | 1,358,972 | Nevada. | 1,358,083 | 1,394,336 | 1,400,452 |
| California. | 18,322,527 | 18,614,914 | 18,629,516 | New Hampshire.......................... | 739,455 | 743,788 | 744,003 |
| Colorado. | 2,724,986 | 2,725,094 | 2,737,359 | New Jersey. | 4,487,720 | 4,540,571 | 4,572,378 |
| Connecticut. | 1,865,841 | 1,884,885 | 1,887,180 | New Mexico.. | 956,306 | 954,599 | 955,478 |
| Delaware. | 441,413 | 436,166 | 438,347 | New York. | 9,647,585 | 9,762,516 | 9,771,997 |
| District of Columbia.. | 332,560 | 328,454 | 326,180 | North Carolina. | 4,517,957 | 4,554,471 | 4,579,637 |
| Florida. | 9,168,770 | 9,218,209 | 9,247,899 | North Dakota. | 368,411 | 370,123 | 369,837 |
| Georgia.. | 4,838,992 | 4,783,304 | 4,784,070 | Ohio. | 5,975,843 | 5,953,746 | 5,968,531 |
| Hawaii. | 653,835 | 644,426 | 646,671 | Oklahoma. | 1,739,958 | 1,763,261 | 1,771,688 |
| Idaho. | 751,203 | 750,049 | 750,167 | Oregon. | 1,947,049 | 2,000,064 | 2,003,610 |
| Illinois. | 6,727,466 | 6,577,979 | 6,611,172 | Pennsylvania. | 6,370,021 | 6,433,548 | 6,430,784 |
| Indiana. | 3,225,319 | 3,219,896 | 3,205,269 | Rhode Island.. | 568,757 | 564,449 | 563,408 |
| Iowa. | 1,675,337 | 1,674,810 | 1,674,828 | South Carolina. | 2,135,310 | 2,187,149 | 2,198,419 |
| Kansas. | 1,491,656 | 1,509,008 | 1,521,980 | South Dakota. | 443,706 | 448,089 | 446,866 |
| Kentucky. | 2,036,198 | 2,082,311 | 2,076,540 | Tennessee. | 3,041,381 | 3,039,502 | 3,039,141 |
| Louisiana. | 2,063,334 | 2,070,503 | 2,074,281 | Texas. | 11,633,510 | 11,861,161 | 11,924,810 |
| Maine. | 705,846 | 705,307 | 703,855 | Utah. | 1,378,929 | 1,382,215 | 1,379,354 |
| Maryland.. | 2,993,399 | 2,961,054 | 2,968,440 | Vermont. | 355,332 | 359,148 | 360,992 |
| Massachusetts. | 3,420,250 | 3,421,053 | 3,434,282 | Virginia.. | 4,103,565 | 4,151,436 | 4,170,518 |
| Michigan.. | 4,954,978 | 4,841,297 | 4,847,947 | Washington.. | 3,456,708 | 3,541,053 | 3,539,901 |
| Minnesota. | 2,926,399 | 2,954,684 | 2,964,037 | West Virginia.. | 808,002 | 792,686 | 795,041 |
| Mississippi.. | 1,312,789 | 1,321,098 | 1,311,937 | Wisconsin................................ | 3,082,122 | 3,104,921 | 3,110,840 |
|  |  |  |  | Wyoming.................................. | 291,137 | 290,250 | 290,793 |

NOTE: Some data in this table may differ from data published elsewhere because of the continual updating of the database.
$p=$ preliminary
12. Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted
[In thousands]

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| TOTAL NONFARM | 137,598 | 137,066 | 137,517 | 137,356 | 137,228 | 137,053 | 136,732 | 136,352 | 135,755 | 135,074 | 134,333 | 133,652 | 133,000 | 132,481 | 132,159 |
| TOTAL PRIVATE. | 115,380 | 114,566 | 115,029 | 114,834 | 114,691 | 114,497 | 114,197 | 113,813 | 113,212 | 112,542 | 111,793 | 111,105 | 110,457 | 109,865 | 109,553 |
| GOODS-PRODUCING.. | 22,233 | 21,419 | 21,612 | 21,507 | 21,432 | 21,351 | 21,247 | 21,063 | 20,814 | 20,532 | 20,127 | 19,832 | 19,520 | 19,253 | 19,038 |
| Natural resources and mining $\qquad$ | 724 | 774 | 763 | 770 | 777 | 787 | 794 | 794 | 793 | 789 | 781 | 71 | 54 | 通 | 929 |
| Logging..... | 60.1 | 57.0 | 57.3 | 56.0 | 55.8 | 56.1 | 56.5 | 56.6 | 56.6 | 55.7 | 55.2 | 54.5 | 51.9 | 51.4 | 51.6 |
| Mining....... | 663.8 | 717.0 | 705.5 | 713.8 | 721.3 | 730.6 | 737.7 | 737.7 | 736.8 | 733.3 | 725.3 | 716.4 | 701.9 | 689.0 | 677.4 |
| Oil and gas extraction | 146.2 | 161.6 | 158.8 | 160.7 | 162.7 | 164.7 | 166.3 | 166.5 | 167.4 | 169.4 | 167.7 | 167.8 | 166.9 | 167.0 | 167.1 |
| Mining, except oil and gas | 223.4 | 227.7 | 226.3 | 226.9 | 227.6 | 230.0 | 230.2 | 230.5 | 230.7 | 229.2 | 227.9 | 225.7 | 222.8 | 220.4 | 218.7 |
| Coal mining.. | 77.2 | 80.6 | 79.2 | 79.6 | 79.5 | 81.7 | 82.5 | 83.1 | 84.3 | 84.5 | 84.9 | 84.1 | 83.3 | 82.4 | 81.2 |
| Support activities for mining | 294.3 | 327.7 | 320.4 | 326.2 | 331.0 | 335.9 | 341.2 | 340.7 | 338.7 | 334.7 | 329.7 | 322.9 | 312.2 | 301.6 | 291.6 |
| Construction. | 7,630 | 7,215 | 7,293 | 7,232 | 7,201 | 7,177 | 7,131 | 7,066 | 6,939 | 6,841 | 6,706 | 6,593 | 6,470 | 6,367 | 6,319 |
| Construction of buildings.... | 1,774.2 | 1,659.3 | 1,676.9 | 1,660.6 | 1,655.5 | 1,647.5 | 1,625.0 | 1,609.9 | 1,588.4 | 1,572.9 | 1,536.9 | 1,509.5 | 1,481.5 | 1,461.7 | 1,454.0 |
| Heavy and civil engineering | 1,005.4 | 970.2 | 982.1 | 972.2 | 970.9 | 966.1 | 960.2 | 952.6 | 942.5 | 933.2 | 926.6 | 919.0 | 907.2 | 885.5 | 877.1 |
| Speciality trade contractors. | 4,850.2 | 4,585.3 | 4,633.6 | 4,598.7 | 4,574.6 | 4,563.1 | 4,545.4 | 4,503.9 | 4,408.5 | 4,335.2 | 4,242.2 | 4,164.4 | 4,081.4 | 4,019.6 | 3,987.6 |
| Manufacturing.................... | 13,879 | 13,431 | 13,556 | 13,505 | 13,454 | 13,387 | 13,322 | 13,203 | 13,082 | 12,902 | 12,640 | 12,468 | 12,296 | 12,146 | 11,990 |
| Production workers | 9,975 | 9,649 | 9,770 | 9,723 | 9,672 | 9,608 | 9,543 | 9,425 | 9,322 | 9,174 | 8,946 | 8,804 | 8,654 | 8,532 | 8,403 |
| Durable goods.. | 8,808 | 8,476 | 8,567 | 8,533 | 8,502 | 8,439 | 8,392 | 8,300 | 8,216 | 8,085 | 7,881 | 7,753 | 7,620 | 7,490 | 7,362 |
| Production workers. | 6,250 | 5,986 | 6,077 | 6,040 | 6,006 | 5,948 | 5,898 | 5,805 | 5,741 | 5,633 | 5,458 | 5,352 | 5,239 | 5,130 | 5,027 |
| Wood products. | 515.3 | 459.6 | 468.3 | 462.9 | 458.4 | 451.9 | 446.4 | 438.8 | 429.8 | 416.2 | 403.9 | 390.4 | 388.4 | 382.4 | 373.4 |
| Nonmetallic mineral products | 500.5 | 468.1 | 473.0 | 469.7 | 466.4 | 464.5 | 460.2 | 458.2 | 450.1 | 441.2 | 434.3 | 425.8 | 417.0 | 415.5 | 409.8 |
| Primary metals. | 455.8 | 443.3 | 447.9 | 446.6 | 444.8 | 440.8 | 441.1 | 438.6 | 429.8 | 419.6 | 409.3 | 395.2 | 386.4 | 376.2 | 367.9 |
| Fabricated metal products | 1,562.8 | 1,528.3 | 1,544.8 | 1,534.8 | 1,528.4 | 1,530.6 | 1,519.4 | 1,505.0 | 1,486.3 | 1,461.5 | 1,425.3 | 1,399.0 | 1,370.3 | 1,344.1 | 1,323.7 |
| Machinery. | 1,187.1 | 1,185.6 | 1,192.2 | 1,190.8 | 1,191.1 | 1,187.5 | 1,183.1 | 1,179.3 | 1,162.7 | 1,150.2 | 1,126.0 | 1,100.8 | 1,070.5 | 1,051.4 | 1,029.3 |
| Computer and electronic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| products ${ }^{1}$ | 1,272.5 | 1,247.6 | 1,252.8 | 1,248.5 | 1,247.3 | 1,248.3 | 1,246.5 | 1,239.8 | 1,233.3 | 1,223.7 | 1,212.9 | 1,196.9 | 1,187.1 | 1,171.1 | 1,154.5 |
| Computer and peripheral |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| equipment. | 186.2 | 182.8 | 183.6 | 182.1 | 182.5 | 182.6 | 182.8 | 182.4 | 181.8 | 180.0 | 180.3 | 175.5 | 173.5 | 167.8 | 163.8 |
| Communications equipment. | 128.1 | 129.0 | 129.1 | 130.2 | 129.1 | 129.1 | 129.2 | 128.6 | 129.5 | 129.1 | 129.6 | 129.0 | 128.5 | 127.8 | 127.0 |
| Semiconductors and electronic components.. | 447.5 | 432.4 | 434.4 | 431.2 | 431.9 | 432.3 | 431.0 | 428.4 | 423.2 | 417.4 | 410.5 | 403.3 | 397.6 | 389.2 | 38.1 |
| Electronic instruments... | 443.2 | 441.6 | 443.1 | 442.4 | 441.8 | 442.6 | 442.5 | 440.2 | 438.8 | 437.5 | 433.8 | 431.9 | 430.9 | 431.1 | 427.1 |
| Electrical equipment and appliances. | 429.4 | 424.9 | 428.5 | 428.3 | 428.4 | 425.5 | 422.6 | 421.3 | 417.5 | 412.0 | 406.1 | 399.1 | 389.7 | 382.0 | 378.5 |
| Transportation equipment | 1,711.9 | 1,606.5 | 1,636.6 | 1,634.3 | 1,625.7 | 1,584.5 | 1,572.6 | 1,531.3 | 1,532.5 | 1,501.8 | 1,423.5 | 1,423.7 | 1,400.4 | 1,365.9 | 1,331.7 |
| Furniture and related products. | 531.1 | 481.0 | 491.6 | 488.0 | 483.4 | 475.7 | 470.3 | 458.8 | 449.6 | 440.6 | 428.6 | 417.4 | 408.8 | 401.0 | 394.2 |
| Miscellaneous manufacturing | 641.7 | 630.8 | 631.4 | 629.0 | 627.9 | 630.1 | 629.4 | 628.5 | 624.2 | 618.4 | 611.0 | 604.5 | 601.1 | 600.4 | 598.7 |
| Nondurable goods...... | 5,071 | 4,955 | 4,989 | 4,972 | 4,952 | 4,948 | 4,930 | 4,903 | 4,866 | 4,817 | 4,759 | 4,715 | 4,676 | 4,656 | 4,628 |
| Production workers.... | 3,725 | 3,663 | 3,693 | 3,683 | 3,666 | 3,660 | 3,645 | 3,620 | 3,581 | 3,541 | 3,488 | 3,452 | 3,415 | 3,402 | 3,376 |
| Food manufacturing...... | 1,484.1 | 1,484.8 | 1,483.1 | 1,482.1 | 1,478.1 | 1,482.7 | 1,484.3 | 1,484.7 | 1,489.0 | 1,477.6 | 1,470.7 | 1,467.2 | 1,464.4 | 1,474.9 | 1,472.4 |
| Beverages and tobacco products. | 198.2 | 199.0 | 201.4 | 200.6 | 200.0 | 199.2 | 199.3 | 197.2 | 196.4 | 195.8 | 194.2 | 191.3 | 191.6 | 190.9 | 90.3 |
| Textile mills. | 169.7 | 151.0 | 154.3 | 150.7 | 149.0 | 149.5 | 147.5 | 145.6 | 140.6 | 136.8 | 133.6 | 130.0 | 128.2 | 127.3 | 125.9 |
| Textile product mills. | 157.7 | 147.5 | 149.1 | 147.1 | 146.2 | 145.2 | 145.5 | 144.5 | 143.5 | 141.2 | 137.4 | 134.2 | 129.3 | 127.5 | 127.0 |
| Apparel. | 214.6 | 198.4 | 200.8 | 200.0 | 199.5 | 200.4 | 197.3 | 192.8 | 187.1 | 183.5 | 178.9 | 176.3 | 173.8 | 169.9 | 170.1 |
| Leather and allied products.. | 33.8 | 33.6 | 33.6 | 34.2 | 33.0 | 34.5 | 34.3 | 33.9 | 32.6 | 32.6 | 32.4 | 31.9 | 31.7 | 31.7 | 31.3 |
| Paper and paper products..... | 458.2 | 445.8 | 449.8 | 448.2 | 447.1 | 444.7 | 441.9 | 439.7 | 437.1 | 433.4 | 427.3 | 422.5 | 418.3 | 415.1 | 410.2 |
| Printing and related support activities. | 622.1 | 594.1 | 601.2 | 594.8 | 591.5 | 591.5 | 587.6 | 582.3 | 574.1 | 567.0 | 558.1 | 549.2 | 541.5 | 534.4 | 528.8 |
| Petroleum and coal products. | 114.5 | 117.1 | 117.1 | 117.6 | 118.1 | 118.0 | 117.9 | 117.8 | 117.2 | 116.9 | 114.2 | 114.6 | 114.5 | 114.6 | 114.6 |
| Chemicals............................ | 860.9 | 849.8 | 854.2 | 852.8 | 850.0 | 847.3 | 844.3 | 843.4 | 842.6 | 837.1 | 832.7 | 828.2 | 823.4 | 818.9 | 815.2 |
| Plastics and rubber products.. | 757.2 | 734.2 | 744.3 | 743.4 | 739.3 | 734.7 | 729.7 | 721.1 | 705.9 | 694.9 | 679.7 | 669.3 | 659.0 | 651.1 | 641.8 |
| SERVICE-PROVIDING..... | 115,366 | 115,646 | 115,905 | 115,849 | 115,796 | 115,702 | 115,485 | 115,289 | 114,941 | 114,542 | 114,206 | 113,820 | 113,480 | 113,228 | 113,121 |
| PRIVATE SERVICEPROVIDING. | 93,147 | 93,146 | 93,417 | 93,327 | 93,259 | 93,146 | 92,950 | 92,750 | 92,398 | 92,010 | 91,666 | 91,273 | 90,937 | 90,612 | 90,515 |
| Trade, transportation, and utilities. | 26,630 | 26,385 | 26,503 | 26,467 | 26,425 | 26,354 | 26,257 | 26,157 | 26,005 | 25,843 | 25,735 | 25,605 | 25,479 | 25,371 | 25,314 |
| Wholesale trade. | 6,015.2 | 5,963.7 | 5,989.3 | 5,983.1 | 5,966.9 | 5,954.3 | 5,947.2 | 5,920.1 | 5,890.3 | 5,850.7 | 5,819.3 | 5,773.7 | 5,741.3 | 5,710.8 | 5,693.3 |
| Durable goods.. | 3,121.5 | 3,060.7 | 3,078.2 | 3,071.7 | 3,062.5 | 3,052.4 | 3,047.2 | 3,026.1 | 3,004.9 | 2,978.6 | 2,959.6 | 2,926.2 | 2,899.4 | 2,875.5 | 2,860.9 |
| Nondurable goods. | 2,062.2 | 2,053.0 | 2,063.7 | 2,061.5 | 2,053.2 | 2,049.0 | 2,044.1 | 2,040.5 | 2,033.6 | 2,025.1 | 2,013.9 | 2,006.6 | 2,002.5 | 1,997.7 | 1,996.5 |
| Electronic markets and agents and brokers.. | 831.5 | 850.1 | 847.4 | 849.9 | 851.2 | 852.9 | 855.9 | 853.5 | 851.8 | 847.0 | 845.8 | 840.9 | 839.4 | 837.6 | 835.9 |
| Retail trade...... | 15,520.0 | 15,356.3 | 15,419.9 | 15,404.4 | 15,380.2 | 15,334.5 | 15,278.2 | 15,216.8 | 15,126.0 | 15,037.9 | 14,991.5 | 14,934.3 | 14,872.4 | 14,839.7 | 14,822.1 |
| Motor vehicles and parts |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| dealers ${ }^{1}$ | 1,908.3 | 1,844.5 | 1,877.4 | 1,866.2 | 1,851.4 | 1,832.6 | 1,818.4 | 1,792.7 | 1,770.5 | 1,745.6 | 1,730.1 | 1,716.8 | 1,701.8 | 1,690.2 | 1,679.5 |
| Automobile dealers. | 1,242.2 | 1,186.0 | 1,214.6 | 1,204.7 | 1,191.5 | 1,176.2 | 1,164.8 | 1,141.7 | 1,121.2 | 1,099.9 | 1,088.6 | 1,078.7 | 1,067.7 | 1,057.1 | 1,048.3 |
| Furniture and home furnishings stores.... | 574.6 | 542.8 | 547.6 | 546.5 | 545.8 | 542.3 | 538.4 | 532.4 | 522.6 | 514.2 | 508.3 | 499.7 | 497.7 | 492.4 | 486.4 |
| Electronics and appliance stores. $\qquad$ | 549.4 | 549.6 | 555.0 | 552.9 | 553.0 | 551.0 | 547.1 | 545.1 | 541.5 | 538.6 | 535.5 | 533.7 | 518.6 | 518.0 | 517.2 |

See notes at end of table.
12. Continued-Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted [In thousands]

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| Building material and garden supply stores. $\qquad$ Food and beverage stores | $\begin{aligned} & 1,309.3 \\ & 2,843.6 \end{aligned}$ | $\begin{aligned} & 1,253.1 \\ & 2,858.4 \end{aligned}$ | $\begin{aligned} & 1,256.0 \\ & 2,864.0 \end{aligned}$ | $\begin{aligned} & 1,252.2 \\ & 2,863.2 \end{aligned}$ | $\begin{aligned} & 1,244.1 \\ & 2,863.4 \end{aligned}$ | $\begin{aligned} & 1,245.9 \\ & 2,853.8 \end{aligned}$ | $\begin{aligned} & 1,248.4 \\ & 2,846.5 \end{aligned}$ | $\begin{aligned} & 1,245.9 \\ & 2,851.9 \end{aligned}$ | $\begin{aligned} & 1,235.8 \\ & 2,843.5 \end{aligned}$ | $\begin{aligned} & 1,227.8 \\ & 2,835.1 \end{aligned}$ | $\begin{aligned} & 1,214.9 \\ & 2,835.3 \end{aligned}$ | $\begin{aligned} & 1,207.1 \\ & 2,826.0 \end{aligned}$ | $\begin{aligned} & 1,193.5 \\ & 2,827.6 \end{aligned}$ | $\begin{aligned} & 1,189.3 \\ & 2,828.9 \end{aligned}$ | $\begin{aligned} & 1,186.0 \\ & 2,829.9 \end{aligned}$ |
| Food and beverage stores..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Health and personal care stores. | $\begin{aligned} & 993.1 \\ & 861.5 \end{aligned}$ | $\begin{array}{r} 1,002.4 \\ 843.4 \end{array}$ | $\begin{array}{r} 1,004.8 \\ 838.1 \end{array}$ | $\begin{array}{r} 1,003.6 \\ 845.8 \end{array}$ | $\begin{array}{r} 1,005.4 \\ 843.0 \end{array}$ | $\begin{aligned} & 999.0 \\ & 840.9 \end{aligned}$ | $\begin{aligned} & 998.9 \\ & 834.8 \end{aligned}$ | $\begin{aligned} & 995.9 \\ & 836.1 \end{aligned}$ | $\begin{aligned} & 989.4 \\ & 836.9 \end{aligned}$ | $\begin{aligned} & 991.2 \\ & 834.4 \end{aligned}$ | $\begin{aligned} & 985.7 \\ & 833.0 \end{aligned}$ | $\begin{aligned} & 986.9 \\ & 832.1 \end{aligned}$ | $\begin{aligned} & 985.0 \\ & 830.4 \end{aligned}$ | $\begin{aligned} & 984.2 \\ & 831.1 \end{aligned}$ | $\begin{aligned} & 985.0 \\ & 829.3 \end{aligned}$ |
| Gasoline stations... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clothing and clothing accessories stores. | 1,500.0 | 1,484.2 | 1,490.9 | 1,487.2 | 1,483.6 | 1,483.3 | 1,478.5 | 1,471.5 | 1,462.2 | 1,448.5 | 1,445.0 | 1,443.8 | 1,433.4 | 1,432.7 | 1,429.7 |
| Sporting goods, hobby, book, and music stores. | 656.3 | 646.7 | 649.2 | 646.9 | 642.2 | 645.8 | 641.6 | 641.2 | 633.1 | 624.3 | 620.8 | 613.6 | 610.0 | 608.8 | 607.5 |
| General merchandise stores1 | 3,020.6 | 3,047.1 | 3,043.2 | 3,052.0 | 3,062.3 | 3,058.2 | 3,045.8 | 3,025.5 | 3,024.5 | 3,029.2 | 3,040.7 | 3,040.7 | 3,045.5 | 3,041.2 | 3,046.2 |
| Department stores. | 1,591.5 | 1,557.0 | 1,564.0 | 1,561.8 | 1,563.2 | 1,554.4 | 1,541.9 | 1,523.9 | 1,517.5 | 1,521.2 | 1,529.1 | 1,532.6 | 1,530.9 | 1,524.0 | 1,528.2 |
| Miscellaneous store retailers. | 865.4 | 847.8 | 851.8 | 849.4 | 848.3 | 845.6 | 844.3 | 845.0 | 838.3 | 825.0 | 819.5 | 815.1 | 810.4 | 805.3 | 807.5 |
| Nonstore retailers.. | 437.9 | 436.3 | 441.9 | 438.5 | 437.7 | 436.1 | 435.5 | 433.6 | 427.7 | 424.0 | 422.7 | 418.8 | 418.5 | 417.6 | 417.9 |
| Transportation and warehousing $\qquad$ | 4,540.9 | 4,505.0 | 4,536.3 | 4,521.1 | 4,518.0 | 4,506.0 | 4,471.3 | 4,456.9 | 4,424.4 | 4,389.9 | 4,354.4 | 4,327.0 | 4,295.5 | 4,251.7 | 4,231.7 |
| Air transportation... | 491.8 | 492.6 | 498.3 | 494.9 | 492.9 | 488.1 | 483.2 | 482.1 | 481.6 | 477.8 | 476.8 | 474.8 | 474.0 | 466.8 | 467.1 |
| Rail transportation. | 233.7 | 229.5 | 230.3 | 227.1 | 230.1 | 228.8 | 227.6 | 229.5 | 229.0 | 226.8 | 227.1 | 224.1 | 220.7 | 217.9 | 214.6 |
| Water transportation. | 65.5 | 65.2 | 65.8 | 66.1 | 66.4 | 64.9 | 64.5 | 63.9 | 62.6 | 60.3 | 59.7 | 60.9 | 59.6 | 1,283.2 | 1,276.6 |
| Truck transportation.. | 1,439.2 | 1,391.1 | 1,405.1 | 1,393.1 | 1,391.2 | 1,390.3 | 1,378.1 | 1,370.3 | 1,358.0 | 1,340.8 | 1,323.3 | 1,313.9 | 1,300.3 |  |  |
| Transit and ground passenger transportation. | 412.1 | 418.1 | 418.8 | 421.9 | 420.8 | 422.7 | 414.4 | 413.8 | 411.7 | 410.1 | 408.1 | 406.4 | 406.2 | 401.8 | 405.8 |
| Pipeline transportation.......... | 39.9 | 42.0 | 41.7 | 42.3 | 42.7 | 42.5 | 43.1 | 43.3 | 43.2 | 43.3 | 43.1 | 43.1 | 43.0 | 43.0 | 42.5 |
| Scenic and sightseeing transportation. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Support activities for transportation. | 584.2 | 28.0 | 28.1 | 28.1 | 27.6 | 27.3 | 27.1 | 27.1 | 27.2 | 27.2 | 26.9 | 27.0 | 27.0 | 550.3 | 543.4 |
| Couriers and messengers. | 580.7 | 575.9 | 578.9 | 579.2 | 577.7 | 575.7 | 572.9 | 570.5 | 565.7 | 564.6 | 563.2 | 563.7 | 558.5 | 556.0 | 550.9 |
| Warehousing and storage. | 665.2 | 672.8 | 677.8 | 677.5 | 675.8 | 673.6 | 670.9 | 668.4 | 663.2 | 659.5 | 656.9 | 652.1 | 651.6 | 647.4 | 645.3 |
| Utilities. | 553.4 | 559.5 | 557.0 | 558.2 | 559.7 | 559.3 | 560.5 | 562.8 | 564.0 | 564.6 | 569.3 | 570.0 | 570.1 | 568.5 | 567.3 |
| Information.... | 3,032 | 2,997 | 3,013.0 | 3,006 | 2,995 | 2,990 | 2,986 | 2,982 | 2,965 | 2,940 | 2,924 | 2,918 | 2,905 | 2,884 | 2,859 |
| Publishing industries, except Internet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Motion picture and sound recording industries. | 901.2 | 882.6 | 890.4 | 886.8 | 882.9 | 879.4 | 876.6 | 872.6 | 863.6 | 857.8 | 846.3 | 836.3 | 827.8 | 820.1 | 381.1 |
| Broadcasting, except Internet. | 325.2 | 315.9 | 317.7 | 315.7 | 315.9 | 313.8 | 313.0 | 312.9 | 313.1 | 308.1 | 306.5 | 302.5 | 299.0 | 296.3 | 294.6 |
| Internet publishing and broadcasting. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Telecommunications.. | 1,030.6 | 1,021.4 | 1,025.3 | 1,025.5 | 1,022.8 | 1,023.1 | 1,021.6 | 1,014.5 | 1,010.2 | 1,004.0 | 1,001.6 | 999.5 | 996.7 | 989.3 | 986.4 |
| ISPs, search portals, and data processing. |  | 261.6 |  |  |  |  |  |  |  |  |  | 254.6 | 253.9 | 255.5 | 253.8 |
| Other information services | 126.3 | 133.6 | 132.5 | 132.2 | 133.0 | 133.6 | 133.6 | 134.1 | 135.1 | 136.5 | 135.7 | 134.8 | 134.1 | 133.7 | 134.0 |
| Financial activities | 8,301 | 8,146 | 8,179.0 | 8,162 | 8,154 | 8,141 | 8,115 | 8,088 | 8,043 | 8,010 | 7,954 | 7,898 | 7,857 | 7,811 | 7,781 |
| Finance and insurance. | 6,132.0 | 6,015.2 | 6,039.7 | 6,026.1 | 6,019.9 | 6,010.6 | 5,994.3 | 5,978.7 | 5,948.7 | 5,924.0 | 5,890.4 | 5,853.9 | 5,829.5 | 5,799.6 | 5,782.0 |
| Monetary authoritiescentral bank. $\qquad$ <br> Credit intermediation and | 21.6 | 22.2 | 22.5 | 22.3 | 22.3 | 22.3 | 22.3 | 22.1 | 21.5 | 21.3 | 21.0 | 20.9 | 20.8 | 20.5 | 20.3 |
| related activities ${ }^{1}$. | 2,866.3 | 2,735.8 | 2,746.7 | 2,738.5 | 2,730.9 | 2,724.4 | 2,722.4 | 2,706.4 | 2,692.8 | 2,680.8 | 2,665.3 | 2,648.8 | 2,635.4 | 2,619.8 | 2,613.6 |
| Depository credit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| intermediation ${ }^{1}$. | 1,823.5 | 1,819.5 | 1,824.8 | 1,822.2 | 1,820.0 | 1,818.4 | 1,814.8 | 1,811.1 | 1,806.9 | 1,804.9 | 1,798.1 | 1,790.9 | 1,783.4 | 1,778.0 | 1,774.4 |
| Commercial banking.. | 1,351.4 | 1,359.9 | 1,363.0 | 1,362.1 | 1,361.1 | 1,360.1 | 1,359.0 | 1,356.0 | 1,352.7 | 1,351.8 | 1,346.6 | 1,340.5 | 1,334.2 | 1,329.4 | 1,327.8 |
| Securities, commodity contracts, investments | 848.6 | 858.1 | 865.8 | 864.4 | 860.4 | 861.4 | 851.4 | 847.8 | 842.1 | 839.9 | 826.5 | 814.9 | 805.8 | 797.0 | 792.1 |
| Insurance carriers and related activities. | 2,306.8 | 2,308.8 | 2,314.7 | 2,310.6 | 2,316.1 | 2,312.0 | 2,307.6 | 2,311.0 | 2,300.9 | 2,292.0 | 2,287.4 | 2,281.1 | 2,279.4 | 2,274.3 | 2,268.3 |
| Funds, trusts, and other financial vehicles.. | 88.7 | 90.3 | 90.0 | 90.3 | 90.2 | 90.5 | 90.6 | 91.4 | 91.4 | 90.0 | 90.2 | 88.2 | 88.1 | 88.0 | 87.7 |
| Real estate and rental and leasing. | 2,169.1 | 2,130.2 | 2,138.9 | 2,135.9 | 2,134.4 | 2,130.0 | 2,120.6 | 2,109.0 | 2,093.8 | 2,085.8 | 2,063.2 | 2,043.8 | 2,027.0 | 2,011.7 | 1,999.0 |
| Real estate.. | 1,500.4 | 1,481.1 | 1,486.2 | 1,485.5 | 1,481.5 | 1,482.4 | 1,474.5 | 1,471.2 | 1,461.7 | 1,458.2 | 1,444.9 | 1,432.4 | 1,421.9 | 1,411.9 | 1,402.6 |
| Rental and leasing services. | 640.3 | 620.9 | 624.8 | 622.5 | 624.4 | 619.4 | 617.7 | 609.7 | 603.8 | 599.3 | 589.9 | 583.2 | 576.6 | 571.5 | 568.0 |
| Lessors of nonfinancial intangible assets. | 28.4 | 28.2 | 27.9 | 27.9 | 28.5 | 28.2 | 28.4 | 28.1 | 28.3 | 28.3 | 28.4 | 28.2 | 28.5 | 28.3 | 28.4 |
| Professional and business services. $\qquad$ | 17,942 | 17,778 | 17,887.0 | 17,824 | 17,788 | 17,727 | 17,675 | 17,612 | 17,488 | 17,356 | 17,205 | 17,029 | 16,910 | 16,783 | 16,735 |
| Professional and technical |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| services ${ }^{1}$. | 7,659.5 | 7,829.7 | 7,821.5 | 7,828.9 | 7,833.6 | 7,833.0 | 7,834.4 | 7,844.0 | 7,827.7 | 7,797.2 | 7,765.5 | 7,729.2 | 7,697.9 | 7,670.7 | 7,647.7 |
| Legal services. | 1,175.4 | 1,163.7 | 1,165.2 | 1,164.5 | 1,163.0 | 1,161.0 | 1,160.2 | 1,160.2 | 1,157.7 | 1,156.8 | 1,154.1 | 1,148.7 | 1,144.9 | 1,139.4 | 1,137.2 |
| Accounting and bookkeeping services. | 935.9 | 950.1 | 944.9 | 948.3 | 947.5 | 947.9 | 945.6 | 946.4 | 941.0 | 933.7 | 927.5 | 924.4 | 929.5 | 929.3 | 935.5 |
| Architectural and engineering services. | 1,432.2 | 1,444.8 | 1,449.3 | 1,450.5 | 1,449.2 | 1,447.2 | 1,441.4 | 1,437.1 | 1,428.6 | 1,419.4 | 1,411.1 | 1,394.2 | 1,377.9 | 1,364.1 | 1,349.8 |

12. Continued-Employment of workers on nonfarm payrolls by industry, monthly data seasonally adjusted [In thousands]

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| Computer systems design and related services. | 1,372.1 | 1,450.3 | 1,445.8 | 1,446.2 | 1,456.2 | 1,460.6 | 1,461.6 | 1,466.1 | 1,467.9 | 1,466.8 | 1,462.4 | 1,463.7 | 1,459.2 | 1,460.4 | 1,454.1 |
| Management and technical consulting services. | 952.7 | 1,008.9 | 1,002.3 | 1,010.1 | 1,011.3 | 1,011.6 | 1,021.0 | 1,022.9 | 1,024.9 | 1,020.5 | 1,025.7 | 1,021.6 | 1,016.0 | 1,016.7 | 1,017.3 |
| Management of companies and enterprises. | 1,866.4 | 1,894.6 | 1,902.1 | 1,900.6 | 1,895.3 | 1,895.2 | 1,887.1 | 1,882.8 | 1,882.0 | 1,872.1 | 1,871.7 | 1,862.1 | 1,852.6 | 1,840.2 | 1,827.8 |
| Administrative and waste services. | 8,416.3 | 8,053.7 | 8,163.3 | 8,094.9 | 8,058.6 | 7,998.6 | 7,953.2 | 7,884.8 | 7,778.3 | 7,686.3 | 7,567.5 | 7,437.8 | 7,359.4 | 7,272.3 | . 0 |
| Administrative and support services ${ }^{1}$ | 8,061.3 | 7,693.5 | 7,804.4 | 7,736.4 | 7,699.3 | 7,637.0 | 7,591.9 | 7,522.0 | 7,414.2 | 7,324.4 | 7,203.1 | 7,076.5 | 6,999.2 | 6,911.7 | 6,897.7 |
| Employment services ${ }^{1}$. | 3,545.9 | 3,144.4 | 3,242.7 | 3,184.0 | 3,146.9 | 3,089.5 | 3,049.8 | 2,987.7 | 2,896.7 | 2,829.5 | 2,720.5 | 2,638.7 | 2,567.0 | 2,506.4 | 2,496.3 |
| Temporary help services | 2,597.4 | 2,342.6 | 2,426.7 | 2,383.5 | 2,349.1 | 2,301.1 | 2,264.2 | 2,218.9 | 2,128.5 | 2,055.6 | 1,965.7 | 1,892.7 | 1,835.4 | 1,781.5 | 1,773.4 |
| Business support services Services to buildings | 817.4 | 823.2 | 822.6 | 818.1 | 817.4 | 814.9 | 818.1 | 820.8 | 823.7 | 816.0 | 817.6 | 805.0 | 799.1 | 792.9 | 789.0 |
| and dwellin | 1,849.5 | 1,847.0 | 1,853.5 | 1,851.4 | 1,848.6 | 1,847.0 | 1,843.3 | 1,837.4 | 1,829.4 | 1,818.1 | 1,812.5 | 1,796.8 | 1,791.5 | 1,778.7 | 1,778.9 |
| Waste management and remediation services.. | 355.0 | 360.2 | 358.9 | 358.5 | 359.3 | 361.6 | 361.3 | 362.8 | 364.1 | 361.9 | 364.4 | 361.3 | 360.2 | 360.6 | 361.3 |
| Educational and health |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| services | 18,322 | 18,855 | 18,798 | 18,843 | 18,888 | 18,950 | 18,957 | 18,981 | 19,044 | 19,080 | 19,119 | 19,138 | 19,158 | 19,175 | 19,222 |
| Educational services. | 2,941.4 | 3,036.6 | 3,025.4 | 3,049.2 | 3,062.4 | 3,083.7 | 3,055.1 | 3,047.3 | 3,066.0 | 3,063.1 | 3,088.4 | 3,083.1 | 3,077.9 | 3,077.4 | 3,082.7 |
| Health care and social assistance. | 15,380.2 | 15,818.5 | 15,772.3 | 15,794.1 | 15,825.9 | 15,865.9 | 15,901.9 | 15,934.1 | 15,977.8 | 16,017.0 | 16,030.3 | 16,054.7 | 16,080.1 | 16,097.8 | 16,139.4 |
| Ambulatory health care |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| services ${ }^{1}$. | 5,473.5 | 5,660.7 | 5,634.9 | 5,652.0 | 5,676.3 | 5,683.8 | 5,699.5 | 5,706.1 | 5,727.7 | 5,742.6 | 5,753.3 | 5,770.1 | 5,779.8 | 5,794.1 | 5,813.9 |
| Offices of physicia | 2,201.6 | 2,265.7 | 2,256.8 | 2,264.6 | 2,272.7 | 2,272.7 | 2,279.0 | 2,283.3 | 2,289.8 | 2,294.5 | 2,300.4 | 2,304.4 | 2,308.0 | 2,310.5 | 2,314.3 |
| Outpatient care centers | 512.0 | 532.5 | 531.5 | 531.2 | 535.4 | 537.2 | 534.8 | 536.6 | 536.9 | 536.7 | 538.0 | 538.5 | 537.7 | 538.7 | 539.7 |
| Home health care service | 913.8 | 958.0 | 951.8 | 955.3 | 961.1 | 963.4 | 966.8 | 968.6 | 975.6 | 980.7 | 981.4 | 991.0 | 996.7 | 1,004.5 | 1,012.1 |
| Hospitals. | 4,515.0 | 4,641.1 | 4,627.2 | 4,634.0 | 4,646.8 | 4,660.7 | 4,668.9 | 4,681.9 | 4,692.4 | 4,703.7 | 4,707.5 | 4,711.3 | 4,715.1 | 4,716.7 | 4,719.4 |
| Nursing and residential |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| care facilities ${ }^{1}$. | 2,958.3 | 3,008.1 | 3,006.2 | 3,005.7 | 3,006.3 | 3,009.9 | 3,007.6 | 3,013.2 | 3,022.3 | 3,029.6 | 3,029.4 | 3,033.6 | 3,041.0 | 3,042.8 | 3,049.1 |
| Nursing care facilitie | 1,602.6 | 1,613.7 | 1,615.1 | 1,613.0 | 1,612.3 | 1,612.6 | 1,608.9 | 1,611.0 | 1,614.5 | 1,617.3 | 1,616.6 | 1,617.9 | 1,621.8 | 1,624.5 | 1,628.1 |
| Social assistance ${ }^{1}$.... | 2,433.4 | 2,508.7 | 2,504.0 | 2,502.4 | 2,496.5 | 2,511.5 | 2,525.9 | 2,532.9 | 2,535.4 | 2,541.1 | 2,540.1 | 2,539.7 | 2,544.2 | 2,544.2 | 2,557.0 |
| Child day care services.. | 850.4 | 859.2 | 863.3 | 853.8 | 844.6 | 851.6 | 862.5 | 862.3 | 863.2 | 864.3 | 862.7 | 860.4 | 858.2 | 853.9 | 860.2 |
| Leisure and hospitality...... | 13,427 | 13,459 | 13,495 | 13,490 | 13,473 | 13,454 | 13,428 | 13,395 | 13,344 | 13,304 | 13,268 | 13,236 | 13,202 | 13,168 | 13,186 |
| Arts, entertainment, and recreation. | 1,969.2 | 1,969.3 | 1,978.3 | 1,975.1 | 1,966.6 | 1,964.7 | 1,955.3 | 1,952.0 | 1,944.0 | 1,947.1 | 1,943.8 | 1,936.2 | 1,928.7 | 1,900.6 | 1,901.4 |
| Performing arts and spectator sports. | 405.0 | 406.3 | 409.4 | 409.7 | 406.9 | 406.2 | 402.9 | 402.5 | 398.8 | 401.4 | 405.7 | 398.6 | 400.5 | 392.9 | 393.3 |
| Museums, historical sites, zoos, and parks. | 130.3 | 131.8 | 133.9 | 132.2 | 132.1 | 132.1 | 130.6 | 129.6 | 130.6 | 130.8 | 130.3 | 130.9 | 130.6 | 130.5 | 131.2 |
| Amusements, gambling, and recreation $\qquad$ | 1,433.9 | 1,431.2 | 1,435.0 | 1,433.2 | 1,427.6 | 1,426.4 | 1,421.8 | 1,419.9 | 1,414.6 | 1,414.9 | 1,407.8 | 1,406.7 | 1,397.6 | 1,377.2 | 1,376.9 |
| Accommodations and food services. | 11,457.4 | 11,489.3 | 11,516.7 | 11,515.3 | 11,506.3 | 11,489.3 | 11,472.4 | 11,442.7 | 11,399.6 | 11,356.5 | 11,323.7 | 11,299.7 | 11,273.2 | 11,267.0 | 11,284.2 |
| Accommodations. | 1,866.9 | 1,857.3 | 1,872.1 | 1,865.0 | 1,854.6 | 1,843.6 | 1,841.3 | 1,827.9 | 1,812.1 | 1,794.3 | 1,768.4 | 1,754.7 | 1,732.7 | 1,723.6 | 1,722.4 |
| Food services and drinking places. | 9,590.4 | 9,632.0 | 9,644.6 | 9,650.3 | 9,651.7 | 9,645.7 | 9,631.1 | 9,614.8 | 9,587.5 | 9,562.2 | 9,555.3 | 9,545.0 | 9,540.5 | 9,543.4 | 9,561.8 |
| Other services... | 5,494 | 5,528 | 5,542 | 5,535 | 5,536 | 5,530 | 5,532 | 5,535 | 5,509 | 5,477 | 5,461 | 5,449 | 5,426 | 5,420 | 5,418 |
| Repair and maintenance........ | 1,253.4 | 1,228.2 | 1,239.6 | 1,233.6 | 1,230.6 | 1,220.6 | 1,221.2 | 1,216.4 | 1,204.7 | 1,189.9 | 1,184.7 | 1,177.3 | 1,166.3 | 1,163.7 | 1,158.3 |
| Personal and laundry services | 1,309.7 | 1,326.6 | 1,325.3 | 1,327.4 | 1,328.9 | 1,331.7 | 1,333.9 | 1,330.1 | 1,323.2 | 1,320.9 | 1,313.6 | 1,312.5 | 1,302.4 | 1,297.3 | 1,295.0 |
| Membership associations and organizations. $\qquad$ | 2,931.1 | 2,973.3 | 2,976.9 | 2,973.8 | 2,976.6 | 2,977.6 | 2,977.1 | 2,988.3 | 2,980.7 | 2,965.7 | 2,963.1 | 2,958.7 | 2,956.8 | 2,958.6 | 2,965.1 |
| Government... | 22,218 | 22,500 | 22,488 | 22,522 | 22,537 | 22,556 | 22,535 | 22,539 | 22,543 | 22,532 | 22,540 | 22,547 | 22,543 | 22,616 | 22,606 |
| Federal.. | 2,734 | 2,764 | 2,763 | 2,765 | 2,776 | 2,768 | 2,771 | 2,775 | 2,783 | 2,778 | 2,793 | 2,796 | 2,808 | 2,876 | 2,856 |
| Federal, except U.S. Postal Service. $\qquad$ | 1,964.7 | 2,016.8 | 2,007.7 | 2,014.6 | 2,020.2 | 2,027.1 | 2,034.3 | 2,043.5 | 2,052.4 | 2,057.3 | 2,065.8 | 2,071.0 | 2,086.0 | 2,154.6 | 2,146.8 |
| U.S. Postal Service. | 769.1 | 747.5 | 755.7 | 750.5 | 755.8 | 740.6 | 736.5 | 731.9 | 730.1 | 720.9 | 726.9 | 724.9 | 721.7 | 721.0 | 708.7 |
| State.. | 5,122 | 5,178 | 5,167 | 5,175 | 5,184 | 5,204 | 5,192 | 5,194 | 5,197 | 5,196 | 5,192 | 5,192 | 5,186 | 5,189 | 5,195 |
| Education... | 2,317.5 | 2,359.0 | 2,348.0 | 2,355.4 | 2,365.1 | 2,379.5 | 2,373.3 | 2,372.8 | 2,380.3 | 2,381.3 | 2,380.2 | 2,382.3 | 2,379.9 | 2,385.5 | 2,391.5 |
| Other State government... | 2,804.3 | 2,818.9 | 2,818.5 | 2,819.4 | 2,819.1 | 2,824.6 | 2,818.9 | 2,820.7 | 2,816.4 | 2,814.8 | 2,811.6 | 2,809.4 | 2,805.9 | 2,803.5 | 2,803.4 |
| Local... | 14,362 | 14,557 | 14,558 | 14,582 | 14,577 | 14,584 | 14,572 | 14,570 | 14,563 | 14,558 | 14,555 | 14,559 | 14,549 | 14,551 | 14,555 |
| Education.... | 7,986.8 | 8,075.6 | 8,085.2 | 8,101.3 | 8,088.3 | 8,084.5 | 8,075.4 | 8,071.6 | 8,067.6 | 8,060.5 | 8,070.7 | 8,076.7 | 8,078.7 | 8,081.4 | 8,080.4 |
| Other local government. | 6,375.5 | 6,481.8 | 6,472.9 | 6,481.1 | 6,488.2 | 6,499.4 | 6,496.4 | 6,498.3 | 6,495.6 | 6,497.7 | 6,484.7 | 6,482.5 | 6,469.8 | 6,469.2 | 6,474.5 |

${ }^{1}$ Includes other industries not shown separately.
NOTE: See "Notes on the data" for a description of the most recent benchmark revision.
$\mathrm{p}=$ preliminary.
13. Average weekly hours of production or nonsupervisory workers ${ }^{1}$ on private nonfarm payrolls, by industry, monthly data seasonally adjusted

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| TOTAL PRIVATE. | 33.9 | 33.6 | 33.7 | 33.6 | 33.6 | 33.7 | 33.6 | 33.5 | 33.4 | 33.3 | 33.3 | 33.3 | 33.1 | 33.1 | 33.1 |
| GOODS-PRODUCING. | 40.6 | 40.2 | 40.2 | 40.3 | 40.3 | 40.2 | 39.9 | 39.8 | 39.5 | 39.4 | 39.3 | 39.2 | 38.9 | 39.0 | 38.9 |
| Natural resources and mining. | 45.9 | 45.1 | 44.6 | 44.9 | 44.8 | 45.3 | 44.5 | 44.7 | 45.3 | 44.3 | 44.2 | 43.9 | 43.4 | 43.0 | 43.4 |
| Construction.. | 39.0 | 38.5 | 38.5 | 38.7 | 38.7 | 38.6 | 38.3 | 38.3 | 37.7 | 38.0 | 37.9 | 38.0 | 37.7 | 37.5 | 37.6 |
| Manufacturing.. | 41.2 | 40.8 | 40.9 | 40.9 | 41.0 | 40.8 | 40.5 | 40.4 | 40.2 | 39.9 | 39.8 | 39.5 | 39.4 | 39.6 | 39.4 |
| Overtime hours... | 4.2 | 3.7 | 3.9 | 3.8 | 3.7 | 3.7 | 3.5 | 3.5 | 3.2 | 2.9 | 2.9 | 2.7 | 2.6 | 2.7 | 2.8 |
| Durable goods. | 41.5 | 41.1 | 41.2 | 41.2 | 41.2 | 41.1 | 40.6 | 40.6 | 40.4 | 40.0 | 39.8 | 39.6 | 39.3 | 39.5 | 39.3 |
| Overtime hours.. | 4.2 | 3.7 | 3.9 | 3.8 | 3.7 | 3.7 | 3.4 | 3.4 | 3.1 | 2.8 | 2.7 | 2.5 | 2.4 | 2.5 | 2.5 |
| Wood products... | 39.4 | 38.6 | 39.0 | 39.1 | 38.8 | 38.8 | 38.4 | 38.1 | 37.6 | 36.8 | 36.9 | 37.1 | 36.9 | 37.0 | 37.0 |
| Nonmetallic mineral products... | 42.3 | 42.1 | 42.3 | 42.0 | 42.6 | 42.2 | 41.9 | 41.8 | 40.9 | 40.9 | 40.2 | 40.0 | 39.9 | 40.2 | 40.3 |
| Primary metals. | 42.9 | 42.2 | 42.4 | 42.5 | 42.2 | 42.5 | 41.8 | 41.4 | 40.9 | 40.5 | 40.4 | 40.1 | 40.1 | 40.0 | 39.8 |
| Fabricated metal products.. | 41.6 | 41.3 | 41.5 | 41.2 | 41.2 | 41.1 | 40.9 | 40.8 | 40.8 | 40.3 | 39.7 | 39.5 | 39.0 | 39.2 | 39.1 |
| Machinery.. | 42.6 | 42.3 | 42.2 | 42.1 | 42.1 | 42.5 | 42.1 | 41.8 | 41.4 | 41.1 | 40.9 | 40.6 | 40.1 | 40.1 | 39.8 |
| Computer and electronic products. | 40.6 | 41.0 | 41.1 | 41.2 | 41.1 | 41.0 | 40.8 | 40.8 | 41.3 | 40.4 | 40.7 | 40.5 | 39.9 | 40.2 | 39.9 |
| Electrical equipment and appliances... | 41.2 | 40.9 | 41.1 | 40.9 | 40.8 | 40.8 | 41.0 | 40.4 | 40.2 | 39.7 | 39.4 | 38.9 | 38.8 | 39.6 | 39.4 |
| Transportation equipment................. | 42.8 | 42.0 | 41.9 | 42.1 | 42.6 | 41.7 | 40.9 | 41.3 | 40.9 | 40.9 | 40.4 | 40.1 | 40.0 | 40.6 | 39.9 |
| Furniture and related products.. | 39.2 | 38.1 | 38.8 | 38.7 | 38.3 | 37.9 | 37.4 | 37.4 | 37.2 | 37.3 | 37.7 | 37.4 | 37.7 | 37.6 | 37.8 |
| Miscellaneous manufacturing..... | 38.9 | 38.9 | 39.2 | 39.0 | 39.1 | 39.4 | 38.7 | 38.9 | 38.5 | 38.3 | 38.4 | 38.2 | 38.2 | 38.3 | 38.1 |
| Nondurable goods. | 40.8 | 40.4 | 40.5 | 40.4 | 40.6 | 40.4 | 40.2 | 40.2 | 39.9 | 39.7 | 39.7 | 39.5 | 39.4 | 39.6 | 39.6 |
| Overtime hours... | 4.1 | 3.7 | 3.8 | 3.8 | 3.7 | 3.8 | 3.6 | 3.6 | 3.4 | 3.1 | 3.2 | 3.0 | 3.0 | 3.1 | 3.2 |
| Food manufacturing... | 40.7 | 40.5 | 40.8 | 40.6 | 40.6 | 40.5 | 40.3 | 40.3 | 39.9 | 39.8 | 40.1 | 39.9 | 40.1 | 40.1 | 40.1 |
| Beverage and tobacco products. | 40.7 | 38.8 | 39.5 | 38.8 | 38.7 | 38.2 | 38.2 | 38.1 | 37.9 | 36.7 | 37.0 | 37.0 | 36.2 | 35.8 | 36.4 |
| Textile mills. | 40.3 | 38.7 | 38.9 | 38.8 | 39.2 | 39.5 | 38.9 | 38.4 | 37.7 | 37.0 | 37.1 | 36.4 | 36.3 | 36.9 | 36.8 |
| Textile product mills.. | 39.7 | 38.6 | 38.7 | 38.9 | 39.1 | 38.7 | 38.1 | 37.9 | 37.9 | 37.1 | 37.0 | 37.1 | 37.0 | 37.5 | 38.2 |
| Apparel......... | 37.2 | 36.4 | 36.0 | 36.4 | 37.0 | 36.5 | 35.9 | 36.3 | 36.2 | 36.0 | 36.0 | 35.6 | 36.1 | 36.1 | 35.8 |
| Leather and allied products. | 38.2 | 37.5 | 38.8 | 38.4 | 38.2 | 37.5 | 37.5 | 36.9 | 34.4 | 34.7 | 34.0 | 33.3 | 32.8 | 32.4 | 31.8 |
| Paper and paper products... | 43.1 | 42.9 | 42.6 | 42.7 | 42.6 | 42.9 | 42.4 | 42.2 | 42.1 | 41.9 | 41.6 | 41.5 | 41.1 | 41.4 | 41.3 |
| Printing and related support activities. | 39.1 | 38.3 | 38.6 | 38.1 | 38.0 | 38.2 | 38.3 | 38.3 | 38.2 | 38.0 | 37.7 | 37.3 | 37.5 | 37.7 | 37.5 |
| Petroleum and coal products. | 44.1 | 44.6 | 44.1 | 44.6 | 45.5 | 45.6 | 45.2 | 45.2 | 44.4 | 45.3 | 45.1 | 43.8 | 44.3 | 43.8 | 43.4 |
| Chemicals............. | 41.9 | 41.5 | 41.2 | 41.6 | 41.9 | 41.4 | 41.3 | 41.5 | 41.3 | 41.1 | 41.1 | 41.1 | 40.9 | 41.0 | 40.9 |
| Plastics and rubber products. | 41.3 | 41.0 | 40.9 | 41.0 | 41.3 | 41.0 | 40.7 | 40.6 | 40.6 | 40.0 | 39.9 | 39.6 | 39.4 | 39.8 | 39.8 |
| PRIVATE SERVICEPROVIDING. | 32.4 | 32.3 | 32.4 | 32.3 | 32.3 | 32.4 | 32.3 | 32.3 | 32.2 | 32.2 | 32.2 | 32.1 | 32.1 | 32.0 | 32.0 |
| Trade, transportation, and utilities $\qquad$ | 33.3 | 33.2 | 33.2 | 33.2 | 33.2 | 33.2 | 33.2 | 33.1 | 33.0 | 32.9 | 32.9 | 32.8 | 32.7 | 32.8 | 32.8 |
| Wholesale trade. | 38.2 | 38.2 | 38.3 | 38.3 | 38.4 | 38.3 | 38.1 | 38.2 | 38.1 | 37.8 | 38.1 | 37.9 | 37.8 | 37.8 | 37.6 |
| Retail trade. | 30.2 | 30.0 | 30.1 | 30.0 | 30.0 | 30.0 | 30.1 | 29.9 | 29.8 | 29.7 | 29.7 | 29.8 | 29.7 | 29.8 | 29.9 |
| Transportation and warehousing.. | 37.0 | 36.4 | 36.4 | 36.4 | 36.4 | 36.4 | 36.4 | 36.3 | 36.1 | 36.2 | 36.0 | 35.7 | 35.7 | 35.8 | 35.9 |
| Utilities. | 42.4 | 42.7 | 42.5 | 43.0 | 42.4 | 42.3 | 42.7 | 42.5 | 42.4 | 42.9 | 42.6 | 43.2 | 42.4 | 42.3 | 42.1 |
| Information... | 36.5 | 36.7 | 36.6 | 36.7 | 36.7 | 36.8 | 36.9 | 36.9 | 37.0 | 37.0 | 37.2 | 36.9 | 36.7 | 36.4 | 36.5 |
| Financial activities. | 35.9 | 35.8 | 35.9 | 35.8 | 35.7 | 36.1 | 36.0 | 35.9 | 36.1 | 35.9 | 36.2 | 36.2 | 36.1 | 36.0 | 36.0 |
| Professional and business services $\qquad$ | 34.8 | 34.8 | 34.9 | 34.8 | 34.8 | 34.9 | 34.8 | 34.9 | 34.9 | 34.8 | 34.9 | 34.8 | 34.7 | 34.7 | 34.7 |
| Education and health services.. | 32.6 | 32.5 | 32.7 | 32.5 | 32.5 | 32.6 | 32.5 | 32.5 | 32.4 | 32.4 | 32.4 | 32.3 | 32.4 | 32.3 | 32.3 |
| Leisure and hospitality............... | 25.5 | 25.2 | 25.3 | 25.3 | 25.2 | 25.2 | 25.2 | 25.1 | 25.0 | 25.0 | 24.8 | 25.0 | 24.8 | 24.8 | 24.7 |
| Other services.................................. | 30.9 | 30.8 | 30.8 | 30.7 | 30.8 | 30.9 | 30.7 | 30.7 | 30.7 | 30.6 | 30.7 | 30.6 | 30.5 | 30.5 | 30.5 |

${ }^{1}$ 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.
14. Average hourly earnings of production or nonsupervisory workers ${ }^{1}$ on private nonfarm payrolls, by industry, monthly data seasonally adjusted

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| TOTAL PRIVATE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Current dollars. | \$17.43 | \$18.08 | \$17.99 | \$18.04 | \$18.10 | \$18.18 | \$18.21 | \$18.28 | \$18.34 | \$18.40 | \$18.43 | \$18.46 | \$18.50 | \$18.50 | \$18.53 |
| Constant (1982) dollars | 8.33 | 8.30 | 8.27 | 8.20 | 8.16 | 8.20 | 8.21 | 8.33 | 8.54 | 8.65 | 8.64 | 8.61 | 8.64 | 8.65 | 8.65 |
| GOODS-PRODUCING... | 18.67 | 19.33 | 19.20 | 19.27 | 19.36 | 19.43 | 19.48 | 19.56 | 19.63 | 19.69 | 19.72 | 19.78 | 19.85 | 19.82 | 19.84 |
| Natural resources and mining.. | 20.97 | 22.50 | 21.79 | 22.04 | 22.54 | 23.01 | 23.08 | 23.03 | 23.28 | 23.23 | 23.14 | 23.14 | 23.33 | 23.38 | 23.31 |
| Construction... | 20.95 | 21.87 | 21.72 | 21.77 | 21.85 | 22.02 | 22.09 | 22.17 | 22.28 | 22.41 | 22.43 | 22.42 | 22.59 | 22.55 | 22.60 |
| Manufacturing... | 17.26 | 17.74 | 17.68 | 17.73 | 17.80 | 17.78 | 17.81 | 17.89 | 17.94 | 17.96 | 17.99 | 18.07 | 18.10 | 18.11 | 18.11 |
| Excluding overtime. | 16.43 | 16.97 | 16.88 | 16.94 | 17.03 | 17.01 | 17.07 | 17.15 | 17.25 | 17.33 | 17.36 | 17.47 | 17.52 | 17.51 | 17.49 |
| Durable goods.. | 18.20 | 18.70 | 18.63 | 18.70 | 18.78 | 18.74 | 18.74 | 18.84 | 18.91 | 18.94 | 18.99 | 19.09 | 19.17 | 19.18 | 19.22 |
| Nondurable goods. | 15.67 | 16.15 | 16.08 | 16.11 | 16.16 | 16.19 | 16.28 | 16.35 | 16.37 | 16.39 | 16.43 | 16.49 | 16.46 | 16.49 | 16.46 |
| PRIVATE SERVICE-PRIVATE SERVICEPROVIDING $\qquad$ | 17.11 | 17.77 | 17.69 | 17.74 | 17.79 | 17.87 | 17.90 | 17.97 | 18.03 | 18.10 | 18.14 | 18.17 | 18.20 | 18.21 | 18.24 |
| Trade,transportation, and utilities $\qquad$ | 15.78 | 16.16 | 16.13 | 16.16 | 16.17 | 16.23 | 16.20 | 16.23 | 16.29 | 16.31 | 16.36 | 16.38 | 16.38 | 16.38 | 16.41 |
| Wholesale trade. | 19.59 | 20.14 | 20.07 | 20.11 | 20.15 | 20.28 | 20.20 | 20.22 | 20.29 | 20.31 | 20.41 | 20.52 | 20.59 | 20.70 | 20.87 |
| Retail trade. | 12.75 | 12.87 | 12.87 | 12.87 | 12.88 | 12.92 | 12.91 | 12.89 | 12.93 | 12.94 | 12.97 | 12.96 | 12.97 | 12.96 | 12.96 |
| Transportation and warehousing. | 17.72 | 18.41 | 18.39 | 18.41 | 18.42 | 18.48 | 18.47 | 18.58 | 18.66 | 18.66 | 18.72 | 18.67 | 18.68 | 18.62 | 18.61 |
| Utilities.. | 27.88 | 28.84 | 28.81 | 29.12 | 28.67 | 28.89 | 28.86 | 28.91 | 28.91 | 29.16 | 29.22 | 29.67 | 29.31 | 29.29 | 29.40 |
| Information... | 23.96 | 24.77 | 24.71 | 24.78 | 24.87 | 24.95 | 24.90 | 24.99 | 24.94 | 24.91 | 24.98 | 25.09 | 25.31 | 25.28 | 25.44 |
| Financial activities. | 19.64 | 20.27 | 20.23 | 20.24 | 20.26 | 20.37 | 20.43 | 20.43 | 20.41 | 20.53 | 20.53 | 20.55 | 20.62 | 20.64 | 20.74 |
| Professional and business services. $\qquad$ | 20.15 | 21.19 | 20.96 | 21.08 | 21.19 | 21.38 | 21.47 | 21.63 | 21.78 | 21.97 | 22.04 | 22.17 | 22.26 | 22.26 | 22.27 |
| Education and health services. $\qquad$ | 18.11 | 18.88 | 18.80 | 18.84 | 18.92 | 18.96 | 19.04 | 19.08 | 19.13 | 19.20 | 19.18 | 19.24 | 19.24 | 19.33 | 19.35 |
| Leisure and hospitality....... | 10.41 | 10.84 | 10.83 | 10.85 | 10.87 | 10.89 | 10.90 | 10.92 | 10.90 | 10.94 | 10.97 | 10.97 | 10.98 | 10.97 | 10.98 |
| Other services................................ | 15.42 | 16.08 | 16.04 | 16.09 | 16.13 | 16.17 | 16.20 | 16.24 | 16.29 | 16.29 | 16.30 | 16.25 | 16.23 | 16.22 | 16.25 |

[^12]15. Average hourly earnings of production or nonsupervisory workers ${ }^{1}$ on private nonfarm payrolls, by industry

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| TOTAL PRIVATE. | \$17.43 | \$18.08 | \$17.94 | \$18.00 | \$18.02 | \$18.10 | \$18.25 | \$18.27 | \$18.40 | \$18.40 | \$18.49 | \$18.57 | \$18.57 | \$18.52 | \$18.47 |
| Seasonally adjusted |  | - | 17.99 | 18.04 | 18.10 | 18.18 | 18.21 | 18.28 | 18.34 | 18.40 | 18.43 | 18.46 | 18.50 | 18.50 | 18.53 |
| GOODS-PRODUCING. | 18.67 | 19.33 | 19.15 | 19.26 | 19.39 | 19.53 | 19.63 | 19.61 | 19.65 | 19.75 | 19.64 | 19.64 | 19.74 | 19.78 | 19.84 |
| Natural resources and mining | 20.97 | 22.50 | 21.52 | 21.75 | 22.45 | 23.06 | 23.19 | 22.98 | 23.31 | 23.53 | 23.41 | 23.19 | 23.40 | 23.40 | 23.09 |
| Construction. | 20.95 | 21.87 | 21.61 | 21.69 | 21.90 | 22.16 | 22.34 | 22.28 | 22.32 | 22.52 | 22.32 | 22.25 | 22.45 | 22.44 | 22.55 |
| Manufacturing | 17.26 | 17.74 | 17.65 | 17.73 | 17.73 | 17.75 | 17.84 | 17.86 | 17.94 | 18.06 | 18.03 | 18.07 | 18.09 | 18.13 | 18.10 |
| Durable goods. | 18.20 | 18.70 | 18.60 | 18.70 | 18.66 | 18.72 | 18.80 | 18.81 | 18.92 | 19.06 | 18.99 | 19.09 | 19.17 | 19.20 | 19.21 |
| Wood products | 13.68 | 14.20 | 14.11 | 14.16 | 14.25 | 14.25 | 14.37 | 14.44 | 14.58 | 14.66 | 14.69 | 14.77 | 14.67 | 14.72 | 14.89 |
| Nonmetallic mineral products | 16.93 | 16.90 | 16.89 | 16.97 | 16.93 | 16.85 | 16.94 | 16.92 | 16.85 | 16.73 | 16.82 | 17.03 | 17.19 | 17.37 | 17.31 |
| Primary metals | 19.66 | 20.18 | 20.24 | 20.26 | 20.43 | 20.28 | 20.36 | 20.01 | 19.98 | 20.05 | 19.80 | 19.75 | 19.69 | 19.98 | 19.86 |
| Fabricated metal products | 16.53 | 16.99 | 16.85 | 16.93 | 16.94 | 17.08 | 17.14 | 17.18 | 17.21 | 17.36 | 17.24 | 17.30 | 17.29 | 17.41 | 17.37 |
| Machinery | 17.72 | 17.97 | 18.01 | 17.90 | 17.96 | 17.97 | 18.08 | 18.11 | 18.18 | 18.15 | 18.16 | 18.17 | 18.26 | 18.20 | 18.42 |
| Computer and electronic products | 19.94 | 21.03 | 20.95 | 21.02 | 21.11 | 21.21 | 21.23 | 21.42 | 21.37 | 21.44 | 21.46 | 21.42 | 21.71 | 21.73 | 21.70 |
| Electrical equipment and appliances | 15.93 | 15.78 | 15.66 | 15.72 | 15.85 | 15.94 | 15.99 | 15.83 | 15.74 | 15.88 | 15.81 | 15.93 | 15.95 | 15.99 | 16.16 |
| Transportation equipment | 23.04 | 23.83 | 23.59 | 23.86 | 23.75 | 23.88 | 24.05 | 24.10 | 24.37 | 24.58 | 24.66 | 24.69 | 24.80 | 24.76 | 24.86 |
| Furniture and related products | 14.32 | 14.54 | 14.48 | 14.58 | 14.52 | 14.59 | 14.54 | 14.55 | 14.77 | 14.92 | 14.95 | 14.85 | 15.02 | 15.00 | 15.01 |
| Miscellaneous manufacturing . | 14.66 | 15.19 | 14.97 | 15.15 | 15.35 | 15.33 | 15.31 | 15.33 | 15.42 | 15.60 | 15.66 | 15.97 | 16.02 | 16.07 | 16.17 |
| Nondurable goods. | 15.67 | 16.15 | 16.05 | 16.08 | 16.20 | 16.15 | 16.30 | 16.32 | 16.35 | 16.43 | 16.51 | 16.48 | 16.43 | 16.51 | 16.43 |
| Food manufacturing. | 13.55 | 14.00 | 13.91 | 13.97 | 14.03 | 14.02 | 14.15 | 14.10 | 14.17 | 14.26 | 14.34 | 14.30 | 14.24 | 14.27 | 14.25 |
| Beverages and tobacco products | 18.54 | 19.35 | 19.19 | 18.74 | 19.02 | 18.60 | 18.97 | 19.41 | 19.98 | 19.95 | 20.07 | 20.25 | 20.40 | 20.25 | 20.33 |
| Textile mills . | 13.00 | 13.57 | 13.50 | 13.58 | 13.77 | 13.67 | 13.72 | 13.71 | 13.69 | 13.80 | 13.90 | 13.76 | 13.88 | 13.79 | 13.62 |
| Textile product mills | 11.78 | 11.73 | 11.86 | 11.80 | 11.80 | 11.78 | 11.81 | 11.62 | 11.59 | 11.72 | 11.59 | 11.53 | 11.34 | 11.34 | 11.36 |
| Apparel .. | 11.05 | 11.40 | 11.43 | 11.35 | 11.35 | 11.28 | 11.48 | 11.38 | 11.35 | 11.38 | 11.46 | 11.40 | 11.26 | 11.44 | 11.28 |
| Leather and allied products | 12.04 | 12.96 | 12.88 | 12.88 | 12.85 | 12.94 | 12.98 | 13.14 | 13.61 | 13.47 | 14.10 | 14.19 | 14.21 | 14.34 | 13.85 |
| Paper and paper products | 18.44 | 18.88 | 18.79 | 18.93 | 19.11 | 18.81 | 19.04 | 19.11 | 18.89 | 19.11 | 19.27 | 18.99 | 18.90 | 19.29 | 19.10 |
| Printing and related support activ | 16.15 | 16.75 | 16.66 | 16.77 | 16.81 | 16.83 | 16.90 | 16.99 | 16.86 | 17.01 | 16.79 | 16.79 | 16.69 | 16.76 | 16.58 |
| Petroleum and coal products | 25.21 | 27.46 | 26.85 | 26.99 | 27.54 | 27.69 | 28.25 | 28.69 | 28.28 | 28.17 | 29.13 | 29.57 | 29.80 | 29.26 | 29.23 |
| Chemicals | 19.55 | 19.49 | 19.33 | 19.29 | 19.41 | 19.53 | 19.77 | 19.67 | 19.77 | 19.72 | 19.89 | 19.96 | 19.93 | 20.02 | 20.15 |
| Plastics and rubber products | 15.39 | 15.85 | 15.74 | 15.72 | 15.87 | 15.86 | 15.94 | 16.03 | 16.13 | 16.24 | 16.24 | 16.22 | 16.20 | 16.19 | 16.12 |
| PRIVATE SERVICEPROVIDING | 17.11 | 17.77 | 17.64 | 17.68 | 17.68 | 17.73 | 17.90 | 17.94 | 18.10 | 18.09 | 18.23 | 18.33 | 18.31 | 18.24 | 18.18 |
| Trade, transportation, and utilities. $\qquad$ | 15.78 | 16.16 | 16.12 | 16.17 | 16.18 | 16.21 | 16.27 | 16.24 | 16.26 | 16.14 | 16.37 | 16.47 | 16.45 | 16.42 | 16.39 |
| Wholesale trade | 19.59 | 20.14 | 19.93 | 20.05 | 20.12 | 20.23 | 20.20 | 20.21 | 20.41 | 20.36 | 20.44 | 20.65 | 20.64 | 20.69 | 20.79 |
| Retail trade | 12.75 | 12.87 | 12.89 | 12.90 | 12.92 | 12.93 | 13.01 | 12.89 | 12.85 | 12.74 | 12.96 | 12.99 | 13.02 | 13.01 | 12.98 |
| Transportation and warehousing | 17.72 | 18.41 | 18.35 | 18.46 | 18.54 | 18.52 | 18.53 | 18.55 | 18.69 | 18.62 | 18.68 | 18.73 | 18.64 | 18.58 | 18.52 |
| Utilities | 27.88 | 28.84 | 28.84 | 29.02 | 28.49 | 28.64 | 28.95 | 29.00 | 28.96 | 29.28 | 29.27 | 29.70 | 29.42 | 29.50 | 29.48 |
| Information | 23.96 | 24.77 | 24.65 | 24.78 | 24.75 | 24.87 | 25.03 | 25.06 | 25.03 | 24.86 | 25.03 | 25.12 | 25.40 | 25.24 | 25.42 |
| Financial activities | 19.64 | 20.27 | 20.19 | 20.26 | 20.19 | 20.29 | 20.42 | 20.41 | 20.54 | 20.50 | 20.48 | 20.68 | 20.67 | 20.65 | 20.70 |
| Professional and business services $\qquad$ | 20.15 | 21.19 | 20.88 | 21.09 | 21.06 | 21.12 | 21.31 | 21.45 | 21.97 | 22.01 | 22.16 | 22.52 | 22.52 | 22.28 | 22.15 |
| Education and health services $\qquad$ | 18.11 | 18.88 | 18.76 | 18.79 | 18.96 | 18.95 | 19.08 | 19.04 | 19.10 | 19.23 | 19.26 | 19.26 | 19.23 | 19.33 | 19.30 |
| Leisure and hospitality | 10.41 | 10.84 | 10.83 | 10.78 | 10.73 | 10.79 | 10.89 | 10.93 | 10.93 | 11.05 | 11.03 | 11.06 | 11.00 | 10.99 | 10.99 |
| Other services............................. | 15.42 | 16.08 | 16.11 | 16.10 | 16.06 | 16.10 | 16.22 | 16.17 | 16.24 | 16.27 | 16.34 | 16.34 | 16.33 | 16.27 | 16.30 |

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.
16. Average weekly earnings of production or nonsupervisory workers ${ }^{1}$ on private nonfarm payrolls, by industry

| Industry | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| TOTAL PRIVATE | \$590.04 | \$607.99 | \$602.78 | \$613.80 | \$607.27 | \$613.59 | \$613.20 | \$613.87 | \$620.08 | \$610.88 | \$608.32 | \$616.52 | \$614.67 | \$607.46 | \$609.51 |
| Seasonally adjusted. |  |  | 606.26 | 606.14 | 608.16 | 612.67 | 611.86 | 612.38 | 612.56 | 612.72 | 613.72 | 614.72 | 612.35 | 612.35 | 613.34 |
| GOODS-PRODUC | 757.34 | 776.60 | 769.83 | 783.88 | 781.42 | 794.87 | 791.09 | 788.32 | 782.07 | 778.15 | 762.03 | 758.10 | 763.94 | 759.55 | 773.76 |
| Natural resources and mining. | 962.64 | 1,013.78 | 951.18 | 985.28 | 1,005.76 | 1,051.54 | 1,041.23 | 1,038.70 | 1,072.26 | 1,040.03 | 1,020.68 | 1,008.77 | 1,003.86 | 994.50 | 995.18 |
| CONSTRUCTION | 816.66 | 842.36 | 834.15 | 854.59 | 858.48 | 875.32 | 869.03 | 866.69 | 845.93 | 840.00 | 828.07 | 823.25 | 837.39 | 830.28 | 856.90 |
| Manufacturing. | 711.56 | 724.23 | 721.89 | 730.48 | 719.84 | 727.75 | 729.66 | 726.90 | 726.57 | 727.82 | 712.19 | 708.34 | 709.13 | 705.26 | 711.33 |
| Durable goods. | 754.77 | 767.56 | 766.32 | 776.05 | 761.33 | 775.01 | 770.80 | 767.45 | 766.26 | 771.93 | 750.11 | 748.33 | 751.46 | 746.88 | 753.03 |
| Wood products | 539.34 | 547.81 | 554.52 | 566.40 | 560.03 | 561.45 | 561.87 | 551.61 | 549.67 | 538.02 | 524.43 | 531.72 | 531.05 | 534.34 | 555.40 |
| Nonmetallic mineral produ | 716.78 | 711.30 | 717.83 | 724.62 | 726.30 | 726.24 | 725.03 | 719.10 | 692.54 | 677.57 | 654.30 | 657.36 | 673.85 | 694.80 | 701.06 |
| Primary metals. | 843.26 | 850.84 | 854.13 | 871.18 | 860.10 | 865.96 | 861.23 | 832.42 | 817.18 | 818.04 | 797.94 | 786.05 | 793.51 | 783.22 | 786.46 |
| Fabricated metal products. | 687.20 | 701.47 | 697.59 | 699.21 | 692.85 | 707.11 | 707.88 | 707.82 | 707.33 | 706.55 | 680.98 | 678.16 | 670.85 | 668.54 | 675.69 |
| Machinery.................... | 754.19 | 759.92 | 758.22 | 755.38 | 750.73 | 763.73 | 764.78 | 760.62 | 758.11 | 755.04 | 740.93 | 735.89 | 730.40 | 720.72 | 729.43 |
| Computer and electronic products. | 808.80 | 861.43 | 861.05 | 872.33 | 861.29 | 869.61 | 874.68 | 876.08 | 891.13 | 883.33 | 866.98 | 863.23 | 864.06 | 860.51 | 863.66 |
| Electrical equipment and appliances. $\qquad$ | 656.46 | 645.60 | 638.93 | 647.66 | 640.34 | 650.35 | 660.39 | 645.86 | 642.19 | 646.32 | 621.33 | 613.31 | 615.67 | 615.62 | 635.09 |
| Transportation equipment | 986.79 | 999.94 | 988.42 | 1,016.44 | 978.50 | 1,002.96 | 990.86 | 1,002.56 | 994.30 | 1,022.53 | 993.80 | 990.07 | 992.00 | 985.45 | 991.91 |
| Furniture and related products. | 560.84 | 554.20 | 557.48 | 571.54 | 557.57 | 566.09 | 549.61 | 542.72 | 546.49 | 563.98 | 559.13 | 547.97 | 563.25 | 552.00 | 565.88 |
| Miscellaneous manufacturing. | 569.99 | 591.73 | 583.83 | 595.40 | 594.05 | 608.60 | 595.56 | 593.27 | 593.67 | 600.60 | 599.78 | 603.67 | 613.57 | 610.66 | 616.08 |
| Nondurable goods. | 639.99 | 652.20 | 646.82 | 652.85 | 652.86 | 654.08 | 663.41 | 659.33 | 658.91 | 657.20 | 650.49 | 644.37 | 644.06 | 642.24 | 647.34 |
| Food manufacturing.. | 551.32 | 566.91 | 566.14 | 568.58 | 568.22 | 572.02 | 581.57 | 575.28 | 572.47 | 573.25 | 569.30 | 561.99 | 563.90 | 555.10 | 570.00 |
| Beverages and tobacco products. $\qquad$ | 755.22 | 750.18 | 765.68 | 738.36 | 741.78 | 716.10 | 720.86 | 729.82 | 767.23 | 726.18 | 28.54 | 741.15 |  |  |  |
| Textile mills. | 524.40 | 524.93 | 522.45 | 529.62 | 535.65 | 542.70 | 544.68 | 525.09 | 520.22 | 514.74 | 510.13 | 493.98 | 502.46 | 496.44 | 497.13 |
| Textile product mills | 467.77 | 453.12 | 454.24 | 468.46 | 462.56 | 460.60 | 452.32 | 438.07 | 441.58 | 441.84 | 423.04 | 426.61 | 419.58 | 417.31 | 431.68 |
| Apparel.... | 411.39 | 415.17 | 412.62 | 415.41 | 416.55 | 410.59 | 409.84 | 411.96 | 414.28 | 410.82 | 407.98 | 403.56 | 407.61 | 409.55 | 406.08 |
| Leather and allied products | 459.50 | 486.49 | 502.32 | 501.03 | 485.73 | 481.37 | 486.75 | 484.87 | 462.74 | 476.84 | 470.94 | 465.43 | 470.35 | 457.45 | 445.97 |
| Paper and paper products. | 795.58 | 809.21 | 791.06 | 806.42 | 808.35 | 806.95 | 818.72 | 812.18 | 802.83 | 814.09 | 797.78 | 780.49 | 769.23 | 792.82 | 781.19 |
| Printing and related support activities... | 632.02 | 642.50 | 638.08 | 633.91 | 630.38 | 644.59 | 655.72 | 659.21 | 652.48 | 654.89 | 627.95 | 622.91 | 627.54 | 625.15 | 615.12 |
| Petroleum and coal products. $\qquad$ | 1,112.73 | 1,224.26 | 1,181.40 | 1,219.95 | 1,266.84 | 1,259.90 | 1,302.33 | 1,322.61 | 1,275.43 | 1,256.38 | 1,307.94 | 1,286.30 | 1,290.34 | 1,258.18 | 1,259.81 |
| Chemicals. | 819.54 | 808.80 | 790.60 | 808.25 | 809.40 | 810.50 | 820.46 | 814.34 | 822.43 | 814.44 | 811.51 | 820.36 | 815.14 | 816.82 | 820.11 |
| Plastics and rubber products. | 635.63 | 649.04 | 645.34 | 650.81 | 647.50 | 650.26 | 655.13 | 652.42 | 658.10 | 657.72 | 647.98 | 639.07 | 636.66 | 633.03 | 638.35 |
| PRIVATE SERVICEPROVIDING | 554.89 | 574.31 | 569.77 | 579.90 | 572.83 | 576.23 | 578.17 | 577.67 | 588.25 | 578.88 | 579.71 | 592.06 | 587.75 | 580.03 | 579.94 |
| Trade, transportation, and utilities | 526.07 | 535.79 | 533.57 | 544.93 | 538.79 | 541.41 | 543.42 | 535.92 | 536.58 | 531.01 | 530.39 | 538.57 | 37.92 | 535.29 | 537.59 |
| Wholesale tra | 748.94 | 769.91 | 761.33 | 779.95 | 770.60 | 774.81 | 767.60 | 772.02 | 787.83 | 767.57 | 770.59 | 784.70 | 782.26 | 775.88 | 779.63 |
| Retail trade. | 385.11 | 386.39 | 386.70 | 393.45 | 391.48 | 391.78 | 395.50 | 384.12 | 381.65 | 380.93 | 378.43 | 384.50 | 384.09 | 385.10 | 388.10 |
| Transportation and warehousing........ Utilities................. | 654.95 $1,182.65$ | 670.33 $1,231.19$ | 664.27 $1,222.82$ | 681.17 $1,250.76$ | 674.86 $1,205.13$ | 679.68 $1,205.74$ | 676.35 $1,244.85$ | 671.51 $1,238.30$ | 680.32 $1,236.59$ | 679.63 $1,256.11$ | 663.14 $1,243.98$ | 663.04 $1,286.01$ | 665.45 $1,241.52$ | 655.87 $1,250.80$ | 661.16 $1,241.11$ |
| Information. | 874.65 | 908.44 | 892.33 | 919.34 | 910.80 | 917.70 | 926.11 | 924.71 | 936.12 | 917.33 | 921.10 | 931.95 | 934.72 | 911.16 | 915.12 |
| Financial activities. | 705.13 | 726.37 | 718.76 | 737.46 | 718.76 | 726.38 | 728.99 | 728.64 | 753.82 | 731.85 | 735.23 | 761.02 | 754.46 | 739.27 | 738.99 |
| Professional and business services.. | 700.82 | 738.25 | 726.62 | 748.70 | 730.78 | 739.20 | 739.46 | 750.75 | 775.54 | 761.55 | 762.30 | 785.95 | 785.95 | 766.43 | 766.39 |
| Education and $\qquad$ health services $\qquad$ | 590.09 | 614.30 | 609.70 | 614.43 | 618.10 | 617.77 | 620.10 | 616.90 | 624.57 | 621.13 | 622.10 | 624.02 | 623.05 | 620.49 | 619.53 |
| Leisure and hospitality.. | 265.52 | 273.27 | 274.00 | 280.28 | 276.83 | 278.38 | 272.25 | 273.25 | 273.25 | 270.73 | 264.72 | 275.39 | 272.80 | 270.35 | 271.45 |
| Other services. | 477.06 | 494.99 | 494.58 | 500.71 | 496.25 | 500.71 | 497.95 | 496.42 | 501.82 | 496.24 | 498.37 | 501.64 | 498.07 | 494.61 | 495.52 |

1 Data relate to production workers in natural resources and mining and manufacturing, NOTE: See "Notes on the data" for a description of the most recent benchmark revision.
construction workers in construction, and nonsupervisory workers in the service- Dash indicates data not available.
providing industries.
$\mathrm{p}=$ 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: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 52.6 | 60.1 | 54.1 | 58.1 | 56.8 | 58.3 | 58.5 | 59.2 | 54.2 | 55.9 | 62.7 | 57.6 |
| 2006. | 64.9 | 62.2 | 63.8 | 59.8 | 49.1 | 51.8 | 59.2 | 55.4 | 55.7 | 56.3 | 59.4 | 60.7 |
| 2007. | 53.5 | 55.5 | 52.4 | 49.4 | 55.9 | 48.3 | 50.7 | 46.5 | 55.9 | 57.2 | 59.4 | 57.9 |
| 2008. | 42.1 | 40.6 | 44.1 | 41.1 | 42.6 | 36.9 | 37.6 | 39.1 | 34.7 | 33.0 | 27.1 | 20.5 |
| 2009. | 22.1 | 20.8 | 19.6 | 21.8 | 31.0 |  |  |  |  |  |  |  |
| Over 3-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 51.7 | 57.2 | 59.0 | 59.8 | 57.9 | 62.0 | 60.5 | 62.9 | 60.3 | 55.5 | 56.3 | 62.7 |
| 2006. | 67.7 | 68.6 | 65.1 | 65.1 | 60.5 | 58.9 | 55.5 | 57.0 | 55.0 | 54.4 | 59.0 | 64.2 |
| 2007. | 62.5 | 54.8 | 54.2 | 54.8 | 54.1 | 50.4 | 52.8 | 48.7 | 53.3 | 53.9 | 58.3 | 62.5 |
| 2008. | 57.7 | 44.8 | 40.2 | 39.7 | 37.3 | 33.6 | 33.6 | 32.8 | 34.9 | 33.2 | 26.9 | 20.8 |
| 2009. | 18.6 | 14.2 | 15.1 | 15.3 | 19.9 |  |  |  |  |  |  |  |
| Over 6-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 55.4 | 57.9 | 58.1 | 57.0 | 58.3 | 60.9 | 63.1 | 63.3 | 61.6 | 59.6 | 61.4 | 62.5 |
| 2006. | 64.6 | 63.8 | 67.5 | 66.2 | 65.5 | 66.6 | 60.3 | 61.1 | 57.9 | 57.9 | 62.4 | 59.0 |
| 2007. | 60.3 | 57.2 | 60.5 | 58.3 | 55.5 | 56.5 | 52.8 | 52.4 | 56.6 | 54.4 | 56.8 | 59.0 |
| 2008. | 56.6 | 53.0 | 50.7 | 47.4 | 40.2 | 33.4 | 31.0 | 33.4 | 30.6 | 29.0 | 26.0 | 24.4 |
| 2009. | 21.6 | 17.2 | 15.1 | 15.3 | 15.1 |  |  |  |  |  |  |  |
| Over 12-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 60.9 | 60.9 | 60.0 | 59.2 | 58.3 | 60.3 | 61.3 | 63.3 | 60.7 | 59.2 | 59.8 | 61.8 |
| 2006. | 67.2 | 65.5 | 65.9 | 62.9 | 65.5 | 66.8 | 64.8 | 64.4 | 66.6 | 65.9 | 64.9 | 66.2 |
| 2007. | 63.3 | 59.4 | 61.1 | 59.6 | 59.2 | 58.3 | 56.8 | 57.2 | 59.4 | 58.9 | 58.1 | 59.6 |
| 2008. | 54.4 | 56.1 | 52.6 | 49.1 | 50.2 | 47.8 | 43.7 | 42.3 | 38.0 | 37.8 | 32.3 | 28.2 |
| 2009. | 24.0 | 22.0 | 19.9 | 18.1 | 17.3 |  |  |  |  |  |  |  |
|  | Manufacturing payrolls, 84 industries |  |  |  |  |  |  |  |  |  |  |  |
| Over 1-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 36.7 | 46.4 | 42.2 | 46.4 | 40.4 | 33.7 | 41.0 | 43.4 | 45.8 | 47.6 | 44.6 | 47.0 |
| 2006. | 57.8 | 49.4 | 53.6 | 47.0 | 37.3 | 50.6 | 49.4 | 42.2 | 40.4 | 42.8 | 41.0 | 44.0 |
| 2007. | 44.6 | 41.0 | 30.7 | 24.7 | 38.0 | 32.5 | 43.4 | 30.7 | 39.2 | 42.8 | 60.8 | 48.2 |
| 2008. | 30.7 | 28.9 | 37.3 | 32.5 | 40.4 | 25.3 | 25.9 | 27.7 | 22.9 | 18.7 | 15.1 | 10.2 |
| 2009. | 6.0 | 9.6 | 10.8 | 16.3 | 10.8 |  |  |  |  |  |  |  |
| Over 3-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 36.7 | 43.4 | 41.0 | 41.6 | 35.5 | 36.1 | 34.9 | 36.7 | 42.2 | 44.0 | 38.6 | 48.8 |
| 2006. | 56.6 | 57.2 | 48.2 | 48.2 | 44.6 | 50.0 | 43.4 | 45.2 | 36.7 | 33.1 | 35.5 | 39.2 |
| 2007. | 40.4 | 33.1 | 33.1 | 28.9 | 29.5 | 30.1 | 31.9 | 28.9 | 30.7 | 30.7 | 39.2 | 51.2 |
| 2008. | 48.8 | 33.7 | 28.3 | 29.5 | 26.5 | 22.9 | 19.9 | 16.9 | 22.3 | 21.1 | 15.1 | 11.4 |
| 2009. | 6.0 | 3.6 | 3.6 | 7.8 | 9.0 |  |  |  |  |  |  |  |
| Over 6-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 33.7 | 39.8 | 38.0 | 36.1 | 35.5 | 34.9 | 39.8 | 36.1 | 36.1 | 38.0 | 36.7 | 39.8 |
| 2006. | 45.2 | 45.2 | 50.6 | 48.8 | 50.6 | 50.0 | 45.2 | 47.0 | 43.4 | 42.2 | 39.8 | 34.3 |
| 2007. | 37.3 | 33.1 | 29.5 | 28.9 | 30.7 | 34.9 | 28.9 | 26.5 | 29.5 | 28.3 | 33.7 | 38.0 |
| 2008. | 34.3 | 30.1 | 37.3 | 35.5 | 25.3 | 20.5 | 17.5 | 18.1 | 16.9 | 13.3 | 11.4 | 9.6 |
| 2009. | 9.0 | 4.8 | 4.8 | 6.0 | 4.8 |  |  |  |  |  |  |  |
| Over 12-month span: |  |  |  |  |  |  |  |  |  |  |  |  |
| 2005. | 45.2 | 44.0 | 42.2 | 41.0 | 36.7 | 35.5 | 32.5 | 34.3 | 33.1 | 33.7 | 33.7 | 38.0 |
| 2006. | 44.0 | 41.0 | 41.0 | 39.8 | 39.8 | 45.2 | 42.2 | 42.8 | 47.0 | 48.8 | 45.8 | 44.6 |
| 2007. | 39.8 | 36.7 | 37.3 | 30.7 | 28.9 | 29.5 | 30.7 | 28.9 | 33.1 | 28.9 | 34.3 | 35.5 |
| 2008. | 27.7 | 28.9 | 25.9 | 25.3 | 30.7 | 27.1 | 24.7 | 19.3 | 21.7 | 21.7 | 16.9 | 15.1 |
| 2009. | 8.4 | 4.8 | 4.8 | 4.8 | 4.8 |  |  |  |  |  |  |  |
| 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. <br> 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 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  |  |  |  | 2008 |  | 2009 |  |  |  |  |
|  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May ${ }^{\text {p }}$ | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. ${ }^{\text {p }}$ |
| Total ${ }^{2}$. | 3,311 | 3,224 | 2,920 | 2,973 | 2,633 | 2,513 | 2,554 | 2.4 | 2.3 | 2.1 | 2.2 | 1.9 | 1.9 | 1.9 |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total private ${ }^{2}$. | 2,928 | 2,861 | 2,461 | 2,606 | 2,269 | 2,042 | 2,221 | 2.5 | 2.5 | 2.2 | 2.3 | 2.0 | 1.8 | 2.0 |
| Construction... | 76 | 66 | 55 | 58 | 51 | 29 | 39 | 1.1 | 0.9 | 0.8 | 0.9 | 0.8 | 0.5 | 0.6 |
| Manufacturing..... | 203 | 188 | 115 | 141 | 115 | 95 | 91 | 1.5 | 1.4 | 0.9 | 1.1 | 0.9 | 0.8 | 0.8 |
| Trade, transportation, and utilities....... | 624 | 495 | 488 | 488 | 414 | 332 | 430 | 2.3 | 1.9 | 1.9 | 1.9 | 1.6 | 1.3 | 1.7 |
| Professional and business services.... | 505 | 562 | 501 | 482 | 428 | 461 | 520 | 2.8 | 3.1 | 2.8 | 2.8 | 2.5 | 2.7 | 3.0 |
| Education and health services. | 697 | 685 | 636 | 589 | 537 | 515 | 537 | 3.5 | 3.5 | 3.2 | 3.0 | 2.7 | 2.6 | 2.7 |
| Leisure and hospitality... | 302 | 315 | 272 | 332 | 289 | 322 | 269 | 2.2 | 2.3 | 2.0 | 2.4 | 2.1 | 2.4 | 2.0 |
| Government... | 378 | 345 | 417 | 367 | 353 | 461 | 344 | 1.6 | 1.5 | 1.8 | 1.6 | 1.5 | 2.0 | 1.5 |
| Region ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast. | 582 | 633 | 560 | 607 | 583 | 520 | 545 | 2.2 | 2.4 | 2.2 | 2.4 | 2.3 | 2.0 | 2.2 |
| South.... | 1,267 | 1,245 | 1,109 | 1,109 | 1,000 | 942 | 922 | 2.5 | 2.5 | 2.2 | 2.2 | 2.0 | 1.9 | 1.9 |
| Midwest... | 644 | 607 | 587 | 563 | 499 | 512 | 517 | 2.0 | 1.9 | 1.9 | 1.8 | 1.6 | 1.7 | 1.7 |
| West........................................ | 767 | 689 | 655 | 638 | 556 | 570 | 567 | 2.5 | 2.2 | 2.1 | 2.1 | 1.8 | 1.9 | 1.9 |

${ }^{1}$ 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,

West Virginia; Midwest: Illinois, Indiana, lowa, 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.

Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia,
19. Hires levels and rates by industry and region, seasonally adjusted

| Industry and region | Levels ${ }^{1}$ (in thousands) |  |  |  |  |  |  | Percent |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  |  |  |  | 2008 |  | 2009 |  |  |  |  |
|  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May ${ }^{\text {p }}$ | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. ${ }^{\text {p }}$ |
| Total ${ }^{2}$. | 4,226 | 4,508 | 4,460 | 4,339 | 4,099 | 4,117 | 3,980 | 3.1 | 3.3 | 3.3 | 3.2 | 3.1 | 3.1 | 3.0 |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total private ${ }^{2}$. | 3,928 | 4,214 | 4,141 | 4,042 | 3,799 | 3,822 | 3,706 | 3.5 | 3.7 | 3.7 | 3.6 | 3.4 | 3.5 | 3.4 |
| Construction.. | 340 | 366 | 381 | 370 | 343 | 341 | 348 | 4.9 | 5.3 | 5.7 | 5.6 | 5.3 | 5.4 | 5.5 |
| Manufacturing... | 257 | 252 | 237 | 257 | 244 | 236 | 204 | 2.0 | 2.0 | 1.9 | 2.1 | 2.0 | 1.9 | 1.7 |
| Trade, transportation, and utilities.. | 852 | 891 | 949 | 814 | 883 | 888 | 837 | 3.3 | 3.4 | 3.7 | 3.2 | 3.5 | 3.5 | 3.3 |
| Professional and business services... | 783 | 786 | 762 | 730 | 668 | 733 | 729 | 4.5 | 4.5 | 4.4 | 4.3 | 4.0 | 4.4 | 4.4 |
| Education and health services. | 528 | 528 | 539 | 527 | 483 | 475 | 468 | 2.8 | 2.8 | 2.8 | 2.8 | 2.5 | 2.5 | 2.4 |
| Leisure and hospitality.. | 706 | 711 | 743 | 704 | 693 | 691 | 693 | 5.3 | 5.3 | 5.6 | 5.3 | 5.3 | 5.3 | 5.3 |
| Government.. | 281 | 271 | 306 | 275 | 271 | 340 | 326 | 1.2 | 1.2 | 1.4 | 1.2 | 1.2 | 1.5 | 1.4 |
| Region ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast. | 661 | 726 | 753 | 837 | 696 | 729 | 692 | 2.6 | 2.9 | 3.0 | 3.3 | 2.8 | 2.9 | 2.8 |
| South.. | 1,572 | 1,659 | 1,663 | 1,566 | 1,458 | 1,619 | 1,442 | 3.2 | 3.4 | 3.4 | 3.2 | 3.0 | 3.4 | 3.0 |
| Midwest.. | 934 | 1,009 | 1,003 | 904 | 943 | 901 | 886 | 3.0 | 3.3 | 3.3 | 3.0 | 3.1 | 3.0 | 2.9 |
| West. | 1,043 | 1,053 | 1,002 | 960 | 931 | 949 | 1,007 | 3.4 | 3.5 | 3.3 | 3.2 | 3.1 | 3.2 | 3.4 |

[^13]Midwest: Illinois, Indiana, lowa, 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.
${ }^{\mathrm{p}}=$ preliminary.
20. Total separations levels and rates by industry and region, seasonally adjusted

| Industry and region | Levels ${ }^{1}$ (in thousands) |  |  |  |  |  |  | Percent |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  |  |  |  | 2008 |  | 2009 |  |  |  |  |
|  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May ${ }^{\text {p }}$ | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. ${ }^{\text {P }}$ |
| Total ${ }^{2}$. | 4,863 | 4,958 | 4,949 | 4,833 | 4,712 | 4,641 | 4,359 | 3.6 | 3.7 | 3.7 | 3.6 | 3.5 | 3.5 | 3.3 |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total private ${ }^{2}$.. | 4,571 | 4,673 | 4,686 | 4,555 | 4,434 | 4,362 | 4,082 | 4.0 | 4.1 | 4.2 | 4.1 | 4.0 | 4.0 | 3.7 |
| Construction. | $\begin{aligned} & 472 \\ & 384 \end{aligned}$ | 452 | 524 | 463 | 463 | 437 | 408 | 6.8 | 6.6 | 7.8 | 7.0 | 7.2 | 6.9 | 6.5 |
| Manufacturing... |  | 4191,041 | 4761,049 | 424 | 401 | 390 | 365 | 2.9 | 3.2 | 3.8 | 3.4 | 3.33.9 | 3.2 | 3.0 |
| Trade, transportation, and utilities....... | 1,030 |  |  | 920951 | 1,001 | 982 | 927 | 4.0 | 4.0 | 4.1 | 3.6 |  |  |  |
| Professional and business services..... | 909 | 898 | 866 |  | 778 | 839 | 795 | 5.2 | 5.2 | 5.0 | 5.6 | 4.6 | 3.9 5.0 | 3.7 4.7 |
| Education and health services.. | 466773 | 498 | 494 | 498 | 466 | 462 | 422 | 2.4 | 2.6 | 2.6 | 2.6 | 2.4 | 2.4 | 2.25.4 |
| Leisure and hospitality. |  | 755 | 763 | 731 | 751 | 716 | 707 | 5.8 | 5.7 | 5.7 | 5.5 | 5.7 | 5.4 |  |
| Government. | 282 | 278 | 277 | 271 | 265 | 255 | 265 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.2 |
| Region ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast... | 7671,841 | 799 | 813 | 783 | 878 | 700 | 779 | 3.0 | 3.2 | 3.2 | 3.1 | 3.5 | 2.8 | 3.1 |
| South.. |  | $\begin{aligned} & 1,815 \\ & 1,088 \\ & 1,227 \end{aligned}$ | 1,898 | 1,742 | 1,741 | 1,682 | 1,562 | 3.8 | 3.7 | 3.9 | 3.6 | 3.6 | 3.5 | 3.33.4 |
| Midwest.. | $1,205$ |  | 1,120 | 1,121 | 1,085 | 1,065 | 1,018 | 3.6 | 3.5 | 3.7 | 3.7 |  |  |  |
| West........................................ |  |  | 1,180 | 1,188 | 978 | 1,188 | 980 | 4.0 | 4.0 | 3.9 | 4.0 | 3.3 | 4.0 | 3.3 |

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, lowa, 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.
${ }^{\mathrm{p}}=$ preliminary

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

| Industry and region | Levels ${ }^{1}$ (in thousands) |  |  |  |  |  |  | Percent |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  |  |  |  | 2008 |  | 2009 |  |  |  |  |
|  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May ${ }^{\text {p }}$ | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May. ${ }^{\text {p }}$ |
| Total ${ }^{2}$. | 2,201 | 2,114 | 2,063 | 1,911 | 1,856 | 1,777 | 1,746 | 1.6 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 | 1.3 |
| Industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total private ${ }^{2}$. | 2,076 | 1,984 | 1,945 | 1,831 | 1,749 | 1,678 | 1,650 | 1.8 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.5 |
| Construction.. | 109 | 92 | 85 | 87 | 102 | 74 | 62 | 1.6 | 1.3 | 1.3 | 1.3 | 1.6 | 1.2 | 1.0 |
| Manufacturing... | 122 | 87 | 105 | 105 | 81 | 80 | 83 | . 9 | . 7 | . 8 | . 8 | . 7 | . 7 | . 7 |
| Trade, transportation, and utilities.. | 489 | 518 | 469 | 372 | 444 | 385 | 388 | 1.9 | 2.0 | 1.8 | 1.5 | 1.7 | 1.5 | 1.5 |
| Professional and business services.. | 349 | 297 | 326 | 310 | 278 | 272 | 266 | 2.0 | 1.7 | 1.9 | 1.8 | 1.6 | 1.6 | 1.6 |
| Education and health services.. | 251 | 256 | 248 | 258 | 249 | 228 | 245 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.3 |
| Leisure and hospitality.. | 469 | 461 | 443 | 431 | 433 | 430 | 422 | 3.5 | 3.5 | 3.3 | 3.3 | 3.3 | 3.3 | 3.2 |
| Government.... | 122 | 130 | 105 | 115 | 107 | 99 | 99 | . 5 | . 6 | . 5 | . 5 | . 5 | . 4 | . 4 |
| Region ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast. | 321 | 302 | 278 | 271 | 273 | 263 | 294 | 1.3 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 |
| South.. | 879 | 847 | 790 | 759 | 751 | 691 | 699 | 1.8 | 1.7 | 1.6 | 1.6 | 1.6 | 1.4 | 1.5 |
| Midwest. | 491 | 452 | 491 | 468 | 431 | 410 | 396 | 1.6 | 1.5 | 1.6 | 1.5 | 1.4 | 1.4 | 1.3 |
| West... | 510 | 498 | 492 | 453 | 408 | 453 | 372 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 | 1.5 | 1.3 |

[^14]Midwest: Illinois, Indiana, lowa, 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.
${ }^{\mathrm{p}}=$ preliminary.
22. Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2008.

| County by NAICS supersector | ```Establishments, third quarter 2008 (thousands)``` | Employment |  | Average weekly wage ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { September } \\ & 2008 \\ & \text { (thousands) } \end{aligned}$ | Percent change, September 2007-08 ${ }^{2}$ | Third quarter 2008 | Percent change, third quarter 2007-08 ${ }^{2}$ |
| United States ${ }^{3}$ | 9,150.8 | 135,173.8 | -0.8 | \$841 | 2.8 |
| Private industry | 8,857.7 | 113,499.1 | -1.1 | 833 | 2.8 |
| Natural resources and mining | 126.2 | 2,003.6 | 3.6 | 880 | 7.3 |
| Construction ....................... | 889.2 | 7,255.4 | -6.7 | 922 | 5.1 |
| Manufacturing | 361.0 | 13,345.0 | -3.6 | 1,006 | 1.9 |
| Trade, transportation, and utilities ................................ | 1,927.8 | 25,953.1 | -1.3 | 719 | 1.7 |
| Information | 146.3 | 2,973.8 | -2.0 | 1,335 | 4.9 |
| Financial activities . | 866.3 | 7,919.9 | -2.5 | 1,207 | . 8 |
| Professional and business services ................................. | 1,528.7 | 17,752.2 | -1.4 | 1,045 | 4.6 |
| Education and health services ................................. | 851.2 | 17,996.4 | 2.7 | 803 | 3.6 |
| Leisure and hospitality ................................................. | 739.3 | 13,568.1 | . 0 | 358 | 2.9 |
| Other services ........................................................... | 1,205.9 | 4,482.9 | . 9 | 544 | 2.4 |
| Government ................................................................. | 293.1 | 21,674.7 | 1.0 | 886 | 3.0 |
| Los Angeles, CA | 428.8 | 4,141.1 | -1.5 | 951 | 3.1 |
| Private industry | 424.8 | 3,581.8 | -1.4 | 923 | 2.7 |
| Natural resources and mining ... | . 5 | 11.7 | -2.8 | 1,232 | 9.3 |
| Construction. | 14.0 | 145.0 | -9.5 | 994 | 5.2 |
| Manufacturing | 14.6 | 432.3 | -3.4 | 1,009 | 4.6 |
| Trade, transportation, and utilities .................................. | 53.7 | 792.1 | -2.1 | 775 | 2.1 |
| Information ..... | 8.7 | 214.8 | ${ }^{4}$ ) | 1,551 | $\left.{ }^{4}\right)$ |
| Financial activities | 24.1 | 233.8 | -5.4 | 1,482 | . 1 |
| Professional and business services | 42.5 | 583.7 | ${ }^{4}$ ) | 1,104 | $\left.{ }^{4}\right)$ |
| Education and health services ... | 28.0 | 488.8 | 1.7 | 888 | 4.5 |
| Leisure and hospitality. | 27.0 | 401.6 | -. 2 | 536 | 3.3 |
| Other services | 195.2 | 259.5 | 4.2 | 439 | . 5 |
| Government | 4.0 | 559.3 | $\left.{ }^{4}\right)$ | 1,132 | 5.8 |
| Cook, IL | 140.4 | 2,504.2 | -1.3 | 988 | 2.8 |
| Private industry | 139.0 | 2,195.4 | -1.5 | 986 | 2.8 |
| Natural resources and mining .... | . 1 | 1.3 | -3.6 | 960 | -9.3 |
| Construction .. | 12.4 | 92.9 | -5.9 | 1,284 | 5.9 |
| Manufacturing | 7.0 | 226.3 | -4.1 | 1,002 | 2.5 |
| Trade, transportation, and utilities ... | 27.6 | 460.4 | -2.3 | 788 | 1.8 |
| Information | 2.5 | 56.5 | -1.5 | 1,557 | 10.2 |
| Financial activities | 15.7 | 206.3 | -3.2 | 1,538 | -. 8 |
| Professional and business services | 28.9 | 434.2 | -2.1 | 1,248 | 5.3 |
| Education and health services ... | 13.9 | 378.9 | 2.9 | 873 | 3.3 |
| Leisure and hospitality ............... | 11.7 | 237.8 | -1.3 | 443 | 3.3 |
| Other services .... | 14.5 | 96.6 | 1.5 | 707 | 2.2 |
| Government ......................................................... | 1.4 | 308.8 | . 0 | 1,009 | 2.9 |
| New York, NY ... | 118.9 | 2,363.8 | 6 | 1,552 | . 5 |
| Private industry | 118.6 | 1,919.7 | 7 | 1,673 | 4 |
| Natural resources and mining | . 0 | . 2 | -8.9 | 1,820 | 14.0 |
| Construction ... | 2.4 | 37.8 | 4.1 | 1,535 | 5.4 |
| Manufacturing ... | 3.0 | 35.4 | -5.8 | 1,183 | -2.6 |
| Trade, transportation, and utilities . | 22.1 | 248.9 | . 4 | 1,127 | . 4 |
| Information | 4.6 | 135.9 | . 0 | 1,982 | 4.2 |
| Financial activities . | 19.1 | 372.9 | -2.1 | 2,985 | -2.2 |
| Professional and business services | 25.6 | 491.8 | 1.4 | 1,799 | 2.3 |
| Education and health services ............ | 8.8 | 283.4 | . 6 | 1,059 | 4.7 |
| Leisure and hospitality ......................................... | 11.7 | 218.9 | 3.9 | 748 | 3.2 |
| Other services ..................................................................... | 18.0 | 89.1 | 2.1 | 919 | 4.1 |
| Government ........................................................................ | . 3 | 444.1 | . 1 | 1,027 | 1.4 |
| Harris, TX | 97.3 | 2,047.2 | 1.3 | 1,050 | 3.0 |
| Private industry | 96.7 | 1,796.9 | 1.1 | 1,061 | 2.9 |
| Natural resources and mining | 1.6 | 84.8 | 7.9 | 2,585 | $\left({ }^{4}\right)$ |
| Construction | 6.7 | 157.2 | ${ }^{4}$ ) | 1,005 | ${ }^{4}$ ) |
| Manufacturing | 4.6 | 187.3 | 2.8 | 1,272 | -1.1 |
| Trade, transportation, and utilities ......... | 22.4 | 428.3 | 1.0 | 919 | 2.1 |
| Information ........... | 1.4 | 31.9 | -2.4 | 1,285 | 2.1 |
| Financial activities ....................... | 10.6 | 118.2 | $\left({ }^{4}\right)$ | 1,287 | 2.6 |
| Professional and business services Education and health services ...... | 19.4 | 336.5 | ${ }^{4}$ ) | 1,233 | 4.8 |
| Education and health services ............ | 10.3 | 218.7 | 1.6 | 865 | 4.3 |
| Leisure and hospitality .......................................................... | 7.5 | 174.2 | -1.2 | 385 | 5.2 |
|  | 11.7 | 58.5 | . 2 | 598 | 1.2 |
| Government ............................................................ | . 5 | 250.3 | 2.7 | 973 | 5.1 |
| Maricopa, AZ | 103.0 | 1,761.0 | -3.7 | 836 | 1.8 |
| Private industry | 102.3 | 1,535.7 | -4.5 | 825 | 1.9 |
| Natural resources and mining ........................................ | . 5 | 8.5 | . 9 | 840 | 16.5 |
| Construction. | 11.0 | 130.8 | -21.8 | 878 | 5.1 |
| Manufacturing | 3.6 | 125.0 | -5.6 | 1,137 | 2.1 |
| Trade, transportation, and utilities .................................... | 22.8 | 361.4 | -3.9 | 770 | -. 3 |
| Information ................................................................... | 1.7 | 29.8 | -2.0 | 1,083 | 5.5 |
| Financial activities | 12.9 | 142.4 | -4.0 | 1,004 | -1.8 |
| Professional and business services .................................. | 22.9 | 293.9 | -6.4 | 863 | 4.2 |
| Education and health services ............................................... | 10.1 | 216.2 | 7.8 | 906 | 2.7 |
| Leisure and hospitality ........................................................... | 7.4 | 176.8 | -1.7 | 394 | 1.8 |
| Other services ....................................................................... | 7.3 | 49.2 | -2.3 | 584 | 3.4 |
| Government ....................................................................... | . 7 | 225.3 | 2.3 | 915 | . 9 |

See footnotes at end of table.
22. Continued-Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2008.

| County by NAICS supersector | $\begin{aligned} & \text { Establishments, } \\ & \text { third quarter } \\ & 2008 \\ & \text { (thousands) } \end{aligned}$ | Employment |  | Average weekly wage ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { September } \\ & 2008 \\ & \text { (thousands) } \end{aligned}$ | Percent change, September 2007-08 ${ }^{2}$ | Third quarter 2008 | Percent change, third quarter 2007-08 ${ }^{2}$ |
| Orange, CA | 102.5 | 1,469.5 | -2.8 | \$955 | 3.0 |
| Private industry | 101.1 | 1,327.1 | -3.0 | 947 | 2.4 |
| Natural resources and mining ..................................... | . 2 | 4.5 | -10.7 | 681 | 7.1 |
| Construction.. | 6.9 | 90.0 | -13.4 | 1,094 | 6.0 |
| Manufacturing | 5.3 | 171.4 | -3.2 | 1,133 | 3.5 |
| Trade, transportation, and utilities ... | 17.3 | 270.0 | -4.0 | 880 | 1.7 |
| Information .... | 1.3 | 29.4 | -1.2 | 1,552 | 15.6 |
| Financial activities | 10.8 | 112.3 | -9.0 | 1,346 | -1.0 |
| Professional and business services | 19.0 | 266.8 | -4.2 | 1,071 | 4.5 |
| Education and health services | 10.0 | 148.9 | 3.9 | 899 | 3.7 |
| Leisure and hospitality ................................................. | 7.1 | 177.8 | 1.3 | 420 | 2.2 |
| Other services | 17.5 | 49.4 | 2.6 | 551 | -1.6 |
| Government ................... | 1.4 | 142.3 | -1.2 | 1,033 | 9.2 |
| Dallas, TX . | 68.2 | 1,489.1 | . 5 | 1,025 | 2.4 |
| Private industry | 67.6 | 1,321.8 | . 3 | 1,034 | 2.3 |
| Natural resources and mining ........................................ | . 6 | 8.3 | 14.7 | 4,831 | 61.8 |
| Construction. | 4.4 | 84.7 | . 3 | 922 | 2.6 |
| Manufacturing | 3.1 | 132.9 | -4.0 | 1,148 | -1.0 |
| Trade, transportation, and utilities . | 15.1 | 304.7 | . 1 | 953 | . 3 |
| Information ...... | 1.7 | 47.6 | -3.2 | 1,445 | 5.8 |
| Financial activities | 8.9 | 143.9 | . 4 | 1,311 | -3.7 |
| Professional and business services | 14.8 | 279.1 | . 7 | 1,153 | 2.6 |
| Education and health services | 6.7 | 150.7 | 3.1 | 938 | 4.1 |
| Leisure and hospitality | 5.4 | 129.7 | 1.5 | 461 | 4.5 |
| Other services ........ | 6.5 | 39.1 | -. 5 | 634 | 4.1 |
| Government ..................................... | . 5 | 167.3 | 2.0 | 952 | 3.6 |
| San Diego, CA | 99.6 | 1,318.0 | -1.2 | 921 | 3.8 |
| Private industry | 98.3 | 1,099.8 | -1.5 | 904 | 4.1 |
| Natural resources and mining .... | . 8 | 11.4 | -3.6 | 564 | 1.6 |
| Construction ... | 7.1 | 76.2 | -12.9 | 988 | 4.2 |
| Manufacturing . | 3.1 | 102.1 | -. 4 | 1,198 | 3.3 |
| Trade, transportation, and utilities | 14.2 | 214.5 | -3.2 | 733 | -. 8 |
| Information | 1.3 | 39.1 | 3.6 | 2,244 | 30.4 |
| Financial activities | 9.6 | 75.2 | -5.2 | 1,090 | -2.2 |
| Professional and business services | 16.2 | 215.9 | -2.2 | 1,131 | 4.6 |
| Education and health services | 8.1 | 135.5 | 3.8 | 869 | 4.3 |
| Leisure and hospitality. | 6.9 | 165.8 | . 0 | 419 | 2.9 |
| Other services ... | 26.1 | 58.2 | 1.6 | 489 | 1.5 |
| Government .......... | 1.3 | 218.2 | . 4 | 1,014 | 2.7 |
| King, WA | 78.5 | 1,198.7 | 1.4 | 1,162 | 2.9 |
| Private industry | 78.0 | 1,045.7 | 1.3 | 1,176 | 2.7 |
| Natural resources and mining .... | . 4 | 3.2 | . 8 | 1,288 | 12.1 |
| Construction ....... | 6.9 | 72.3 | -2.9 | 1,083 | 4.9 |
| Manufacturing ... | 2.5 | 112.0 | -. 8 | 1,259 | . 6 |
| Trade, transportation, and utilities. | 15.2 | 220.2 | . 3 | 921 | 3.5 |
| Information | 1.8 | 80.9 | 5.9 | 3,364 | 8.3 |
| Financial activities | 7.1 | 74.6 | -. 9 | 1,368 | 6.0 |
| Professional and business services .............................. | 13.9 | 193.2 | 1.3 | 1,243 | -6.3 |
| Education and health services ..... | 6.6 | 126.5 | 5.2 | 863 | 3.0 |
| Leisure and hospitality ............. | 6.2 | 115.7 | 1.9 | 447 | . 9 |
| Other services ............ | 17.5 | 47.2 | 4.2 | 601 | 4.7 |
| Government ............... | . 5 | 153.0 | 2.1 | 1,064 | 4.9 |
| Miami-Dade, FL | 87.8 | 993.1 | -3.2 | 842 | 2.2 |
| Private industry .......................................................... | 87.5 | 842.7 | -3.5 | 805 | 1.5 |
| Natural resources and mining ...................................... | . 5 | 7.7 | -9.6 | 474 | -2.3 |
| Construction. | 6.6 | 44.2 | -20.3 | 844 | 2.9 |
| Manufacturing | 2.6 | 42.8 | -10.2 | 745 | 3.5 |
| Trade, transportation, and utilities . | 23.5 | 248.8 | -2.1 | 746 | $-.4$ |
| Information . | 1.5 | 19.0 | -7.5 | 1,227 | 2.8 |
| Financial activities | 10.4 | 68.0 | -5.6 | 1,156 | . 3 |
| Professional and business services ............................... | 18.1 | 129.8 | -4.4 | 1,011 | 4.6 |
| Education and health services .... | 9.4 | 144.2 | 2.8 | 822 | 1.7 |
| Leisure and hospitality ........................................................ | 6.0 | 100.6 | -2.0 | 481 | 4.3 |
| Other services ...................................................................... | 7.6 | 35.9 | -. 5 | 523 | 1.4 |
| Government ..................................................................... | . 4 | 150.4 | -1.4 | 1,058 | 4.9 |

${ }^{1}$ 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 2008.

| State | Establishments, third quarter 2008 (thousands) | Employment |  | Average weekly wage ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { September } \\ & 2008 \\ & \text { (thousands) } \end{aligned}$ | Percent change, September 2007-08 | Third quarter 2008 | Percent change, third quarter 2007-08 |
| United States ${ }^{2}$............................... | 9,150.8 | 135,173.8 | -0.8 | \$841 | 2.8 |
| Alabama | 121.8 | 1,936.4 | -1.2 | 730 | 3.3 |
| Alaska ........................................ | 21.6 | 332.1 | 1.4 | 872 | 3.7 |
| Arizona .. | 164.1 | 2,570.1 | -3.0 | 798 | 2.0 |
| Arkansas | 86.1 | 1,185.0 | -. 1 | 649 | 3.0 |
| California | 1,344.6 | 15,527.1 | -1.4 | 959 | 2.9 |
| Colorado | 180.4 | 2,322.7 | . 4 | 877 | 3.8 |
| Connecticut ... | 113.5 | 1,692.5 | -. 3 | 1,032 | 1.0 |
| Delaware | 29.5 | 420.6 | -1.1 | 879 | 2.1 |
| District of Columbia ........................ | 33.8 | 688.2 | 1.4 | 1,391 | 1.0 |
| Florida ......................................... | 625.2 | 7,546.4 | -4.1 | 756 | 2.2 |
| Georgia ....................................... | 276.6 | 4,018.6 | -1.6 | 794 | 1.5 |
| Hawaii ......................................... | 39.1 | 613.0 | -2.1 | 774 | 1.8 |
| Idaho ....................................... | 57.0 | 665.7 | -1.4 | 643 | 1.3 |
| Illinois ........................................ | 369.7 | 5,872.8 | -. 7 | 891 | 2.9 |
| Indiana ........................................ | 160.5 | 2,897.6 | -1.4 | 718 | 2.3 |
| lowa | 94.6 | 1,499.0 | . 2 | 696 | 4.2 |
| Kansas ... | 86.7 | 1,368.9 | . 0 | 711 | 4.6 |
| Kentucky | 110.4 | 1,795.3 | -1.0 | 692 | 2.4 |
| Louisiana ...................................... | 124.1 | 1,877.4 | -. 2 | 756 | 5.6 |
| Maine .......................................... | 50.7 | 610.8 | -. 6 | 683 | 3.5 |
| Maryland | 163.9 | 2,543.4 | -. 8 | 920 | 3.1 |
| Massachusetts | 213.9 | 3,265.7 | . 0 | 1,025 | 2.3 |
| Michigan ... | 259.0 | 4,093.9 | -3.0 | 820 | 1.5 |
| Minnesota . | 171.6 | 2,699.6 | -. 5 | 862 | 4.7 |
| Mississippi | 70.8 | 1,128.3 | -1.3 | 631 | 4.0 |
| Missouri ... | 175.4 | 2,736.1 | -. 4 | 739 | 2.8 |
| Montana | 43.3 | 446.4 | . 1 | 628 | 3.1 |
| Nebraska | 60.0 | 925.7 | . 2 | 694 | 4.2 |
| Nevada | 77.5 | 1,253.0 | -2.7 | 809 | 2.1 |
| New Hampshire ............................ | 49.8 | 634.6 | -. 5 | 822 | 2.8 |
| New Jersey .................................. | 277.8 | 3,952.9 | -. 7 | 990 | 2.5 |
| New Mexico ................................ | 54.7 | 835.2 | . 7 | 712 | 3.5 |
| New York .... | 586.1 | 8,633.8 | . 5 | 1,030 | 2.2 |
| North Carolina | 259.4 | 4,064.2 | -1.0 | 741 | 3.1 |
| North Dakota ................................ | 25.8 | 357.0 | 2.8 | 665 | 6.9 |
| Ohio ...... | 295.5 | 5,251.1 | -1.5 | 766 | 2.8 |
| Oklahoma | 100.9 | 1,562.8 | 1.2 | 698 | 4.5 |
| Oregon ......................................... | 132.5 | 1,734.1 | -1.0 | 766 | 2.1 |
| Pennsylvania ............................... | 343.5 | 5,679.0 | . 0 | 822 | 2.5 |
| Rhode Island ................................. | 35.9 | 476.0 | -2.0 | 778 | 2.5 |
| South Carolina .............................. | 119.6 | 1,874.6 | -1.5 | 683 | 2.9 |
| South Dakota .............................. | 30.6 | 401.3 | 1.0 | 623 | 4.2 |
| Tennessee | 143.5 | 2,730.4 | -1.5 | 745 | 2.8 |
| Texas ......................................... | 563.6 | 10,438.3 | 1.4 | 850 | 2.9 |
| Utah ........................................... | 87.3 | 1,229.3 | -. 1 | 717 | 2.9 |
| Vermont ...................................... | 25.1 | 304.2 | -. 5 | 722 | 3.3 |
| Virginia ......................................... | 232.7 | 3,676.1 | -. 3 | 877 | 2.3 |
| Washington .................................. | 225.5 | 3,007.5 | 1.0 | 903 | 3.0 |
| West Virginia ................................. | 48.9 | 716.4 | . 6 | 661 | 5.9 |
| Wisconsin ................................... | 161.6 | 2,788.7 | -. 6 | 730 | 3.4 |
| Wyoming ...................................... | 25.2 | 294.0 | 3.3 | 781 | 6.4 |
| Puerto Rico ................................... | 55.6 | 992.8 | -1.6 | 477 | 5.5 |
| Virgin Islands ................................ | 3.5 | 44.9 | -. 9 | 709 | 4.3 |

[^15]NOTE: Includes workers covered by Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. Data are preliminary.
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) |  |  |  |  |
| 1998 | 7,634,018 | 124,183,549 | \$3,967,072,423 | \$31,945 | \$614 |
| 1999 | 7,820,860 | 127,042,282 | 4,235,579,204 | 33,340 | 641 |
| 2000 | 7,879,116 | 129,877,063 | 4,587,708,584 | 35,323 | 679 |
| 2001 ....................................... | 7,984,529 | 129,635,800 | 4,695,225,123 | 36,219 | 697 |
| 2002 | 8,101,872 | 128,233,919 | 4,714,374,741 | 36,764 | 707 |
| 2003 | 8,228,840 | 127,795,827 | 4,826,251,547 | 37,765 | 726 |
| 2004 | 8,364,795 | 129,278,176 | 5,087,561,796 | 39,354 | 757 |
| 2005 | 8,571,144 | 131,571,623 | 5,351,949,496 | 40,677 | 782 |
| 2006 | 8,784,027 | 133,833,834 | 5,692,569,465 | 42,535 | 818 |
| 2007 ......................................... | 8,971,897 | 135,366,106 | 6,018,089,108 | 44,458 | 855 |
|  | Ul covered |  |  |  |  |
| 1998 | 7,586,767 | 121,400,660 | \$3,845,494,089 | \$31,676 | \$609 |
| 1999 | 7,771,198 | 124,255,714 | 4,112,169,533 | 33,094 | 636 |
| 2000 | 7,828,861 | 127,005,574 | 4,454,966,824 | 35,077 | 675 |
| 2001 | 7,933,536 | 126,883,182 | 4,560,511,280 | 35,943 | 691 |
| 2002 | 8,051,117 | 125,475,293 | 4,570,787,218 | 36,428 | 701 |
| 2003 | 8,177,087 | 125,031,551 | 4,676,319,378 | 37,401 | 719 |
| 2004 | 8,312,729 | 126,538,579 | 4,929,262,369 | 38,955 | 749 |
| 2005 | 8,518,249 | 128,837,948 | 5,188,301,929 | 40,270 | 774 |
| 2006 | 8,731,111 | 131,104,860 | 5,522,624,197 | 42,124 | 810 |
| 2007 | 8,908,198 | 132,639,806 | 5,841,231,314 | 44,038 | 847 |
|  | Private industry covered |  |  |  |  |
| 1998 | 7,381,518 | 105,082,368 | \$3,337,621,699 | \$31,762 | \$611 |
| 1999 | 7,560,567 | 107,619,457 | 3,577,738,557 | 33,244 | 639 |
| 2000 | 7,622,274 | 110,015,333 | 3,887,626,769 | 35,337 | 680 |
| 2001 | 7,724,965 | 109,304,802 | 3,952,152,155 | 36,157 | 695 |
| 2002 | 7,839,903 | 107,577,281 | 3,930,767,025 | 36,539 | 703 |
| 2003 | 7,963,340 | 107,065,553 | 4,015,823,311 | 37,508 | 721 |
| 2004 | 8,093,142 | 108,490,066 | 4,245,640,890 | 39,134 | 753 |
| 2005 | 8,294,662 | 110,611,016 | 4,480,311,193 | 40,505 | 779 |
| 2006 | 8,505,496 | 112,718,858 | 4,780,833,389 | 42,414 | 816 |
| 2007 | 8,681,001 | 114,012,221 | 5,057,840,759 | 44,362 | 853 |
|  | State government covered |  |  |  |  |
| 1998 | 67,347 | 4,240,779 | \$142,512,445 | \$33,605 | \$646 |
| 1999 | 70,538 | 4,296,673 | 149,011,194 | 34,681 | 667 |
| 2000 | 65,096 | 4,370,160 | 158,618,365 | 36,296 | 698 |
| 2001 | 64,583 | 4,452,237 | 168,358,331 | 37,814 | 727 |
| 2002 | 64,447 | 4,485,071 | 175,866,492 | 39,212 | 754 |
| 2003 | 64,467 | 4,481,845 | 179,528,728 | 40,057 | 770 |
| 2004 | 64,544 | 4,484,997 | 184,414,992 | 41,118 | 791 |
| 2005 | 66,278 | 4,527,514 | 191,281,126 | 42,249 | 812 |
| 2006 | 66,921 | 4,565,908 | 200,329,294 | 43,875 | 844 |
| 2007 ............................................ | 67,381 | 4,611,395 | 211,677,002 | 45,903 | 883 |
|  | Local government covered |  |  |  |  |
| 1998 | 137,902 | 12,077,513 | \$365,359,945 | \$30,251 | \$582 |
| 1999 | 140,093 | 12,339,584 | 385,419,781 | 31,234 | 601 |
| 2000 | 141,491 | 12,620,081 | 408,721,690 | 32,387 | 623 |
| 2001 | 143,989 | 13,126,143 | 440,000,795 | 33,521 | 645 |
| 2002 | 146,767 | 13,412,941 | 464,153,701 | 34,605 | 665 |
| 2003 | 149,281 | 13,484,153 | 480,967,339 | 35,669 | 686 |
| 2004 | 155,043 | 13,563,517 | 499,206,488 | 36,805 | 708 |
| 2005 ........................................ | 157,309 | 13,699,418 | 516,709,610 | 37,718 | 725 |
| 2006 | 158,695 | 13,820,093 | 541,461,514 | 39,179 | 753 |
| 2007 | 159,816 | 14,016,190 | 571,713,553 | 40,790 | 784 |
|  | Federal government covered (UCFE) |  |  |  |  |
| 1998 | 47,252 | 2,782,888 | \$121,578,334 | \$43,688 | \$840 |
| 1999 | 49,661 | 2,786,567 | 123,409,672 | 44,287 | 852 |
| 2000 | 50,256 | 2,871,489 | 132,741,760 | 46,228 | 889 |
| 2001 ........................................... | 50,993 | 2,752,619 | 134,713,843 | 48,940 | 941 |
| 2002 ........................................ | 50,755 | 2,758,627 | 143,587,523 | 52,050 | 1,001 |
| 2003 | 51,753 | 2,764,275 | 149,932,170 | 54,239 | 1,043 |
| 2004 | 52,066 | 2,739,596 | 158,299,427 | 57,782 | 1,111 |
| 2005 | 52,895 | 2,733,675 | 163,647,568 | 59,864 | 1,151 |
| 2006 ........................................ | 52,916 | 2,728,974 | 169,945,269 | 62,274 | 1,198 |
| 2007 ........................................... | 63,699 | 2,726,300 | 176,857,794 | 64,871 | 1,248 |

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 2007

| 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 | $\begin{gathered} 1,000 \text { or } \\ \text { more } \\ \text { workers } \end{gathered}$ |
| Total all industries ${ }^{2}$ <br> Establishments, first quarter $\qquad$ <br> Employment, March $\qquad$ |  |  |  |  |  |  |  |  |  |  |
|  | 8,572,894 | 5,189,837 | 1,407,987 | 933,910 | 648,489 | 220,564 | 124,980 | 30,568 | 11,049 | 5,510 |
|  | 112,536,714 | 7,670,620 | 9,326,775 | 12,610,385 | 19,566,806 | 15,156,364 | 18,718,813 | 10,438,705 | 7,479,948 | 11,568,298 |
| Natural resources and mining Establishments, first quarter | 124,002 | 69,260 | 23,451 | 15,289 | 10,137 | 3,250 | 1,842 | 519 | 190 | 64 |
|  | 1,686,694 | 111,702 | 155,044 | 205,780 | 304,936 | 222,684 | 278,952 | 179,598 | 126,338 | 101,660 |
| Construction |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter | 883,409 | 580,647 | 141,835 | 84,679 | 52,336 | 15,341 | 6,807 | 1,326 | 350 | 88 |
| Employment, March ........... | 7,321,288 | 835,748 | 929,707 | 1,137,104 | 1,564,722 | 1,046,790 | 1,004,689 | 443,761 | 232,556 | 126,211 |
| Manufacturing |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter ................ | 361,070 | 136,649 | 61,845 | 54,940 | 53,090 | 25,481 | 19,333 | 6,260 | 2,379 | 1,093 |
| Employment, March ........................... | 13,850,738 | 238,848 | 415,276 | 755,931 | 1,657,463 | 1,785,569 | 2,971,836 | 2,140,531 | 1,613,357 | 2,271,927 |
| Trade, transportation, and utilities | 1,905,750 | 1,017,012 | 381,434 | 248,880 | 160,549 | 53,721 | 34,536 | 7,315 | 1,792 | 511 |
| Employment, March ........... | 25,983,275 | 1,683,738 | 2,539,291 | 3,335,327 | 4,845,527 | 3,709,371 | 5,140,740 | 2,510,273 | 1,167,986 | 1,051,022 |
| Information |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter ................ | 143,094 | 81,414 | 20,986 | 16,338 | 13,384 | 5,609 | 3,503 | 1,134 | 489 | 237 |
| Employment, March ........................... | 3,016,454 | 113,901 | 139,730 | 222,710 | 411,218 | 387,996 | 533,877 | 392,350 | 335,998 | 478,674 |
| Financial activities |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter | 863,784 | 563,670 | 155,984 | 81,849 | 40,668 | 12,037 | 6,313 | 1,863 | 939 | 461 |
| Employment, March ............................ | 8,146,274 | 890,816 | 1,029,911 | 1,080,148 | 1,210,332 | 822,627 | 945,396 | 645,988 | 648,691 | 872,365 |
| Professional and business services |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter ................ | 1,456,681 | 989,991 | 196,645 | 125,014 | 83,127 | 32,388 | 20,412 | 5,902 | 2,263 | 939 |
| Employment, March ............................ | 17,612,073 | 1,375,429 | 1,292,744 | 1,685,085 | 2,520,739 | 2,243,595 | 3,102,005 | 2,012,609 | 1,535,591 | 1,844,276 |
| Education and health services |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter | 812,914 | 388,773 | 179,011 | 116,031 | 75,040 | 27,393 | 18,815 | 4,153 | 1,906 | 1,792 |
| Employment, March ............ | 17,331,231 | 700,195 | 1,189,566 | 1,559,689 | 2,258,922 | 1,908,595 | 2,828,678 | 1,409,073 | 1,319,128 | 4,157,385 |
| Leisure and hospitality |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter ................ | 716,126 | 275,121 | 120,795 | 132,408 | 134,766 | 39,766 | 10,681 | 1,639 | 646 | 304 |
| Employment, March ............................ | 12,949,319 | 439,080 | 815,688 | 1,858,394 | 4,054,666 | 2,648,733 | 1,510,212 | 551,528 | 438,008 | 633,010 |
| Other services |  |  |  |  |  |  |  |  |  |  |
| Establishments, first quarter | 1,119,209 | 908,792 | 118,963 | 57,419 | 25,169 | 5,562 | 2,731 | 457 | 95 | 21 |
| Employment, March ............................ | 4,402,263 | 1,109,065 | 776,354 | 756,783 | 732,313 | 379,320 | 401,371 | 152,994 | 62,295 | 31,768 |

${ }^{1}$ Includes establishments that reported no workers in March 2007.
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 2006 and 2007 for all covered workers ${ }^{1}$ by metropolitan area

| Metropolitan area² | Average annual wages ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | 2006 | 2007 | Percent change, 2006-07 |
| Metropolitan areas ${ }^{4}$ | \$44,165 | \$46,139 | 4.5 |
| Abilene, TX | 29,842 | 31,567 | 5.8 |
| Aguadilla-Isabela-San Sebastian, PR | 19,277 | 20,295 | 5.3 |
| Akron, OH | 38,088 | 39,499 | 3.7 |
| Albany, GA | 32,335 | 33,378 | 3.2 |
| Albany-Schenectady-Troy, NY | 41,027 | 42,191 | 2.8 |
| Albuquerque, NM | 36,934 | 38,191 | 3.4 |
| Alexandria, LA | 31,329 | 32,757 | 4.6 |
| Allentown-Bethlehem-Easton, PA-NJ | 39,787 | 41,784 | 5.0 |
| Altoona, PA | 30,394 | 31,988 | 5.2 |
| Amarillo, TX | 33,574 | 35,574 | 6.0 |
| Ames, IA | 35,331 | 37,041 | 4.8 |
| Anchorage, AK | 42,955 | 45,237 | 5.3 |
| Anderson, IN | 32,184 | 32,850 | 2.1 |
| Anderson, SC | 30,373 | 31,086 | 2.3 |
| Ann Arbor, MI | 47,186 | 49,427 | 4.7 |
| Anniston-Oxford, AL | 32,724 | 34,593 | 5.7 |
| Appleton, WI | 35,308 | 36,575 | 3.6 |
| Asheville, NC | 32,268 | 33,406 | 3.5 |
| Athens-Clarke County, GA | 33,485 | 34,256 | 2.3 |
| Atlanta-Sandy Springs-Marietta, GA | 45,889 | 48,111 | 4.8 |
| Atlantic City, NJ | 38,018 | 39,276 | 3.3 |
| Auburn-Opelika, AL | 30,468 | 31,554 | 3.6 |
| Augusta-Richmond County, GA-SC | 35,638 | 36,915 | 3.6 |
| Austin-Round Rock, TX | 45,737 | 46,458 | 1.6 |
| Bakersfield, CA | 36,020 | 38,254 | 6.2 |
| Baltimore-Towson, MD | 45,177 | 47,177 | 4.4 |
| Bangor, ME | 31,746 | 32,829 | 3.4 |
| Barnstable Town, MA | 36,437 | 37,691 | 3.4 |
| Baton Rouge, LA | 37,245 | 39,339 | 5.6 |
| Battle Creek, MI | 39,362 | 40,628 | 3.2 |
| Bay City, MI | 35,094 | 35,680 | 1.7 |
| Beaumont-Port Arthur, TX | 39,026 | 40,682 | 4.2 |
| Bellingham, WA | 32,618 | 34,239 | 5.0 |
| Bend, OR | 33,319 | 34,318 | 3.0 |
| Billings, MT | 33,270 | 35,372 | 6.3 |
| Binghamton, NY | 35,048 | 36,322 | 3.6 |
| Birmingham-Hoover, AL | 40,798 | 42,570 | 4.3 |
| Bismarck, ND | 32,550 | 34,118 | 4.8 |
| Blacksburg-Christiansburg-Radford, VA | 34,024 | 35,248 | 3.6 |
| Bloomington, IN ................. | 30,913 | 32,028 | 3.6 |
| Bloomington-Normal, IL | 41,359 | 42,082 | 1.7 |
| Boise City-Nampa, ID | 36,734 | 37,553 | 2.2 |
| Boston-Cambridge-Quincy, MA-NH | 56,809 | 59,817 | 5.3 |
| Boulder, CO | 50,944 | 52,745 | 3.5 |
| Bowling Green, KY | 32,529 | 33,308 | 2.4 |
| Bremerton-Silverdale, WA | 37,694 | 39,506 | 4.8 |
| Bridgeport-Stamford-Norwalk, CT | 74,890 | 79,973 | 6.8 |
| Brownsville-Harlingen, TX | 25,795 | 27,126 | 5.2 |
| Brunswick, GA | 32,717 | 32,705 | 0.0 |
| Buffalo-Niagara Falls, NY | 36,950 | 38,218 | 3.4 |
| Burlington, NC | 32,835 | 33,132 | 0.9 |
| Burlington-South Burlington, VT | 40,548 | 41,907 | 3.4 |
| Canton-Massillon, OH | 33,132 | 34,091 | 2.9 |
| Cape Coral-Fort Myers, FL | 37,065 | 37,658 | 1.6 |
| Carson City, NV ....... | 40,115 | 42,030 | 4.8 |
| Casper, WY | 38,307 | 41,105 | 7.3 |
| Cedar Rapids, IA | 38,976 | 41,059 | 5.3 |
| Champaign-Urbana, IL | 34,422 | 35,788 | 4.0 |
| Charleston, WV | 36,887 | 38,687 | 4.9 |
| Charleston-North Charleston, SC | 35,267 | 36,954 | 4.8 |
| Charlotte-Gastonia-Concord, NC-SC | 45,732 | 46,975 | 2.7 |
| Charlottesville, VA | 39,051 | 40,819 | 4.5 |
| Chattanooga, TN-GA | 35,358 | 36,522 | 3.3 |
| Cheyenne, WY | 35,306 | 36,191 | 2.5 |
| Chicago-Naperville-Joliet, IL-IN-WI | 48,631 | 50,823 | 4.5 |
| Chico, CA | 31,557 | 33,207 | 5.2 |
| Cincinnati-Middletown, OH-KY-IN | 41,447 | 42,969 | 3.7 |
| Clarksville, TN-KY | 30,949 | 32,216 | 4.1 |
| Cleveland, TN | 33,075 | 34,666 | 4.8 |
| Cleveland-Elyria-Mentor, OH ................. | 41,325 | 42,783 | 3.5 |
| Coeur d'Alene, ID | 29,797 | 31,035 | 4.2 |
| College Station-Bryan, TX | 30,239 | 32,630 | 7.9 |
| Colorado Springs, CO | 38,325 | 39,745 | 3.7 |
| Columbia, MO | 32,207 | 33,266 | 3.3 |
| Columbia, SC | 35,209 | 36,293 | 3.1 |
| Columbus, GA-AL | 32,334 | 34,511 | 6.7 |
| Columbus, IN | 40,107 | 41,078 | 2.4 |
| Columbus, OH | 41,168 | 42,655 | 3.6 |
| Corpus Christi, TX | 35,399 | 37,186 | 5.0 |
| Corvallis, OR ....................................... | 40,586 | 41,981 | 3.4 |

26. Continued - Average annual wages for 2006 and 2007 for all covered workers ${ }^{1}$ by metropolitan area

| Metropolitan area² | Average annual wages ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | 2006 | 2007 | Percent change, 2006-07 |
| Cumberland, MD-WV | \$29,859 | \$31,373 | 5.1 |
| Dallas-Fort Worth-Arlington, TX | 47,525 | 49,627 | 4.4 |
| Dalton, GA | 33,266 | 34,433 | 3.5 |
| Danville, IL | 33,141 | 34,086 | 2.9 |
| Danville, VA | 28,870 | 30,212 | 4.6 |
| Davenport-Moline-Rock Island, IA-IL | 37,559 | 39,385 | 4.9 |
| Dayton, OH .................................. | 39,387 | 40,223 | 2.1 |
| Decatur, AL | 34,883 | 35,931 | 3.0 |
| Decatur, IL | 39,375 | 41,039 | 4.2 |
| Deltona-Daytona Beach-Ormond Beach, FL ...................... | 31,197 | 32,196 | 3.2 |
| Denver-Aurora, CO | 48,232 | 50,180 | 4.0 |
| Des Moines, IA | 41,358 | 42,895 | 3.7 |
| Detroit-Warren-Livonia, MI | 47,455 | 49,019 | 3.3 |
| Dothan, AL | 31,473 | 32,367 | 2.8 |
| Dover, DE | 34,571 | 35,978 | 4.1 |
| Dubuque, IA | 33,044 | 34,240 | 3.6 |
| Duluth, MN-WI | 33,677 | 35,202 | 4.5 |
| Durham, NC | 49,314 | 52,420 | 6.3 |
| Eau Claire, WI | 31,718 | 32,792 | 3.4 |
| El Centro, CA | 30,035 | 32,419 | 7.9 |
| Elizabethtown, KY | 32,072 | 32,701 | 2.0 |
| Elkhart-Goshen, IN | 35,878 | 36,566 | 1.9 |
| Elmira, NY | 33,968 | 34,879 | 2.7 |
| El Paso, TX | 29,903 | 31,354 | 4.9 |
| Erie, PA | 33,213 | 34,788 | 4.7 |
| Eugene-Springfield, OR | 33,257 | 34,329 | 3.2 |
| Evansville, IN-KY | 36,858 | 37,182 | 0.9 |
| Fairbanks, AK | 41,296 | 42,345 | 2.5 |
| Fajardo, PR | 21,002 | 22,075 | 5.1 |
| Fargo, ND-MN | 33,542 | 35,264 | 5.1 |
| Farmington, NM | 36,220 | 38,572 | 6.5 |
| Fayetteville, NC | 31,281 | 33,216 | 6.2 |
| Fayetteville-Springdale-Rogers, AR-MO | 35,734 | 37,325 | 4.5 |
| Flagstaff, AZ | 32,231 | 34,473 | 7.0 |
| Flint, MI | 39,409 | 39,310 | -0.3 |
| Florence, SC | 33,610 | 34,305 | 2.1 |
| Florence-Muscle Shoals, AL | 29,518 | 30,699 | 4.0 |
| Fond du Lac, WI | 33,376 | 34,664 | 3.9 |
| Fort Collins-Loveland, CO | 37,940 | 39,335 | 3.7 |
| Fort Smith, AR-OK | 30,932 | 31,236 | 1.0 |
| Fort Walton Beach-Crestview-Destin, FL | 34,409 | 35,613 | 3.5 |
| Fort Wayne, IN | 35,641 | 36,542 | 2.5 |
| Fresno, CA | 33,504 | 35,111 | 4.8 |
| Gadsden, AL | 29,499 | 30,979 | 5.0 |
| Gainesville, FL | 34,573 | 36,243 | 4.8 |
| Gainesville, GA | 34,765 | 36,994 | 6.4 |
| Glens Falls, NY | 32,780 | 33,564 | 2.4 |
| Goldsboro, NC | 29,331 | 30,177 | 2.9 |
| Grand Forks, ND-MN | 29,234 | 30,745 | 5.2 |
| Grand Junction, CO .......................................................... | 33,729 | 36,221 | 7.4 |
| Grand Rapids-Wyoming, MI | 38,056 | 38,953 | 2.4 |
| Great Falls, MT | 29,542 | 31,009 | 5.0 |
| Greeley, CO | 35,144 | 37,066 | 5.5 |
| Green Bay, WI | 36,677 | 37,788 | 3.0 |
| Greensboro-High Point, NC | 35,898 | 37,213 | 3.7 |
| Greenville, NC | 32,432 | 33,703 | 3.9 |
| Greenville, SC | 35,471 | 36,536 | 3.0 |
| Guayama, PR | 24,551 | 26,094 | 6.3 |
| Gulfport-Biloxi, MS ...................................................... | 34,688 | 34,971 | 0.8 |
| Hagerstown-Martinsburg, MD-WV .................................... | 34,621 | 35,468 | 2.4 |
| Hanford-Corcoran, CA | 31,148 | 32,504 | 4.4 |
| Harrisburg-Carlisle, PA | 39,807 | 41,424 | 4.1 |
| Harrisonburg, VA | 31,522 | 32,718 | 3.8 |
| Hartford-West Hartford-East Hartford, CT | 51,282 | 54,188 | 5.7 |
| Hattiesburg, MS ................ | 30,059 | 30,729 | 2.2 |
| Hickory-Lenoir-Morganton, NC ....................................... | 31,323 | 32,364 | 3.3 |
| Hinesville-Fort Stewart, GA ............................................ | 31,416 | 33,210 | 5.7 |
| Holland-Grand Haven, MI | 36,895 | 37,470 | 1.6 |
| Honolulu, HI | 39,009 | 40,748 | 4.5 |
| Hot Springs, AR .......................................................... | 27,684 | 28,448 | 2.8 |
| Houma-Bayou Cane-Thibodaux, LA | 38,417 | 41,604 | 8.3 |
| Houston-Baytown-Sugar Land, TX | 50,177 | 53,494 | 6.6 |
| Huntington-Ashland, WV-KY-OH | 32,648 | 33,973 | 4.1 |
| Huntsville, AL | 44,659 | 45,763 | 2.5 |
| Idaho Falls, ID | 31,632 | 29,878 | -5.5 |
| Indianapolis, IN | 41,307 | 42,227 | 2.2 |
| lowa City, IA | 35,913 | 37,457 | 4.3 |
| Ithaca, NY | 38,337 | 39,387 | 2.7 |
| Jackson, MI | 36,836 | 38,267 | 3.9 |
| Jackson, MS ................................................................ | 34,605 | 35,771 | 3.4 |

See footnotes at end of table.
26. Continued - Average annual wages for 2006 and 2007 for all covered workers ${ }^{1}$ by metropolitan area

| Metropolitan area² | Average annual wages ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | 2006 | 2007 | Percent change, 2006-07 |
| Jackson, TN | \$34,477 | \$35,059 | 1.7 |
| Jacksonville, FL | 40,192 | 41,437 | 3.1 |
| Jacksonville, NC | 25,854 | 27,005 | 4.5 |
| Janesville, WI | 36,732 | 36,790 | 0.2 |
| Jefferson City, MO | 31,771 | 32,903 | 3.6 |
| Johnson City, TN . | 31,058 | 31,985 | 3.0 |
| Johnstown, PA | 29,972 | 31,384 | 4.7 |
| Jonesboro, AR | 28,972 | 30,378 | 4.9 |
| Joplin, MO | 30,111 | 31,068 | 3.2 |
| Kalamazoo-Portage, MI .................................................. | 37,099 | 38,402 | 3.5 |
| Kankakee-Bradley, IL | 32,389 | 33,340 | 2.9 |
| Kansas City, MO-KS | 41,320 | 42,921 | 3.9 |
| Kennewick-Richland-Pasco, WA | 38,750 | 40,439 | 4.4 |
| Killeen-Temple-Fort Hood, TX | 31,511 | 32,915 | 4.5 |
| Kingsport-Bristol-Bristol, TN-VA | 35,100 | 36,399 | 3.7 |
| Kingston, NY .... | 33,697 | 35,018 | 3.9 |
| Knoxville, TN | 37,216 | 38,386 | 3.1 |
| Kokomo, IN | 45,808 | 47,269 | 3.2 |
| La Crosse, WI-MN | 31,819 | 32,949 | 3.6 |
| Lafayette, IN | 35,380 | 36,419 | 2.9 |
| Lafayette, LA | 38,170 | 40,684 | 6.6 |
| Lake Charles, LA | 35,883 | 37,447 | 4.4 |
| Lakeland, FL | 33,530 | 34,394 | 2.6 |
| Lancaster, PA | 36,171 | 37,043 | 2.4 |
| Lansing-East Lansing, MI | 39,890 | 40,866 | 2.4 |
| Laredo, TX | 28,051 | 29,009 | 3.4 |
| Las Cruces, NM | 29,969 | 31,422 | 4.8 |
| Las Vegas-Paradise, NV | 40,139 | 42,336 | 5.5 |
| Lawrence, KS .. | 29,896 | 30,830 | 3.1 |
| Lawton, OK | 29,830 | 30,617 | 2.6 |
| Lebanon, PA | 31,790 | 32,876 | 3.4 |
| Lewiston, ID-WA | 30,776 | 31,961 | 3.9 |
| Lewiston-Auburn, ME | 32,231 | 33,118 | 2.8 |
| Lexington-Fayette, KY | 37,926 | 39,290 | 3.6 |
| Lima, OH | 33,790 | 35,177 | 4.1 |
| Lincoln, NE | 33,703 | 34,750 | 3.1 |
| Little Rock-North Little Rock, AR | 36,169 | 39,305 | 8.7 |
| Logan, UT-ID | 26,766 | 27,810 | 3.9 |
| Longview, TX | 35,055 | 36,956 | 5.4 |
| Longview, WA | 35,140 | 37,101 | 5.6 |
| Los Angeles-Long Beach-Santa Ana, CA | 48,680 | 50,480 | 3.7 |
| Louisville, KY-IN | 38,673 | 40,125 | 3.8 |
| Lubbock, TX | 31,977 | 32,761 | 2.5 |
| Lynchburg, VA | 33,242 | 34,412 | 3.5 |
| Macon, GA | 34,126 | 34,243 | 0.3 |
| Madera, CA | 31,213 | 33,266 | 6.6 |
| Madison, WI | 40,007 | 41,201 | 3.0 |
| Manchester-Nashua, NH | 46,659 | 49,235 | 5.5 |
| Mansfield, OH .......... | 33,171 | 33,109 | -0.2 |
| Mayaguez, PR ............................................................. | 20,619 | 21,326 | 3.4 |
| McAllen-Edinburg-Pharr, TX | 26,712 | 27,651 | 3.5 |
| Medford, OR .................... | 31,697 | 32,877 | 3.7 |
| Memphis, TN-MS-AR | 40,580 | 42,339 | 4.3 |
| Merced, CA | 31,147 | 32,351 | 3.9 |
| Miami-Fort Lauderdale-Miami Beach, FL | 42,175 | 43,428 | 3.0 |
| Michigan City-La Porte, IN | 31,383 | 32,570 | 3.8 |
| Midland, TX | 42,625 | 45,574 | 6.9 |
| Milwaukee-Waukesha-West Allis, WI ...... | 42,049 | 43,261 | 2.9 |
| Minneapolis-St. Paul-Bloomington, MN-WI ......................... | 46,931 | 49,542 | 5.6 |
| Missoula, MT ................................................................ | 30,652 | 32,233 | 5.2 |
| Mobile, AL | 36,126 | 36,890 | 2.1 |
| Modesto, CA | 35,468 | 36,739 | 3.6 |
| Monroe, LA | 30,618 | 31,992 | 4.5 |
| Monroe, MI | 40,938 | 41,636 | 1.7 |
| Montgomery, AL | 35,383 | 36,223 | 2.4 |
| Morgantown, WV | 32,608 | 35,241 | 8.1 |
| Morristown, TN | 31,914 | 32,806 | 2.8 |
| Mount Vernon-Anacortes, WA | 32,851 | 34,620 | 5.4 |
| Muncie, IN ......................... | 30,691 | 31,326 | 2.1 |
| Muskegon-Norton Shores, MI .......................................... | 33,949 | 34,982 | 3.0 |
| Myrtle Beach-Conway-North Myrtle Beach, SC ................... | 27,905 | 28,576 | 2.4 |
| Napa, CA | 41,788 | 44,171 | 5.7 |
| Naples-Marco Island, FL | 39,320 | 41,300 | 5.0 |
| Nashville-Davidson--Murfreesboro, TN | 41,003 | 42,728 | 4.2 |
| New Haven-Milford, CT .................... | 44,892 | 47,039 | 4.8 |
| New Orleans-Metairie-Kenner, LA | 42,434 | 43,255 | 1.9 |
| New York-Northern New Jersey-Long Island, NY-NJ-PA ...... | 61,388 | 65,685 | 7.0 |
| Niles-Benton Harbor, MI | 36,967 | 38,140 | 3.2 |
| Norwich-New London, CT ............................................... | 43,184 | 45,463 | 5.3 |
| Ocala, FL .................................................................... | 31,330 | 31,623 | 0.9 |

[^16]26. Continued - Average annual wages for 2006 and 2007 for all covered workers' by metropolitan area

| Metropolitan area | Average annual wages ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | 2006 | 2007 | Percent change, 2006-07 |
| Ocean City, NJ | \$31,801 | \$32,452 | 2.0 |
| Odessa, TX | 37,144 | 41,758 | 12.4 |
| Ogden-Clearfield, UT | 32,890 | 34,067 | 3.6 |
| Oklahoma City, OK | 35,846 | 37,192 | 3.8 |
| Olympia, WA | 37,787 | 39,678 | 5.0 |
| Omaha-Council Bluffs, NE-IA | 38,139 37776 | 39,273 | 3.0 |
| Oshkosh-Neenah, WI | 39,538 | 41,014 | 3.7 |
| Owensboro, KY | 32,491 | 33,593 | 3.4 |
| Oxnard-Thousand Oaks-Ventura, CA | 45,467 | 47,669 | 4.8 |
| Palm Bay-Melbourne-Titusville, FL | 39,778 | 40,975 | 3.0 |
| Panama City-Lynn Haven, FL | 33,341 | 33,950 | 1.8 |
| Parkersburg-Marietta, WV-OH | 32,213 | 33,547 | 4.1 |
| Pascagoula, MS | 36,287 | 39,131 | 7.8 |
| Pensacola-Ferry Pass-Brent, FL | 33,530 | 34,165 | 1.9 |
| Peoria, IL ................................................ | 42,283 | 43,470 | 2.8 |
| Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Phoenix-Mesa-Scottsdale, AZ | 48,647 42,220 | 50,611 43,697 | 4.0 3.5 |
| Pine Bluft, AR .................. | 32,115 | 33,094 | 3.0 |
| Pittsburgh, PA ........................................................... | 40,759 | 42,910 | 5.3 |
| Pittsfield, MA | 36,707 | 38,075 | 3.7 |
| Pocatello, ID | 28,418 | 29,268 | 3.0 |
| Ponce, PR | 20,266 | 21,019 | 3.7 |
| Portland-South Portland-Biddeford, ME | 36,979 | 38,497 | 4.1 |
| Portland-Vancouver-Beaverton, OR-WA | 42,607 | 44,335 | 4.1 |
| Port St. Lucie-Fort Pierce, FL Poughkeepsie-Newburgh-Middet......... | 34,408 | 36,375 40 | 5.7 |
| Prescott, AZ .................................. | 30,625 | 32,048 | 4.6 |
| Providence-New Bedford-Fall River, RI-MA | 39,428 | 40,674 | 3.2 |
| Provo-Orem, UT ...... | 32,308 | 34,141 | 5.7 |
| Pueblo, CO | 30,941 | 32,552 | 5.2 |
| Punta Gorda, FL | 32,370 | 32,833 | 1.4 |
| Racine, WI | 39,002 | 40,746 | 4.5 |
| Raleigh-Cary, NC | 41,205 | 42,801 | 3.9 |
| Rapid City, SD | 29,920 | 31,119 | 4.0 |
| Reading, PA | 38,048 | 39,945 | 5.0 |
| Redding, CA | 33,307 | 34,953 | 4.9 |
| Reno-Sparks, NV | 39,537 | 41,365 | 4.6 |
| Richmond, VA ............................ | 42,495 | 44,530 | 4.8 |
| Riverside-San Bernardino-Ontario, CA | 36,668 | 37,846 | 3.2 |
| Roanoke, VA | 33,912 | 35,419 | 4.4 |
| Rochester, MN | 42,941 | 44,786 | 4.3 |
| Rochester, NY | 39,481 | 40,752 | 3.2 |
| Rockford, IL | 37,424 | 38,304 | 2.4 |
| Rocky Mount, NC | 31,556 | 32,527 | 3.1 |
| Rome, GA | 34,850 | 33,041 | -5.2 |
| Sacramento--Arden-Arcade--Roseville, CA | 44,552 | 46,385 | 4.1 |
| Saginaw-Saginaw Township North, MI | 37,747 | 37,507 | -0.6 |
| St. Cloud, MN | 33,018 | 33,996 | 3.0 |
| St. George, UT ........ | 28,034 | 29,052 | 3.6 |
| St. Joseph, MO-KS | 31,253 | 31,828 | 1.8 |
| St. Louis, MO-IL | 41,354 | 42,873 | 3.7 |
| Salem, OR | 32,764 | 33,986 | 3.7 |
| Salinas, CA | 37,974 | 39,419 | 3.8 |
| Salisbury, MD | 33,223 | 34,833 | 4.8 |
| Salt Lake City, UT | 38,630 | 40,935 | 6.0 |
| San Angelo, TX | 30,168 | 30,920 | 2.5 |
| San Antonio, TX | 36,763 | 38,274 | 4.1 |
| San Diego-Carlsbad-San Marcos, CA <br> Sandusky, OH | 45,784 33,526 | 47,657 33,471 | 4.1 -0.2 |
| San Francisco-Oakland-Fremont, CA | 61,343 | 64,559 | 5.2 |
| San German-Cabo Rojo, PR | 19,498 | 19,777 | 1.4 |
| San Jose-Sunnyvale-Santa Clara, CA | 76,608 | 82,038 | 7.1 |
| San Juan-Caguas-Guaynabo, PR | 24,812 | 25,939 | 4.5 |
| San Luis Obispo-Paso Robles, CA | 35,146 | 36,740 | 4.5 |
| Santa Barbara-Santa Maria-Goleta, CA | 40,326 | 41,967 | 4.1 |
| Santa Cruz-Watsonville, CA ........... | 40,776 | 41,540 | 1.9 |
| Santa Fe, NM | 35,320 | 37,395 | 5.9 |
| Santa Rosa-Petaluma, CA | 41,533 | 42,824 | 3.1 |
| Sarasota-Bradenton-Venice, FL | 35,751 | 36,424 | 1.9 |
| Savannah, GA | 35,684 | 36,695 | 2.8 |
| Scranton--Wilkes-Barre, PA | 32,813 | 34,205 | 4.2 |
| Seattle-Tacoma-Bellevue, WA | 49,455 | 51,924 | 5.0 |
| Sheboygan, WI | 35,908 | 37,049 | 3.2 |
| Sherman-Denison, TX | 34,166 | 35,672 | 4.4 |
| Shreveport-Bossier City, LA | 33,678 | 34,892 | 3.6 |
| Sioux City, IA-NE-SD | 31,826 | 33,025 | 3.8 |
| Sioux Falls, SD | 34,542 | 36,056 | 4.4 |
| South Bend-Mishawaka, IN-MI | 35,089 | 36,266 | 3.4 |
| Spartanburg, SC ......................................................... | 37,077 | 37,967 | 2.4 |

See footnotes at end of table.
26. Continued - Average annual wages for 2006 and 2007 for all covered workers' by metropolitan area

| Metropolitan area² | Average annual wages ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | 2006 | 2007 | Percent change, 2006-07 |
| Spokane, WA | \$34,016 | \$35,539 | 4.5 |
| Springfield, IL | 40,679 | 42,420 | 4.3 |
| Springfield, MA | 37,962 | 39,487 | 4.0 |
| Springfield, MO | 30,786 | 31,868 | 3.5 |
| Springfield, OH | 31,844 | 32,017 | 0.5 |
| State College, PA | 35,392 | 36,797 | 4.0 |
| Stockton, CA | 36,426 | 37,906 | 4.1 |
| Sumter, SC | 29,294 | 30,267 | 3.3 |
| Syracuse, NY | 38,081 | 39,620 | 4.0 |
| Tallahassee, FL | 35,018 | 36,543 | 4.4 |
| Tampa-St. Petersburg-Clearwater, FL | 38,016 | 39,215 | 3.2 |
| Terre Haute, IN | 31,341 | 32,349 | 3.2 |
| Texarkana, TX-Texarkana, AR | 32,545 | 34,079 | 4.7 |
| Toledo, OH | 37,039 | 38,538 | 4.0 |
| Topeka, KS | 34,806 | 36,109 | 3.7 |
| Trenton-Ewing, NJ | 54,274 | 56,645 | 4.4 |
| Tucson, AZ | 37,119 | 38,524 | 3.8 |
| Tulsa, OK | 37,637 | 38,942 | 3.5 |
| Tuscaloosa, AL | 35,613 | 36,737 | 3.2 |
| Tyler, TX | 36,173 | 37,184 | 2.8 |
| Utica-Rome, NY | 32,457 | 33,916 | 4.5 |
| Valdosta, GA | 26,794 | 27,842 | 3.9 |
| Vallejo-Fairfield, CA | 40,225 | 42,932 | 6.7 |
| Vero Beach, FL | 33,823 | 35,901 | 6.1 |
| Victoria, TX | 36,642 | 38,317 | 4.6 |
| Vineland-Millville-Bridgeton, NJ | 37,749 | 39,408 | 4.4 |
| Virginia Beach-Norfolk-Newport News, VA-NC | 36,071 | 37,734 | 4.6 |
| Visalia-Porterville, CA | 29,772 | 30,968 | 4.0 |
| Waco, TX | 33,450 | 34,679 | 3.7 |
| Warner Robins, GA | 38,087 | 39,220 | 3.0 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 58,057 | 60,711 | 4.6 |
| Waterloo-Cedar Falls, IA | 34,329 | 35,899 | 4.6 |
| Wausau, WI | 34,438 | 35,710 | 3.7 |
| Weirton-Steubenville, WV-OH | 31,416 | 32,893 | 4.7 |
| Wenatchee, WA | 28,340 | 29,475 | 4.0 |
| Wheeling, WV-OH | 30,620 | 31,169 | 1.8 |
| Wichita, KS | 38,763 | 39,662 | 2.3 |
| Wichita Falls, TX | 30,785 | 32,320 | 5.0 |
| Williamsport, PA | 31,431 | 32,506 | 3.4 |
| Wilmington, NC | 32,948 | 34,239 | 3.9 |
| Winchester, VA-WV | 34,895 | 36,016 | 3.2 |
| Winston-Salem, NC | 37,712 | 38,921 | 3.2 |
| Worcester, MA | 42,726 | 44,652 | 4.5 |
| Yakima, WA | 28,401 | 29,743 | 4.7 |
| Yauco, PR | 19,001 | 19,380 | 2.0 |
| York-Hanover, PA | 37,226 | 38,469 | 3.3 |
| Youngstown-Warren-Boardman, OH-PA | 33,852 | 34,698 | 2.5 |
| Yuba City, CA | 33,642 | 35,058 | 4.2 |
| Yuma, AZ | 28,369 | 30,147 | 6.3 |
| ${ }^{1}$ Includes workers covered by Unemployment | ${ }^{3}$ Each year's total is based on the MSA definition for the specific year. Annual changes include differences resulting from changes in MSA definitions. |  |  |
| 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. | ${ }^{4}$ Totals do not include the six MSAs within Puerto Rico. |  |  |

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

[Numbers in thousands]

| Employment status | $1998{ }^{1}$ | $1999{ }^{1}$ | $2000{ }^{1}$ | $2001{ }^{1}$ | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Civilian noninstitutional population.. | 205,220 | 207,753 | 212,577 | 215,092 | 217,570 | 221,168 | 223,357 | 226,082 | 228,815 | 231,867 | 233,788 |
| Civilian labor force. | 137,673 | 139,368 | 142,583 | 143,734 | 144,863 | 146,510 | 147,401 | 149,320 | 151,428 | 153,124 | 154,287 |
| Labor force participation rate. | 67.1 | 67.1 | 67.1 | 66.8 | 66.6 | 66.2 | 66.0 | 66.0 | 66.2 | 66.0 | 66.0 |
| Employed. | 131,463 | 133,488 | 136,891 | 136,933 | 136,485 | 137,736 | 139,252 | 141,730 | 144,427 | 146,047 | 145,362 |
| Employment-population ratio. | 64.1 | 64.3 | 64.4 | 63.7 | 62.7 | 62.3 | 62.3 | 62.7 | 63.1 | 63.0 | 62.2 |
| Unemployed. | 6,210 | 5,880 | 5,692 | 6,801 | 8,378 | 8,774 | 8,149 | 7,591 | 7,001 | 7,078 | 8,924 |
| Unemployment rate.. | 4.5 | 4.2 | 4.0 | 4.7 | 5.8 | 6.0 | 5.5 | 5.1 | 4.6 | 4.6 | 5.8 |
| Not in the labor force. | 67,547 | 68,385 | 69,994 | 71,359 | 72,707 | 74,658 | 75,956 | 76,762 | 77,387 | 78,743 | 79,501 |

${ }^{1}$ Not strictly comparable with prior years.
28. Annual data: Employment levels by industry
[In thousands]

| Industry | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total private employment. | 106,021 | 108,686 | 110,995 | 110,708 | 108,828 | 108,416 | 109,814 | 111,899 | 114,113 | 115,420 | 114,792 |
| Total nonfarm employment. | 125,930 | 128,993 | 131,785 | 131,826 | 130,341 | 129,999 | 131,435 | 133,703 | 136,086 | 137,623 | 137,248 |
| Goods-producing. | 24,354 | 24,465 | 24,649 | 23,873 | 22,557 | 21,816 | 21,882 | 22,190 | 22,531 | 22,221 | 21,404 |
| Natural resources and mining. | 645 | 598 | 599 | 606 | 583 | 572 | 591 | 628 | 684 | 723 | 774 |
| Construction. | 6,149 | 6,545 | 6,787 | 6,826 | 6,716 | 6,735 | 6,976 | 7,336 | 7,691 | 7,614 | 7,175 |
| Manufacturing. | 17,560 | 17,322 | 17,263 | 16,441 | 15,259 | 14,510 | 14,315 | 14,226 | 14,155 | 13,884 | 13,455 |
| Private service-providing. | 81,667 | 84,221 | 86,346 | 86,834 | 86,271 | 86,600 | 87,932 | 89,709 | 91,582 | 93,199 | 93,387 |
| Trade, transportation, and utilities... | 25,186 | 25,771 | 26,225 | 25,983 | 25,497 | 25,287 | 25,533 | 25,959 | 26,276 | 26,608 | 26,332 |
| Wholesale trade. | 5,795 | 5,893 | 5,933 | 5,773 | 5,652 | 5,608 | 5,663 | 5,764 | 5,905 | 6,028 | 6,012 |
| Retail trade. | 14,609 | 14,970 | 15,280 | 15,239 | 15,025 | 14,917 | 15,058 | 15,280 | 15,353 | 15,491 | 15,265 |
| Transportation and warehousing. | 4,168 | 4,300 | 4,410 | 4,372 | 4,224 | 4,185 | 4,249 | 4,361 | 4,470 | 4,536 | 4,495 |
| Utilities. | 613 | 609 | 601 | 599 | 596 | 577 | 564 | 554 | 549 | 553 | 560 |
| Information. | 3,218 | 3,419 | 3,630 | 3,629 | 3,395 | 3,188 | 3,118 | 3,061 | 3,038 | 3,029 | 2,987 |
| Financial activities. | 7,462 | 7,648 | 7,687 | 7,808 | 7,847 | 7,977 | 8,031 | 8,153 | 8,328 | 8,308 | 8,192 |
| Professional and business services. | 15,147 | 15,957 | 16,666 | 16,476 | 15,976 | 15,987 | 16,394 | 16,954 | 17,566 | 17,962 | 17,863 |
| Education and health services. | 14,446 | 14,798 | 15,109 | 15,645 | 16,199 | 16,588 | 16,953 | 17,372 | 17,826 | 18,327 | 18,878 |
| Leisure and hospitality. | 11,232 | 11,543 | 11,862 | 12,036 | 11,986 | 12,173 | 12,493 | 12,816 | 13,110 | 13,474 | 13,615 |
| Other services. | 4,976 | 5,087 | 5,168 | 5,258 | 5,372 | 5,401 | 5,409 | 5,395 | 5,438 | 5,491 | 5,520 |
| Government. | 19,909 | 20,307 | 20,790 | 21,118 | 21,513 | 21,583 | 21,621 | 21,804 | 21,974 | 22,203 | 22,457 |

## 29. Annual data: Average hours and earnings of production or nonsupervisory workers on nonfarm

payrolls, by industry

| Industry | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Private sector: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours... | 34.5 | 34.3 | 34.3 | 34.0 | 33.9 | 33.7 | 33.7 | 33.8 | 33.9 | 33.8 | 33.6 |
| Average hourly earnings (in dollars). | 13.01 | 13.49 | 14.02 | 14.54 | 14.97 | 15.37 | 15.69 | 16.13 | 16.76 | 17.42 | 18.05 |
| Average weekly earmings (in dollars). | 448.56 | 463.15 | 481.01 | 493.79 | 506.75 | 518.06 | 529.09 | 544.33 | 567.87 | 589.72 | 606.84 |
| Goods-producing: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.. | 40.8 | 40.8 | 40.7 | 39.9 | 39.9 | 39.8 | 40.0 | 40.1 | 40.5 | 40.6 | 40.2 |
| Average hourly eamings (in dollars). | 14.23 | 14.71 | 15.27 | 15.78 | 16.33 | 16.80 | 17.19 | 17.60 | 18.02 | 18.67 | 19.31 |
| Average weekly earnings (in dollars). | 580.99 | 599.99 | 621.86 | 630.01 | 651.61 | 669.13 | 688.13 | 705.31 | 730.16 | 757.06 | 775.28 |
| Natural resources and mining |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours. | 44.9 | 44.2 | 44.4 | 44.6 | 43.2 | 43.6 | 44.5 | 45.6 | 45.6 | 45.9 | 45.0 |
| Average hourly earnings (in dollars). | 16.20 | 16.33 | 16.55 | 17.00 | 17.19 | 17.56 | 18.07 | 18.72 | 19.90 | 20.96 | 22.42 |
| Average weekly eamings (in dollars). | 727.28 | 721.74 | 734.92 | 757.92 | 741.97 | 765.94 | 803.82 | 853.71 | 907.95 | 961.78 | 1008.27 |
| Construction: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.. | 38.8 | 39.0 | 39.2 | 38.7 | 38.4 | 38.4 | 38.3 | 38.6 | 39.0 | 39.0 | 38.5 |
| Average hourly earnings (in dollars).. | 16.23 | 16.80 | 17.48 | 18.00 | 18.52 | 18.95 | 19.23 | 19.46 | 20.02 | 20.95 | 21.86 |
| Average weekly eamings (in dollars).. | 629.75 | 655.11 | 685.78 | 695.89 | 711.82 | 726.83 | 735.55 | 750.22 | 781.21 | 816.06 | 841.46 |
| Manufacturing: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.. | 41.4 | 41.4 | 41.3 | 40.3 | 40.5 | 40.4 | 40.8 | 40.7 | 41.1 | 41.2 | 40.8 |
| Average hourly earmings (in dollars). | 13.45 | 13.85 | 14.32 | 14.76 | 15.29 | 15.74 | 16.14 | 16.56 | 16.81 | 17.26 | 17.72 |
| Average weekly earmings (in dollars). | 557.09 | 573.25 | 590.77 | 595.19 | 618.75 | 635.99 | 658.49 | 673.33 | 691.02 | 711.36 | 723.51 |
| Private service-providing: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours. | 32.8 | 32.7 | 32.7 | 32.5 | 32.5 | 32.3 | 32.3 | 32.4 | 32.5 | 32.4 | 32.3 |
| Average hourly eamings (in dollars). | 12.61 | 13.09 | 13.62 | 14.18 | 14.59 | 14.99 | 15.29 | 15.74 | 16.42 | 17.10 | 17.73 |
| Average weekly earmings (in dollars). | 413.50 | 427.98 | 445.74 | 461.08 | 473.80 | 484.68 | 494.22 | 509.58 | 532.78 | 554.78 | 572.96 |
| Trade, transportation, and utilities: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.. | 34.2 | 33.9 | 33.8 | 33.5 | 33.6 | 33.6 | 33.5 | 33.4 | 33.4 | 33.3 | 33.2 |
| Average hourly eamings (in dollars). | 12.39 | 12.82 | 13.31 | 13.70 | 14.02 | 14.34 | 14.58 | 14.92 | 15.39 | 15.79 | 16.19 |
| Average weekly earmings (in dollars). | 423.30 | 434.31 | 449.88 | 459.53 | 471.27 | 481.14 | 488.42 | 498.43 | 514.34 | 526.38 | 537.00 |
| Wholesale trade: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.. | 38.6 | 38.6 | 38.8 | 38.4 | 38.0 | 37.9 | 37.8 | 37.7 | 38.0 | 38.2 | 38.2 |
| Average hourly earmings (in dollars). | 15.07 | 15.62 | 16.28 | 16.77 | 16.98 | 17.36 | 17.65 | 18.16 | 18.91 | 19.59 | 20.13 |
| Average weekly earmings (in dollars). | 582.21 | 602.77 | 631.40 | 643.45 | 644.38 | 657.29 | 667.09 | 685.00 | 718.63 | 748.90 | 769.74 |
| Retail trade: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.. | 30.9 | 30.8 | 30.7 | 30.7 | 30.9 | 30.9 | 30.7 | 30.6 | 30.5 | 30.2 | 30.0 |
| Average hourly earmings (in dollars). | 10.05 | 10.45 | 10.86 | 11.29 | 11.67 | 11.90 | 12.08 | 12.36 | 12.57 | 12.76 | 12.90 |
| Average weekly eamings (in dollars). | 582.21 | 602.77 | 631.40 | 643.45 | 644.38 | 657.29 | 667.09 | 685.00 | 718.63 | 748.90 | 769.74 |
| Transportation and warehousing: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.... | 38.7 | 37.6 | 37.4 | 36.7 | 36.8 | 36.8 | 37.2 | 37.0 | 36.9 | 36.9 | 36.4 |
| Average hourly eamings (in dollars). | 14.12 | 14.55 | 15.05 | 15.33 | 15.76 | 16.25 | 16.52 | 16.70 | 17.28 | 17.73 | 18.39 |
| Average weekly eamings (in dollars). | 546.86 | 547.97 | 562.31 | 562.70 | 579.75 | 598.41 | 614.82 | 618.58 | 636.97 | 654.83 | 669.44 |
| Utilities: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours. | 42.0 | 42.0 | 42.0 | 41.4 | 40.9 | 41.1 | 40.9 | 41.1 | 41.4 | 42.4 | 42.6 |
| Average hourly eamings (in dollars).. | 21.48 | 22.03 | 22.75 | 23.58 | 23.96 | 24.77 | 25.61 | 26.68 | 27.40 | 27.87 | 28.84 |
| Average weekly eamings (in dollars).... | 902.94 | 924.59 | 955.66 | 977.18 | 979.09 | 1017.27 | 1048.44 | 1095.90 | 1135.34 | 1182.17 | 1230.08 |
| Information: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours... | 36.6 | 36.7 | 36.8 | 36.9 | 36.5 | 36.2 | 36.3 | 36.5 | 36.6 | 36.5 | 36.7 |
| Average hourly earmings (in dollars). | 17.67 | 18.40 | 19.07 | 19.80 | 20.20 | 21.01 | 21.40 | 22.06 | 23.23 | 23.94 | 24.74 |
| Average weekly earmings (in dollars). | 646.34 | 675.47 | 700.86 | 730.88 | 737.77 | 760.45 | 777.25 | 805.08 | 850.42 | 873.63 | 907.02 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours................... | 36.0 | 35.8 | 35.9 | 35.8 | 35.6 | 35.5 | 35.5 | 35.9 | 35.7 | 35.9 | 35.9 |
| Average hourly eamings (in dollars). | 13.93 | 14.47 | 14.98 | 15.59 | 16.17 | 17.14 | 17.52 | 17.95 | 18.80 | 19.64 | 20.28 |
| Average weekly earmings (in dollars). | 500.98 | 517.57 | 537.37 | 557.92 | 575.54 | 609.08 | 622.87 | 644.99 | 672.21 | 705.29 | 727.38 |
| Professional and business services: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours...... | 34.3 | 34.4 | 34.5 | 34.2 | 34.2 | 34.1 | 34.2 | 34.2 | 34.6 | 34.8 | 34.8 |
| Average hourly eamings (in dollars).. | 14.27 | 14.85 | 15.52 | 16.33 | 16.81 | 17.21 | 17.48 | 18.08 | 19.13 | 20.13 | 21.15 |
| Average weekly earmings (in dollars). | 490.00 | 510.99 | 535.07 | 557.84 | 574.66 | 587.02 | 597.56 | 618.87 | 662.27 | 700.15 | 736.55 |
| Education and health services: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours.... | 32.2 | 32.1 | 32.2 | 32.3 | 32.4 | 32.3 | 32.4 | 32.6 | 32.5 | 32.6 | 32.5 |
| Average hourly eamings (in dollars).. | 13.00 | 13.44 | 13.95 | 14.64 | 15.21 | 15.64 | 16.15 | 16.71 | 17.38 | 18.11 | 18.78 |
| Average weekly eamings (in dollars).. | 418.82 | 431.35 | 449.29 | 473.39 | 492.74 | 505.69 | 523.78 | 544.59 | 564.94 | 590.18 | 611.03 |
| Leisure and hospitality: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours...... | 26.2 | 26.1 | 26.1 | 25.8 | 25.8 | 25.6 | 25.7 | 25.7 | 25.7 | 25.5 | 25.2 |
| Average hourly earmings (in dollars). | 7.67 | 7.96 | 8.32 | 8.57 | 8.81 | 9.00 | 9.15 | 9.38 | 9.75 | 10.41 | 10.83 |
| Average weekly eamings (in dollars).. | 200.82 | 208.05 | 217.20 | 220.73 | 227.17 | 230.42 | 234.86 | 241.36 | 250.34 | 265.45 | 272.97 |
| Other services: |  |  |  |  |  |  |  |  |  |  |  |
| Average weekly hours... | 32.6 | 32.5 | 32.5 | 32.3 | 32.0 | 31.4 | 31.0 | 30.9 | 30.9 | 30.9 | 30.8 |
| Average hourly eamings (in dollars).. | 11.79 | 12.26 | 12.73 | 13.27 | 13.72 | 13.84 | 13.98 | 14.34 | 14.77 | 15.42 | 15.86 |
| Average weekly eamings (in dollars)............ | 384.25 | 398.77 | 413.41 | 428.64 | 439.76 | 434.41 | 433.04 | 443.37 | 456.50 | 476.80 | 488.22 |

NOTE: Data reflect the conversion to the 2002 version of the North American Industry Classification System (NAICS), replacing the Standard Industrial Classification (SIC) system. NAICS-based data by industry are not comparable with SIC-based data.
30. Employment Cost Index, compensation, by occupation and industry group
[December 2005 = 100]


[^17]30. Continued-Employment Cost Index, compensation, by occupation and industry group
[December $2005=100$ ]

| Series | 2007 |  |  |  | 2008 |  |  |  | 2009 | Percent change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | Mar. | 3 months ended | 12 months ended |
|  |  |  |  |  |  |  |  |  |  | Mar. 2009 |  |
| Wholesale trade. | 103.7 | 104.6 | 104.2 | 105.3 | 105.7 | 107.2 | 107.1 | 106.8 | 107.1 | 0.3 | 1.3 |
| Retail trade. | 102.9 | 103.9 | 105.1 | 106.1 | 106.6 | 107.6 | 108.2 | 108.1 | 108.3 | . 2 | 1.6 |
| Transportation and warehousing. | 102.8 | 104.0 | 104.5 | 104.5 | 105.6 | 106.4 | 106.8 | 106.9 | 107.4 | . 5 | 1.7 |
| Utilities.. | 102.8 | 104.7 | 105.0 | 105.6 | 106.5 | 108.1 | 108.1 | 108.9 | 109.6 | . 6 | 2.9 |
| Information.. | 104.3 | 105.6 | 105.8 | 106.1 | 106.1 | 106.2 | 107.2 | 107.4 | 107.7 | . 3 | 1.5 |
| Financial activities.. | 104.2 | 104.6 | 105.4 | 105.6 | 106.8 | 107.3 | 107.4 | 107.1 | 106.8 | -. 3 | . 0 |
| Finance and insurance. | 104.6 | 104.9 | 105.7 | 106.1 | 107.0 | 107.7 | 107.6 | 107.2 | 106.9 | -. 3 | -. 1 |
| Real estate and rental and leasing. | 102.2 | 103.0 | 104.1 | 103.7 | 105.5 | 105.7 | 106.4 | 106.6 | 106.6 | . 0 | 1.0 |
| Professional and business services.. | 104.7 | 105.9 | 106.9 | 107.5 | 109.0 | 109.9 | 110.8 | 111.6 | 111.9 | . 3 | 2.7 |
| Education and health services. | 105.1 | 105.7 | 106.9 | 107.7 | 108.6 | 109.4 | 110.3 | 110.6 | 111.5 | . 8 | 2.7 |
| Education services. | 104.5 | 104.9 | 106.7 | 107.5 | 108.1 | 109.1 | 111.4 | 111.3 | 111.9 | . 5 | 3.5 |
| Health care and social assistance. | 105.2 | 105.9 | 106.9 | 107.8 | 108.8 | 109.4 | 110.1 | 110.5 | 111.5 | . 9 | 2.5 |
| Hospitals.. | 105.0 | 105.6 | 106.5 | 107.3 | 108.2 | 109.1 | 110.1 | 110.7 | 111.5 | . 7 | 3.0 |
| Leisure and hospitality. | 105.3 | 106.0 | 107.5 | 108.1 | 109.0 | 109.3 | 110.6 | 111.4 | 112.2 | . 7 | 2.9 |
| Accommodation and food services. | 105.8 | 106.4 | 108.1 | 108.6 | 109.5 | 110.0 | 111.4 | 112.1 | 113.0 | . 8 | 3.2 |
| Other services, except public administration............ | 105.7 | 106.1 | 107.1 | 107.6 | 108.7 | 109.4 | 109.9 | 109.9 | 110.8 | . 8 | 1.9 |
| State and local government workers........................... | 105.1 | 105.7 | 107.6 | 108.4 | 108.9 | 109.4 | 111.3 | 111.6 | 112.3 | . 6 | 3.1 |
| Workers by occupational group Management, professional, and related. | 104.9 | 105.4 | 107.5 | 108.3 | 108.8 | 109.3 | 111.3 | 111.6 | 112.0 | . 4 | 2.9 |
| Professional and related.. | 104.8 | 105.3 | 107.5 | 108.2 | 108.6 | 109.1 | 111.1 | 111.4 | 111.9 | . 4 | 3.0 |
| Sales and office.. | 105.6 | 106.2 | 107.9 | 108.6 | 108.8 | 109.3 | 111.0 | 111.3 | 112.4 | 1.0 | 3.3 |
| Office and administrative support. | 105.7 | 106.4 | 108.2 | 108.9 | 109.3 | 109.8 | 111.4 | 111.8 | 112.8 | . 9 | 3.2 |
| Service occupations...................... | 105.4 | 106.3 | 108.0 | 109.1 | 109.7 | 110.0 | 111.9 | 112.4 | 113.4 | . 9 | 3.4 |
| Workers by industry Education and health services. | 104.8 | 105.3 | 107.5 | 108.2 | 108.6 | 109.1 | 111.2 | 111.5 | 111.9 | . 4 | 3.0 |
| Education services............. | 104.6 | 105.0 | 107.4 | 108.0 | 108.4 | 108.8 | 111.0 | 111.2 | 111.8 | . 5 | 3.1 |
| Schools........... | 104.6 | 104.9 | 107.4 | 108.0 | 108.4 | 108.8 | 111.0 | 111.2 | 111.8 | . 5 | 3.1 |
| Elementary and secondary schools.. | 104.7 | 105.0 | 107.4 | 108.0 | 108.3 | 108.8 | 111.1 | 111.4 | 112.0 | . 5 | 3.4 |
| Health care and social assistance............ | 107.1 | 107.6 | 108.6 | 109.3 | 110.1 | 111.1 | 112.7 | 113.2 | 113.3 | . 1 | 2.9 |
| Hospitals............................................... | 105.6 | 106.3 | 107.5 | 108.2 | 109.2 | 109.7 | 110.8 | 111.3 | 112.4 | 1.0 | 2.9 |
| Public administration ${ }^{3}$...................................... | 105.6 | 106.6 | 108.0 | 109.1 | 109.7 | 110.1 | 111.6 | 112.0 | 113.0 | . 9 | 3.0 |

[^18]31. Employment Cost Index, wages and salaries, by occupation and industry group [December $2005=100]$

| Series | 2007 |  |  |  | 2008 |  |  |  | 2009 | Percent change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | Mar. | 3 months ended | 12 months ended |
|  |  |  |  |  |  |  |  |  |  | Mar. 2009 |  |
| Civilian workers ${ }^{1}$. | 104.3 | 105.0 | 106.0 | 106.7 | 107.6 | 108.4 | 109.3 | 109.6 | 110.0 | 0.4 | 2.2 |
| Workers by occupational group |  |  |  |  |  |  |  |  |  |  |  |
| Management, professional, and related. | 104.7 | 105.4 | 106.6 | 107.1 | 108.2 | 109.0 | 110.1 | 110.5 | 111.0 | . 5 | 2.6 |
| Management, business, and financial. | 104.7 | 105.4 | 106.4 | 106.7 | 108.2 | 109.0 | 109.8 | 110.1 | 110.4 | . 3 | 2.0 |
| Professional and related.. | 104.7 | 105.3 | 106.7 | 107.4 | 108.3 | 109.0 | 110.3 | 110.7 | 111.2 | . 5 | 2.7 |
| Sales and office. | 103.8 | 104.8 | 105.4 | 106.2 | 106.7 | 107.7 | 108.1 | 108.1 | 108.1 | . 0 | 1.3 |
| Sales and related. | 102.7 | 103.9 | 104.3 | 105.5 | 105.2 | 106.6 | 106.3 | 105.6 | 104.3 | -1.2 | -. 9 |
| Office and administrative support. | 104.5 | 105.3 | 106.1 | 106.8 | 107.8 | 108.5 | 109.3 | 109.8 | 110.6 | . 7 | 2.6 |
| Natural resources, construction, and maintenance | 104.3 | 105.1 | 106.3 | 107.1 | 108.1 | 109.0 | 109.9 | 110.6 | 110.7 | . 1 | 2.4 |
| Construction and extraction. | 104.6 | 105.7 | 106.6 | 107.7 | 109.0 | 109.9 | 110.7 | 111.3 | 111.4 | . 1 | 2.2 |
| Installation, maintenance, and repair. | 103.8 | 104.4 | 105.8 | 106.4 | 107.0 | 107.8 | 108.8 | 109.6 | 110.0 | 4 | 2.8 |
| Production, transportation, and material moving. | 103.2 | 103.9 | 104.7 | 105.1 | 106.1 | 106.9 | 107.7 | 108.0 | 108.5 | 5 | 2.3 |
| Production.. | 103.2 | 103.6 | 104.3 | 104.7 | 105.7 | 106.5 | 107.2 | 107.5 | 108.2 | . 7 | 2.4 |
| Transportation and material moving. | 103.3 | 104.2 | 105.1 | 105.5 | 106.6 | 107.3 | 108.2 | 108.5 | 108.8 | . 3 | 2.1 |
| Service occupations. | 104.6 | 105.3 | 106.5 | 107.3 | 108.0 | 108.7 | 109.9 | 110.3 | 111.2 | 8 | 3.0 |
| Workers by industry |  |  |  |  |  |  |  |  |  |  |  |
| Goods-producing. | 103.9 | 104.7 | 105.4 | 106.0 | 107.1 | 108.0 | 108.6 | 109.0 | 109.2 | . 2 | 2.0 |
| Manufacturing. | 103.3 | 103.9 | 104.5 | 104.9 | 105.9 | 106.7 | 107.4 | 107.7 | 108.1 | . 4 | 2.1 |
| Service-providing. | 104.3 | 105.1 | 106.2 | 106.8 | 107.7 | 108.5 | 109.4 | 109.7 | 110.2 | . 5 | 2.3 |
| Education and health services. | 104.4 | 104.9 | 106.6 | 107.4 | 108.0 | 108.7 | 110.2 | 110.5 | 111.0 | . 5 | 2.8 |
| Health care and social assistance | 105.1 | 105.9 | 107.1 | 107.9 | 108.9 | 109.6 | 110.4 | 110.9 | 111.7 | . 7 | 2.6 |
| Hospitals. | 104.8 | 105.6 | 106.7 | 107.4 | 108.4 | 109.4 | 110.5 | 111.3 | 112.0 | . 6 | 3.3 |
| Nursing and residential care facilities. | 104.1 | 104.7 | 105.8 | 106.4 | 107.4 | 108.1 | 109.1 | 109.7 | 110.3 | . 5 | 2.7 |
| Education services.. | 103.7 | 104.0 | 106.2 | 106.9 | 107.3 | 107.9 | 110.0 | 110.2 | 110.5 | . 3 | 3.0 |
| Elementary and secondary schools. | 103.6 | 103.8 | 106.0 | 106.6 | 107.0 | 107.5 | 109.9 | 110.1 | 110.4 | . 3 | 3.2 |
| Public administration ${ }^{2}$. | 104.5 | 105.2 | 106.4 | 107.4 | 108.2 | 108.6 | 109.9 | 110.4 | 111.3 | . 8 | 2.9 |
| Private industry workers....................................... | 104.3 | 105.1 | 106.0 | 106.6 | 107.6 | 108.4 | 109.1 | 109.4 | 109.8 | . 4 | 2.0 |
| Workers by occupational group Management, professional, and related | 104.9 | 105.8 | 106.7 | 107.2 | 108.5 | 109.3 | 110.1 | 110.5 | 111.1 | . 5 | 2.4 |
| Management, business, and financial. | 104.7 | 105.5 | 106.3 | 106.6 | 108.2 | 109.0 | 109.7 | 110.0 | 110.3 | . 3 | 2.4 1.9 |
| Professional and related. | 105.1 | 106.0 | 107.0 | 107.6 | 108.7 | 109.5 | 110.4 | 110.9 | 111.6 | . 6 | 2.7 |
| Sales and office. | 103.8 | 104.8 | 105.3 | 106.2 | 106.7 | 107.7 | 108.0 | 108.0 | 107.9 | -. 1 | 1.1 |
| Sales and related. | 102.8 | 104.0 | 104.4 | 105.5 | 105.3 | 106.6 | 106.4 | 105.7 | 104.3 | -1.3 | -. 9 |
| Office and administrative support. | 104.5 | 105.4 | 106.0 | 106.7 | 107.7 | 108.5 | 109.2 | 109.7 | 110.6 | . 8 | 2.7 |
| Natural resources, construction, and maintenance. | 104.2 | 105.1 | 106.2 | 107.1 | 108.1 | 109.0 | 109.8 | 110.5 | 110.6 | . 1 | 2.3 |
| Construction and extraction.. | 104.7 | 105.8 | 106.7 | 107.8 | 109.2 | 110.1 | 110.8 | 111.5 | 111.4 | -. 1 | 2.0 |
| Installation, maintenance, and repair. | 103.7 | 104.2 | 105.6 | 106.1 | 106.8 | 107.6 | 108.5 | 109.3 | 109.7 | . 4 | 2.7 |
| Production, transportation, and material moving. | 103.1 | 103.8 | 104.5 | 105.0 | 106.0 | 106.8 | 107.5 | 107.8 | 108.3 | . 5 | 2.2 |
| Production.. | 103.1 | 103.6 | 104.2 | 104.6 | 105.6 | 106.4 | 107.2 | 107.4 | 108.1 | . 7 | 2.4 |
| Transportation and material moving.. | 103.2 | 104.1 | 105.0 | 105.4 | 106.5 | 107.4 | 108.0 | 108.3 | 108.5 | . 2 | 1.9 |
| Service occupations.... | 104.6 | 105.3 | 106.5 | 107.1 | 107.9 | 108.8 | 109.7 | 110.1 | 111.0 | . 8 | 2.9 |
| Workers by industry and occupational group Goods-producing industries |  |  |  |  |  |  |  |  |  | 2 |  |
| Goods-producing industries................... | 103.9 104.4 | 104.7 105.3 | 105.4 105.9 | 106.0 106.0 | 107.1 107.7 | 108.0 | 108.6 108.7 | 109.0 | 109.2 109.3 | . 2 | 2.0 1.5 |
| Sales and office.. | 103.4 | 104.1 | 104.7 | 105.5 | 105.8 | 107.2 | 107.6 | 107.9 | 108.1 | . 2 | 2.2 |
| Natural resources, construction, and maintenance.. | 104.4 | 105.6 | 106.5 | 107.6 | 108.8 | 109.6 | 110.5 | 111.3 | 111.1 | -. 2 | 2.1 |
| Production, transportation, and material moving... | 103.2 | 103.7 | 104.4 | 104.8 | 105.7 | 106.6 | 107.3 | 107.6 | 108.0 | . 4 | 2.2 |
| Construction. | 104.9 | 106.0 | 107.0 | 107.8 | 109.0 | 110.0 | 110.6 | 111.1 | 111.2 | . 1 | 2.0 |
| Manufacturing.. | 103.3 | 103.9 | 104.5 | 104.9 | 105.9 | 106.7 | 107.4 | 107.7 | 108.1 | . 4 | 2.1 |
| Management, professional, and related.. | 103.8 | 104.6 | 105.0 | 105.3 | 106.7 | 107.2 | 107.6 | 107.8 | 108.4 | . 6 | 1.6 |
| Sales and office.. | 102.4 | 103.2 | 103.9 | 104.7 | 105.5 | 106.9 | 107.6 | 108.1 | 108.2 | . 1 | 2.6 |
| Natural resources, construction, and maintenance. | 103.8 | 104.3 | 105.0 | 105.9 | 106.8 | 107.1 | 108.1 | 109.0 | 108.8 | -. 2 | 1.9 |
| Production, transportation, and material moving........ | 103.1 | 103.6 | 104.2 | 104.5 | 105.4 | 106.3 | 107.1 | 107.3 | 107.7 | . 4 | 2.2 |
| Service-providing industries... | 104.4 | 105.3 | 106.1 | 106.8 | 107.7 | 108.6 | 109.3 | 109.6 | 110.0 | . 4 | 2.1 |
| Management, professional, and related. | 105.0 | 105.9 | 106.8 | 107.4 | 108.6 | 109.4 | 110.3 | 110.8 | 111.4 | . 5 | 2.6 |
| Sales and office............... | 103.8 | 104.9 | 105.4 | 106.3 | 106.8 | 107.7 | 108.0 | 108.0 | 107.9 | -. 1 | 1.0 |
| Natural resources, construction, and maintenance.. | 103.9 | 104.3 | 105.7 | 106.3 | 106.9 | 108.0 | 108.6 | 109.3 | 109.9 | . 5 | 2.8 |
| Production, transportation, and material moving.. | 103.0 | 104.0 | 104.6 | 105.2 | 106.3 | 107.1 | 107.8 | 108.1 | 108.6 | . 5 | 2.2 |
| Service occupations.. | 104.6 | 105.3 | 106.6 | 107.2 | 108.0 | 108.8 | 109.7 | 110.1 | 111.0 | . 8 | 2.8 |
| Trade, transportation, and utilities.. | 103.2 | 104.3 | 104.6 | 105.5 | 105.9 | 107.2 | 107.5 | 107.4 | 107.8 | . 4 | 1.8 |

31. Continued-Employment Cost Index, wages and salaries, by occupation and industry group
[December $2005=100$ ]


[^19]32. Employment Cost Index, benefits, by occupation and industry group
[December $2005=100]$


NOTE: The Employment Cost Index data reflect the conversion to to 2006 are for informational purposes only. Series based on NAICS and soc became the official the 2002 North American Classification System (NAICS) and the 2000
Standard Occupational Classification (SOC) system. The NAICS and
sOC data shown prior
33. Employment Cost Index, private industry workers by bargaining status and region
[December 2005 = 100]

| Series | 2007 |  |  |  | 2008 |  |  |  | 2009 | Percent change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. | Mar. | 3 months ended | 12 months ended |
|  |  |  |  |  |  |  |  |  |  | Mar. 2009 |  |
| COMPENSATION <br> Workers by bargaining status ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Union. | 102.7 | 103.9 | 104.4 | 105.1 | 105.9 | 106.7 | 107.4 | 108.0 | 109.1 | 1.0 | 3.0 |
| Goods-producing. | 101.5 | 102.8 | 103.1 | 104.0 | 104.6 | 105.6 | 106.2 | 106.9 | 108.0 | 1.0 | 3.3 |
| Manufacturing. | 99.2 | 100.0 | 100.0 | 101.0 | 101.4 | 101.7 | 102.1 | 102.8 | 104.4 | 1.6 | 3.0 |
| Service-providing. | 103.7 | 104.7 | 105.4 | 106.0 | 107.0 | 107.5 | 108.3 | 108.8 | 109.9 | 1.0 | 2.7 |
| Nonunion.. | 104.2 | 105.1 | 105.9 | 106.5 | 107.5 | 108.3 | 108.9 | 109.1 | 109.4 | . 3 | 1.8 |
| Goods-producing. | 103.3 | 104.2 | 104.8 | 105.4 | 106.5 | 107.1 | 107.6 | 107.7 | 107.9 | . 2 | 1.3 |
| Manufacturing. | 102.8 | 103.7 | 104.1 | 104.6 | 105.6 | 106.2 | 106.6 | 106.8 | 107.1 | . 3 | 1.4 |
| Service-providing.. | 104.4 | 105.3 | 106.2 | 106.8 | 107.7 | 108.6 | 109.2 | 109.4 | 109.8 | . 4 | 1.9 |
| Workers by region ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Northeast. | 104.0 | 105.1 | 106.2 | 106.8 | 107.4 | 108.1 | 108.7 | 109.5 | 109.8 | . 3 | 2.2 |
| South.. | 104.3 | 105.3 | 106.1 | 106.7 | 107.8 | 108.5 | 109.1 | 109.3 | 109.8 | . 5 | 1.9 |
| Midwest. | 103.3 | 104.2 | 104.6 | 105.3 | 106.0 | 107.0 | 107.4 | 107.6 | 107.9 | . 3 | 1.8 |
| West. | 104.2 | 104.9 | 105.7 | 106.5 | 107.8 | 108.4 | 109.3 | 109.4 | 109.9 | . 5 | 1.9 |
| WAGES AND SALARIES <br> Workers by bargaining status ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Union.. | 102.8 | 103.7 | 104.4 | 104.7 | 105.5 | 106.7 | 107.4 | 108.1 | 108.8 | . 6 | 3.1 |
| Goods-producing. | 102.7 | 103.6 | 104.3 | 104.3 | 105.2 | 106.4 | 107.1 | 107.7 | 108.2 | . 5 | 2.9 |
| Manufacturing. | 102.0 | 102.5 | 102.9 | 102.6 | 103.4 | 104.4 | 104.9 | 105.5 | 106.0 | . 5 | 2.5 |
| Service-providing. | 102.9 | 103.8 | 104.6 | 104.9 | 105.8 | 106.9 | 107.7 | 108.3 | 109.2 | . 8 | 3.2 |
| Nonunion.. | 104.5 | 105.3 | 106.2 | 106.9 | 107.9 | 108.7 | 109.4 | 109.6 | 110.0 | . 4 | 1.9 |
| Goods-producing. | 104.2 | 105.0 | 105.8 | 106.4 | 107.7 | 108.4 | 109.0 | 109.3 | 109.5 | . 2 | 1.7 |
| Manufacturing. | 103.6 | 104.2 | 104.9 | 105.5 | 106.6 | 107.3 | 108.0 | 108.2 | 108.6 | . 4 | 1.9 |
| Service-providing. | 104.6 | 105.4 | 106.3 | 107.0 | 107.9 | 108.8 | 109.4 | 109.7 | 110.1 | . 4 | 2.0 |
| Workers by region ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Northeast. | 104.0 | 105.0 | 106.1 | 106.6 | 107.5 | 108.2 | 108.7 | 109.6 | 109.9 | . 3 | 2.2 |
| South.. | 104.6 | 105.6 | 106.5 | 107.0 | 108.1 | 109.1 | 109.8 | 110.0 | 110.4 | . 4 | 2.1 |
| Midwest. | 103.6 | 104.4 | 105.0 | 105.6 | 106.3 | 107.5 | 107.9 | 108.0 | 108.4 | . 4 | 2.0 |
| West................................................... | 104.8 | 105.4 | 106.2 | 107.0 | 108.3 | 108.9 | 109.9 | 110.1 | 110.5 | . 4 | 2.0 |

${ }^{1}$ 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-ime.... | 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 |

[^20]34. Continued-National Compensation Survey: Retirement benefits in private industry by access, participation, and selected series, 2003-2007

34. Continued-National Compensation Survey: Retirement benefits in private industry by access, participation, and selected series, 2003-2007

${ }^{1}$ 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, particpation, 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 |

[^21]35. Continued-National Compensation Survey: Health insurance benefits in private industry by access, particpation, and selected series, 2003-2007

| Series | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2004 | 2005 | 2006 | $2007{ }^{1}$ |
| Percentage of workers participating | 3237 | 3743 |  |  |  |
| All workers... |  |  |  |  |  |
| White-collar occupations ${ }^{2}$. |  |  | 36 42 | 41 |  |
| Management, professional, and related . |  | 40 | - | 38 | 5133 |
| Sales and office... |  |  |  |  |  |
| Blue-collar occupations ${ }^{2}$. | 33 |  | 39 |  | 36 |
| Natural resources, construction, and maintenance. | 1540 | 16 | - | 18 |  |
| Production, transportation, and material moving.. |  |  |  |  | 38 |
| Service occupations. |  |  | 17 |  | 20 |
| Full-time... |  | 46 | 45 |  | 44 |
| Part-time. | 6 |  | 9 | 10 | 9 |
| Union.. | 51 | 68 | 67 | 63 | 62 |
| Non-union....... | 30 | 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 | 33 | 49 | 45 |
| Service-providing industries.... | 29 | 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 |  | 29 | 29 | 29 | 2922 |
| Percentage of workers with access... | 25 |  |  |  |  |
| Percentage of workers participating.... | 19 | 22 | 22 | 22 |  |
| Outpatient Prescription drug coverage |  |  |  |  | 68 |
| Percentage of workers with access.... | - | - | 64 | 67 |  |
| Percentage of workers participating... | - | - | 48 | 49 | 49 |
| Percent of estalishments offering healthcare benefits | 58 | 61 | 63 | 62 | 60 |
| Percentage of medical premium paid by Employer and Employee |  |  |  |  |  |
| Single coverage | 82 |  |  |  |  |
| Employer share.. |  | 82 | 82 | 82 | 81 |
| Employee share.. | 18 | 18 | 18 | 18 | 19 |
| Family coverage |  |  |  |  |  |
| Employer share.. | 7030 | 6931 | 7129 | 70 | 71 |
| Employee share. |  |  |  | 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


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 |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May ${ }^{\text {p }}$ |
| Number of stoppages: <br> Beginning in period. $\qquad$ <br> In effect during period $\qquad$ |  | 15 16 | 2 4 | 2 2 | 1 1 | 2 2 | 2 2 | 1 2 | 0 1 | 0 | 0 | 0 0 | 0 | 0 | 0 |
| Workers involved: <br> Beginning in period (in thousands).. In effect during period (in thousands) | $\begin{aligned} & 189.2 \\ & 220.9 \end{aligned}$ | $\begin{array}{r} 72.2 \\ 136.8 \end{array}$ | $\begin{array}{r} 4.2 \\ 10.1 \end{array}$ | 4.2 4.2 | 8.5 8.5 | $\begin{aligned} & 7.0 \\ & 7.0 \end{aligned}$ | $\begin{aligned} & 28.2 \\ & 28.2 \end{aligned}$ | $\begin{array}{r} 6.0 \\ 33.0 \end{array}$ | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 | 0.0 0.0 |
| Days idle: <br> Number (in thousands) $\qquad$ <br> Percent of estimated working time ${ }^{1}$ $\qquad$ | $\begin{array}{r} 1264.8 \\ 0.01 \\ \hline \end{array}$ | $\begin{array}{r} 1954.1 \\ 0.01 \\ \hline \end{array}$ | $\begin{array}{r} 129.0 \\ 0 \end{array}$ | $\begin{array}{r} 12.3 \\ 0 \\ \hline \end{array}$ | $\begin{array}{r}42.5 \\ 0 \\ \hline\end{array}$ | $\begin{array}{r} 100.6 \\ 0 \end{array}$ | $\begin{array}{r} 469.8 \\ 0.02 \\ \hline \end{array}$ | $\begin{array}{r} 600.0 \\ 0.02 \end{array}$ | 0.0 0 | 0.0 0 | 0.0 0 | 0.0 0 | 0.0 0 | 0.0 0 | $\begin{array}{r}0.0 \\ 0 \\ \hline\end{array}$ |
| 1 Agricultural and government empl and total working time; private house excluded. An explanation of the mea the total time | es are d, fores rement | uded in and fish dleness |  | mploy yees ntage | wor <br> Oc <br> No | ked is fo ober 196 <br> E: $\quad \mathrm{p}=$ | und in "To <br> 8 , pp. 54 <br> prelimina | tal econo 56. <br> y. | my mea | ures of s | rike idlen | ess," | onthly Lal | or Revi |  |

38. Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers:
U.S. city average, by expenditure category and commodity or service group
[1982-84 = 100, unless otherwise indicated]

| Series | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| CONSUMER PRICE INDEX |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All items | 207.342 | 215.303 | 216.632 | 218.815 | 219.964 | 219.086 | 218.783 | 216.573 | 212.425 | 210.228 | . 143 | 12.193 | 212.709 | 240 | 56 |
| All items (1967 = 100 | 621.106 | 644.951 | 648.933 | 655.474 | 658.915 | 656.284 | 655.376 | 648.758 | 636.332 | 629.751 | 632.491 | 635.637 | 637.182 | 638.771 | 640.616 |
| Food and beverages | 203.300 | 214.225 | 212.251 | 213.383 | 215.326 | 216.419 | 217.672 | 218.705 | 218.752 | 218.839 | 219.729 | 219.333 | 218.794 | 218.364 | 218.076 |
| Food. | 202.916 | 214.106 | 212.054 | 213.243 | 215.299 | 216.422 | 217.696 | 218.738 | 218.749 | 218.805 | 219.675 | 219.205 | 218.600 | 218.162 | 217.826 |
| Food at home | 201.245 | 214.125 | 211.863 | 213.171 | 215.785 | 217.259 | 218.629 | 219.660 | 219.086 | 218.683 | 219.744 | 218.389 | 217.110 | 215.783 | 215.088 |
| Cereals and bakery produ | 222.107 | 244.853 | 244.192 | 245.758 | 250.321 | 250.080 | 250.924 | 252.832 | 252.723 | 253.063 | 254.445 | 254.187 | 253.698 | 252.709 | 252.714 |
| Meats, poultry, fish, and eggs | 195.616 | 204.653 | 200.960 | 202.914 | 205.075 | 207.488 | 209.937 | 210.706 | 209.602 | 208.890 | 208.616 | 207.963 | 206.348 | 205.699 | 203.789 |
| Dairy and related products ${ }^{1}$. | 194.770 | 210.396 | 207.778 | 209.117 | 213.981 | 214.748 | 213.533 | 212.733 | 213.102 | 210.838 | 209.632 | 204.537 | 199.687 | 197.124 | 196.055 |
| Fruits and vegetables... | 262.628 | 278.932 | 276.481 | 277.957 | 280.209 | 283.296 | 285.986 | 285.484 | 283.677 | 281.706 | 282.601 | 278.721 | 274.759 | 274.297 | 274.006 |
| Nonalcoholic beverages and beverage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other foods at home | 173.275 | 184.166 | 182.680 | 183.804 | 25 | 186.991 | 187.944 | 189.348 | 9301 | 190.203 | 192.492 | 192.404 | 192.234 | 52 | 191.144 |
| Sugar and sw | 6.77 | 186 | 185.097 | 185.558 | 187.067 | 187.813 | 189.929 | 190.515 | 191.756 | 193.312 | 197.429 | 196.676 | 197.137 | 197.301 | 196.403 |
| Fats and oils. | 172.921 | 196.751 | 193.364 | 196.150 | 201.205 | 203.059 | 206.274 | 208.300 | 205.806 | 206.710 | 206.886 | 205.359 | 204.776 | 200.464 | 200.679 |
| Other foods. | 188.244 | 198.103 | 196.787 | 197.888 | 199.566 | 200.961 | 201.388 | 202.993 | 203.058 | 203.902 | 206.343 | 206.621 | 206.367 | 205.734 | 205.587 |
| Other miscellaneous foods ${ }^{1,}$ | 115.105 | 119.924 | 118.744 | 118.453 | 120.510 | 121.033 | 121.144 | 122.699 | 123.543 | 123.791 | 124.012 | 122.580 | 122.402 | 122.883 | 122.838 |
| Food away from home ${ }^{1}$. | 06.659 | 215.769 | 213.967 | 215.015 | 216.376 | 217.063 | 18.225 | 219.290 | 220.043 | 220.684 | 221.319 | 221.968 | 222.216 | 05 | . 023 |
| Other food away from ho | 144.068 | 150.640 | 149.666 | 149.873 | 151.120 | 151.133 | 152.040 | 153.544 | 153.978 | 154.062 | 153.402 | 154.726 | 154.414 | 155.099 | 155.099 |
| Alcoholic beverages. | 207.026 | 214.484 | 213.532 | 213.912 | 214.394 | 215.094 | 55 | 216.972 | 217.492 | 217.975 | 219.113 | 219.682 | 219.999 | 671 | 05 |
| Housing. | 209.586 | 16.264 | 215.809 | 217.941 | 219.610 | 219.148 | 184 | 217.383 | 216.467 | 216.073 | 216.928 | 217.180 | 217.374 | 217.126 | 6.971 |
| Shelter. | 240.611 | 246.666 | 246.069 | 247.083 | 248.075 | 247.985 | 247.737 | 247.844 | 247.463 | 247.085 | 248.292 | 248.878 | 249.597 | 249.855 | 249.779 |
| Rent of primary residen | 234.679 | 243.271 | 241.803 | 242.640 | 243.367 | 244.181 | 244.926 | 245.855 | 246.681 | 247.278 | 247.974 | 248.305 | 248.639 | 248.899 | 249.069 |
| Lodging away from home. | 142.813 | 143.664 | 145.634 | 148.621 | 153.032 | 149.146 | 143.597 | 141.140 | 133.555 | 129.157 | 133.559 | 135.809 | 137.715 | 137.700 | 135.680 |
| Owners' equivalent rent of primary residence | 246.235 | 252.426 | 251.576 | 252.170 | 252.504 | 252.957 | 253.493 | 253.902 | 254.669 | 254.875 | 255.500 | 255.779 | 256.321 | 256.62 | 256.875 |
| Tenants' and household insurance ${ }^{1,2}$. | 117.004 | 118.843 | 118.411 | 119.092 | 118.764 | 118.562 | 119.944 | 119.916 | 120.232 | 120.019 | 120.402 | 120.683 | 120.737 | 120.675 | 28 |
| Fuels and utilities. | 200.632 | 220.018 | 219.881 | 231.412 | 239.039 | 235.650 | 228.450 | 221.199 | 216.285 | 215.184 | 215.232 | 213.520 | 210.501 | 207.175 | 206.358 |
| Fuels. | 181.744 | 200.808 | 201.212 | 213.762 | 221.742 | 217.455 | 209.501 | 201.176 | 195.599 | 194.335 | 194.149 | 192.168 | 188.736 | 184.903 | 183.783 |
| Fuel oil and other f | 251.453 | 334.405 | 363.872 | 389.423 | 395.706 | 367.794 | 349.164 | 318.667 | 281.869 | 256.209 | 247.163 | 242.264 | 230.837 | 228.107 | 225.164 |
| Gas (piped) and electricity. | 186.262 | 202.212 | 200.999 | 213.375 | 221.805 | 218.656 | 210.950 | 203.503 | 199.435 | 199.487 | 199.791 | 197.886 | 194.752 | 190.686 | 189.619 |
| Household furnishings and operations | 126.875 | 127.800 | 127.598 | 127.625 | 127.884 | 128.013 | 128.584 | 128.789 | 128.554 | 128.535 | 128.761 | 129.170 | 129.669 | 129.654 | 129.644 |
| Apparel | 118.998 | 118.907 | 120.752 | 117.019 | 114.357 | 116.376 | 121.168 | 122.243 | 121.262 | 117.078 | 114.764 | 118.825 | 122.545 | 123.208 | 121.751 |
| Men's and boys' apparel. | 112.368 | 113.032 | 116.479 | 112.011 | 109.669 | 110.180 | 112.720 | 115.067 | 114.239 | 110.767 | 110.797 | 115.202 | 117.748 | 117.195 | 117.146 |
| Women's and girrs' apparel. | 110.296 | 107.460 | 108.722 | 104.312 | 100.049 | 104.211 | 111.774 | 111.833 | 110.588 | 105.456 | 100.638 | 105.777 | 111.079 | 111.871 | 109.460 |
| Infants' and toddlers' apparel ${ }^{1}$. | . 948 | 762 | . 582 | 111.555 | 109.218 | 109.558 | 13.494 | 116.158 | 116.010 | 112.568 | 112.321 | 113.544 | 115.548 | 117.084 | 14.142 |
| Footwe | 122.37 | 124.157 | 125.537 | 123.568 | 122.421 | 121.982 | 124.907 | 126.442 | 88 | 124.093 | 122.363 | 124.301 | 126.707 | 源 057 | 27.519 |
| Transportation. | 184.682 | 195.549 | 205.262 | 211.787 | 212.806 | 206.739 | 203.861 | 192.709 | 173.644 | 164.628 | 166.738 | 169.542 | 169.647 | 171.987 | 175.997 |
| Private transportation. | 180.778 | 191.039 | 201.133 | 207.257 | 208.038 | 201.779 | 199.153 | 187.976 | 168.527 | 159.411 | 161.788 | 164.871 | 165.023 | 167.516 | 171.757 |
| New and used motor vehicles | 94.303 | 91 | 05 | . 598 | 93.650 | 93.260 | 92.480 | 92.071 | 91.618 | 91.408 | 91.831 | 92.224 | 92.109 | 92.381 | 92.701 |
| New vehicles.. | 136.254 | 134.194 | 134.669 | 134.516 | 134.397 | 133.404 | 132.399 | 132.264 | 132.359 | 132.308 | 133.273 | 134.186 | 134.611 | 134.863 | 135.162 |
| Used cars and trucks ${ }^{1}$ | 135.747 | 133.951 | 136.325 | 135.980 | 135.840 | 135.405 | 132.916 | 129.733 | 126.869 | 125.883 | 124.863 | 122.837 | 121.061 | 121.213 | 122.650 |
| Motor fue | 239.070 | 279.652 | 322.124 | 347.418 | 349.731 | 323.822 | 315.078 | 268.537 | 187.189 | 149.132 | 156.604 | 167.395 | 168.404 | 177.272 | 193.609 |
| Gasoline (all types).. | 237.959 | 277.457 | 319.787 | 344.981 | 347.357 | 321.511 | 313.535 | 266.382 | 184.235 | 146.102 | 154.488 | 166.118 | 167.826 | 176.704 | 193.727 |
| Motor vehicle parts and equipment. | 121.583 | 128.747 | 126.824 | 127.824 | 129.118 | 130.327 | 131.048 | 131.917 | 132.947 | 133.077 | 133.414 | 134.108 | 134.484 | 134.640 | 134.347 |
| Motor vehicle maintenance and repair | 222.963 | 233.859 | 231.730 | 233.162 | 234.788 | 236.125 | 237.121 | 238.227 | 239.048 | 239.356 | 241.076 | 241.689 | 242.118 | 242.64 | 242.488 |
| Public transportation. | 230.002 | 250.549 | 251.600 | 264.681 | 270.002 | 268.487 | 261.318 | 252.323 | 243.385 | 237.638 | 234.394 | 231.529 | 230.735 | . 82 | 28.878 |
| Medical care. | 351.054 | 364.065 | 363.396 | 363.616 | 363.963 | 364.477 | 365.036 | 365.746 | 366.613 | 367.133 | 369.830 | 372.405 | 373.189 | 374.170 | 375.026 |
| Medical care commodities | 289.999 | 296.045 | 294.896 | 295.194 | 294.777 | 295.003 | 295.461 | 295.791 | 297.317 | 298.361 | 299.998 | 302.184 | 302.908 | . 979 | 304.697 |
| Medical care services | 369.302 | 384.943 | 384.505 | 384.685 | 385.361 | 385.990 | 386.579 | 387.440 | 387.992 | 388.267 | 391.365 | 394.047 | 394.837 | 395.753 | 96.648 |
| Professional services | 300.792 | 310.968 | 310.917 | 311.317 | 311.926 | 312.396 | 312.527 | 312.914 | 313.328 | 313.886 | 315.603 | 316.992 | 317.460 | 317.661 | 319.333 |
| Hospital and related services. | 498.922 | 533.953 | 531.022 | 531.606 | 533.558 | 535.501 | 537.728 | 540.853 | 543.183 | 543.585 | 551.305 | 558.373 | 560.995 | 564.785 | 4.112 |
| Recreation ${ }^{2}$. | 111.443 | 113.254 | 112.987 | 112.991 | 113.277 | 113.786 | 114.032 | 114.169 | 114.078 | 113.674 | 113.822 | 114.461 | 114.625 | 14.261 | 114.264 |
| Video and audio ${ }^{1,2}$. | 102.949 | 102.632 | 102.988 | 102.306 | 102.203 | 102.546 | 102.706 | 102.193 | 101.831 | 101.629 | 101.347 | 101.704 | 102.000 | 102.300 | 101.947 |
| Education and communication ${ }^{2}$ | 119.577 | 123.631 | 122.348 | 122.828 | 123.445 | 124.653 | 125.505 | 125.686 | 125.758 | 125.921 | 126.151 | 126.1 | 126.1 | 126.2 | 126.467 |
| Education ${ }^{2}$ | 171.388 | 181.277 | 177.994 | 178.385 | 179.229 | 183.184 | 186.148 | 186.669 | 186.733 | 186.916 | 187.175 | 187.256 | 187.298 | 187.416 | 187.853 |
| Educational books and supplies.... | 420.418 | 450.187 | 442.770 | 443.309 | 444.382 | 458.989 | 462.787 | 463.825 | 462.694 | 464.544 | 468.432 | 469.996 | 472.185 | 472.507 | 472.588 |
| Tuition, other school fees, and child ca | 494.079 | 522.098 | 512.579 | 513.743 | 516.264 | 527.230 | 536.082 | 537.606 | 537.906 | 538.309 | 538.765 | 538.878 | 538.813 | 539.149 | 540.498 |
|  | 83.367 | 84.185 | 83.929 | 84.394 | 84.840 | 84.701 | 84.524 | 84.535 | 84.601 | 84.737 | 84.928 | 84.945 | 84.922 | 84.985 | 85.049 |
| Information and information processing ${ }^{1,2}$ | 80.720 | 81.352 | 81.080 | 81.513 | 81.965 | 81.815 | 81.635 | 81.652 | 81.723 | 81.886 | 82.030 | 82.052 | 82.022 | 82.090 | 82.038 |
| Telephone serviceses ${ }^{1,2}$...................... Information and information processing | 98.247 | 100.451 | 99.879 | 100.677 | 101.339 | 101.301 | 101.311 | 101.407 | 101.538 | 101.688 | 101.880 | 101.895 | 101.991 | 102.072 | 102.267 |
| Information and information processing other than telephone services ${ }^{1,4}$ | 10.597 | 10.061 | 10.118 | 10.071 | 10.087 | 10.012 | 9.901 | 9.874 | 9.867 | 9.906 | 9.919 | 9.926 | 9.872 | 9.881 | 9.775 |
| Personal computers and peripheral |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\text { equipment }{ }^{1,2} \text {. }$ | 108.411 | 94.944 | 97.028 | 95.663 | 94.711 | 92.921 | 90.797 | 89.945 | 88.984 | 88.529 | 88.522 | 87.696 | 86.213 | 85.714 | 84.366 |
| Other goods and services... | 333.328 | 345.381 | 344.709 | 345.885 | 346.810 | 346.990 | 348.166 | 349.276 | 349.040 | 349.220 | 350.259 | 351.223 | 361.156 | 370.606 | 369.901 |
| Tobacco and smoking products | 554.184 | 588.682 | 581.185 | 589.904 | 596.782 | 597.361 | 597.581 | 599.744 | 599.820 | 602.644 | 607.403 | 611.549 | 679.078 | 742.443 | 740.311 |
| Personal care ${ }^{1}$. | 195.622 | 201.279 | 201.523 | 201.537 | 201.545 | 201.623 | 202.486 | 203.107 | 202.921 | 202.774 | 203.080 | 203.39 | 204.11 | 204.896 | 204.578 |
| Personal care products ${ }^{1}$. | 158.285 | 159.290 | 158.790 | 158.868 | 158.989 | 159.252 | 159.643 | 159.826 | 161.000 | 161.397 | 162.588 | 162.508 | 162.696 | 163.777 | 163.051 |
| Personal care services ${ }^{1}$. | 216.559 | 223.669 | 223.649 | 223.520 | 223.719 | 224.151 | 224.614 | 225.564 | 226.197 | 226.281 | 225.734 | 225.895 | 227.982 | 227.913 | 227.607 |

See footnotes at end of table.
38. Continued-Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers U.S. city average, by expenditure category and commodity or service group [1982-84 = 100, unless otherwise indicated]

38. Continued-Consumer Price Indexes for All Urban Consumers and for Urban Wage Earners and Clerical Workers: U.S. city average, by expenditure category and commodity or service group
[1982-84 $=100$, unless otherwise indicated]

| Series | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| New vehicle | 137.415 | 135338 | 35.933 | 135.728 | 135.556 | 134.540 | 133.504 | 133.351 | 133.380 | 133.317 | 134.490 | 135.248 | 135.744 | $135.911$ | $136.113$ |
| Used cars and trucks ${ }^{1}$. | 136.586 | 134.731 | 137.145 | 136.790 | 136.639 | 136.186 | 133.669 | 130.444 | 127.540 | 126.526 | 125.485 | 123.443 | 121.669 | 121.850 | 123.339 |
| Motor fue | 239.900 | 280.817 | 323.495 | 348.762 | 351.124 | 325.116 | 316.717 | 269.639 | 187.770 | 149.650 | 157.265 | 168.028 | 169.060 | 177.982 | 194.339 |
| Gasoline (all typ | 238.879 | 278.728 | 321.291 | 346.459 | 348.888 | 322.930 | 315.324 | 267.580 | 184.855 | 146.644 | 155.204 | 166.831 | 168.574 | 177.510 | 194.569 |
| Motor vehicle parts and equipmen | 121.356 | 128.776 | 126.742 | 127.750 | 128.997 | 130.228 | 131.072 | 132.088 | 133.125 | 133.295 | 133.645 | 134.264 |  | 134.614 | $134.439$ |
| Motor vehicle maintenance and repair | 225.535 | 236.353 | 234.221 | 235.550 | 237.324 | 238.583 | 239.571 | 240.688 | 241.509 | 241.855 | $243.594$ | 244.219 | $244.650$ | 245.180 | $245.036$ |
| Public transportation | 228.531 | 247.865 | 249.310 | 261.779 | 266.259 | 264.755 | 258.142 | 249.168 | 240.496 | 235.199 | $232.422$ | 229.404 | 229.034 | 228.525 | 227.522 |
| Medical care | 350.882 | 364.208 | 363.462 | 363.628 | 363.942 | 364.652 | 365.250 | 366.000 | 366.800 | 367.301 | 370.001 | 372.630 | 373.541 | 374.599 | 375.420 |
| Medical care commodities | 282.558 | 287.970 | 286.825 | 287.033 | 286.562 | 286.880 | 287.397 | 287.725 | 289.046 | 290.080 | 291.710 | 293.917 | 294.728 | 295.699 | 296.431 |
| Medical care services | 370.111 | 386.317 | 385.769 | 385.911 | 386.560 | 387.420 | 388.036 | 388.947 | 389.493 | 389.744 | 392.831 | 395.563 | 396.489 | 397.553 | 398.387 |
| Professional service | 303.169493.740 | $\begin{aligned} & 313.446 \\ & 530.193 \end{aligned}$ | 313.294 | 313.618 | 314.235 | 314.893 | 314.977 | 315.458 | 315.825 | 316.435 | 318.110 | 319.663 | 320.231 | 320.407 | 322.043 |
| Hospital and related service |  |  | 527.230 | 527.948 | 529.798 | 532.065 | 534.394 | 537.382 | 539.864 | 540.101 | 547.655 | 554.390 | 557.167 | 561.516 | 560.906 |
| Recreation ${ }^{2}$. | 108.572 | 110.143 | 109.876 | 109.905 | 110.198 | 110.698 | 110.904 | 110.947 | 110.826 | 110.487 | 110.630 | 111.257 | 1.436 | 182 | 152 |
| Video and audio ${ }^{1,2}$ | 102.559 | 102.654 | 102.958 | 102.306 | 102.267 | 102.643 | 102.819 | 102.267 | 101.974 | 101.810 | 101.488 | 101.857 | 102.153 | 102.516 | 102.214 |
| Education and communication ${ }^{2}$. | 116.301 | 119.827 | 118.737 | 119.264 | 119.852 | 120.809 | 121.439 | 121.569 | 121.636 | 121.819 | 122.025 | 122.092 | 122.087 | 122.152 | 122.293 |
| Education ${ }^{2}$ | 169.280 | 178.892 | 175.791 | 176.148 | 176.879 | 180.819 | 183.613 | 184.091 | 184.115 | 184.352 | 184.642 | 184.765 | 184.824 | 184.892 | 185.291 |
| Educational books and supplies | 423.730 | 452.880 | 445.394 | 445.740 | 446.741 | 461.104 | 465.570 | 466.885 | 465.576 | 467.179 | 471.061 | 473.012 | 474.880 | 474.950 | 475.213 |
| Tuition, other school fees, and child | 477.589 | 504.163 | 495.384 | 496.449 | 498.598 | 509.241 | 517.389 | 518.726 | 518.938 | 519.500 | 519.987 | 520.159 | 520.146 | 520.348 | 521.550 |
| Communication ${ }^{1,2}$ | 85.782 | 86.807 | 86.496 | 87.017 | 87.490 | 87.369 | 87.224 | 87.226 | 87.300 | 87.444 | 87.599 | 87.640 | 87.615 | 87.671 | 87.712 |
| Information and information proce | 83.92 | 84.828 | 84.511 | 85.007 | 85.484 | 85.355 | 85.208 | 85.214 | 85.292 | 85.454 | 85.581 | 85.624 | 85.595 | 85.655 | 85.624 |
| Telephone services | 98 | 100.502 | 99.939 | 100.723 | 101.375 | 101.339 | 101.350 | 101.436 | 101.564 | 101.720 | 101.876 | 101.890 | 101.977 | 102.048 | 102.231 |
| Information and information processing other than telephone services ${ }^{1,4}$ | 11.062 | 10.567 | 10.621 | 10.585 | 10.600 | 10.525 | 10.414 | 10.375 | 10.367 | 10.406 | 10.418 | 10.442 | 10.378 | 10.385 | 10.271 |
| Personal computers and peripheral equipment ${ }^{1,2}$ |  | 94.863 | 97.010 | 95.766 | 94.691 | 92.931 | 90.722 | 89.690 | 88.631 | 88.176 | 88.178 | 87.622 | 86.004 | 85.406 | 84.017 |
| Other goods and services. | 344.004 | 357.906 | 356.523 | 358.419 | 359.961 | 360.102 | 361.125 | 362.354 | 362.550 | 362.986 | 364.333 | 365.522 | 380.208 | 394.902 | 394.061 |
| Tobacco and smoking produ | 555.502 | 591.100 | 583.296 | 592.248 | 599.180 | 599.823 | 600.293 | 602.533 | 602.881 | 605.662 | 610.503 | 615.012 | 682.115 | 747.906 | 746.009 |
| Personal care ${ }^{1}$. | 193.590 | 199.170 | 199.367 | 199.404 | 199.495 | 199.501 | 200.284 | 200.930 | 201.036 | 200.918 | 201.209 | 201.426 | 202.099 | 203.010 | 202.631 |
| Personal care products ${ }^{1}$ | 158.268 | 159.410 | 158.993 | 159.052 | 159.237 | 159.345 | 159.730 | 159.914 | 160.994 | 161.295 | 162.683 | 162.543 | 162.516 | 163.911 | 163.119 |
| Personal care services ${ }^{1}$. | 216.823 | 223.978 | 223.922 | 223.838 | 223.994 | 224.464 | 224.910 | 225.800 | 226.433 | 226.578 | 225.951 | 226.088 | 228.201 | 228.1 | 227.829 |
| Miscellaneous personal servi | 326.100 | 340.533 | 341.212 | 341.921 | 341.763 | 342.974 | 345.175 | 344.622 | 342.853 | 342.530 | 343.022 | 343.443 | 344.021 | 345.016 | 345.326 |
| Commodity and service group: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commoditi | 16 | 177.618 | 181.837 | 184.495 | 185.105 | 182.846 | 182.647 | 177.906 | 168.926 | 164.233 | 165.151 | 166.673 | 167.514 | 169.005 | 170.532 |
| Food and beverages | 202.531 | 213.546 | 211.438 | 212.700 | 214.662 | 215.850 | 217.098 | 218.141 | 218.178 | 218.269 | 219.123 | 218.645 | 218.119 | 217.653 | 217.308 |
| Commodities less food and beverages | 150.865 | 157.481 | 164.188 | 167.344 | 167.376 | 163.761 | 162.971 | 155.982 | 143.544 | 137.015 | 137.932 | 140.23 | 141.615 | 143.871 | 146.125 |
| Nondurables less food and beverage | 189.507 | 205.279 | 218.794 | 225.585 | 225.595 | 218.454 | 217.828 | 203.762 | 178.209 | 164.879 | 166.694 | 171.698 | 174.838 | 179.415 | 183.813 |
| Appare | 118.518 | 118.735 | 120.407 | 116.706 | 113.978 | 116.214 | 120.990 | 121.957 | 121.149 | 117.006 | 114.969 | 118.766 | 122.162 | 122.709 | 121.364 |
| Nondurables les and apparel.. | 237.858 | 263.756 | 285.024 | 298.593 | 300.341 | 287.124 | 283.056 | 259.204 | 217.500 | 198.108 | 202.400 | 208.255 | 211.287 | 218.502 | 621 |
| Durab | 112.640 | 111.217 | 111.845 | 111.769 | 111.820 | 111.357 | 110.451 | 109.782 | 109.038 | 108.576 | 108.689 | 108.592 | 108.413 | 108.596 | 108.933 |
| Services | 241.696 | 250.272 | 249.175 | 251.365 | 252.991 | 253.304 | 252.861 | 252.369 | 252.14 | 252.176 | 253.033 | 253.456 | 253.59 | 253.4 | 253.482 |
| Rent of shelter ${ }^{3}$. | 224.617 | 230.555 | 229.810 | 230.620 | 231.255 | 231.445 | 231.541 | 231.885 | 232.096 | 232.112 | 232.981 | 233.365 | 233.903 | 234.148 | 234.229 |
| Transporatation se | 233.420 | 242.563 | 240.728 | 243.395 | 245.005 | 246.041 | 245.722 | 246.003 | 246.126 | 245.881 | 246.931 | 248.029 | 247.86 | 24 | 248.795 |
| Other services | 275.218 | 284.319 | 282.720 | 283.449 | 284.449 | 286.389 | 287.792 | 287.898 | 288.082 | 288.227 | 288.627 | 289.432 | 290.043 | 289.738 | 290.116 |
| Special indexes: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All items less food. | 202.698 | 210.452 | 212.870 | 215.498 | 216.407 | 214.950 | 214.361 | 210.949 | 205.214 | 202.292 | 203.186 | 204.465 | 205.167 | 206.081 | 207.148 |
| All items less shelte | 193.940 | 203.102 | 205.774 | 208.817 | 210.069 | 208.544 | 208.068 | 204.149 | 197.342 | 193.918 | 194.811 | 196.052 | 196.551 | 197.432 | 198.571 |
| All items less medical car | 196.564 | 204.626 | 206.423 | 208.906 | 210.002 | 208.900 | 208.563 | 205.726 | 200.707 | 198.153 | 198.978 | 199.928 | 200.421 | 201.11 | 201.955 |
| Commodities less fo | 152.875 | 159.538 | 166.070 | 169.169 | 169.213 | 165.689 | 164.937 | 158.132 | 145.985 | 139.620 | 140.543 | 142.809 | 144.172 | 146.37 | 148.589 |
| Nondurables less food. | 190.698 | 206.047 | 218.809 | 225.276 | 225.309 | 218.562 | 218.010 | 204.734 | 180.533 | 167.933 | 169.708 | 174.484 | 177.487 | 181.815 | 186.012 |
| Nondurables less food and app | 234.201 | 258.423 | 277.717 | 290.127 | 291.760 | 279.753 | 276.112 | 254.473 | 216.516 | 198.909 | 202.90 | 208.291 | 211.09 | 217.6 | 225.091 |
| Nondurables. | 196.772 | 210.333 | 216.582 | 220.813 | 221.740 | 218.473 | 218.725 | 211.680 | 198.009 | 190.910 | 192.284 | 194.740 | 196.174 | 198.408 | 200.601 |
| Services less rent of shelter ${ }^{3}$. | 230.876 | 241.567 | 240.181 | 243.780 | 246.411 | 246.834 | 245.787 | 244.331 | 243.599 | 243.646 | 244.376 | 244.791 | 244.413 | 243.718 | 243.784 |
| Services less medical care services | 232.195 | 240.275 | 239.167 | 241.422 | 243.071 | 243.354 | 242.868 | 242.316 | 242.058 | 242.079 | 242.819 | 243.128 | 243.223 | 242.980 | 243.022 |
| Energy.. | 208.066 | 237.414 | 258.903 | 277.597 | 282.579 | 267.624 | 259.864 | 232.106 | 188.375 | 168.726 | 172.463 | 177.033 | 175.947 | 178.485 | 186.321 |
| All items less energy. | 203.002 | 208.719 | 208.021 | 208.458 | 209.062 | 209.718 | 210.325 | 210.649 | 210.541 | 210.168 | 210.707 | 211.27 | 211.98 | 212.47 | 212.462 |
| All items less food and energy.. | 203.554 | 208.147 | 207.747 | 208.007 | 208.317 | 208.857 | 209.329 | 209.511 | 209.383 | 208.925 | 209.404 | 210.203 | 211.178 | 211.857 | 211.926 |
| Commodities less food and energ | 140.612 | 141.084 | 141.558 | 140.878 | 140.492 | 140.802 | 141.428 | 141.375 | 140.793 | 139.731 | 139.614 | 140.554 | 142.077 | 143.23 | 43.170 |
| Energy commodities. | 241.257 | 284.270 | 326.565 | 351.873 | 354.402 | 328.310 | 319.507 | 272.894 | 192.494 | 154.744 | 161.781 | 171.978 | 172.563 | 181.021 | 196.706 |
| Services less energy. | 247.888 | 255.598 | 254.517 | 255.513 | 256.365 | 257.072 | 257.411 | 257.774 | 258.008 | 258.039 | 258.976 | 259.643 | 260.158 | 260.439 | 260.615 |

[^22]${ }^{4}$ Indexes on a December $1988=100$ base.
NOTE: Index applied to a month as a whole, not to any specific date.
39. Consumer Price Index: U.S. city average and available local area data: all items
[1982-84 = 100, unless otherwise indicated]

${ }^{1}$ Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:
M-Every month.
1-January, March, May, July, September, and November.
2-February, April, June, August, October, and December.
${ }^{2}$ Regions defined as the four Census regions.
${ }^{3}$ Indexes on a December $1996=100$ base.
${ }^{4}$ The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.
${ }^{5}$ Indexes on a December $1986=100$ base.
${ }^{6}$ In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the CPI Detailed

Report: Anchorage, AK; Cincinnatti, OH-KY-IN; Kansas City, MO-Ks; Milwaukee-Racine, WI; Minneapolis-St. Paul, MN-WI; Pittsburgh, PA; Port-land-Salem, OR-WA; St Louis, MO-IL; San Diego, CA; Tampa-St. Petersburg-Clearwater, FL.
${ }^{7}$ Indexes on a November $1996=100$ base.
NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date. Dash indicates data not available.
40. Annual data: Consumer Price Index, U.S. city average, all items and major groups
[1982-84 = 100]

| Series | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Consumer Price Index for All Urban Consumers: |  |  |  |  |  |  |  |  |  |  |  |
| All items: |  |  |  |  |  |  |  |  |  |  |  |
| Index. | 163.0 | 166.6 | 172.2 | 177.1 | 179.9 | 184.0 | 188.9 | 195.3 | 201.6 | 207.342 | 215.303 |
| Percent change.. | 1.6 | 2.2 | 3.4 | 2.8 | 1.6 | 2.3 | 2.7 | 3.4 | 3.2 | 2.8 | 3.8 |
| Food and beverages: |  |  |  |  |  |  |  |  |  |  |  |
| Index.. | 161.1 | 164.6 | 168.4 | 173.6 | 176.8 | 180.5 | 186.6 | 191.2 | 195.7 | 203.300 | 214.225 |
| Percent change. | 2.2 | 2.2 | 2.3 | 3.1 | 1.8 | 2.1 | 3.3 | 2.5 | 2.4 | 3.9 | 5.4 |
| Housing: |  |  |  |  |  |  |  |  |  |  |  |
| Index.... | 160.4 | 163.9 | 169.6 | 176.4 | 180.3 | 184.8 | 189.5 | 195.7 | 203.2 | 209.586 | 216.264 |
| Percent change.. | 2.3 | 2.2 | 3.5 | 4.0 | 2.2 | 2.5 | 2.5 | 3.3 | 3.8 | 3.1 | 3.2 |
| Apparel: |  |  |  |  |  |  |  |  |  |  |  |
| Index.. | 133.0 | 131.3 | 129.6 | 127.3 | 124.0 | 120.9 | 120.4 | 119.5 | 119.5 | 118.998 | 118.907 |
| Percent change. | . 1 | -1.3 | -1.3 | -1.8 | -2.6 | -2.5 | -. 4 | -. 7 | . 0 | -0.4 | -0.1 |
| Transportation: |  |  |  |  |  |  |  |  |  |  |  |
| Index...... | 141.6 | 144.4 | 153.3 | 154.3 | 152.9 | 157.6 | 163.1 | 173.9 | 180.9 | 184.682 | 195.549 |
| Percent change. | -1.9 | 2.0 | 6.2 | 0.7 | -. 9 | 3.1 | 3.5 | 6.6 | 4.0 | 2.1 | 5.9 |
| Medical care: |  |  |  |  |  |  |  |  |  |  |  |
| Index.............................................................. | 242.1 | 250.6 | 260.8 | 272.8 | 285.6 | 297.1 | 310.1 | 323.2 | 336.2 | 351.054 | 364.065 |
| Percent change.. | 3.2 | 3.5 | 4.1 | 4.6 | 4.7 | 4.0 | 4.4 | 4.2 | 4.0 | 4.4 | 3.7 |
| Other goods and services: |  |  |  |  |  |  |  |  |  |  |  |
| Index.. | 237.7 | 258.3 | 271.1 | 282.6 | 293.2 | 298.7 | 304.7 | 313.4 | 321.7 | 333.328 | 345.381 |
| Percent change.. | 5.7 | 8.7 | 5.0 | 4.2 | 3.8 | 1.9 | 2.0 | 2.9 | 2.6 | 3.6 | 3.6 |
| Consumer Price Index for Urban Wage Earners and Clerical Workers: <br> All items: |  |  |  |  |  |  |  |  |  |  |  |
| All items: <br> Index | 159.7 | 163.2 | 168.9 | 173.5 | 175.9 | 179.8 | 184.5 | 191.0 | 197.1 | 202.767 |  |
|  | 1.3 | 2.2 | 3.5 | 2.7 | 1.4 | 2.2 | 5.1 | 1.1 | 3.2 | $\begin{array}{r}202.767 \\ \hline\end{array}$ | $\begin{array}{r}17.1 \\ \hline\end{array}$ |

## 41. Producer Price Indexes, by stage of processing

[1982 = 100]

| Grouping | Annual average |  | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2008 | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ${ }^{\text {p }}$ | Mar. ${ }^{\text {p }}$ | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
| Finished goods. | 166.6 | 177.1 | 179.8 | 182.4 | 185.1 | 182.2 | 182.2 | 177.4 | 172.0 | 168.8 | 170.4 | 169.9 | 168.9 | 169.9 | 170.8 |
| Finished consumer goods. | 173.5 | 186.3 | 190.3 | 193.8 | 197.2 | 193.2 | 193.0 | 185.5 | 178.2 | 173.7 | 175.8 | 175.2 | 173.9 | 175.5 | 176.8 |
| Finished consumer foods | 167.0 | 178.3 | 177.6 | 180.0 | 181.0 | 181.3 | 181.5 | 180.7 | 179.8 | 177.7 | 177.7 | 175.0 | 174.0 | 175.8 | 173.9 |
| Finished consumer goods |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| excluding foods | 175.6 | 189.1 | 195.0 | 199.0 | 203.4 | 197.5 | 197.2 | 187.0 | 177.0 | 171.5 | 174.4 | 174.5 | 173.1 | 174.6 | 176.9 |
| Nondurable goods less food. | 191.7 | 210.5 | 220.0 | 226.4 | 233.1 | 223.9 | 223.4 | 205.4 | 190.6 | 182.1 | 186.5 | 186.6 | 184.6 | 186.8 | 190.5 |
| Durable goods. | 138.3 | 141.2 | 140.3 | 139.7 | 139.6 | 140.2 | 140.3 | 144.8 | 144.2 | 144.4 | 144.3 | 144.3 | 144.2 | 144.3 | 144.1 |
| Capital equipment | 149.5 | 153.8 | 152.7 | 152.7 | 153.3 | 153.9 | 154.3 | 157.0 | 156.9 | 157.2 | 157.4 | 157.2 | 157.0 | 156.6 | 156.3 |
| Intermediate materials, supplies, and components. $\qquad$ | 170.7 | 188.3 | 192.8 | 197.2 | 203.1 | 199.4 | 198.6 | 189.0 | 179.2 | 171.6 | 171.4 | 169.7 | 168.1 | 167.7 | 168.7 |
| Materials and components |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| for manufacturing... | 162.4 | 177.2 | 179.1 | 182.4 | 187.4 | 188.7 | 186.7 | 180.3 | 171.1 | 163.7 | 162.7 | 161.0 | 160.2 | 158.4 | 158.2 |
| Materials for food manufacturing... | 161.4 | 180.4 | 182.7 | 185.4 | 187.6 | 187.5 | 185.2 | 179.4 | 175.5 | 170.8 | 167.3 | 164.3 | 163.6 | 164.1 | 166.1 |
| Materials for nondurable manufacturing... | 184.0 | 214.3 | 215.9 | 222.8 | 234.8 | 238.6 | 234.7 | 222.4 | 200.6 | 185.0 | 186.8 | 185.6 | 184.8 | 181.3 | 180.9 |
| Materials for durable manufacturing........ | 189.8 | 203.3 | 211.9 | 215.4 | 219.2 | 218.9 | 214.5 | 202.2 | 190.0 | 178.6 | 172.8 | 168.2 | 166.0 | 162.7 | 162.0 |
| Components for manufacturing.............. | 136.3 | 140.3 | 139.4 | 140.1 | 141.3 | 141.9 | 142.4 | 142.5 | 142.3 | 141.9 | 141.7 | 141.5 | 141.2 | 140.6 | 140.6 |
| Materials and components for construction. $\qquad$ | 192.5 | 205.4 | 203.3 | 206.5 | 209.8 | 212.9 | 214.0 | 212.2 | 210.2 | 207.9 | 207.0 | 204.8 | 204.2 | 202.5 | 202.2 |
| Processed fuels and lubricants | 173.9 | 206.2 | 227.3 | 238.4 | 250.1 | 225.2 | 224.5 | 193.9 | 168.7 | 151.2 | 153.4 | 150.7 | 145.0 | 148.6 | 153.9 |
| Containers. | 180.3 | 191.8 | 187.6 | 189.2 | 191.9 | 195.0 | 198.4 | 199.1 | 199.0 | 198.1 | 200.8 | 199.5 | 198.4 | 196.7 | 195.5 |
| Supplies. | 161.7 | 173.8 | 173.1 | 174.6 | 178.3 | 178.9 | 179.0 | 177.0 | 175.3 | 173.4 | 172.9 | 172.3 | 172.0 | 171.8 | 172.2 |
| Crude materials for further |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| processing | 207.1 | 251.8 | 293.1 | 301.2 | 313.3 | 274.6 | 254.2 | 212.0 | 183.3 | 172.6 | 170.2 | 160.7 | 159.9 | 164.8 | 172.5 |
| Foodstuffs and feedstuffs........................ | 146.7 | 163.4 | 173.2 | 178.1 | 178.9 | 170.6 | 167.6 | 147.9 | 144.2 | 135.5 | 136.1 | 133.3 | 130.5 | 136.7 | 140.8 |
| Crude nonfood materials........................ | 246.3 | 313.9 | 382.4 | 393.0 | 414.9 | 350.0 | 314.2 | 253.9 | 203.2 | 191.6 | 186.5 | 171.5 | 172.7 | 175.8 | 186.3 |
| Special groupings: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Finished goods, excluding foods............... | 166.2 | 176.6 | 180.1 | 182.8 | 185.9 | 182.2 | 182.1 | 176.3 | 169.6 | 166.1 | 168.0 | 168.0 | 167.0 | 167.9 | 169.3 |
| Finished energy goods.. | 156.3 | 178.7 | 194.8 | 204.6 | 214.0 | 198.6 | 197.0 | 167.8 | 144.1 | 130.6 | 136.4 | 136.3 | 132.4 | 135.7 | 141.6 |
| Finished goods less energy.. | 162.8 | 169.8 | 168.8 | 169.4 | 170.2 | 170.8 | 171.2 | 173.1 | 172.7 | 172.3 | 172.7 | 172.1 | 171.9 | 172.3 | 171.7 |
| Finished consumer goods less energy....... | 168.7 | 176.9 | 175.9 | 176.8 | 177.7 | 178.3 | 178.7 | 180.2 | 179.7 | 179.0 | 179.4 | 178.6 | 178.5 | 179.3 | 178.5 |
| Finished goods less food and energy........ | 161.7 | 167.2 | 166.1 | 166.0 | 166.7 | 167.4 | 167.9 | 170.8 | 170.6 | 170.8 | 171.3 | 171.3 | 171.4 | 171.3 | 171.1 |
| Finished consumer goods less food and energy | 170.0 | 176.4 | 175.2 | 175.2 | 175.9 | 176.6 | 177.2 | 180.2 | 180.0 | 180.1 | 180.7 | 181.0 | 181.4 | 181.5 | 181.3 |
| Consumer nondurable goods less tood |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| and energy......................... | 197.0 | 206.8 | 205.4 | 206.0 | 207.6 | 208.5 | 209.7 | 210.7 | 210.9 | 211.0 | 212.4 | 212.9 | 213.8 | 214.0 | 213.8 |
| Intermediate materials less foods and feeds. | 171.5 | 188.7 | 193.3 | 197.8 | 203.6 | 199.7 | 199.1 | 189.5 | 179.4 | 171.8 | 171.8 | 170.1 | 168.4 | 167.9 | 168.8 |
| Intermediate foods and feeds.. | 154.4 | 181.6 | 184.5 | 186.6 | 195.5 | 194.3 | 190.0 | 179.9 | 174.7 | 167.9 | 165.8 | 164.6 | 164.0 | 164.4 | 167.3 |
| Intermediate energy goods... | 174.6 | 208.1 | 228.7 | 240.3 | 253.5 | 231.3 | 227.5 | 197.4 | 167.3 | 147.7 | 152.2 | 149.3 | 142.6 | 146.2 | 151.4 |
| Intermediate goods less energy. | 167.6 | 180.9 | 181.4 | 183.9 | 187.9 | 188.9 | 188.8 | 184.5 | 179.8 | 175.3 | 174.0 | 172.7 | 172.3 | 170.9 | 170.9 |
| Intermediate materials less foods and energy $\qquad$ | 168.4 | 180.9 | 181.2 | 183.8 | 187.5 | 188.7 | 188.8 | 184.8 | 180.2 | 175.9 | 174.6 | 173.4 | 173.0 | 171.5 | 171.2 |
| Crude energy materials........................... | 232.8 | 309.4 | 386.1 | 400.4 | 426.5 | 339.1 | 303.7 | 244.4 | 194.9 | 181.1 | 173.0 | 152.1 | 153.8 | 158.2 | 166.4 |
| Crude materials less energy..................... | 182.6 | 205.4 | 223.9 | 228.2 | 231.7 | 222.3 | 211.7 | 182.0 | 167.6 | 159.8 | 161.2 | 158.8 | 155.7 | 160.6 | 167.2 |
| Crude nonfood materials less energy........ | 282.6 | 324.4 | 372.4 | 373.8 | 386.1 | 374.2 | 337.5 | 276.7 | 224.8 | 221.3 | 225.2 | 224.9 | 221.7 | 220.5 | 235.4 |

$p=$ preliminary.

## 42. Producer Price Indexes for the net output of major industry groups

[December 2003 $=100$, unless otherwise indicated]

| NAICS | Industry | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. ${ }^{\text {p }}$ | Mar. ${ }^{\mathbf{p}}$ | Apr. ${ }^{\text {p }}$ | May ${ }^{\text {p }}$ |
|  | Total mining industries (December 1984=100)... | 329.0 | 341.4 | 363.8 | 299.2 | 273.4 | 223.3 | 184.9 | 174.8 | 173.4 | 159.0 | 157.2 | 161.1 | 168.3 |
| 211 | Oil and gas extraction (December 1985=100) | 436.2 | 456.0 | 490.4 | 383.6 | 341.2 | 259.4 | 199.5 | 184.1 | 180.3 | 154.1 | 152.9 | 159.4 | 170.1 |
| 212 | Mining, except oil and gas.. | 184.7 | 185.8 | 191.8 | 190.4 | 188.9 | 184.1 | 174.7 | 173.0 | 178.4 | 184.7 | 181.6 | 184.6 | 188.9 |
| 213 | Mining support activities. | 172.2 | 173.1 | 175.9 | 177.1 | 177.6 | 179.3 | 179.9 | 177.0 | 174.0 | 172.0 | 168.2 | 162.2 | 159.5 |
|  | Total manufacturing industries (December 1984=100). | 179.4 | 182.0 | 185.6 | 182.6 | 182.9 | 176.8 | 169.4 | 164.1 | 164.7 | 163.9 | 163.0 | 163.8 | 165.6 |
| 311 | Food manufacturing (December 1984=100).. | 174.0 | 176.1 | 180.3 | 180.5 | 179.2 | 176.4 | 173.4 | 171.1 | 170.1 | 168.7 | 167.7 | 168.5 | 170.4 |
| 312 | Beverage and tobacco manufacturing.. | 114.2 | 114.1 | 115.0 | 114.8 | 115.2 | 116.1 | 116.0 | 116.3 | 117.6 | 119.2 | 120.3 | 119.9 | 119.3 |
| 313 | Textile mills.. | 111.4 | 111.7 | 112.6 | 114.2 | 114.9 | 114.9 | 114.7 | 113.5 | 113.4 | 113.0 | 112.7 | 112.9 | 112.2 |
| 315 | Apparel manufacturing. | 102.2 | 102.1 | 102.3 | 102.5 | 102.7 | 103.0 | 103.2 | 103.2 | 103.5 | 103.5 | 103.8 | 103.7 | 103.8 |
| 316 | Leather and allied product manufacturing (December 1984=100) | 152.4 | 153.4 | 153.8 | 154.1 | 154.8 | 154.6 | 154.3 | 154.3 | 154.3 | 154.7 | 155.0 | 154.5 | 153.4 |
| 321 | Wood products manufacturing. | 108.2 | 109.2 | 108.9 | 109.1 | 109.1 | 107.6 | 106.7 | 106.2 | 105.0 | 104.0 | 103.0 | 102.7 | 102.3 |
| 322 | Paper manufacturing. | 120.5 | 120.9 | 121.8 | 124.5 | 126.6 | 127.3 | 127.2 | 127.0 | 126.7 | 126.0 | 125.6 | 124.6 | 123.1 |
| 323 | Printing and related support activities. | 109.2 | 109.5 | 109.8 | 110.0 | 110.4 | 110.3 | 110.2 | 110.3 | 110.2 | 109.6 | 109.4 | 109.5 | 109.3 |
| 324 | Petroleum and coal products manufacturing (December 1984=100). | 384.1 | 406.0 | 429.6 | 382.2 | 382.6 | 300.0 | 221.4 | 167.0 | 178.6 | 176.4 | 166.6 | 182.5 | 205.2 |
| 325 | Chemical manufacturing (December 1984=100). | 224.5 | 228.5 | 234.5 | 238.2 | 240.4 | 239.3 | 234.5 | 229.7 | 226.7 | 225.1 | 226.9 | 224.0 | 222.9 |
| 326 | Plastics and rubber products manufacturing <br> (December 1984=100) | 158.3 | 159.4 | 162.9 | 165.2 | 166.9 | 167.8 | 166.9 | 165.0 | 163.4 | 161.6 | 160.6 | 160.5 | 160.4 |
| 331 | Primary metal manufacturing (December 1984=100)........ | 221.1 | 227.8 | 232.7 | 233.5 | 228.9 | 214.9 | 199.9 | 185.6 | 177.6 | 173.3 | 169.1 | 163.8 | 162.2 |
| 332 | Fabricated metal product manufacturing (December 1984=100). | 173.0 | 174.7 | 177.2 | 178.8 | 179.6 | 179.6 | 179.3 | 178.5 | 178.9 | 177.7 | 176.6 | 175.1 | 174.7 |
| 333 | Machinery manufacturing. | 115.8 | 116.4 | 117.9 | 118.3 | 118.8 | 119.4 | 119.9 | 120.0 | 120.5 | 120.4 | 120.5 | 120.3 | 120.3 |
| 334 | Computer and electronic products manufacturing. | 92.8 | 92.8 | 92.8 | 92.7 | 92.7 | 92.7 | 92.6 | 92.4 | 92.5 | 92.4 | 92.3 | 92.5 | 92.5 |
| 335 | Electrical equipment, appliance, and components manufacturing | 127.8 | 128.2 | 129.1 | 129.3 | 129.8 | 129.4 | 127.3 | 126.9 | 126.8 | 126.8 | 126.9 | 127.7 | 128.3 |
| 336 | Transportation equipment manufacturing............................ | 106.6 | 105.9 | 105.9 | 106.5 | 106.6 | 110.4 | 110.0 | 110.1 | 110.0 | 109.9 | 109.5 | 109.2 | 108.9 |
| 337 | Furniture and related product manufacturing (December 1984=100) | 170.2 | 171.3 | 172.3 | 173.5 | 174.3 | 175.1 | 175.3 | 175.7 | 176.1 | 177.0 | 176.9 | 176.5 | 176.5 |
| 339 | Miscellaneous manufacturing | 109.4 | 109.9 | 110.8 | 110.5 | 110.4 | 110.6 | 110.4 | 110.8 | 111.4 | 111.4 | 111.6 | 111.1 | 111.5 |
|  | Retail trade |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 441 | Motor vehicle and parts dealers. | 118.3 | 118.1 | 118.4 | 117.5 | 117.6 | 116.8 | 118.5 | 117.1 | 116.9 | 118.4 | 117.2 | 118.5 | 118.3 |
| 442 | Furniture and home furnishings stores | 120.2 | 119.6 | 120.3 | 122.0 | 121.1 | 121.0 | 120.8 | 120.6 | 120.8 | 121.0 | 120.7 | 121.4 | 123.7 |
| 443 | Electronics and appliance stores. | 118.7 | 105.8 | 106.5 | 111.0 | 110.8 | 108.9 | 108.1 | 107.8 | 107.8 | 103.7 | 102.4 | 106.9 | 104.6 |
| 446 | Health and personal care stores... | 127.3 | 127.8 | 133.8 | 133.3 | 134.0 | 134.6 | 136.4 | 136.4 | 136.0 | 136.0 | 137.9 | 139.7 | 137.4 |
| 447 | Gasoline stations (June 2001=100) | 59.3 | 67.6 | 77.2 | 72.7 | 81.7 | 76.8 | 76.3 | 77.7 | 68.9 | 71.0 | 62.4 | 59.2 | 59.2 |
| 454 | Nonstore retailers. | 136.5 | 141.8 | 140.6 | 162.4 | 150.6 | 148.7 | 154.1 | 155.2 | 150.9 | 153.9 | 159.0 | 146.5 | 142.5 |
|  | Transportation and warehousing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 481 | Air transportation (December 1992=100) | 203.7 | 213.5 | 213.6 | 213.0 | 208.6 | 209.3 | 203.8 | 198.5 | 198.4 | 190.5 | 184.9 | 186.7 | 176.1 |
| 483 | Water transportation................... | 124.7 | 127.0 | 130.4 | 133.7 | 135.1 | 135.0 | 130.6 | 128.0 | 122.4 | 118.5 | 117.5 | 118.0 | 117.5 |
| 491 | Postal service (June 1989=100 | 180.5 | 180.5 | 180.5 | 180.5 | 180.5 | 180.5 | 180.5 | 180.5 | 180.5 | 181.6 | 181.6 | 181.6 | 186.8 |
|  | Utilities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 221 | Utilities | 137.0 | 141.7 | 146.8 | 145.7 | 140.8 | 136.0 | 133.4 | 133.1 | 133.9 | 132.9 | 130.2 | 126.7 | 126.9 |
|  | Health care and social assistance |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6211 | Office of physicians (December 1996=100). | 123.2 | 123.2 | 123.5 | 123.6 | 123.7 | 124.0 | 124.3 | 124.2 | 125.6 | 125.6 | 125.7 | 125.8 | 125.7 |
| 6215 | Medical and diagnostic laboratories. | 106.9 | 106.9 | 106.9 | 106.9 | 107.6 | 107.7 | 107.7 | 107.8 | 108.3 | 108.7 | 108.4 | 109.0 | 108.8 |
| 6216 | Home health care services (December 1996=100) | 125.4 | 125.4 | 125.6 | 126.3 | 126.5 | 127.3 | 127.3 | 127.4 | 127.2 | 127.6 | 127.4 | 127.2 | 127.3 |
| 622 | Hospitals (December 1992=100)..................... | 162.7 | 162.6 | 163.2 | 163.2 | 163.0 | 164.9 | 164.9 | 165.3 | 166.5 | 166.8 | 166.4 | 166.6 | 166.9 |
| 6231 | Nursing care facilities................. | 118.6 | 118.6 | 119.4 | 119.7 | 119.8 | 120.6 | 120.6 | 120.7 | 122.0 | 122.2 | 121.7 | 122.6 | 122.7 |
| 62321 | Residential mental retardation facilities | 118.5 | 118.5 | 118.6 | 118.7 | 118.9 | 119.1 | 119.2 | 119.2 | 120.3 | 120.3 | 120.4 | 120.5 | 121.5 |
|  | Other services industries |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 511 | Publishing industries, except Internet | 110.7 | 110.4 | 111.0 | 111.1 | 110.2 | 110.9 | 111.1 | 110.7 | 111.9 | 111.9 | 111.4 | 111.5 | 111.7 |
| 515 | Broadcasting, except Internet.... | 105.5 | 104.4 | 103.9 | 105.5 | 107.0 | 112.0 | 111.5 | 109.3 | 107.9 | 108.1 | 109.3 | 106.6 | 107.1 |
| 517 | Telecommunications.......... | 101.3 | 101.1 | 101.0 | 101.5 | 101.5 | 101.2 | 101.2 | 101.4 | 101.2 | 101.1 | 101.0 | 100.6 | 101.8 |
| 5182 | Data processing and related services.. | 100.8 | 100.8 | 100.9 | 101.0 | 101.1 | 101.3 | 101.3 | 101.3 | 101.0 | 100.9 | 100.8 | 100.9 | 100.9 |
| 523 | Security, commodity contracts, and like activity................... | 119.6 | 120.2 | 119.1 | 120.2 | 120.5 | 117.7 | 115.8 | 115.2 | 113.5 | 111.7 | 108.4 | 110.9 | 111.8 |
| 53112 | Lessors or nonresidental buildings (except miniwarehouse). | 110.5 | 110.4 | 110.9 | 112.7 | 111.7 | 111.5 | 111.7 | 112.8 | 111.0 | 109.0 | 110.1 | 109.1 | 109.0 |
| 5312 | Offices of real estate agents and brokers............................ | 106.9 | 106.9 | 106.8 | 104.4 | 103.8 | 103.1 | 103.0 | 102.8 | 101.6 | 101.6 | 101.6 | 101.9 | 101.9 |
| 5313 | Real estate support activities............... | 108.3 | 108.2 | 109.2 | 109.3 | 108.6 | 109.2 | 108.2 | 109.8 | 109.9 | 108.6 | 110.8 | 109.6 | 109.7 |
| 5321 | Automotive equipment rental and leasing (June 2001=100) | 122.0 | 125.4 | 136.7 | 135.0 | 131.3 | 128.2 | 126.9 | 123.7 | 128.3 | 133.0 | 133.0 | 134.9 | 134.6 |
| 5411 | Legal services (December 1996=100)...... | 160.9 | 161.1 | 161.5 | 161.5 | 162.6 | 163.2 | 163.2 | 163.2 | 164.8 | 165.5 | 166.0 | 166.1 | 166.1 |
| 541211 | Offices of certified public accountants... | 114.0 | 112.7 | 115.3 | 115.5 | 115.4 | 115.6 | 115.0 | 115.7 | 115.3 | 115.2 | 115.3 | 115.2 | 115.3 |
| 5413 | Architectural, engineering, and related services <br> (December 1996=100) | 140.5 | 141.3 | 141.6 | 141.6 | 141.6 | 141.8 | 141.8 | 141.9 | 142.9 | 142.9 | 142.3 | 142.9 | 142.9 |
| 54181 | Advertising agencies............................. | 106.3 | 106.3 | 106.3 | 106.3 | 106.3 | 106.3 | 106.3 | 106.3 | 105.6 | 105.4 | 105.3 | 105.4 | 105.4 |
| 5613 | Employment services (December 1996=100). | 122.7 | 122.8 | 123.0 | 123.4 | 123.1 | 123.6 | 124.1 | 124.2 | 123.8 | 124.0 | 123.2 | 124.1 | 123.3 |
| 56151 | Travel agencies... | 98.8 | 98.8 | 98.8 | 98.8 | 101.4 | 101.4 | 101.4 | 101.4 | 101.4 | 101.8 | 102.6 | 99.7 | 99.7 |
| 56172 | Janitorial services. | 109.0 | 109.1 | 109.0 | 109.3 | 109.4 | 109.4 | 109.4 | 109.1 | 109.6 | 109.7 | 109.5 | 109.6 | 109.6 |
| 5621 | Waste collection.. | 111.9 | 112.6 | 112.3 | 113.3 | 114.0 | 113.0 | 113.3 | 111.3 | 112.2 | 113.3 | 116.4 | 116.3 | 115.8 |
| 721 | Accommodation (December 1996=100). | 144.9 | 147.0 | 149.9 | 150.9 | 146.9 | 145.6 | 144.3 | 141.6 | 140.6 | 139.9 | 142.3 | 142.0 | 143.8 |

43. Annual data: Producer Price Indexes, by stage of processing
[1982 = 100]

| Index | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Finished goods |  |  |  |  |  |  |  |  |  |  |  |
| Total. | 130.7 | 133.0 | 138.0 | 140.7 | 138.9 | 143.3 | 148.5 | 155.7 | 160.4 | 166.6 | 177.1 |
| Foods. | 134.3 | 135.1 | 137.2 | 141.3 | 140.1 | 145.9 | 152.7 | 155.7 | 156.7 | 167.0 | 178.3 |
| Energy. | 75.1 | 78.8 | 94.1 | 96.7 | 88.8 | 102.0 | 113.0 | 132.6 | 145.9 | 156.3 | 178.7 |
| Other. | 143.7 | 146.1 | 148.0 | 150.0 | 150.2 | 150.5 | 152.7 | 156.4 | 158.7 | 161.7 | 167.2 |
| Intermediate materials, supplies, and components |  |  |  |  |  |  |  |  |  |  |  |
| Total.. | 123.0 | 123.2 | 129.2 | 129.7 | 127.8 | 133.7 | 142.6 | 154.0 | 164.0 | 170.7 | 188.3 |
| Foods. | 123.2 | 120.8 | 119.2 | 124.3 | 123.2 | 134.4 | 145.0 | 146.0 | 146.2 | 161.4 | 180.4 |
| Energy. | 80.8 | 84.3 | 101.7 | 104.1 | 95.9 | 111.9 | 123.2 | 149.2 | 162.8 | 174.6 | 208.1 |
| Other.. | 133.5 | 133.1 | 136.6 | 136.4 | 135.8 | 138.5 | 146.5 | 154.6 | 163.8 | 168.4 | 180.9 |
| Crude materials for further processing |  |  |  |  |  |  |  |  |  |  |  |
| Total.. | 96.8 | 98.2 | 120.6 | 121.0 | 108.1 | 135.3 | 159.0 | 182.2 | 184.8 | 207.1 | 251.8 |
| Foods. | 103.9 | 98.7 | 100.2 | 106.1 | 99.5 | 113.5 | 127.0 | 122.7 | 119.3 | 146.7 | 163.4 |
| Energy... | 68.6 | 78.5 | 122.1 | 122.3 | 102.0 | 147.2 | 174.6 | 234.0 | 226.9 | 232.8 | 309.4 |
| Other........................................................... | 84.5 | 91.1 | 118.0 | 101.5 | 101.0 | 116.9 | 149.2 | 176.7 | 210.0 | 238.7 | 308.5 |

44. U.S. export price indexes by end-use category
[2000 = 100]

| Category | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| ALL COMMODITIES. | 124.8 | 126.1 | 128.0 | 125.9 | 124.9 | 122.3 | 118.4 | 115.8 | 116.6 | 116.3 | 115.5 | 116.1 | 116.7 |
| Foods, feeds, and beverages. | 193.3 | 198.0 | 211.5 | 189.6 | 190.4 | 175.0 | 164.8 | 155.1 | 165.4 | 162.1 | 156.7 | 162.8 | 167.0 |
| Agricultural foods, feeds, and beverages. | 198.9 | 204.0 | 218.9 | 194.7 | 195.6 | 178.3 | 166.9 | 156.6 | 167.6 | 164.1 | 158.3 | 165.0 | 170.0 |
| Nonagricultural (fish, beverages) food products.... | 145.5 | 146.1 | 147.0 | 145.7 | 145.5 | 147.8 | 148.3 | 143.5 | 147.9 | 145.7 | 144.4 | 145.4 | 141.7 |
| Industrial supplies and materials.. | 169.6 | 173.2 | 177.8 | 174.0 | 169.4 | 161.8 | 148.2 | 139.6 | 139.0 | 137.9 | 136.5 | 136.9 | 138.1 |
| Agricultural industrial supplies and materials. | 156.9 | 158.0 | 162.8 | 160.9 | 157.4 | 148.5 | 134.2 | 126.1 | 125.6 | 126.2 | 122.9 | 123.5 | 133.3 |
| Fuels and lubricants | 275.8 | 297.2 | 312.3 | 275.8 | 267.2 | 239.2 | 193.4 | 166.8 | 165.8 | 156.2 | 146.9 | 156.9 | 160.5 |
| Nonagricultural supplies and materials, excluding fuel and building materials. Selected building materials. $\qquad$ | 160.1 113.9 | 161.6 113.8 | 165.1 114.5 | 165.3 115.2 | 160.8 115.4 | 155.5 | 145.6 | 138.8 115.1 | 138.2 115.5 | 138.2 115.3 | 138.2 114.0 | 137.2 113.3 | 137.6 112.0 |
| Capital goods... | 101.6 | 102.0 | 101.9 | 101.9 | 101.8 | 101.7 | 101.6 | 101.5 | 102.1 | 102.3 | 102.3 | 102.8 | 103.0 |
| Electric and electrical generating equipment. | 108.6 | 108.9 | 109.3 | 109.2 | 109.5 | 109.7 | 109.2 | 109.0 | 107.3 | 106.7 | 106.8 | 106.7 | 106.9 |
| Nonelectrical machinery.. | 93.9 | 94.2 | 94.0 | 94.1 | 93.9 | 93.6 | 93.5 | 93.3 | 93.7 | 94.0 | 93.8 | 94.3 | 94.4 |
| Automotive vehicles, parts, and engines. | 107.5 | 107.4 | 107.7 | 107.8 | 107.9 | 108.2 | 108.1 | 108.0 | 108.4 | 108.1 | 108.2 | 108.1 | 108.1 |
| Consumer goods, excluding automotive.. | 108.1 | 108.2 | 108.5 | 109.0 | 109.3 | 109.9 | 109.1 | 109.0 | 109.2 | 109.3 | 108.5 | 107.6 | 108.0 |
| Nondurables, manufactured. | 110.0 | 110.1 | 109.8 | 109.6 | 109.0 | 108.9 | 107.4 | 107.2 | 108.8 | 109.0 | 107.1 | 107.3 | 108.0 |
| Durables, manufactured. | 105.1 | 105.2 | 106.0 | 107.2 | 108.7 | 109.9 | 109.8 | 109.7 | 109.7 | 109.8 | 109.9 | 107.6 | 107.9 |
| Agricultural commodities... | 190.8 | 195.2 | 208.2 | 188.2 | 188.3 | 172.5 | 160.6 | 150.8 | 159.7 | 157.0 | 151.6 | 157.2 | 163.0 |
| Nonagricultural commodities. | 120.1 | 121.2 | 122.3 | 121.5 | 120.4 | 118.7 | 115.4 | 113.2 | 113.5 | 113.3 | 112.9 | 113.1 | 113.4 |

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

| Category | 2008 |  |  |  |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May |
| ALL COMMODITIES. | 141.2 | 145.5 | 147.5 | 143.0 | 137.8 | 129.6 | 120.0 | 114.5 | 113.0 | 113.0 | 113.6 | 114.9 | 116.5 |
| Foods, feeds, and beverages. | 145.0 | 147.7 | 149.7 | 150.4 | 147.9 | 146.0 | 139.5 | 142.3 | 142.3 | 137.8 | 137.0 | 139.0 | 139.3 |
| Agricultural foods, feeds, and beverages.............. | 162.2 | 165.1 | 167.6 | 167.9 | 165.1 | 162.8 | 154.4 | 159.4 | 159.0 | 153.0 | 151.3 | 154.5 | 155.2 |
| Nonagricultural (fish, beverages) food products..... | 105.9 | 108.4 | 109.1 | 110.9 | 109.1 | 108.0 | 105.8 | 103.8 | 104.5 | 103.4 | 104.8 | 103.9 | 103.4 |
| Industrial supplies and materials. | 265.0 | 283.0 | 290.7 | 270.7 | 248.9 | 213.5 | 174.6 | 150.4 | 143.7 | 144.9 | 149.3 | 154.3 | 161.7 |
| Fuels and lubricants. | 388.3 | 423.7 | 437.6 | 392.0 | 346.3 | 274.1 | 197.8 | 153.9 | 146.6 | 150.5 | 162.3 | 174.4 | 188.6 |
| Petroleum and petroleum products. | 412.2 | 450.3 | 465.0 | 419.5 | 371.5 | 288.9 | 201.6 | 150.8 | 143.8 | 151.6 | 168.5 | 185.5 | 202.7 |
| Paper and paper base stocks. | 117.1 | 117.3 | 118.9 | 119.7 | 119.9 | 116.4 | 115.1 | 113.2 | 110.3 | 108.8 | 106.6 | 104.5 | 103.3 |
| Materials associated with nondurable supplies and materials. | 149.6 | 152.9 | 157.4 | 159.6 | 162.4 | 160.2 | 155.0 | 148.5 | 138.8 | 137.1 | 136.7 | 135.3 | 139.5 |
| Selected building materials................................ | 116.2 | 119.2 | 121.3 | 122.1 | 122.7 | 120.4 | 118.8 | 118.1 | 117.2 | 116.5 | 116.2 | 115.3 | 114.5 |
| Unfinished metals associated with durable goods.. | 263.6 | 273.2 | 273.4 | 270.3 | 255.4 | 236.7 | 209.3 | 185.7 | 176.5 | 175.9 | 171.6 | 170.9 | 171.9 |
| Nonmetals associated with durable goods............ | 107.3 | 107.6 | 110.7 | 111.8 | 111.4 | 110.9 | 110.4 | 109.0 | 107.1 | 106.2 | 105.2 | 104.6 | 103.8 |
| Capital goods. | 93.3 | 93.2 | 93.4 | 93.4 | 93.3 | 93.3 | 92.9 | 92.7 | 92.7 | 92.3 | 91.8 | 91.9 | 91.9 |
| Electric and electrical generating equipment......... | 111.7 | 112.0 | 112.7 | 113.0 | 112.9 | 112.3 | 111.8 | 111.4 | 111.1 | 110.3 | 109.4 | 109.2 | 110.0 |
| Nonelectrical machinery. | 88.4 | 88.2 | 88.4 | 88.3 | 88.2 | 88.1 | 87.7 | 87.5 | 87.5 | 87.2 | 86.6 | 86.8 | 86.7 |
| Automotive vehicles, parts, and engines.. | 107.8 | 107.9 | 108.1 | 108.3 | 108.1 | 108.3 | 107.9 | 107.8 | 108.0 | 107.9 | 107.7 | 107.7 | 107.9 |
| Consumer goods, excluding automotive................ | 104.8 | 104.9 | 105.1 | 105.2 | 105.1 | 105.1 | 104.6 | 104.4 | 104.4 | 104.4 | 103.9 | 104.1 | 104.1 |
| Nondurables, manufactured.. | 108.0 | 107.9 | 108.2 | 108.4 | 108.2 | 108.1 | 108.0 | 108.2 | 108.9 | 108.9 | 108.4 | 108.4 | 108.2 |
| Durables, manufactured.... | 101.3 | 101.5 | 101.7 | 101.7 | 101.8 | 101.8 | 101.1 | 100.7 | 100.1 | 100.0 | 99.8 | 100.0 | 100.1 |
| Nonmanufactured consumer goods. | 105.8 | 106.6 | 106.7 | 106.6 | 106.6 | 105.9 | 103.2 | 103.6 | 102.7 | 104.4 | 101.2 | 102.7 | 101.3 |

46. U.S. international price Indexes for selected categories of services
[2000 $=100$, unless indicated otherwise]

| Category | 2007 |  |  |  | 2008 |  |  |  | $\begin{aligned} & \hline 2009 \\ & \hline \text { Mar. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mar. | June | Sept. | Dec. | Mar. | June | Sept. | Dec. |  |
| Import air freight. | 130.7 | 132.3 | 134.2 | 141.8 | 144.4 | 158.7 | 157.1 | 138.5 | 132.8 |
| Export air freight. | 117.0 | 117.0 | 119.8 | 127.1 | 132.0 | 140.8 | 144.3 | 135.0 | 122.8 |
| Import air passenger fares (Dec. $2006=100$ ). | 122.9 | 144.6 | 140.2 | 135.3 | 131.3 | 171.6 | 161.3 | 157.3 | 134.9 |
| Export air passenger fares (Dec. $2006=100$ ) $\ldots . . . . . . . . . . . . ~$ | 140.2 | 147.3 | 154.6 | 155.7 | 156.4 | 171.4 | 171.9 | 164.6 | 140.0 |

47. Indexes of productivity, hourly compensation, and unit costs, quarterly data seasonally adjusted
[1992 = 100]

| Item | 2006 |  |  |  | 2007 |  |  |  | 2008 |  |  |  | $2009$ <br> I |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | II | III | IV | I | II | III | IV | I | II | III | IV |  |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons. | 135.9 | 136.5 | 136.0 | 135.9 | 135.7 | 137.5 | 140.0 | 139.6 | 140.4 | 142.0 | 142.8 | 142.6 | 143.2 |
| Compensation per hour. | 167.8 | 168.1 | 169.0 | 172.6 | 174.3 | 175.4 | 177.4 | 178.9 | 180.5 | 181.3 | 183.9 | 185.8 | 187.8 |
| Real compensation per hour. | 120.4 | 119.6 | 119.2 | 122.1 | 122.1 | 121.6 | 122.3 | 121.6 | 121.3 | 120.6 | 120.4 | 124.4 | 126.5 |
| Unit labor costs. | 123.5 | 123.1 | 124.3 | 127.0 | 128.5 | 127.5 | 126.7 | 128.2 | 128.6 | 127.7 | 128.8 | 130.3 | 131.2 |
| Unit nonlabor payments. | 133.4 | 136.3 | 136.3 | 133.3 | 134.3 | 137.5 | 139.8 | 139.0 | 140.2 | 142.4 | 144.3 | 141.8 | 142.3 |
| Implicit price deflator.. | 127.2 | 128.0 | 128.8 | 129.4 | 130.7 | 131.2 | 131.6 | 132.2 | 132.9 | 133.2 | 134.6 | 134.6 | 135.3 |
| Nonfarm business |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons. | 134.8 | 135.6 | 135.1 | 134.9 | 134.7 | 136.3 | 138.7 | 138.5 | 139.4 | 141.0 | 141.7 | 141.5 | 142.1 |
| Compensation per hour. | 166.5 | 167.0 | 168.0 | 171.7 | 173.4 | 174.0 | 175.8 | 177.8 | 179.4 | 180.2 | 182.7 | 184.7 | 186.8 |
| Real compensation per hour. | 119.5 | 118.9 | 118.5 | 121.4 | 121.5 | 120.6 | 121.2 | 120.8 | 120.6 | 119.8 | 119.7 | 123.7 | 125.8 |
| Unit labor costs. | 123.5 | 123.1 | 124.3 | 127.2 | 128.7 | 127.6 | 126.8 | 128.4 | 128.7 | 127.8 | 128.9 | 130.5 | 131.5 |
| Unit nonlabor payments. | 135.5 | 138.6 | 138.4 | 134.7 | 135.1 | 138.3 | 140.5 | 139.7 | 141.0 | 143.3 | 145.6 | 143.4 | 144.2 |
| Implicit price deflator.. | 127.9 | 128.8 | 129.5 | 130.0 | 131.1 | 131.5 | 131.8 | 132.5 | 133.2 | 133.5 | 135.0 | 135.2 | 136.2 |
| Nonfinancial corporations |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all employees. | 146.0 | 145.7 | 146.7 | 145.6 | 145.4 | 146.7 | 147.8 | 148.3 | 148.1 | 151.2 | 153.6 | 151.9 | 151.1 |
| Compensation per hour. | 164.2 | 164.4 | 165.1 | 167.8 | 170.0 | 171.1 | 172.8 | 174.9 | 176.1 | 177.4 | 180.0 | 182.1 | 184.9 |
| Real compensation per hour | 117.8 | 117.0 | 116.5 | 118.7 | 119.1 | 118.6 | 119.1 | 118.9 | 118.4 | 118.0 | 117.9 | 121.9 | 124.5 |
| Total unit costs. | 112.6 | 113.3 | 113.1 | 115.6 | 117.1 | 116.9 | 117.2 | 118.3 | 119.0 | 118.0 | 118.3 | 121.2 | 124.1 |
| Unit labor costs.. | 112.5 | 112.8 | 112.5 | 115.3 | 116.9 | 116.6 | 116.9 | 117.9 | 118.9 | 117.3 | 117.3 | 119.9 | 122.4 |
| Unit nonlabor costs. | 113.0 | 114.6 | 114.5 | 116.5 | 117.6 | 117.9 | 118.2 | 119.3 | 119.4 | 119.8 | 121.3 | 124.9 | 129.0 |
| Unit profits. | 182.6 | 183.4 | 193.4 | 174.4 | 172.4 | 173.1 | 167.4 | 156.4 | 150.8 | 147.8 | 156.7 | 144.1 | 136.1 |
| Unit nonlabor payments. | 131.6 | 133.0 | 135.6 | 132.0 | 132.2 | 132.6 | 131.4 | 129.2 | 127.8 | 127.2 | 130.8 | 130.0 | 130.9 |
| Implicit price deflator.. | 118.8 | 119.5 | 120.3 | 120.8 | 122.1 | 122.0 | 121.7 | 121.7 | 121.8 | 120.6 | 121.8 | 123.3 | 125.2 |
| Manufacturing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons. | 172.6 | 172.5 | 174.4 | 175.3 | 176.9 | 178.2 | 180.1 | 181.6 | 182.8 | 181.6 | 180.3 | 178.2 | 177.0 |
| Compensation per hour. | 170.7 | 169.4 | 170.4 | 174.4 | 176.6 | 176.3 | 177.0 | 179.6 | 181.1 | 182.7 | 185.1 | 190.3 | 196.4 |
| Real compensation per hour............................ | 122.5 | 120.6 | 120.2 | 123.4 | 123.7 | 122.3 | 122.0 | 122.1 | 121.7 | 121.5 | 121.2 | 127.4 | 132.3 |
| Unit labor costs.................................................. | 98.9 | 98.2 | 97.7 | 99.5 | 99.8 | 99.0 | 98.2 | 98.9 | 99.1 | 100.6 | 102.7 | 106.8 | 111.0 |

NOTE: Dash indicates data not available.
48. Annual indexes of multifactor productivity and related measures, selected years
[2000 $=100$, unless otherwise indicated]

| Item | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Private business |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Productivity: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons.. | 90.0 | 91.7 | 94.3 | 97.2 | 100.0 | 102.8 | 107.1 | 111.2 | 114.5 | 116.6 | 117.6 | 119.5 | 122.7 |
| Output per unit of capital services. | 105.3 | 105.3 | 103.8 | 102.3 | 100.0 | 96.0 | 94.7 | 95.5 | 97.2 | 98.1 | 98.4 | 97.7 | 95.6 |
| Multifactor productivity.. | 95.3 | 96.2 | 97.4 | 98.8 | 100.0 | 100.4 | 102.5 | 105.4 | 108.2 | 109.7 | 110.3 | 110.7 | 112.0 |
| Output......................... | 82.8 | 87.2 | 91.5 | 96.2 | 100.0 | 100.5 | 102.0 | 105.2 | 109.7 | 113.6 | 117.1 | 119.5 | 120.4 |
| Inputs: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Labor input. | 90.8 | 94.4 | 96.5 | 98.8 | 100.0 | 98.2 | 96.2 | 95.8 | 96.9 | 98.8 | 101.2 | 102.3 | 100.3 |
| Capital services. | 78.7 | 82.9 | 88.2 | 94.1 | 100.0 | 104.6 | 107.7 | 110.2 | 112.9 | 115.8 | 119.1 | 122.3 | 125.9 |
| Combined units of labor and capital input. | 86.9 | 90.7 | 93.9 | 97.4 | 100.0 | 100.0 | 99.5 | 99.9 | 101.4 | 103.6 | 106.2 | 108.0 | 107.6 |
| Capital per hour of all persons... | 85.5 | 87.1 | 90.9 | 95.0 | 100.0 | 107.0 | 113.1 | 116.5 | 117.8 | 118.9 | 119.6 | 122.3 | 128.3 |
| Private nonfarm business |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Productivity: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons. | 90.5 | 92.0 | 94.5 | 97.3 | 100.0 | 102.7 | 107.1 | 111.1 | 114.2 | 116.1 | 117.2 | 118.9 | 122.3 |
| Output per unit of capital services | 106.1 | 105.8 | 104.2 | 102.6 | 100.0 | 96.0 | 94.5 | 95.2 | 96.9 | 97.7 | 97.9 | 97.0 | 95.1 |
| Multifactor productivity. | 95.8 | 96.5 | 97.7 | 99.0 | 100.0 | 100.4 | 102.5 | 105.2 | 108.0 | 109.3 | 109.9 | 110.1 | 111.4 |
| Output. | 82.8 | 87.2 | 91.5 | 96.3 | 100.0 | 100.5 | 102.1 | 105.2 | 109.6 | 113.5 | 117.1 | 119.4 | 120.4 |
| Inputs: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Labor input. | 90.4 | 94.0 | 96.3 | 98.8 | 100.0 | 98.4 | 96.4 | 96.0 | 97.1 | 99.1 | 101.6 | 102.8 | 100.9 |
| Capital services.. | 78.1 | 82.4 | 87.8 | 93.9 | 100.0 | 104.7 | 107.9 | 110.5 | 113.1 | 116.1 | 119.6 | 123.1 | 126.7 |
| Combined units of labor and capital input. | 86.5 | 90.4 | 93.7 | 97.3 | 100.0 | 100.2 | 99.6 | 100.0 | 101.5 | 103.8 | 106.6 | 108.4 | 108.1 |
| Capital per hour of all persons.... | 85.3 | 86.9 | 90.7 | 94.8 | 100.0 | 107.0 | 113.2 | 116.7 | 117.8 | 118.9 | 119.7 | 122.6 | 128.8 |
| Manufacturing [1996 = 100] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Productivity: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons... | 82.7 | 87.3 | 92.0 | 96.1 | 100.0 | 101.6 | 108.6 | 115.3 | 117.9 | 123.5 | 125.0 | - | - |
| Output per unit of capital services. | 98.0 | 100.6 | 100.7 | 100.4 | 100.0 | 93.5 | 92.3 | 93.2 | 95.4 | 98.9 | 100.2 | - | - |
| Multifactor productivity.. | 91.2 | 93.8 | 95.9 | 96.7 | 100.0 | 98.7 | 102.4 | 105.2 | 108.0 | 108.4 | 110.1 | - | - |
| Output......................... | 83.1 | 89.2 | 93.8 | 97.4 | 100.0 | 94.9 | 94.3 | 95.2 | 96.9 | 100.4 | 102.3 | - | - |
| Inputs: |  |  |  |  |  |  |  |  |  |  |  | - | - |
| Hours of all persons.. | 100.4 | 102.2 | 101.9 | 101.3 | 100.0 | 93.5 | 86.8 | 82.6 | 82.2 | 81.3 | 81.8 | - | - |
| Capital services.. | 84.8 | 88.7 | 93.2 | 97.0 | 100.0 | 101.5 | 102.1 | 102.1 | 101.6 | 101.5 | 102.0 | - | - |
| Energy.......... | 110.4 | 108.2 | 105.4 | 105.5 | 100.0 | 90.6 | 89.3 | 84.4 | 84.0 | 91.6 | 86.6 | - | - |
| Nonenergy materials............ | 86.0 | 92.9 | 97.7 | 102.6 | 100.0 | 93.3 | 88.4 | 87.7 | 87.3 | 92.4 | 91.5 | - | - |
| Purchased business services... | 88.5 | 92.1 | 95.0 | 100.0 | 100.0 | 100.7 | 98.2 | 99.1 | 97.0 | 104.5 | 106.6 | - | - |
| Combined units of all factor inputs........................ | 91.1 | 95.1 | 97.8 | 100.7 | 100.0 | 96.2 | 92.1 | 90.5 | 89.7 | 92.7 | 92.9 | - | - |

NOTE: Dash indicates data not available.

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

[1992 = 100]

| Item | 1963 | 1973 | 1983 | 1993 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons.. | 55.0 | 73.4 | 83.0 | 100.4 | 116.1 | 119.1 | 123.9 | 128.7 | 132.4 | 134.8 | 136.1 | 138.2 | 141.9 |
| Compensation per hour.. | 15.6 | 28.9 | 66.3 | 102.2 | 134.7 | 140.3 | 145.3 | 151.2 | 157.0 | 163.2 | 169.4 | 176.5 | 182.8 |
| Real compensation per hour. | 66.6 | 85.1 | 90.5 | 99.8 | 112.0 | 113.5 | 115.7 | 117.7 | 119.0 | 119.7 | 120.3 | 121.9 | 121.6 |
| Unit labor costs. | 28.4 | 39.4 | 79.8 | 101.8 | 116.0 | 117.9 | 117.3 | 117.5 | 118.5 | 121.0 | 124.5 | 127.7 | 128.8 |
| Unit nonlabor payments. | 26.6 | 37.5 | 76.3 | 102.6 | 107.2 | 110.0 | 114.2 | 118.3 | 124.6 | 130.5 | 134.8 | 137.7 | 142.1 |
| Implicit price deflator.. | 27.7 | 38.7 | 78.5 | 102.1 | 112.7 | 114.9 | 116.1 | 117.8 | 120.8 | 124.6 | 128.3 | 131.4 | 133.8 |
| Nonfarm business |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons. | 57.8 | 75.3 | 84.5 | 100.4 | 115.7 | 118.6 | 123.5 | 128.0 | 131.6 | 133.9 | 135.1 | 137.0 | 140.9 |
| Compensation per hour. | 16.1 | 29.1 | 66.6 | 102.0 | 134.2 | 139.5 | 144.6 | 150.4 | 156.0 | 162.1 | 168.3 | 175.2 | 181.7 |
| Real compensation per hour. | 68.7 | 85.5 | 91.1 | 99.5 | 111.6 | 112.8 | 115.1 | 117.1 | 118.2 | 118.9 | 119.5 | 121.0 | 120.8 |
| Unit labor costs... | 27.8 | 38.6 | 78.9 | 101.6 | 116.0 | 117.7 | 117.1 | 117.5 | 118.5 | 121.1 | 124.5 | 127.9 | 129.0 |
| Unit nonlabor payments. | 26.3 | 35.3 | 76.1 | 103.1 | 108.7 | 111.6 | 116.0 | 119.6 | 125.5 | 132.1 | 136.8 | 138.4 | 143.3 |
| Implicit price deflator..... | 27.3 | 37.4 | 77.9 | 102.1 | 113.3 | 115.4 | 116.7 | 118.3 | 121.1 | 125.1 | 129.1 | 131.7 | 134.2 |
| Nonfinancial corporations |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all employees. | 62.6 | 74.8 | 85.7 | 100.3 | 122.5 | 124.7 | 129.7 | 134.6 | 139.7 | 143.4 | 146.0 | 147.1 | 151.2 |
| Compensation per hour.. | 17.9 | 31.0 | 68.9 | 101.8 | 133.0 | 138.6 | 143.6 | 149.5 | 154.0 | 159.6 | 165.4 | 172.2 | 178.9 |
| Real compensation per hour. | 76.4 | 91.2 | 94.2 | 99.3 | 110.6 | 112.1 | 114.3 | 116.4 | 116.8 | 117.1 | 117.5 | 118.9 | 119.0 |
| Total unit costs... | 27.2 | 39.9 | 80.7 | 101.0 | 107.4 | 111.6 | 110.7 | 111.0 | 110.0 | 111.7 | 113.6 | 117.4 | 119.1 |
| Unit labor costs.. | 28.6 | 41.4 | 80.4 | 101.4 | 108.6 | 111.2 | 110.7 | 111.0 | 110.3 | 111.3 | 113.3 | 117.1 | 118.3 |
| Unit nonlabor costs. | 23.4 | 35.7 | 81.6 | 99.9 | 104.2 | 112.6 | 110.8 | 111.1 | 109.3 | 112.7 | 114.6 | 118.3 | 121.3 |
| Unit profits................ | 57.3 | 54.9 | 91.2 | 114.1 | 108.7 | 82.2 | 98.0 | 109.9 | 144.8 | 163.0 | 183.5 | 167.3 | 149.9 |
| Unit nonlabor payments. | 32.5 | 40.8 | 84.2 | 103.7 | 105.4 | 104.5 | 107.4 | 110.7 | 118.8 | 126.2 | 133.0 | 131.4 | 129.0 |
| Implicit price deflator.. | 29.9 | 41.2 | 81.7 | 102.2 | 107.5 | 108.9 | 109.6 | 110.9 | 113.1 | 116.3 | 119.9 | 121.9 | 121.9 |
| Manufacturing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour of all persons.. | - | - | - | 102.6 | 139.1 | 141.2 | 151.0 | 160.4 | 164.0 | 171.9 | 173.7 | 179.2 | 180.7 |
| Compensation per hour.. | - | - | - | 102.0 | 134.7 | 137.8 | 147.8 | 158.2 | 161.5 | 164.5 | 171.2 | 177.4 | 184.7 |
| Real compensation per hour. | - | - | - | 99.6 | 112.0 | 111.5 | 117.7 | 123.2 | 122.5 | 120.7 | 121.6 | 122.5 | 122.8 |
| Unit labor costs........... | - | - | - | 99.5 | 96.9 | 97.6 | 97.9 | 98.7 | 98.5 | 95.7 | 98.6 | 99.0 | 102.2 |
| Unit nonlabor payments..... | - | - | - | 101.1 | 103.5 | 102.0 | 100.3 | 102.9 | 110.2 | 122.2 | 126.6 | - | - |
| Implicit price deflator.......................................... | - | - | - | 100.6 | 101.4 | 100.6 | 99.5 | 101.5 | 106.4 | 113.5 | 117.4 | - | - |

Dash indicates data not available.
50. Annual indexes of output per hour for selected NAICS industries
[1997=100]

| NAICS | Industry | 1987 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mining |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Mining. | 85.3 | 100.0 | 103.5 | 111.4 | 111.0 | 109.1 | 113.5 | 116.0 | 106.8 | 96.0 | 87.3 | 81.7 |
| 211 | Oil and gas extraction. | 80.1 | 100.0 | 101.2 | 107.9 | 119.4 | 121.6 | 123.8 | 130.1 | 111.7 | 107.8 | 100.4 | 97.0 |
| 2111 | Oil and gas extraction. | 80.1 | 100.0 | 101.2 | 107.9 | 119.4 | 121.6 | 123.8 | 130.1 | 111.7 | 107.8 | 100.4 | 97.0 |
| 212 | Mining, except oil and gas. | 69.3 | 100.0 | 104.5 | 105.8 | 106.3 | 109.0 | 110.7 | 113.8 | 116.2 | 114.2 | 111.0 | 105.2 |
| 2121 | Coal mining. | 57.8 | 100.0 | 106.5 | 110.3 | 115.8 | 114.3 | 111.7 | 113.4 | 113.4 | 107.8 | 99.8 | 101.0 |
| 2122 | Metal ore mining. | 71.0 | 100.0 | 108.9 | 112.3 | 121.5 | 132.2 | 138.2 | 142.2 | 137.1 | 129.9 | 123.1 | 104.2 |
| 2123 | Nonmetallic mineral mining and quarrying. | 88.0 | 100.0 | 101.2 | 101.2 | 96.1 | 99.4 | 103.6 | 108.3 | 114.3 | 118.4 | 120.0 | 109.8 |
| 213 | Support activities for mining.. | 79.4 | 100.0 | 96.0 | 98.5 | 100.9 | 110.4 | 103.5 | 136.3 | 170.3 | 144.9 | 147.0 | 156.8 |
| 2131 | Support activities for mining. | 79.4 | 100.0 | 96.0 | 98.5 | 100.9 | 110.4 | 103.5 | 136.3 | 170.3 | 144.9 | 147.0 | 156.8 |
|  | Utilities |  |  |  |  |  |  |  |  |  |  |  |  |
| 2211 | Power generation and supply. | 65.6 | 100.0 | 103.7 | 103.5 | 107.0 | 106.4 | 102.9 | 105.1 | 107.5 | 114.3 | 115.4 | 113.3 |
| 2212 | Natural gas distribution. | 67.8 | 100.0 | 99.0 | 102.7 | 113.2 | 110.1 | 115.4 | 114.1 | 118.3 | 122.2 | 119.1 | 119.7 |
|  | Manufacturing |  |  |  |  |  |  |  |  |  |  |  |  |
| 311 | Food. | 94.1 | 100.0 | 103.9 | 105.9 | 107.1 | 109.5 | 113.8 | 116.8 | 117.3 | 123.3 | 121.1 | - |
| 3111 | Animal food. | 83.6 | 100.0 | 109.0 | 110.9 | 109.7 | 131.4 | 142.7 | 165.8 | 149.5 | 165.5 | 150.4 |  |
| 3112 | Grain and oilseed milling. | 81.1 | 100.0 | 107.5 | 116.1 | 113.1 | 119.5 | 122.4 | 123.9 | 130.3 | 133.0 | 130.7 |  |
| 3113 | Sugar and confectionery products. | 87.6 | 100.0 | 103.5 | 106.5 | 109.9 | 108.6 | 108.0 | 112.5 | 118.2 | 130.7 | 129.2 |  |
| 3114 | Fruit and vegetable preserving and specialty. | 92.4 | 100.0 | 107.1 | 109.5 | 111.8 | 121.4 | 126.9 | 123.0 | 126.2 | 132.0 | 126.9 | - |
| 3115 | Dairy products. | 82.7 | 100.0 | 100.0 | 93.6 | 95.9 | 97.1 | 105.0 | 110.5 | 107.4 | 109.6 | 110.2 | - |
| 3116 | Animal slaughtering and processing. | 97.4 | 100.0 | 100.0 | 101.2 | 102.6 | 103.7 | 107.3 | 106.6 | 108.0 | 117.4 | 116.9 |  |
| 3117 | Seafood product preparation and packaging | 123.1 | 100.0 | 120.2 | 131.6 | 140.5 | 153.0 | 169.8 | 173.2 | 162.2 | 186.1 | 203.8 |  |
| 3118 | Bakeries and tortilla manufacturing. | 100.9 | 100.0 | 103.8 | 108.6 | 108.3 | 109.9 | 108.9 | 109.3 | 113.8 | 115.4 | 110.5 |  |
| 3119 | Other food products.. | 97.5 | 100.0 | 107.8 | 111.4 | 112.6 | 106.2 | 111.9 | 118.8 | 119.3 | 116.2 | 116.3 | - |
| 312 | Beverages and tobacco products | 78.1 | 100.0 | 97.6 | 87.3 | 88.3 | 89.5 | 82.6 | 90.9 | 94.7 | 100.5 | 94.0 |  |
| 3121 | Beverages.. | 77.1 | 100.0 | 99.0 | 90.7 | 90.8 | 92.7 | 99.4 | 108.3 | 114.1 | 120.3 | 112.0 |  |
| 3122 | Tobacco and tobacco products | 71.9 | 100.0 | 98.5 | 91.0 | 95.9 | 98.2 | 67.0 | 78.7 | 82.4 | 93.1 | 94.9 |  |
| 313 | Textile mills. | 73.7 | 100.0 | 102.6 | 106.2 | 106.7 | 109.5 | 125.3 | 136.1 | 138.6 | 152.8 | 150.5 |  |
| 3131 | Fiber, yarn, and thread mills. | 66.5 | 100.0 | 102.1 | 103.9 | 101.3 | 109.1 | 133.3 | 148.8 | 154.1 | 143.5 | 139.7 | - |
| 3132 | Fabric mills. | 68.0 | 100.0 | 104.2 | 110.0 | 110.1 | 110.3 | 125.4 | 137.3 | 138.6 | 164.2 | 170.5 |  |
| 3133 | Textile and fabric finishing mills | 91.3 | 100.0 | 101.2 | 102.2 | 104.4 | 108.5 | 119.8 | 125.1 | 127.7 | 139.8 | 126.2 |  |
| 314 | Textile product mills. | 93.0 | 100.0 | 98.7 | 102.5 | 107.1 | 104.5 | 107.3 | 112.7 | 123.4 | 128.0 | 121.1 |  |
| 3141 | Textile furnishings mills. | 91.2 | 100.0 | 99.3 | 99.1 | 104.5 | 103.1 | 105.5 | 114.4 | 122.3 | 125.7 | 117.3 |  |
| 3149 | Other textile product mills. | 92.2 | 100.0 | 96.7 | 107.6 | 108.9 | 103.1 | 105.1 | 104.2 | 120.4 | 128.9 | 126.1 |  |
| 315 | Apparel. | 71.9 | 100.0 | 101.8 | 111.7 | 116.8 | 116.5 | 102.9 | 112.4 | 103.4 | 110.9 | 114.0 |  |
| 3151 | Apparel knitting mills. | 76.2 | 100.0 | 96.1 | 101.4 | 108.9 | 105.6 | 112.0 | 105.6 | 96.6 | 120.0 | 123.7 |  |
| 3152 | Cut and sew apparel. | 69.8 | 100.0 | 102.3 | 114.6 | 119.8 | 119.5 | 103.9 | 117.2 | 108.4 | 113.5 | 117.6 |  |
| 3159 | Accessories and other apparel | 97.8 | 100.0 | 109.0 | 99.3 | 98.3 | 105.2 | 76.1 | 78.7 | 70.8 | 74.0 | 67.3 |  |
| 316 | Leather and allied products.. | 71.6 | 100.0 | 106.6 | 112.7 | 120.3 | 122.4 | 97.7 | 99.8 | 109.5 | 123.6 | 132.5 | - |
| 3161 | Leather and hide tanning and finishing | 94.0 | 100.0 | 100.3 | 98.1 | 100.1 | 100.3 | 81.2 | 82.2 | 93.5 | 118.7 | 118.1 | - |
| 3162 | Footwear. | 76.7 | 100.0 | 102.1 | 117.3 | 122.3 | 130.7 | 102.7 | 104.8 | 100.7 | 105.6 | 115.4 |  |
| 3169 | Other leather products. | 92.3 | 100.0 | 113.3 | 110.4 | 122.8 | 117.6 | 96.2 | 100.3 | 127.7 | 149.7 | 174.6 |  |
| 321 | Wood products. | 95.0 | 100.0 | 101.2 | 102.9 | 102.7 | 106.1 | 113.6 | 114.7 | 115.6 | 123.1 | 124.9 | - |
| 3211 | Sawmills and wood preservation. | 77.6 | 100.0 | 100.3 | 104.7 | 105.4 | 108.8 | 114.4 | 121.3 | 118.2 | 127.3 | 129.7 | - |
| 3212 | Plywood and engineered wood products | 99.7 | 100.0 | 105.1 | 98.7 | 98.8 | 105.2 | 110.3 | 107.0 | 102.9 | 110.2 | 117.4 | - |
| 3219 | Other wood products.. | 103.0 | 100.0 | 101.0 | 104.5 | 103.0 | 104.7 | 113.9 | 113.9 | 119.6 | 126.3 | 125.3 | - |
| 322 | Paper and paper products. | 85.8 | 100.0 | 102.3 | 104.1 | 106.3 | 106.8 | 114.2 | 118.9 | 123.4 | 124.5 | 127.3 | - |
| 3221 | Pulp, paper, and paperboard mills. | 81.7 | 100.0 | 102.5 | 111.1 | 116.3 | 119.9 | 133.1 | 141.4 | 148.0 | 147.7 | 151.1 | - |
| 3222 | Converted paper products. | 89.0 | 100.0 | 102.5 | 100.1 | 101.1 | 100.5 | 105.6 | 109.6 | 112.9 | 114.8 | 116.6 | - |
| 323 | Printing and related support activities. | 97.6 | 100.0 | 100.6 | 102.8 | 104.6 | 105.3 | 110.2 | 111.1 | 114.5 | 119.5 | 121.1 | - |
| 3231 | Printing and related support activities. | 97.6 | 100.0 | 100.6 | 102.8 | 104.6 | 105.3 | 110.2 | 111.1 | 114.5 | 119.5 | 121.1 | - |
| 324 | Petroleum and coal products. | 71.1 | 100.0 | 102.2 | 107.1 | 113.5 | 112.1 | 118.0 | 119.2 | 123.4 | 123.8 | 122.8 | - |
| 3241 | Petroleum and coal products. | 71.1 | 100.0 | 102.2 | 107.1 | 113.5 | 112.1 | 118.0 | 119.2 | 123.4 | 123.8 | 122.8 | - |
| 325 | Chemicals. | 85.9 | 100.0 | 99.9 | 103.5 | 106.6 | 105.3 | 114.2 | 118.4 | 125.8 | 134.1 | 137.5 | - |
| 3251 | Basic chemicals.. | 94.6 | 100.0 | 102.8 | 115.7 | 117.5 | 108.8 | 123.8 | 136.0 | 154.4 | 165.2 | 169.3 | - |
| 3252 | Resin, rubber, and artificial fibers. | 77.4 | 100.0 | 106.0 | 109.8 | 109.8 | 106.2 | 123.1 | 122.2 | 121.9 | 130.5 | 134.9 | - |
| 3253 | Agricultural chemicals.. | 80.4 | 100.0 | 98.8 | 87.4 | 92.1 | 90.0 | 99.2 | 108.4 | 117.4 | 132.5 | 130.7 | - |
| 3254 | Pharmaceuticals and medicines. | 87.3 | 100.0 | 93.8 | 95.7 | 95.6 | 99.5 | 97.4 | 101.5 | 104.1 | 110.0 | 115.0 | - |
| 3255 | Paints, coatings, and adhesives.. | 89.4 | 100.0 | 100.1 | 100.3 | 100.8 | 105.6 | 108.9 | 115.2 | 119.1 | 120.8 | 115.4 | - |
| 3256 | Soap, cleaning compounds, and toiletries. | 84.4 | 100.0 | 98.0 | 93.0 | 102.8 | 106.0 | 124.1 | 118.2 | 135.3 | 153.1 | 162.9 | - |
| 3259 | Other chemical products and preparations. | 75.4 | 100.0 | 99.2 | 109.3 | 119.7 | 110.4 | 120.8 | 123.0 | 121.3 | 123.5 | 118.1 | - |
| 326 | Plastics and rubber products. | 80.9 | 100.0 | 103.2 | 107.9 | 110.2 | 112.3 | 120.8 | 126.0 | 128.7 | 132.6 | 132.8 | - |
| 3261 | Plastics products. | 83.1 | 100.0 | 104.2 | 109.9 | 112.3 | 114.6 | 123.8 | 129.5 | 131.9 | 135.6 | 133.8 | - |
| 3262 | Rubber products.. | 75.5 | 100.0 | 99.4 | 100.2 | 101.7 | 102.3 | 107.1 | 111.0 | 114.4 | 118.7 | 124.9 | - |
| 327 | Nonmetallic mineral products.. | 87.6 | 100.0 | 103.7 | 104.3 | 102.5 | 100.0 | 104.6 | 111.2 | 108.7 | 115.3 | 114.6 | - |
| 3271 | Clay products and refractories.. | 86.9 | 100.0 | 101.2 | 102.7 | 102.9 | 98.4 | 99.7 | 103.5 | 109.2 | 114.6 | 111.9 | - |

50. Continued - Annual indexes of output per hour for selected NAICS industries

| NAICS | Industry | 1987 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3272 | Glass and glass products. | 82.4 | 100.0 | 101.3 | 106.7 | 108.1 | 102.9 | 107.5 | 115.3 | 113.8 | 123.1 | 132.9 |  |
| 3273 | Cement and concrete products. | 93.6 | 100.0 | 105.1 | 105.9 | 101.6 | 98.0 | 102.4 | 108.3 | 102.8 | 106.5 | 103.1 |  |
| 3274 | Lime and gypsum products. | 88.2 | 100.0 | 114.9 | 104.4 | 98.5 | 101.8 | 99.0 | 107.1 | 104.7 | 119.3 | 116.5 |  |
| 3279 | Other nonmetallic mineral products. | 83.0 | 100.0 | 99.0 | 95.6 | 96.6 | 98.6 | 106.9 | 113.6 | 110.6 | 118.9 | 116.3 |  |
| 331 | Primary metals. | 81.0 | 100.0 | 102.0 | 102.8 | 101.3 | 101.0 | 115.2 | 118.2 | 132.0 | 135.5 | 134.3 |  |
| 3311 | Iron and steel mills and ferroalloy production | 64.8 | 100.0 | 101.3 | 104.8 | 106.0 | 104.4 | 125.1 | 130.4 | 164.9 | 163.1 | 163.5 |  |
| 3312 | Steel products from purchased steel. | 79.7 | 100.0 | 100.6 | 93.8 | 96.4 | 97.9 | 96.8 | 93.9 | 88.6 | 90.8 | 86.1 |  |
| 3313 | Alumina and aluminum production. | 90.5 | 100.0 | 101.5 | 103.5 | 96.6 | 96.2 | 124.5 | 126.8 | 137.3 | 154.4 | 151.7 |  |
| 3314 | Other nonferrous metal production. | 96.8 | 100.0 | 111.3 | 108.4 | 102.3 | 99.5 | 107.6 | 120.6 | 123.1 | 122.3 | 115.7 |  |
| 3315 | Foundries. | 81.4 | 100.0 | 101.2 | 104.5 | 103.6 | 107.4 | 116.7 | 116.3 | 123.9 | 128.6 | 131.8 | - |
| 332 | Fabricated metal products. | 87.3 | 100.0 | 101.3 | 103.0 | 104.8 | 104.8 | 110.9 | 114.4 | 113.4 | 116.9 | 119.7 |  |
| 3321 | Forging and stamping. | 85.4 | 100.0 | 103.5 | 110.9 | 121.1 | 120.7 | 125.0 | 133.1 | 142.0 | 147.6 | 152.7 |  |
| 3322 | Cutlery and handtools. | 86.3 | 100.0 | 99.9 | 108.0 | 105.9 | 110.3 | 113.4 | 113.2 | 107.6 | 114.1 | 116.6 |  |
| 3323 | Architectural and structural metals. | 88.7 | 100.0 | 100.9 | 102.0 | 100.6 | 101.6 | 106.0 | 108.8 | 105.4 | 109.2 | 113.5 |  |
| 3324 | Boilers, tanks, and shipping containers | 86.0 | 100.0 | 100.0 | 96.5 | 94.2 | 94.4 | 98.9 | 101.6 | 93.6 | 95.7 | 96.6 | - |
| 3325 | Hardware. | 88.7 | 100.0 | 100.5 | 105.2 | 114.3 | 113.5 | 115.5 | 125.4 | 126.0 | 131.8 | 131.1 |  |
| 3326 | Spring and wire products. | 82.2 | 100.0 | 110.6 | 111.4 | 112.6 | 111.9 | 125.7 | 135.3 | 133.8 | 143.2 | 140.6 |  |
| 3327 | Machine shops and threaded products | 76.9 | 100.0 | 99.6 | 104.2 | 108.2 | 108.8 | 114.8 | 115.7 | 114.6 | 116.3 | 117.1 |  |
| 3328 | Coating, engraving, and heat treating metal | 75.5 | 100.0 | 100.9 | 101.0 | 105.5 | 107.3 | 116.1 | 118.3 | 125.3 | 136.5 | 135.5 |  |
| 3329 | Other fabricated metal products... | 91.0 | 100.0 | 101.9 | 99.6 | 99.9 | 96.7 | 106.5 | 111.6 | 111.2 | 112.5 | 117.7 |  |
| 333 | Machinery. | 82.3 | 100.0 | 102.9 | 104.7 | 111.5 | 109.0 | 116.6 | 125.2 | 127.0 | 134.1 | 137.4 |  |
| 3331 | Agriculture, construction, and mining machinery.... | 74.6 | 100.0 | 103.3 | 94.3 | 100.3 | 100.3 | 103.7 | 116.1 | 125.4 | 129.4 | 129.1 |  |
| 3332 | Industrial machinery... | 75.1 | 100.0 | 95.1 | 105.8 | 130.0 | 105.8 | 117.6 | 117.0 | 126.5 | 122.4 | 135.3 |  |
| 3333 | Commercial and service industry machinery. | 87.0 | 100.0 | 106.3 | 110.0 | 101.3 | 94.5 | 97.8 | 104.7 | 106.5 | 115.1 | 122.3 |  |
| 3334 | HVAC and commercial refrigeration equipment | 84.0 | 100.0 | 106.2 | 110.2 | 107.9 | 110.8 | 118.6 | 130.0 | 132.8 | 137.1 | 133.4 | - |
| 3335 | Metalworking machinery. | 85.1 | 100.0 | 99.1 | 100.3 | 106.1 | 103.3 | 112.7 | 115.2 | 117.1 | 127.3 | 128.3 |  |
| 3336 | Turbine and power transmission equipment. | 80.2 | 100.0 | 105.0 | 110.8 | 114.9 | 126.9 | 130.7 | 143.0 | 126.4 | 132.5 | 128.5 |  |
| 3339 | Other general purpose machinery. | 83.5 | 100.0 | 103.7 | 106.0 | 113.7 | 110.5 | 117.9 | 128.1 | 127.1 | 138.4 | 143.8 |  |
| 334 | Computer and electronic products. | 28.4 | 100.0 | 118.4 | 149.5 | 181.8 | 181.4 | 188.0 | 217.2 | 244.3 | 259.6 | 282.2 |  |
| 3341 | Computer and peripheral equipment | 11.0 | 100.0 | 140.4 | 195.9 | 235.0 | 252.2 | 297.4 | 373.4 | 415.1 | 543.3 | 715.7 | - |
| 3342 | Communications equipment. | 39.8 | 100.0 | 107.1 | 135.4 | 164.1 | 152.9 | 128.2 | 143.1 | 148.4 | 143.7 | 178.2 |  |
| 3343 | Audio and video equipment. | 61.7 | 100.0 | 105.4 | 119.6 | 126.3 | 128.4 | 150.1 | 171.0 | 239.3 | 230.2 | 240.7 |  |
| 3344 | Semiconductors and electronic component | 17.0 | 100.0 | 125.8 | 173.9 | 232.2 | 230.0 | 263.1 | 321.6 | 360.0 | 381.6 | 380.4 |  |
| 3345 | Electronic instruments... | 70.2 | 100.0 | 102.3 | 106.7 | 116.7 | 119.3 | 118.1 | 125.3 | 145.4 | 146.6 | 150.6 |  |
| 3346 | Magnetic media manufacturing and reproduction | 85.7 | 100.0 | 106.4 | 108.9 | 105.8 | 99.8 | 110.4 | 126.1 | 142.6 | 142.1 | 137.7 | - |
| 335 | Electrical equipment and appliances | 75.5 | 100.0 | 103.9 | 106.6 | 111.5 | 111.4 | 113.4 | 117.2 | 123.3 | 130.0 | 129.4 |  |
| 3351 | Electric lighting equipment. | 91.1 | 100.0 | 104.4 | 102.8 | 102.0 | 106.7 | 112.4 | 111.4 | 122.7 | 130.3 | 136.7 |  |
| 3352 | Household appliances. | 73.3 | 100.0 | 105.2 | 104.0 | 117.2 | 124.6 | 132.3 | 146.7 | 159.6 | 164.5 | 173.2 |  |
| 3353 | Electrical equipment. | 68.7 | 100.0 | 100.2 | 98.7 | 99.4 | 101.0 | 101.8 | 103.4 | 110.8 | 118.5 | 118.1 |  |
| 3359 | Other electrical equipment and components. | 78.8 | 100.0 | 105.8 | 114.7 | 119.7 | 113.1 | 114.0 | 116.2 | 115.6 | 121.6 | 115.7 | - |
| 336 | Transportation equipment. | 81.6 | 100.0 | 109.7 | 118.0 | 109.4 | 113.6 | 127.4 | 137.5 | 134.9 | 140.9 | 142.4 |  |
| 3361 | Motor vehicles.. | 75.4 | 100.0 | 113.4 | 122.6 | 109.7 | 110.0 | 126.0 | 140.7 | 142.1 | 148.4 | 163.8 |  |
| 3362 | Motor vehicle bodies and trailers | 85.0 | 100.0 | 102.9 | 103.1 | 98.8 | 88.7 | 105.4 | 109.8 | 110.7 | 114.2 | 110.9 |  |
| 3363 | Motor vehicle parts.. | 78.7 | 100.0 | 104.9 | 110.0 | 112.3 | 114.8 | 130.5 | 137.0 | 138.0 | 144.1 | 143.7 |  |
| 3364 | Aerospace products and parts. | 87.2 | 100.0 | 119.1 | 120.8 | 103.4 | 115.7 | 118.6 | 119.0 | 113.2 | 125.0 | 117.9 | - |
| 3365 | Railroad rolling stock.. | 55.6 | 100.0 | 103.3 | 116.5 | 118.5 | 126.1 | 146.1 | 139.8 | 131.5 | 137.3 | 148.0 |  |
| 3366 | Ship and boat building. | 95.5 | 100.0 | 99.3 | 112.0 | 122.0 | 121.5 | 131.0 | 133.9 | 138.7 | 131.7 | 127.3 |  |
| 3369 | Other transportation equipment.. | 73.8 | 100.0 | 111.5 | 113.8 | 132.4 | 140.2 | 150.9 | 163.0 | 168.3 | 184.1 | 197.8 |  |
| 337 | Furniture and related products.. | 84.8 | 100.0 | 102.0 | 101.6 | 101.4 | 103.4 | 112.6 | 117.0 | 118.4 | 125.0 | 127.8 |  |
| 3371 | Household and institutional furniture. | 85.2 | 100.0 | 102.2 | 103.1 | 101.9 | 105.5 | 111.8 | 114.7 | 113.6 | 120.8 | 124.0 | - |
| 3372 | Office furniture and fixtures. | 85.8 | 100.0 | 100.0 | 98.2 | 100.2 | 98.0 | 115.9 | 125.2 | 130.7 | 134.9 | 134.4 |  |
| 3379 | Other furniture related products. | 86.3 | 100.0 | 106.9 | 102.0 | 99.5 | 105.0 | 110.2 | 110.0 | 121.3 | 128.3 | 130.8 |  |
| 339 | Miscellaneous manufacturing. | 81.1 | 100.0 | 105.2 | 107.8 | 114.7 | 116.6 | 124.2 | 132.7 | 134.9 | 144.6 | 149.8 |  |
| 3391 | Medical equipment and supplies.. | 76.3 | 100.0 | 109.0 | 111.1 | 115.5 | 120.7 | 129.1 | 138.9 | 139.5 | 148.5 | 152.8 |  |
| 3399 | Other miscellaneous manufacturing | 85.4 | 100.0 | 102.1 | 105.0 | 113.6 | 111.8 | 118.0 | 124.7 | 128.6 | 137.8 | 143.2 | - |
|  | Wholesale trade |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | Wholesale trade. | 73.2 | 100.0 | 103.4 | 111.2 | 116.5 | 117.7 | 123.3 | 127.5 | 134.8 | 135.8 | 138.6 | 141.5 |
| 423 | Durable goods... | 62.3 | 100.0 | 107.1 | 119.2 | 125.0 | 128.9 | 140.2 | 146.6 | 161.5 | 167.4 | 174.5 | 178.4 |
| 4231 | Motor vehicles and parts.. | 74.5 | 100.0 | 106.4 | 120.4 | 116.7 | 120.0 | 133.4 | 137.6 | 143.5 | 146.5 | 162.7 | 161.8 |
| 4232 | Furniture and furnishings. | 80.5 | 100.0 | 99.9 | 102.3 | 112.5 | 110.7 | 116.0 | 123.9 | 130.0 | 127.1 | 130.6 | 131.1 |
| 4233 | Lumber and construction supplies. | 109.1 | 100.0 | 105.4 | 109.3 | 107.7 | 116.6 | 123.9 | 133.0 | 139.4 | 140.2 | 135.4 | 124.5 |
| 4234 | Commercial equipment. | 28.0 | 100.0 | 125.5 | 162.0 | 181.9 | 217.9 | 264.9 | 299.1 | 352.8 | 402.0 | 447.3 | 508.5 |
| 4235 | Metals and minerals. | 101.7 | 100.0 | 100.9 | 94.0 | 93.9 | 94.4 | 96.3 | 97.5 | 106.3 | 104.2 | 99.9 | 94.4 |
| 4236 | Electric goods... | 42.8 | 100.0 | 105.9 | 127.5 | 152.8 | 147.6 | 159.5 | 165.7 | 194.1 | 204.6 | 222.1 | 235.1 |
| 4237 | Hardware and plumbing. | 82.2 | 100.0 | 101.8 | 104.4 | 103.7 | 100.5 | 102.6 | 103.9 | 107.3 | 104.5 | 105.6 | 105.8 |
| 4238 | Machinery and supplies.............................. | 74.1 | 100.0 | 104.3 | 102.9 | 105.5 | 102.9 | 100.3 | 103.4 | 112.4 | 117.6 | 121.2 | 121.5 |

50. Continued - Annual indexes of output per hour for selected NAICS industries
[1997=100]

| NAICS | Industry | 1987 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4239 | Miscellaneous durable goods | 89.8 | 100.0 | 100.8 | 113.7 | 114.7 | 116.8 | 124.6 | 119.6 | 135.0 | 135.5 | 122.3 | 118.4 |
| 424 | Nondurable goods. | 91.0 | 100.0 | 99.1 | 100.8 | 105.1 | 105.1 | 105.8 | 110.5 | 113.6 | 114.3 | 113.1 | 115.0 |
| 4241 | Paper and paper products | 85.6 | 100.0 | 98.4 | 100.1 | 100.9 | 104.6 | 116.6 | 119.7 | 130.9 | 141.7 | 136.9 | 146.5 |
| 4242 | Druggists' goods. | 70.7 | 100.0 | 94.2 | 93.1 | 85.9 | 84.9 | 89.8 | 100.2 | 105.8 | 112.1 | 109.7 | 104.3 |
| 4243 | Apparel and piece goods. | 86.3 | 100.0 | 103.6 | 105.1 | 108.8 | 115.2 | 122.8 | 125.9 | 131.0 | 140.8 | 146.6 | 148.3 |
| 4244 | Grocery and related products | 87.9 | 100.0 | 101.1 | 101.0 | 102.4 | 101.9 | 98.6 | 104.9 | 104.1 | 103.4 | 103.8 | 109.7 |
| 4245 | Farm product raw materials. | 81.6 | 100.0 | 94.3 | 101.6 | 105.1 | 102.1 | 98.1 | 98.2 | 109.3 | 111.0 | 117.9 | 125.1 |
| 4246 | Chemicals. | 90.4 | 100.0 | 97.1 | 93.3 | 87.9 | 85.3 | 89.1 | 92.2 | 91.2 | 87.4 | 85.1 | 86.4 |
| 4247 | Petroleum. | 84.4 | 100.0 | 88.5 | 102.9 | 138.1 | 140.6 | 153.6 | 151.1 | 163.2 | 153.3 | 149.4 | 149.1 |
| 4248 | Alcoholic beverages | 99.3 | 100.0 | 106.5 | 105.6 | 108.4 | 106.4 | 106.8 | 107.9 | 103.1 | 104.0 | 107.4 | 108.5 |
| 4249 | Miscellaneous nondurable goods. | 111.2 | 100.0 | 105.4 | 106.8 | 115.0 | 111.9 | 106.1 | 109.8 | 120.7 | 124.1 | 121.9 | 117.1 |
| 425 | Electronic markets and agents and brokers | 64.3 | 100.0 | 102.4 | 112.3 | 120.1 | 110.7 | 109.8 | 104.5 | 101.6 | 91.5 | 95.0 | 98.3 |
| 4251 | Electronic markets and agents and brokers. | 64.3 | 100.0 | 102.4 | 112.3 | 120.1 | 110.7 | 109.8 | 104.5 | 101.6 | 91.5 | 95.0 | 98.3 |
|  | Retail trade |  |  |  |  |  |  |  |  |  |  |  |  |
| 44-45 | Retail trade. | 79.2 | 100.0 | 105.7 | 112.7 | 116.1 | 120.1 | 125.6 | 131.6 | 137.9 | 141.3 | 147.3 | 152.7 |
| 441 | Motor vehicle and parts dealers | 78.4 | 100.0 | 106.4 | 115.1 | 114.3 | 116.0 | 119.9 | 124.3 | 127.3 | 126.7 | 129.3 | 132.2 |
| 4411 | Automobile dealers. | 79.2 | 100.0 | 106.5 | 116.3 | 113.7 | 115.5 | 117.2 | 119.5 | 124.7 | 123.5 | 125.8 | 129.8 |
| 4412 | Other motor vehicle dealers | 74.1 | 100.0 | 109.6 | 114.8 | 115.3 | 124.6 | 133.6 | 133.8 | 143.3 | 134.6 | 142.6 | 146.9 |
| 4413 | Auto parts, accessories, and ti | 71.8 | 100.0 | 105.1 | 107.6 | 108.4 | 101.3 | 107.7 | 115.1 | 110.1 | 115.5 | 115.9 | 112.0 |
| 442 | Furniture and home furnishings s | 75.1 | 100.0 | 104.1 | 110.8 | 115.9 | 122.4 | 129.3 | 134.6 | 146.7 | 150.5 | 158.2 | 168.7 |
| 4421 | Furniture stores. | 77.3 | 100.0 | 104.3 | 107.5 | 112.0 | 119.7 | 125.2 | 128.8 | 139.2 | 142.3 | 151.1 | 156.6 |
| 4422 | Home furnishings stores. | 71.3 | 100.0 | 104.1 | 115.2 | 121.0 | 126.1 | 134.9 | 142.6 | 156.8 | 161.4 | 168.3 | 184.6 |
| 443 | Electronics and appliance stores | 38.0 | 100.0 | 122.6 | 150.6 | 173.7 | 196.7 | 233.5 | 292.7 | 334.1 | 367.5 | 412.0 | 471.1 |
| 4431 | Electronics and appliance stores | 38.0 | 100.0 | 122.6 | 150.6 | 173.7 | 196.7 | 233.5 | 292.7 | 334.1 | 367.5 | 412.0 | 471.1 |
| 444 | Building material and garden supply stores | 75.8 | 100.0 | 107.4 | 113.8 | 113.3 | 116.8 | 120.8 | 127.1 | 134.6 | 134.8 | 137.9 | 142.2 |
| 4441 | Building material and supplies dealers....... | 77.6 | 100.0 | 108.3 | 115.3 | 115.1 | 116.7 | 121.3 | 127.4 | 134.0 | 134.9 | 138.0 | 140.0 |
| 4442 | Lawn and garden equipment and supplies stores.. | 66.9 | 100.0 | 102.4 | 105.5 | 103.1 | 118.4 | 118.3 | 125.7 | 140.1 | 134.7 | 138.3 | 162.1 |
| 445 | Food and beverage stores. | 110.8 | 100.0 | 99.9 | 101.9 | 101.0 | 103.8 | 104.7 | 107.2 | 112.9 | 117.9 | 120.6 | 123.8 |
| 4451 | Grocery stores.... | 111.1 | 100.0 | 99.6 | 102.5 | 101.1 | 103.3 | 104.8 | 106.7 | 112.2 | 116.8 | 118.2 | 120.6 |
| 4452 | Specialty food stores. | 138.5 | 100.0 | 100.5 | 96.4 | 98.5 | 108.2 | 105.3 | 112.2 | 120.3 | 125.3 | 139.4 | 145.4 |
| 4453 | Beer, wine, and liquor stores | 93.6 | 100.0 | 104.6 | 99.1 | 105.7 | 107.1 | 110.1 | 117.0 | 127.8 | 139.8 | 146.1 | 156.8 |
| 446 | Health and personal care stores. | 84.0 | 100.0 | 104.0 | 107.1 | 112.2 | 116.2 | 122.9 | 129.5 | 134.3 | 133.4 | 139.3 | 139.0 |
| 4461 | Health and personal care stores. | 84.0 | 100.0 | 104.0 | 107.1 | 112.2 | 116.2 | 122.9 | 129.5 | 134.3 | 133.4 | 139.3 | 139.0 |
| 447 | Gasoline stations.. | 83.9 | 100.0 | 106.7 | 110.7 | 107.7 | 112.9 | 125.1 | 119.9 | 122.2 | 124.7 | 124.9 | 129.3 |
| 4471 | Gasoline stations. | 83.9 | 100.0 | 106.7 | 110.7 | 107.7 | 112.9 | 125.1 | 119.9 | 122.2 | 124.7 | 124.9 | 129.3 |
| 448 | Clothing and clothing accessories star | 66.3 | 100.0 | 106.3 | 114.0 | 123.5 | 126.4 | 131.3 | 138.9 | 139.1 | 147.6 | 162.4 | 176.6 |
| 4481 | Clothing stores. | 67.1 | 100.0 | 108.7 | 114.2 | 125.0 | 130.3 | 136.0 | 141.8 | 140.9 | 153.0 | 169.4 | 186.9 |
| 4482 | Shoe stores. | 65.3 | 100.0 | 94.2 | 104.9 | 110.0 | 111.5 | 125.2 | 132.5 | 124.8 | 132.0 | 145.1 | 141.6 |
| 4483 | Jewelry, luggage, and leather goods stores | 64.5 | 100.0 | 108.7 | 122.5 | 130.5 | 123.9 | 118.7 | 132.9 | 144.3 | 138.9 | 148.3 | 162.9 |
| 451 | Sporting goods, hobby, book, and music stores... | 74.9 | 100.0 | 107.9 | 114.0 | 121.1 | 127.1 | 127.6 | 131.5 | 151.1 | 163.5 | 170.5 | 167.8 |
| 4511 | Sporting goods and musical instrument stores. | 73.2 | 100.0 | 111.5 | 119.8 | 129.4 | 134.5 | 136.0 | 141.1 | 166.0 | 179.3 | 191.4 | 189.2 |
| 4512 | Book, periodical, and music stores. | 78.9 | 100.0 | 101.0 | 103.2 | 105.8 | 113.0 | 111.6 | 113.7 | 123.6 | 134.3 | 132.4 | 128.3 |
| 452 | General merchandise stores. | 73.5 | 100.0 | 105.3 | 113.4 | 120.2 | 124.8 | 129.1 | 136.9 | 140.7 | 145.0 | 149.8 | 152.5 |
| 4521 | Department stores | 87.2 | 100.0 | 100.4 | 104.5 | 106.2 | 103.8 | 102.0 | 106.8 | 109.0 | 110.0 | 112.7 | 107.0 |
| 4529 | Other general merchandise stores. | 54.8 | 100.0 | 114.7 | 131.0 | 147.3 | 164.7 | 179.3 | 188.8 | 192.9 | 199.8 | 204.8 | 219.3 |
| 453 | Miscellaneous store retailers........ | 65.1 | 100.0 | 108.9 | 111.3 | 114.1 | 112.6 | 119.1 | 126.1 | 130.8 | 139.2 | 155.0 | 160.8 |
| 4531 | Florists.. | 77.6 | 100.0 | 102.3 | 116.2 | 115.2 | 102.7 | 113.8 | 108.9 | 103.4 | 123.7 | 145.1 | 132.9 |
| 4532 | Office supplies, stationery and gift st | 61.4 | 100.0 | 111.5 | 119.2 | 127.3 | 132.3 | 141.5 | 153.9 | 172.8 | 182.4 | 204.8 | 224.5 |
| 4533 | Used merchandise stores. | 64.5 | 100.0 | 119.1 | 113.4 | 116.5 | 121.9 | 142.0 | 149.7 | 152.6 | 156.6 | 167.6 | 182.0 |
| 4539 | Other miscellaneous store retailers | 68.3 | 100.0 | 105.3 | 103.0 | 104.4 | 96.9 | 94.4 | 99.9 | 96.9 | 101.6 | 114.0 | 115.4 |
| 454 | Nonstore retailers. | 50.7 | 100.0 | 114.3 | 128.9 | 152.2 | 163.6 | 182.1 | 195.5 | 215.5 | 220.6 | 261.9 | 290.8 |
| 4541 | Electronic shopping and mail-order houses | 39.4 | 100.0 | 120.2 | 142.6 | 160.2 | 179.6 | 212.7 | 243.6 | 273.0 | 290.1 | 355.9 | 397.2 |
| 4542 | Vending machine operators. | 95.5 | 100.0 | 106.3 | 105.4 | 111.1 | 95.7 | 91.3 | 102.3 | 110.5 | 114.4 | 125.7 | 132.4 |
| 4543 | Direct selling establishments | 70.8 | 100.0 | 101.9 | 104.3 | 122.5 | 127.9 | 135.1 | 127.0 | 130.3 | 119.6 | 127.5 | 138.4 |
| 481 | Transportation and warehousing Air transportation. | 78.0 | 100.0 | 96.4 | 95.9 | 97.7 | 92.5 | 101.7 | 112.1 | 126.3 | 135.9 | 142.9 | 145.4 |
| 482111 | Line-haul railroads. | 58.9 | 100.0 | 102.1 | 105.5 | 114.3 | 121.9 | 131.9 | 138.5 | 141.4 | 136.3 | 144.2 | 137.7 |
| 48412 | General freight trucking, long-distance.. | 85.7 | 100.0 | 99.4 | 99.1 | 101.9 | 103.2 | 107.0 | 110.7 | 110.7 | 113.3 | 113.3 | 115.3 |
| 48421 | Used household and office goods moving | 106.7 | 100.0 | 91.0 | 96.1 | 94.8 | 84.0 | 81.6 | 86.2 | 88.6 | 88.5 | 88.9 | 93.2 |
| 491 | U.S. Postal service.. | 90.9 | 100.0 | 101.6 | 102.8 | 105.5 | 106.3 | 106.4 | 107.8 | 110.0 | 111.2 | 111.3 | 112.0 |
| 4911 | U.S. Postal service. | 90.9 | 100.0 | 101.6 | 102.8 | 105.5 | 106.3 | 106.4 | 107.8 | 110.0 | 111.2 | 111.3 | 112.0 |
| 492 | Couriers and messengers. | 148.3 | 100.0 | 114.8 | 122.2 | 128.8 | 132.6 | 143.2 | 146.4 | 138.5 | 136.5 | 140.3 | 132.5 |
| 493 | Warehousing and storage.. | - | 100.0 | 106.4 | 107.7 | 109.3 | 115.3 | 122.1 | 124.8 | 122.5 | 123.5 | 119.4 | 115.5 |
| 4931 | Warehousing and storage. |  | 100.0 | 106.4 | 107.7 | 109.3 | 115.3 | 122.1 | 124.8 | 122.5 | 123.5 | 119.4 | 115.5 |
| 49311 | General warehousing and storage.. | - | 100.0 | 112.1 | 112.9 | 115.8 | 126.3 | 136.1 | 138.9 | 130.9 | 132.0 | 130.1 | 124.2 |
| 49312 | Refrigerated warehousing and storage... |  | 100.0 | 97.9 | 103.4 | 95.4 | 85.4 | 87.2 | 92.2 | 99.3 | 88.8 | 80.4 | 85.1 |

50. Continued - Annual indexes of output per hour for selected NAICS industries

| NAICS | Industry | 1987 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Information |  |  |  |  |  |  |  |  |  |  |  |  |
| 511 | Publishing industries, except internet. | 64.1 | 100.0 | 116.1 | 116.3 | 117.1 | 116.6 | 117.2 | 126.4 | 130.7 | 136.7 | 144.3 | 150.1 |
| 5111 | Newspaper, book, and directory publishers. | 105.0 | 100.0 | 103.9 | 104.1 | 107.7 | 105.8 | 104.7 | 109.6 | 106.7 | 107.9 | 112.2 | 114.1 |
| 5112 | Software publishers.. | 10.2 | 100.0 | 134.8 | 129.2 | 119.2 | 117.4 | 122.1 | 138.1 | 160.6 | 173.5 | 178.7 | 184.6 |
| 51213 | Motion picture and video exhibition. | 90.7 | 100.0 | 99.8 | 101.8 | 106.5 | 101.6 | 99.8 | 100.4 | 103.6 | 102.4 | 107.3 | 110.6 |
| 515 | Broadcasting, except internet.... | 99.5 | 100.0 | 100.8 | 102.9 | 103.6 | 99.2 | 104.0 | 107.9 | 112.5 | 116.1 | 123.1 | 132.8 |
| 5151 | Radio and television broadcasting. | 98.1 | 100.0 | 91.5 | 92.6 | 92.1 | 89.6 | 95.1 | 94.6 | 96.6 | 99.0 | 106.8 | 110.8 |
| 5152 | Cable and other subscription programming. | 105.6 | 100.0 | 136.2 | 139.1 | 141.2 | 128.1 | 129.8 | 146.0 | 158.7 | 163.7 | 168.1 | 192.5 |
| 5171 | Wired telecommunications carriers. | 56.9 | 100.0 | 107.7 | 116.7 | 122.7 | 116.7 | 124.1 | 130.5 | 131.9 | 138.3 | 142.4 | 142.2 |
| 5172 | Wireless telecommunications carriers. | 75.6 | 100.0 | 110.5 | 145.2 | 152.8 | 191.9 | 217.9 | 242.6 | 292.4 | 381.9 | 431.6 | 456.5 |
| 5175 | Cable and other program distribution.. | 105.2 | 100.0 | 97.1 | 95.8 | 91.6 | 87.7 | 95.0 | 101.3 | 113.8 | 110.5 | 110.7 | 123.8 |
| 52211 | Finance and insurance Commercial banking | 73.6 | 100.0 | 97.7 | 100.8 | 104.8 | 102.4 | 106.9 | 111.7 | 117.8 | 119.3 | 122.7 | 123.8 |
| 532111 | Real estate and rental and leasing Passenger car rental | 92.7 | 100.0 | 100.1 | 112.2 | 112.3 | 111.1 | 114.6 | 121.1 | 118.2 | 109.8 | 111.4 | 130.1 |
| 53212 | Truck, trailer, and RV rental and leasing. | 60.3 | 100.0 | 115.4 | 121.0 | 121.8 | 113.5 | 114.0 | 116.3 | 137.7 | 147.1 | 168.9 | 173.8 |
| 53223 | Video tape and disc rental..................... | 77.0 | 100.0 | 113.2 | 129.4 | 134.9 | 133.3 | 130.3 | 148.5 | 154.5 | 144.2 | 176.2 | 223.0 |
| 541213 | Professional and technical services Tax preparation services. | 82.9 | 100.0 | 107.6 | 105.8 | 100.9 | 94.4 | 111.4 | 110.0 | 99.9 | 103.7 | 103.2 | 117.4 |
| 54131 | Architectural services... | 90.0 | 100.0 | 111.4 | 106.8 | 107.6 | 111.0 | 107.6 | 112.6 | 118.3 | 119.8 | 118.9 | 124.5 |
| 54133 | Engineering services. | 90.2 | 100.0 | 98.2 | 98.0 | 102.0 | 100.1 | 100.5 | 100.5 | 107.8 | 112.3 | 113.1 | 110.0 |
| 54181 | Advertising agencies. | 95.9 | 100.0 | 89.2 | 97.9 | 107.5 | 106.9 | 113.1 | 121.1 | 133.5 | 132.9 | 134.1 | 139.1 |
| 541921 | Photography studios, portrait. | 98.1 | 100.0 | 124.8 | 109.8 | 108.9 | 102.2 | 97.6 | 104.2 | 93.1 | 93.6 | 98.8 | 104.5 |
| 56131 | Administrative and waste services Employment placement agencies. |  | 100.0 | 86.8 | 93.2 | 89.8 | 99.6 | 116.8 | 115.4 | 119.8 | 116.0 | 123.8 | 132.8 |
| 56151 | Travel agencies. | 89.3 | 100.0 | 111.4 | 115.5 | 119.4 | 115.2 | 127.6 | 147.2 | 167.2 | 179.2 | 183.4 | 190.6 |
| 56172 | Janitorial services. | 75.1 | 100.0 | 95.3 | 98.6 | 101.0 | 102.1 | 105.6 | 118.8 | 116.6 | 120.7 | 116.1 | 122.3 |
| 6215 | Health care and social assistance <br> Medical and diagnostic laboratories |  | 100.0 | 118.8 | 124.7 | 131.9 | 135.3 | 137.6 | 140.8 | 140.8 | 137.8 | 139.7 | 136.0 |
| 621511 | Medical laboratories................. |  | 100.0 | 117.2 | 121.4 | 127.4 | 127.7 | 123.1 | 128.6 | 130.7 | 125.8 | 127.3 | 130.0 |
| 621512 | Diagnostic imaging centers. |  | 100.0 | 121.4 | 129.7 | 139.9 | 148.3 | 163.3 | 160.0 | 153.5 | 154.1 | 156.8 | 138.9 |
| 71311 | Arts, entertainment, and recreation Amusement and theme parks. | 111.9 | 100.0 | 110.5 | 105.2 | 106.0 | 93.0 | 106.5 | 113.2 | 101.4 | 109.9 | 97.7 | 103.2 |
| 71395 | Bowling centers.................. | 106.0 | 100.0 | 89.9 | 89.4 | 93.4 | 94.3 | 96.4 | 102.4 | 107.9 | 106.5 | 102.6 | 122.8 |
| 72 | Accommodation and food services Accommodation and food services. | 93.1 | 100.0 | 100.7 | 102.2 | 105.8 | 104.7 | 105.7 | 107.3 | 109.0 | 108.6 | 108.7 | 107.9 |
| 721 | Accommodation................. | 85.8 | 100.0 | 100.0 | 105.3 | 110.3 | 107.9 | 112.0 | 113.1 | 119.2 | 114.3 | 110.8 | 109.0 |
| 7211 | Traveler accommodation. | 84.8 | 100.0 | 99.6 | 105.4 | 111.2 | 108.4 | 112.2 | 113.2 | 119.4 | 114.9 | 110.9 | 109.0 |
| 722 | Food services and drinking places. | 96.0 | 100.0 | 101.0 | 100.9 | 103.5 | 103.8 | 104.4 | 106.3 | 107.0 | 107.9 | 109.1 | 108.7 |
| 7221 | Full-service restaurants. | 92.1 | 100.0 | 100.9 | 100.8 | 103.0 | 103.6 | 104.4 | 104.2 | 104.8 | 105.2 | 105.5 | 104.0 |
| 7222 | Limited-service eating places. | 96.5 | 100.0 | 101.2 | 100.4 | 102.0 | 102.5 | 102.7 | 105.4 | 106.8 | 107.4 | 109.1 | 109.1 |
| 7223 | Special food services. | 89.9 | 100.0 | 100.6 | 105.2 | 115.0 | 115.3 | 114.9 | 117.6 | 118.0 | 119.2 | 117.9 | 120.4 |
| 7224 | Drinking places, alcoholic beverages. | 136.7 | 100.0 | 99.7 | 98.8 | 100.6 | 97.6 | 102.9 | 118.6 | 112.2 | 120.6 | 134.2 | 137.6 |
| 8111 | Other services <br> Automotive repair and maintenance. | 85.9 | 100.0 | 103.6 | 106.1 | 109.4 | 108.9 | 103.7 | 104.1 | 112.0 | 112.1 | 111.4 | 110.4 |
| 81142 | Reupholstery and furniture repair.... | 105.3 | 100.0 | 95.8 | 105.0 | 105.5 | 105.0 | 102.0 | 97.2 | 99.8 | 101.4 | 100.0 | 105.8 |
| 81211 | Hair, nail, and skin care services. | 83.5 | 100.0 | 108.6 | 108.6 | 108.2 | 114.6 | 110.4 | 119.7 | 125.0 | 130.0 | 129.8 | 134.5 |
| 81221 | Funeral homes and funeral services. | 103.7 | 100.0 | 106.8 | 103.3 | 94.8 | 91.8 | 94.6 | 95.7 | 92.9 | 93.1 | 99.5 | 97.0 |
| 8123 | Drycleaning and laundry services. | 97.1 | 100.0 | 100.1 | 105.0 | 107.6 | 110.9 | 112.5 | 103.8 | 110.6 | 121.1 | 119.7 | 114.6 |
| 81292 | Photofinishing............. | 95.8 | 100.0 | 69.3 | 76.3 | 73.8 | 81.2 | 100.5 | 100.5 | 102.0 | 112.4 | 111.3 | 110.2 |

NOTE: Dash indicates data are not available.
51. Unemployment rates, approximating U.S. concepts, 10 countries, seasonally adjusted [Percent]

| Country | 2006 | 2007 | 2006 |  |  |  | 2007 |  |  |  | 2008 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | I | II | III | IV | I | II | III | IV | I | II | III |
| United States.. | 4.6 | 4.6 | 4.7 | 4.7 | 4.7 | 4.4 | 4.5 | 4.5 | 4.7 | 4.8 | 4.9 | 5.3 | 6.0 |
| Canada.. | 5.5 | 5.3 | 5.7 | 5.4 | 5.6 | 5.4 | 5.4 | 5.3 | 5.2 | 5.2 | 5.2 | 5.3 | 5.3 |
| Australia.. | 4.8 | 4.4 | 5.0 | 4.9 | 4.7 | 4.5 | 4.5 | 4.3 | 4.3 | 4.3 | 4.1 | 4.3 | 4.2 |
| Japan.. | 4.2 | 3.9 | 4.2 | 4.2 | 4.2 | 4.1 | 4.0 | 3.8 | 3.8 | 3.9 | 3.9 | 4.0 | 4.1 |
| France...... | 9.5 | 8.6 | 9.9 | 9.5 | 9.5 | 9.2 | 9.1 | 8.7 | 8.5 | 8.2 | 8.0 | 8.0 | 8.3 |
| Germany............. | 10.4 | 8.7 | 11.1 | 10.6 | 10.1 | 9.6 | 9.3 | 8.9 | 8.5 | 8.1 | 7.8 | 7.6 | 7.5 |
| Italy.......... | 6.9 | 6.2 | 7.3 | 6.9 | 6.7 | 6.5 | 6.2 | 6.1 | 6.2 | 6.4 | 6.7 | 6.8 | - |
| Netherlands.......... | 3.9 | 3.2 | 4.3 | 3.9 | 3.8 | 3.8 | 3.6 | 3.2 | 3.0 | 3.0 | 2.9 | 2.8 | 2.5 |
| Sweden.. | 7.0 | 6.1 | 7.3 | 7.3 | 6.7 | 6.5 | 6.4 | 6.1 | 5.8 | 5.9 | 5.8 | 5.8 | 5.9 |
| United Kingdom..... | 5.5 | 5.4 | 5.3 | 5.5 | 5.5 | 5.5 | 5.5 | 5.4 | 5.3 | 5.2 | 5.3 | 5.4 | - |

[^23]http://www.bls.gov/fis/fiscomparelf.htm). For monthly unemployment rates, as well as the quarterly and annual rates published in this table, see the BLS report Unemployment rates in 10 countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted (on the Internet at http://www.bls.gov/fis/flsjec.pdf). Unemployment rates may differ between the two reports mentioned, because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.
52. Annual data: employment status of the working-age population, approximating U.S. concepts, 10 countries

| Employment status and country | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Civilian labor force |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 136,297 | 137,673 | 139,368 | 142,583 | 143,734 | 144,863 | 146,510 | 147,401 | 149,320 | 151,428 | 153,124 |
| Canada. | 14,884 | 15,135 | 15,403 | 15,637 | 15,891 | 16,366 | 16,733 | 16,955 | 17,108 | 17,351 | 17,696 |
| Australia.. | 9,204 | 9,339 | 9,414 | 9,590 | 9,744 | 9,893 | 10,079 | 10,221 | 10,506 | 10,699 | 10,949 |
| Japan.. | 67,200 | 67,240 | 67,090 | 66,990 | 66,860 | 66,240 | 66,010 | 65,770 | 65,850 | 65,960 | 66,080 |
| France. | 25,116 | 25,434 | 25,791 | 26,099 | 26,393 | 26,646 | 26,851 | 26,937 | 27,092 | 27,322 | 27,535 |
| Germany.. | 39,415 | 39,752 | 39,375 | 39,302 | 39,459 | 39,413 | 39,276 | 39,711 | 40,760 | 41,250 | 41,416 |
| Italy.. | 22,753 | 23,004 | 23,176 | 23,361 | 23,524 | 23,728 | 24,020 | 24,084 | 24,179 | 24,395 | 24,459 |
| Netherlands. | 7,612 | 7,744 | 7,881 | 8,052 | 8,199 | 8,345 | 8,379 | 8,439 | 8,459 | 8,541 | 8,686 |
| Sweden. | 4,414 | 4,401 | 4,423 | 4,482 | 4,522 | 4,537 | 4,557 | 4,571 | 4,694 | 4,748 | 4,823 |
| United Kingdom. | 28,403 | 28,474 | 28,786 | 28,962 | 29,092 | 29,343 | 29,564 | 29,802 | 30,138 | 30,600 | 30,790 |
| Participation rate ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 67.1 | 67.1 | 67.1 | 67.1 | 66.8 | 66.6 | 66.2 | 66.0 | 66.0 | 66.2 | 66.0 |
| Canada. | 65.1 | 65.4 | 65.9 | 66.0 | 66.1 | 67.1 | 67.7 | 67.7 | 67.4 | 67.4 | 67.7 |
| Australia. | 64.3 | 64.3 | 64.0 | 64.4 | 64.4 | 64.3 | 64.6 | 64.6 | 65.3 | 65.6 | 66.0 |
| Japan.. | 63.2 | 62.8 | 62.4 | 62.0 | 61.6 | 60.8 | 60.3 | 60.0 | 60.0 | 60.0 | 60.0 |
| France. | 55.6 | 56.0 | 56.3 | 56.6 | 56.7 | 56.8 | 56.8 | 56.6 | 56.5 | 56.6 | 56.7 |
| Germany.. | 57.3 | 57.7 | 56.9 | 56.7 | 56.7 | 56.4 | 56.0 | 56.4 | 57.6 | 58.2 | 58.4 |
| Italy. | 47.3 | 47.7 | 47.9 | 48.1 | 48.3 | 48.5 | 49.1 | 49.1 | 48.7 | 48.9 | 48.6 |
| Netherlands.. | 61.1 | 61.8 | 62.5 | 63.4 | 64.0 | 64.7 | 64.6 | 64.8 | 64.7 | 65.1 | 65.9 |
| Sweden. | 63.2 | 62.8 | 62.7 | 63.7 | 63.6 | 63.9 | 63.8 | 63.6 | 64.8 | 64.9 | 65.3 |
| United Kingdom. | 62.5 | 62.4 | 62.8 | 62.8 | 62.7 | 62.9 | 62.9 | 63.0 | 63.1 | 63.5 | 63.4 |
| Employed |  |  |  |  |  |  |  |  |  |  |  |
| United States.. | 129,558 | 131,463 | 133,488 | 136,891 | 136,933 | 136,485 | 137,736 | 139,252 | 141,730 | 144,427 | 146,047 |
| Canada. | 13,637 | 13,973 | 14,331 | 14,681 | 14,866 | 15,223 | 15,586 | 15,861 | 16,080 | 16,393 | 16,767 |
| Australia. | 8,444 | 8,618 | 8,762 | 8,989 | 9,086 | 9,264 | 9,480 | 9,668 | 9,975 | 10,186 | 10,470 |
| Japan. | 64,900 | 64,450 | 63,920 | 63,790 | 63,460 | 62,650 | 62,510 | 62,640 | 62,910 | 63,210 | 63,510 |
| France.. | 22,176 | 22,597 | 23,080 | 23,714 | 24,167 | 24,312 | 24,373 | 24,354 | 24,493 | 24,717 | 25,162 |
| Germany. | 35,508 | 36,059 | 36,042 | 36,236 | 36,350 | 36,018 | 35,615 | 35,604 | 36,185 | 36,978 | 37,815 |
| Italy... | 20,169 | 20,370 | 20,617 | 20,973 | 21,359 | 21,666 | 21,972 | 22,124 | 22,290 | 22,721 | 22,953 |
| Netherlands. | 7,189 | 7,408 | 7,605 | 7,813 | 8,014 | 8,114 | 8,069 | 8,052 | 8,056 | 8,205 | 8,408 |
| Sweden. | 3,969 | 4,033 | 4,110 | 4,222 | 4,295 | 4,303 | 4,293 | 4,271 | 4,334 | 4,416 | 4,530 |
| United Kingdom. | 26,413 | 26,684 | 27,058 | 27,375 | 27,603 | 27,815 | 28,077 | 28,379 | 28,674 | 28,930 | 29,138 |
| Employment-population ratio ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 63.8 | 64.1 | 64.3 | 64.4 | 63.7 | 62.7 | 62.3 | 62.3 | 62.7 | 63.1 | 63.0 |
| Canada. | 59.6 | 60.4 | 61.3 | 62.0 | 61.9 | 62.4 | 63.1 | 63.3 | 63.4 | 63.6 | 64.2 |
| Australia. | 59.0 | 59.3 | 59.6 | 60.3 | 60.0 | 60.2 | 60.7 | 61.1 | 62.0 | 62.5 | 63.1 |
| Japan.. | 61.0 | 60.2 | 59.4 | 59.0 | 58.4 | 57.5 | 57.1 | 57.1 | 57.3 | 57.5 | 57.6 |
| France. | 49.1 | 49.7 | 50.4 | 51.4 | 51.9 | 51.8 | 51.5 | 51.1 | 51.1 | 51.2 | 51.8 |
| Germany. | 51.6 | 52.3 | 52.1 | 52.2 | 52.2 | 51.5 | 50.8 | 50.6 | 51.2 | 52.2 | 53.3 |
| Italy... | 41.9 | 42.2 | 42.6 | 43.2 | 43.8 | 44.3 | 44.9 | 45.1 | 44.9 | 45.5 | 45.6 |
| Netherlands. | 57.7 | 59.1 | 60.3 | 61.5 | 62.6 | 62.9 | 62.2 | 61.8 | 61.6 | 62.5 | 63.8 |
| Sweden. | 56.8 | 57.6 | 58.3 | 60.0 | 60.4 | 60.6 | 60.1 | 59.4 | 59.9 | 60.4 | 61.3 |
| United Kingdom. | 58.1 | 58.5 | 59.0 | 59.4 | 59.5 | 59.6 | 59.8 | 60.0 | 60.0 | 60.1 | 60.0 |
| Unemployed |  |  |  |  |  |  |  |  |  |  |  |
| United States... | 6,739 | 6,210 | 5,880 | 5,692 | 6,801 | 8,378 | 8,774 | 8,149 | 7,591 | 7,001 | 7,078 |
| Canada. | 1,248 | 1,162 | 1,072 | 956 | 1,026 | 1,143 | 1,147 | 1,093 | 1,028 | 958 | 929 |
| Australia. | 759 | 721 | 652 | 602 | 658 | 629 | 599 | 553 | 531 | 512 | 478 |
| Japan. | 2,300 | 2,790 | 3,170 | 3,200 | 3,400 | 3,590 | 3,500 | 3,130 | 2,940 | 2,750 | 2,570 |
| France. | 2,940 | 2,837 | 2,711 | 2,385 | 2,226 | 2,334 | 2,478 | 2,583 | 2,599 | 2,605 | 2,374 |
| Germany. | 3,907 | 3,693 | 3,333 | 3,065 | 3,110 | 3,396 | 3,661 | 4,107 | 4,575 | 4,272 | 3,601 |
| Italy... | 2,584 | 2,634 | 2,559 | 2,388 | 2,164 | 2,062 | 2,048 | 1,960 | 1,889 | 1,673 | 1,506 |
| Netherlands. | 423 | 337 | 277 | 239 | 186 | 231 | 310 | 387 | 402 | 336 | 278 |
| Sweden.. | 445 | 368 | 313 | 260 | 227 | 234 | 264 | 300 | 361 | 332 | 293 |
| United Kingdom. | 1,991 | 1,790 | 1,728 | 1,587 | 1,488 | 1,528 | 1,488 | 1,422 | 1,463 | 1,670 | 1,652 |
| Unemployment rate |  |  |  |  |  |  |  |  |  |  |  |
| United States.. | 4.9 | 4.5 | 4.2 | 4.0 | 4.7 | 5.8 | 6.0 | 5.5 | 5.1 | 4.6 | 4.6 |
| Canada. | 8.4 | 7.7 | 7.0 | 6.1 | 6.5 | 7.0 | 6.9 | 6.4 | 6.0 | 5.5 | 5.3 |
| Australia. | 8.3 | 7.7 | 6.9 | 6.3 | 6.8 | 6.4 | 5.9 | 5.4 | 5.1 | 4.8 | 4.4 |
| Japan.. | 3.4 | 4.1 | 4.7 | 4.8 | 5.1 | 5.4 | 5.3 | 4.8 | 4.5 | 4.2 | 3.9 |
| France.. | 11.7 | 11.2 | 10.5 | 9.1 | 8.4 | 8.8 | 9.2 | 9.6 | 9.6 | 9.5 | 8.6 |
| Germany... | 9.9 | 9.3 | 8.5 | 7.8 | 7.9 | 8.6 | 9.3 | 10.3 | 11.2 | 10.4 | 8.7 |
| Italy... | 11.4 | 11.5 | 11.0 | 10.2 | 9.2 | 8.7 | 8.5 | 8.1 | 7.8 | 6.9 | 6.2 |
| Netherlands.. | 5.6 | 4.4 | 3.5 | 3.0 | 2.3 | 2.8 | 3.7 | 4.6 | 4.8 | 3.9 | 3.2 |
| Sweden. | 10.1 | 8.4 | 7.1 | 5.8 | 5.0 | 5.2 | 5.8 | 6.6 | 7.7 | 7.0 | 6.1 |
| United Kingdom.... | 7.0 | 6.3 | 6.0 | 5.5 | 5.1 | 5.2 | 5.0 | 4.8 | 4.9 | 5.5 | 5.4 |

${ }^{1}$ Labor force as a percent of the working-age population.
${ }^{2}$ Employment as a percent of the working-age population.

NOTE: There are breaks in series for the United States (1997, 1998, 1999, 2000, 2003, 2004), Australia (2001), Germany (1999, 2005), the Netherlands (2000, 2003), and Sweden (2005). For further qualifications and historical annual data, see the BLS report International comparisons of annual labor force statistics, 10 countries (on the

Internet at http://www.bls.gov/fls/flscomparelf.htm ). Unemployment rates may differ from those in the BLS report Unemployment rates in 10 countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted (on the Internet at http://www.bls.gov/fis/fisjec.pdf), because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.
53. Annual indexes of manufacturing productivity and related measures, 17 economies [1996 = 100]

| Measure and economy | 1980 | 1990 | 1993 | 1994 | 1995 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Output per hour |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 58.6 | 80.1 | 88.1 | 92.7 | 96.2 | 104.2 | 111.5 | 117.1 | 126.1 | 127.4 | 140.9 | 149.8 | 159.0 | 162.2 | 169.9 | 177.8 |
| Canada. | 66.5 | 85.2 | 94.0 | 99.3 | 100.5 | 104.5 | 109.6 | 114.2 | 121.1 | 118.5 | 120.5 | 121.1 | 122.4 | 126.6 | 129.3 | 132.8 |
| Australia. | 72.5 | 91.1 | 95.8 | 98.4 | 97.1 | 102.0 | 106.9 | 108.5 | 115.1 | 117.9 | 122.9 | 125.2 | 126.8 | 127.6 | 128.8 | 131.3 |
| Japan. | 54.8 | 81.3 | 87.6 | 89.0 | 95.6 | 103.5 | 104.5 | 107.3 | 113.0 | 110.6 | 114.7 | 122.5 | 131.0 | 139.6 | 141.0 | 145.8 |
| Korea, Rep. of | - | 58.0 | 75.9 | 82.8 | 90.9 | 112.8 | 125.7 | 139.8 | 151.7 | 150.6 | 165.3 | 176.8 | 197.2 | 212.1 | 233.5 | 253.9 |
| Singapore. | - | 68.2 | 82.3 | 89.5 | 95.5 | 103.2 | 111.2 | 122.5 | 130.8 | 122.9 | 133.8 | 138.7 | 147.3 | 149.9 | 153.5 | 147.5 |
| Taiwan. | 40.4 | 73.9 | 83.4 | 86.6 | 93.0 | 104.1 | 109.2 | 116.0 | 122.2 | 127.7 | 139.2 | 143.6 | 150.9 | 162.3 | 173.4 | 188.5 |
| Belgium. | 57.2 | 84.7 | 89.6 | 94.4 | 98.6 | 106.3 | 107.6 | 106.8 | 110.9 | 111.0 | 114.6 | 117.8 | 123.7 | 127.0 | 131.8 | 137.6 |
| Denmark. | 75.3 | 90.3 | 92.0 | 103.4 | 103.4 | 108.0 | 107.4 | 109.1 | 113.0 | 113.2 | 113.9 | 118.7 | 125.5 | 129.6 | 135.5 | 136.0 |
| France. | 56.9 | 84.2 | 90.0 | 95.9 | 99.7 | 105.9 | 111.4 | 116.2 | 124.5 | 127.0 | 132.4 | 138.4 | 142.2 | 148.7 | 154.6 | 158.5 |
| Germany | 67.1 | 86.1 | 89.1 | 95.8 | 97.3 | 105.9 | 106.3 | 108.9 | 116.5 | 119.5 | 120.7 | 125.0 | 129.7 | 137.1 | 148.6 | 155.9 |
| Italy. | 60.1 | 82.5 | 87.2 | 94.9 | 99.5 | 102.0 | 100.6 | 101.4 | 106.7 | 107.0 | 105.7 | 103.5 | 105.0 | 106.4 | 105.9 | 105.4 |
| Netherlands. | 57.2 | 81.4 | 86.2 | 94.1 | 97.9 | 100.3 | 103.2 | 107.4 | 115.2 | 115.7 | 119.2 | 121.7 | 129.9 | 135.8 | 140.2 | 144.0 |
| Norway. | 77.3 | 96.8 | 98.3 | 98.3 | 97.1 | 100.2 | 97.7 | 101.1 | 104.2 | 107.1 | 110.2 | 119.7 | 126.8 | 131.2 | 128.5 | 128.2 |
| Spain. | 62.8 | 86.8 | 94.9 | 97.8 | 101.2 | 101.0 | 102.7 | 104.5 | 105.6 | 108.0 | 108.4 | 111.1 | 113.2 | 115.4 | 117.7 | 122.2 |
| Sweden. | 60.0 | 73.9 | 82.6 | 91.1 | 96.8 | 109.1 | 115.6 | 126.2 | 134.8 | 131.0 | 145.3 | 157.1 | 173.9 | 184.7 | 202.0 | 203.0 |
| United Kingdom | 55.9 | 87.8 | 100.1 | 102.7 | 101.0 | 102.0 | 102.9 | 108.0 | 115.4 | 119.4 | 123.0 | 128.2 | 136.2 | 141.9 | 149.1 | 153.0 |
| Output |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 60.5 | 80.7 | 85.7 | 92.2 | 96.4 | 106.1 | 113.2 | 118.1 | 125.5 | 118.5 | 121.8 | 123.2 | 130.1 | 131.2 | 138.4 | 142.4 |
| Canada. | 71.2 | 88.7 | 87.7 | 94.4 | 98.7 | 106.3 | 111.7 | 121.0 | 133.1 | 128.0 | 129.0 | 128.3 | 130.9 | 132.9 | 132.3 | 131.1 |
| Australia | 80.2 | 93.1 | 92.7 | 97.5 | 96.9 | 102.3 | 105.2 | 105.0 | 110.0 | 108.9 | 114.2 | 116.2 | 116.3 | 115.8 | 114.7 | 118.4 |
| Japan. | 59.0 | 94.3 | 93.5 | 92.1 | 95.9 | 102.5 | 97.1 | 96.7 | 101.8 | 96.2 | 94.7 | 99.8 | 105.6 | 111.1 | 114.9 | 119.1 |
| Korea, Rep. of | 20.5 | 63.2 | 75.5 | 84.1 | 94.0 | 104.9 | 96.6 | 117.6 | 137.6 | 140.6 | 151.2 | 159.6 | 177.3 | 189.8 | 205.9 | 219.3 |
| Singapore. | - | 66.2 | 78.5 | 88.4 | 97.3 | 104.3 | 103.5 | 117.0 | 134.7 | 119.1 | 129.1 | 132.9 | 151.3 | 165.7 | 185.4 | 196.2 |
| Taiwan. | 38.2 | 76.7 | 85.0 | 90.1 | 95.0 | 105.7 | 109.1 | 117.1 | 125.7 | 116.4 | 126.7 | 133.5 | 146.5 | 156.7 | 167.9 | 185.3 |
| Belgium. | 74.8 | 96.6 | 92.8 | 97.0 | 99.6 | 104.8 | 106.5 | 106.9 | 111.6 | 111.8 | 110.9 | 109.3 | 113.2 | 113.1 | 116.3 | 119.3 |
| Denmark. | 85.6 | 94.7 | 90.3 | 100.0 | 104.8 | 108.2 | 109.1 | 110.0 | 113.9 | 114.0 | 110.7 | 107.6 | 109.3 | 109.9 | 114.5 | 118.6 |
| France. | 83.2 | 97.5 | 93.8 | 96.8 | 100.3 | 104.7 | 109.7 | 113.4 | 118.6 | 119.8 | 119.7 | 121.9 | 123.0 | 125.9 | 127.2 | 128.8 |
| Germany | 92.3 | 107.2 | 99.9 | 103.1 | 102.1 | 104.4 | 105.6 | 106.6 | 113.9 | 115.8 | 113.4 | 114.2 | 118.3 | 122.3 | 131.2 | 139.2 |
| Italy. | 74.7 | 92.6 | 89.9 | 95.9 | 100.5 | 101.5 | 102.4 | 102.2 | 106.5 | 106.2 | 105.0 | 102.2 | 103.0 | 102.5 | 103.7 | 104.8 |
| Netherlands | 68.7 | 89.2 | 90.2 | 95.0 | 98.6 | 101.4 | 104.8 | 108.7 | 116.0 | 115.8 | 115.9 | 114.6 | 118.5 | 120.9 | 124.1 | 128.1 |
| Norway. | 96.7 | 92.9 | 93.2 | 95.7 | 96.1 | 104.3 | 103.6 | 103.5 | 102.9 | 102.2 | 101.6 | 105.0 | 111.0 | 115.9 | 119.4 | 125.7 |
| Spain. | 75.5 | 94.6 | 92.4 | 94.0 | 97.6 | 106.4 | 112.9 | 119.3 | 124.6 | 128.6 | 128.4 | 130.0 | 130.9 | 132.4 | 134.8 | 138.6 |
| Sweden. | 67.1 | 80.4 | 74.1 | 85.5 | 96.8 | 107.8 | 116.7 | 127.6 | 138.1 | 134.9 | 143.4 | 150.4 | 164.2 | 171.8 | 185.3 | 189.6 |
| United Kingdom. | 80.3 | 96.9 | 93.4 | 97.8 | 99.3 | 101.8 | 102.4 | 103.6 | 105.9 | 104.5 | 102.2 | 101.9 | 104.2 | 104.0 | 105.8 | 106.5 |
| Total hours |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 103.3 | 100.7 | 97.3 | 99.5 | 100.2 | 101.8 | 101.5 | 100.9 | 99.6 | 93.0 | 86.5 | 82.2 | 81.8 | 80.9 | 81.5 | 80.1 |
| Canada. | 107.0 | 104.1 | 93.3 | 95.1 | 98.3 | 101.6 | 101.9 | 105.9 | 109.9 | 107.9 | 107.1 | 105.9 | 106.9 | 105.0 | 102.3 | 98.7 |
| Australia. | 110.6 | 102.2 | 96.9 | 99.1 | 99.8 | 100.3 | 98.4 | 96.7 | 95.6 | 92.4 | 92.9 | 92.8 | 91.7 | 90.7 | 89.1 | 90.2 |
| Japan. | 107.6 | 115.9 | 106.7 | 103.5 | 100.4 | 99.1 | 92.9 | 90.2 | 90.1 | 87.0 | 82.6 | 81.4 | 80.6 | 79.6 | 81.5 | 81.6 |
| Korea, Rep. | - | 109.0 | 99.5 | 101.6 | 103.3 | 93.0 | 76.8 | 84.1 | 90.7 | 93.3 | 91.5 | 90.2 | 89.9 | 89.5 | 88.2 | 86.4 |
| Singapore. | - | 96.9 | 95.3 | 98.8 | 101.9 | 101.1 | 93.1 | 95.6 | 103.0 | 96.9 | 96.5 | 95.8 | 102.8 | 110.5 | 120.8 | 133.0 |
| Taiwan. | 94.5 | 103.7 | 101.9 | 104.0 | 102.2 | 101.6 | 99.9 | 101.0 | 102.9 | 91.1 | 91.1 | 92.9 | 97.1 | 96.5 | 96.8 | 98.3 |
| Belgium. | 130.9 | 114.1 | 103.5 | 102.8 | 101.0 | 98.6 | 98.9 | 100.0 | 100.7 | 100.7 | 96.8 | 92.8 | 91.5 | 89.0 | 88.2 | 86.7 |
| Denmark. | 113.7 | 104.8 | 98.1 | 96.7 | 101.4 | 100.2 | 101.5 | 100.8 | 100.8 | 100.7 | 97.2 | 90.7 | 87.1 | 84.8 | 84.5 | 87.2 |
| France. | 146.3 | 115.8 | 104.1 | 101.0 | 100.6 | 98.9 | 98.5 | 97.6 | 95.3 | 94.3 | 90.4 | 88.1 | 86.5 | 84.7 | 82.3 | 81.2 |
| Germany. | 137.4 | 124.6 | 112.1 | 107.6 | 105.0 | 98.6 | 99.4 | 97.9 | 97.7 | 96.9 | 94.0 | 91.4 | 91.2 | 89.2 | 88.3 | 89.3 |
| Italy. | 124.3 | 112.2 | 103.1 | 101.1 | 100.9 | 99.5 | 101.8 | 100.8 | 99.9 | 99.3 | 99.3 | 98.8 | 98.1 | 96.4 | 97.9 | 99.4 |
| Netherlands. | 120.1 | 109.6 | 104.6 | 100.9 | 100.7 | 101.0 | 101.5 | 101.2 | 100.7 | 100.1 | 97.2 | 94.1 | 91.2 | 89.0 | 88.5 | 88.9 |
| Norway. | 125.1 | 96.0 | 94.8 | 97.3 | 99.0 | 104.1 | 106.1 | 102.4 | 98.8 | 95.4 | 92.3 | 87.7 | 87.5 | 88.4 | 92.9 | 98.0 |
| Spain.. | 120.3 | 109.0 | 97.4 | 96.1 | 96.4 | 105.4 | 109.9 | 114.1 | 118.0 | 119.0 | 118.4 | 117.0 | 115.6 | 114.7 | 114.6 | 113.4 |
| Sweden. | 111.8 | 108.8 | 89.7 | 93.9 | 100.0 | 98.8 | 100.9 | 101.1 | 102.4 | 103.0 | 98.7 | 95.7 | 94.4 | 93.0 | 91.7 | 93.4 |
| United Kingdom. | 143.8 | 110.4 | 93.3 | 95.2 | 98.3 | 99.8 | 99.6 | 95.9 | 91.8 | 87.5 | 83.1 | 79.5 | 76.5 | 73.3 | 71.0 | 69.6 |
| Hourly compensation (national currency basis) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 51.2 | 82.7 | 93.3 | 96.3 | 98.1 | 102.6 | 108.6 | 112.9 | 123.2 | 126.1 | 135.2 | 144.7 | 147.7 | 150.5 | 156.7 | 162.2 |
| Canada. | 43.8 | 82.4 | 93.5 | 96.2 | 98.5 | 102.4 | 107.7 | 110.0 | 113.6 | 116.7 | 120.6 | 125.5 | 129.9 | 135.5 | 139.7 | 144.6 |
| Australia. | - | 79.5 | 88.9 | 90.0 | 95.6 | 102.7 | 106.9 | 111.2 | 116.1 | 123.5 | 129.0 | 134.1 | 141.1 | 150.1 | 160.2 | 168.6 |
| Japan.. | 53.7 | 83.0 | 94.1 | 96.0 | 99.2 | 103.3 | 105.9 | 105.7 | 105.1 | 106.5 | 107.2 | 104.9 | 105.9 | 106.8 | 105.6 | 105.4 |
| Korea, Rep. of | - | 36.1 | 61.6 | 70.8 | 85.9 | 108.7 | 118.4 | 119.0 | 127.1 | 131.1 | 144.4 | 151.5 | 173.0 | 186.8 | 202.9 | 218.6 |
| Singapore. | - | 64.6 | 84.3 | 89.1 | 93.1 | 104.4 | 110.5 | 101.0 | 103.7 | 111.8 | 114.9 | 115.6 | 112.5 | 111.3 | 108.7 | 104.1 |
| Taiwan. | 23.1 | 66.5 | 82.6 | 86.6 | 93.8 | 103.1 | 107.0 | 108.9 | 111.0 | 118.1 | 114.4 | 116.3 | 118.2 | 122.8 | 126.7 | 130.6 |
| Belgium. | 47.5 | 81.4 | 94.8 | 95.5 | 98.2 | 103.8 | 105.3 | 106.7 | 108.5 | 113.1 | 118.0 | 122.0 | 125.2 | 129.0 | 133.7 | 140.7 |
| Denmark. | 39.5 | 83.1 | 90.9 | 94.1 | 96.0 | 103.4 | 106.1 | 108.8 | 110.9 | 116.2 | 121.2 | 129.4 | 134.4 | 142.0 | 149.0 | 152.9 |
| France. | 34.6 | 78.9 | 91.8 | 95.3 | 98.1 | 102.9 | 103.7 | 107.0 | 112.8 | 115.8 | 122.8 | 125.7 | 129.7 | 134.4 | 140.9 | 145.0 |
| Germany.. | 43.3 | 72.3 | 86.7 | 90.6 | 95.5 | 102.0 | 103.4 | 105.8 | 111.3 | 114.7 | 117.5 | 120.2 | 120.8 | 122.4 | 127.4 | 129.5 |
| Italy.. | 22.6 | 70.5 | 85.1 | 89.6 | 94.9 | 104.7 | 102.8 | 105.4 | 108.1 | 111.8 | 115.0 | 119.3 | 123.4 | 127.4 | 129.9 | 132.7 |
| Netherlands. | 52.3 | 78.8 | 91.6 | 95.6 | 98.1 | 102.6 | 106.9 | 110.5 | 115.9 | 120.8 | 127.5 | 132.6 | 138.2 | 140.3 | 144.2 | 148.5 |
| Norway. | 34.3 | 81.2 | 89.2 | 91.9 | 96.0 | 104.5 | 110.6 | 116.9 | 123.5 | 130.9 | 138.8 | 144.5 | 149.2 | 156.2 | 165.8 | 173.7 |
| Spain... | 23.1 | 65.9 | 90.3 | 93.6 | 97.6 | 102.4 | 103.2 | 102.9 | 104.5 | 108.7 | 111.8 | 117.4 | 121.5 | 127.3 | 132.7 | 139.2 |
| Sweden. | 32.9 | 77.4 | 85.8 | 88.0 | 92.8 | 105.4 | 109.4 | 112.8 | 117.2 | 122.8 | 129.4 | 135.2 | 138.9 | 143.6 | 147.8 | 154.8 |
| United Kingdom.. | 33.4 | 82.8 | 96.2 | 98.6 | 100.3 | 104.4 | 112.3 | 118.9 | 126.2 | 131.8 | 139.1 | 146.1 | 153.2 | 163.2 | 173.7 | 174.9 |

## 53. Continued- Annual indexes of manufacturing productivity and related measures, 17 economies

[1996 = 100]

| Measure and economy | 1980 | 1990 | 1993 | 1994 | 1995 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unit labor costs (national currency basis) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 87.4 | 103.3 | 106.0 | 103.9 | 102.0 | 98.5 | 97.4 | 96.4 | 97.7 | 99.0 | 96.0 | 96.6 | 92.9 | 92.8 | 92.2 | 91.2 |
| Canada. | 65.9 | 96.7 | 99.5 | 96.9 | 98.0 | 98.0 | 98.3 | 96.3 | 93.8 | 98.5 | 100.0 | 103.6 | 106.1 | 107.1 | 108.0 | 108.9 |
| Australia. | - | 87.3 | 92.8 | 91.5 | 98.4 | 100.7 | 100.0 | 102.4 | 100.9 | 104.8 | 105.0 | 107.1 | 111.3 | 117.6 | 124.4 | 128.4 |
| Japan. | 98.0 | 102.1 | 107.5 | 107.9 | 103.8 | 99.8 | 101.3 | 98.6 | 93.0 | 96.2 | 93.5 | 85.6 | 80.8 | 76.5 | 74.9 | 72.3 |
| Korea, Rep. of. | 33.6 | 62.3 | 81.2 | 85.5 | 94.5 | 96.4 | 94.2 | 85.1 | 83.8 | 87.0 | 87.3 | 85.7 | 87.8 | 88.1 | 86.9 | 86.1 |
| Singapore. | - | 94.7 | 102.5 | 99.5 | 97.5 | 101.2 | 99.3 | 82.5 | 79.3 | 91.0 | 85.9 | 83.3 | 76.4 | 74.2 | 70.8 | 70.6 |
| Taiwan. | 57.1 | 89.9 | 99.1 | 100.0 | 100.9 | 99.0 | 97.9 | 93.9 | 90.9 | 92.5 | 82.2 | 81.0 | 78.4 | 75.7 | 73.1 | 69.2 |
| Belgium. | 83.0 | 96.1 | 105.7 | 101.2 | 99.6 | 97.6 | 97.9 | 99.9 | 97.9 | 101.9 | 103.0 | 103.5 | 101.2 | 101.5 | 101.4 | 102.3 |
| Denmark. | 52.5 | 91.9 | 98.9 | 91.0 | 92.9 | 95.7 | 98.8 | 99.7 | 98.1 | 102.7 | 106.4 | 109.0 | 107.0 | 109.6 | 109.9 | 112.4 |
| France. | 60.9 | 93.7 | 102.0 | 99.4 | 98.5 | 97.2 | 93.1 | 92.1 | 90.6 | 91.2 | 92.8 | 90.8 | 91.2 | 90.4 | 91.2 | 91.5 |
| Germany | 64.5 | 84.0 | 97.3 | 94.6 | 98.2 | 96.3 | 97.3 | 97.1 | 95.5 | 96.0 | 97.4 | 96.1 | 93.2 | 89.3 | 85.8 | 83.1 |
| Italy. | 37.6 | 85.4 | 97.5 | 94.4 | 95.3 | 102.7 | 102.2 | 104.0 | 101.4 | 104.5 | 108.7 | 115.3 | 117.6 | 119.8 | 122.6 | 125.8 |
| Netherlands. | 91.5 | 96.8 | 106.3 | 101.6 | 100.3 | 102.3 | 103.6 | 102.9 | 100.6 | 104.4 | 106.9 | 108.9 | 106.3 | 103.3 | 102.9 | 103.1 |
| Norway. | 44.4 | 83.9 | 90.7 | 93.4 | 98.9 | 104.2 | 113.2 | 115.7 | 118.5 | 122.2 | 126.0 | 120.7 | 117.6 | 119.1 | 129.0 | 135.5 |
| Spain. | 36.8 | 76.0 | 95.1 | 95.7 | 96.5 | 101.4 | 100.4 | 98.5 | 99.0 | 100.6 | 103.1 | 105.6 | 107.3 | 110.3 | 112.7 | 113.9 |
| Sweden. | 54.9 | 104.8 | 103.9 | 96.6 | 95.8 | 96.6 | 94.7 | 89.4 | 86.9 | 93.8 | 89.1 | 86.1 | 79.9 | 77.8 | 73.2 | 76.3 |
| United Kingdom. | 59.8 | 94.3 | 96.1 | 96.0 | 99.4 | 102.4 | 109.2 | 110.1 | 109.4 | 110.4 | 113.1 | 113.9 | 112.4 | 115.1 | 116.6 | 114.3 |
| Unit labor costs (U.S. dollar basis) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 87.4 | 103.3 | 106.0 | 103.9 | 102.0 | 98.5 | 97.4 | 96.4 | 97.7 | 99.0 | 96.0 | 96.6 | 92.9 | 92.8 | 92.2 | 91.2 |
| Canada. | 76.8 | 113.1 | 105.2 | 96.7 | 97.4 | 96.5 | 90.4 | 88.4 | 86.1 | 86.7 | 86.9 | 100.9 | 111.2 | 120.5 | 129.9 | 138.4 |
| Australia. | - | 87.1 | 80.6 | 85.5 | 93.1 | 95.7 | 80.4 | 84.5 | 75.0 | 69.2 | 72.9 | 89.3 | 104.7 | 114.6 | 119.7 | 137.6 |
| Japan. | 47.0 | 76.6 | 105.2 | 114.8 | 120.2 | 89.7 | 84.1 | 94.3 | 93.9 | 86.1 | 81.2 | 80.3 | 81.3 | 75.6 | 70.1 | 66.7 |
| Korea, Rep. of. | 44.6 | 70.5 | 81.1 | 85.3 | 98.4 | 81.9 | 54.1 | 57.6 | 59.6 | 54.2 | 56.2 | 57.9 | 61.7 | 69.3 | 73.3 | 74.6 |
| Singapore. | - | 73.7 | 89.4 | 91.9 | 97.0 | 96.0 | 83.7 | 68.6 | 64.8 | 71.6 | 67.6 | 67.4 | 63.7 | 62.9 | 62.8 | 66.1 |
| Taiwan. | 43.6 | 91.8 | 103.0 | 103.8 | 104.6 | 94.5 | 80.2 | 79.8 | 79.9 | 75.1 | 65.4 | 64.6 | 64.5 | 64.7 | 61.7 | 57.9 |
| Belgium. | 87.9 | 89.1 | 94.7 | 93.7 | 104.7 | 84.4 | 83.5 | 81.7 | 69.4 | 70.0 | 74.8 | 90.0 | 96.6 | 97.0 | 97.8 | 107.6 |
| Denmark. | 54.1 | 86.2 | 88.4 | 83.1 | 96.2 | 84.0 | 85.5 | 82.7 | 70.3 | 71.5 | 78.2 | 96.1 | 103.7 | 106.0 | 107.3 | 119.8 |
| France. | 73.7 | 88.0 | 92.1 | 91.7 | 101.0 | 85.2 | 80.7 | 76.5 | 65.2 | 63.7 | 68.4 | 80.2 | 88.5 | 87.8 | 89.3 | 97.8 |
| Germany. | 53.4 | 78.2 | 88.5 | 87.8 | 103.2 | 83.5 | 83.2 | 79.6 | 67.8 | 66.1 | 70.8 | 83.7 | 89.2 | 85.5 | 82.9 | 87.6 |
| Italy.. | 67.7 | 110.0 | 95.6 | 90.4 | 90.2 | 93.0 | 90.8 | 88.2 | 74.6 | 74.5 | 81.9 | 104.0 | 116.5 | 118.8 | 122.7 | 137.5 |
| Netherlands. | 77.7 | 89.6 | 96.4 | 94.1 | 105.4 | 88.4 | 88.0 | 83.9 | 71.1 | 71.5 | 77.4 | 94.3 | 101.2 | 98.4 | 98.9 | 108.1 |
| Norway.. | 58.1 | 86.6 | 82.6 | 85.5 | 100.8 | 95.0 | 96.8 | 95.7 | 86.9 | 87.8 | 101.9 | 110.1 | 112.7 | 119.4 | 130.0 | 149.4 |
| Spain. | 65.0 | 94.4 | 94.5 | 90.5 | 98.0 | 87.6 | 85.1 | 79.9 | 69.6 | 68.6 | 74.2 | 91.1 | 101.6 | 104.5 | 107.8 | 118.9 |
| Sweden. | 87.0 | 118.7 | 89.4 | 84.0 | 90.0 | 84.7 | 79.8 | 72.5 | 63.6 | 60.8 | 61.4 | 71.5 | 72.9 | 69.8 | 66.6 | 75.7 |
| United Kingdom... | 89.1 | 107.8 | 92.5 | 94.3 | 100.5 | 107.4 | 116.0 | 114.1 | 106.3 | 101.9 | 108.9 | 119.3 | 132.0 | 134.2 | 137.7 | 146.7 |

NOTE: Data for Germany for years before 1993 are for the former West Germany. Data for 1993 onward are for unified Germany. Dash indicates data not available.
54. Occupational injury and illness rates by industry, ${ }^{1}$ United States

| Industry and type of case ${ }^{2}$ | Incidence rates per 100 full-time workers ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1989{ }^{1}$ | 1990 | 1991 | 1992 | $1993{ }^{4}$ | $1994{ }^{4}$ | $1995{ }^{4}$ | $1996{ }^{4}$ | $1997{ }^{4}$ | $1998{ }^{4}$ | $1999{ }^{4}$ | $2000{ }^{4}$ | $2001{ }^{4}$ |
| PRIVATE SECTOR ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases . | 8.6 | 8.8 | 8.4 | 8.9 | 8.5 | 8.4 | 8.1 | 7.4 | 7.1 | 6.7 | 6.3 | 6.1 | 5.7 |
| Lost workday cases. | 4.0 | 4.1 | 3.9 | 3.9 | 3.8 | 3.8 | 3.6 | 3.4 | 3.3 | 3.1 | 3.0 | 3.0 | 2.8 |
| Lost workdays....... | 78.7 | 84.0 | 86.5 | 93.8 | - |  | - | - | - | - | - | - | - |
| Agriculture, forestry, and fishing ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ...... | 10.9 | 11.6 | 10.8 | 11.6 | 11.2 | 10.0 | 9.7 | 8.7 | 8.4 | 7.9 | 7.3 | 7.1 | 7.3 |
| Lost workday cases... | 5.7 | 5.9 | 5.4 | 5.4 | 5.0 | 4.7 | 4.3 | 3.9 | 4.1 | 3.9 | 3.4 | 3.6 | 3.6 |
| Lost workdays........... | 100.9 | 112.2 | 108.3 | 126.9 | - | - | - | - | - | - | - | - | - |
| Mining |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ..... | 8.5 | 8.3 | 7.4 | 7.3 | 6.8 | 6.3 | 6.2 | 5.4 | 5.9 | 4.9 | 4.4 | 4.7 | 4.0 |
| Lost workday cases..... | 4.8 | 5.0 | 4.5 | 4.1 | 3.9 | 3.9 | 3.9 | 3.2 | 3.7 | 2.9 | 2.7 | 3.0 | 2.4 |
| Lost workdays...... | 137.2 | 119.5 | 129.6 | 204.7 | - | - | - | - | - | - | - | - | - |
| Construction |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases | 14.3 | 14.2 | 13.0 | 13.1 | 12.2 | 11.8 | 10.6 | 9.9 | 9.5 | 8.8 | 8.6 | 8.3 | 7.9 |
| Lost workday cases... | 6.8 | 6.7 | 6.1 | 5.8 | 5.5 | 5.5 | 4.9 | 4.5 | 4.4 | 4.0 | 4.2 | 4.1 | 4.0 |
| Lost workdays..... | 143.3 | 147.9 | 148.1 | 161.9 | - | - | - | - | - | - | - | - | - |
| General building contractors: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ............ | 13.9 | 13.4 | 12.0 | 12.2 | 11.5 | 10.9 | 9.8 | 9.0 | 8.5 | 8.4 | 8.0 | 7.8 | 6.9 |
| Lost workday cases...... | 6.5 | 6.4 | 5.5 | 5.4 | 5.1 | 5.1 | 4.4 | 4.0 | 3.7 | 3.9 | 3.7 | 3.9 | 3.5 |
| Lost workdays......... | 137.3 | 137.6 | 132.0 | 142.7 | - | - | - | - | - | - | - | - | - |
| Heavy construction, except building: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .......................... | 13.8 | 13.8 | 12.8 | 12.1 | 11.1 | 10.2 | 9.9 | 9.0 | 8.7 | 8.2 | 7.8 | 7.6 | 7.8 |
| Lost workday cases... | 6.5 | 6.3 | 6.0 | 5.4 | 5.1 | 5.0 | 4.8 | 4.3 | 4.3 | 4.1 | 3.8 | 3.7 | 4.0 |
| Lost workdays.. | 147.1 | 144.6 | 160.1 | 165.8 | - | - | - | - | - | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ................... | 14.6 | 14.7 | 13.5 | 13.8 | 12.8 | 12.5 | 11.1 | 10.4 | 10.0 | 9.1 | 8.9 | 8.6 | 8.2 |
| Lost workday cases...... | 6.9 | 6.9 | 6.3 | 6.1 | 5.8 | 5.8 | 5.0 | 4.8 | 4.7 | 4.1 | 4.4 | 4.3 | 4.1 |
| Lost workdays......... | 144.9 | 153.1 | 151.3 | 168.3 | - | - | - | - | - | - | - | - | - |
| Manufacturing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .. | 13.1 | 13.2 | 12.7 | 12.5 | 12.1 | 12.2 | 11.6 | 10.6 | 10.3 | 9.7 | 9.2 | 9.0 | 8.1 |
| Lost workday cases. | 5.8 | 5.8 | 5.6 | 5.4 | 5.3 | 5.5 | 5.3 | 4.9 | 4.8 | 4.7 | 4.6 | 4.5 | 4.1 |
| Lost workdays.. | 113.0 | 120.7 | 121.5 | 124.6 | - | - | - | - | - | - | - | - | - |
| Durable goods: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ... | 14.1 | 14.2 | 13.6 | 13.4 | 13.1 | 13.5 | 12.8 | 11.6 | 11.3 | 10.7 | 10.1 | - | 8.8 |
| Lost workday cases. | 6.0 | 6.0 | 5.7 | 5.5 | 5.4 | 5.7 | 5.6 | 5.1 | 5.1 | 5.0 | 4.8 | - | 4.3 |
| Lost workdays... | 116.5 | 123.3 | 122.9 | 126.7 | - | - | - | - | - | - | - | - | - |
| Lumber and wood products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases. | 18.4 | 18.1 | 16.8 | 16.3 | 15.9 | 15.7 | 14.9 | 14.2 | 13.5 | 13.2 | 13.0 | 12.1 | 10.6 |
| Lost workday cases... | 9.4 | 8.8 | 8.3 | 7.6 | 7.6 | 7.7 | 7.0 | 6.8 | 6.5 | 6.8 | 6.7 | 6.1 | 5.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lost workday cases.... | 7.2 | 7.8 | 7.2 | 6.6 | 6.5 | 7.0 | 6.4 | 5.4 | 5.8 | 5.7 | 5.9 | 5.9 | 5.7 |
| Lost workdays.......... | - | - | - | 128.4 | - | - | - | - | - | - | - | - | - |
| Stone, clay, and glass products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .......... | 15.5 | 15.4 | 14.8 | 13.6 | 13.8 | 13.2 | 12.3 | 12.4 | 11.8 | 11.8 | 10.7 | 10.4 | 10.1 |
| Lost workday cases... | 7.4 | 7.3 | 6.8 | 6.1 | 6.3 | 6.5 | 5.7 | 6.0 | 5.7 | 6.0 | 5.4 | 5.5 | 5.1 |
| Lost workdays........... | 149.8 | 160.5 | 156.0 | 152.2 | - | - | - | - | - | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ............ | 18.7 | 19.0 | 17.7 | 17.5 | 17.0 | 16.8 | 16.5 | 15.0 | 15.0 | 14.0 | 12.9 | 12.6 | 10.7 |
| Lost workday cases..... | 8.1 | 8.1 | 7.4 | 7.1 | 7.3 | 7.2 | 7.2 | 6.8 | 7.2 | 7.0 | 6.3 | 6.3 | 5.3 |
| Lost workdays............. | 168.3 | 180.2 | 169.1 | 175.5 | - | - | - | - | - | - | - | - | 11.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .................. | 18.5 | 18.7 | 17.4 | 16.8 | 16.2 | 16.4 | 15.8 | 14.4 | 14.2 | 13.9 | 12.6 | 11.9 | 11.1 |
| Lost workday cases...... | 7.9 | 7.9 | 7.1 | 6.6 | 6.7 | 6.7 | 6.9 | 6.2 | 6.4 | 6.5 | 6.0 | 5.5 | 5.3 |
| Lost workdays......................... | 147.6 | 155.7 | 146.6 | 144.0 | - | - | - | - | - | - | - | - | - |
| Industrial machinery and equipment: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ............. | 12.1 | 12.0 | 11.2 | 11.1 | 11.1 | 11.6 | 11.2 | 9.9 | 10.0 | 9.5 | 8.5 | 8.2 | 11.0 |
| Lost workday cases....... | 4.8 | 4.7 | 4.4 | 4.2 | 4.2 | 4.4 | 4.4 | 4.0 | 4.1 | 4.0 | 3.7 | 3.6 | 6.0 |
| Lost workdays..... | 86.8 | 88.9 | 86.6 | 87.7 | - | - | - | - | - | - | - | - | - |
| Electronic and other electrical equipment: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .................. | 9.1 | 9.1 | 8.6 | 8.4 | 8.3 | 8.3 | 7.6 | 6.8 | 6.6 | 5.9 | 5.7 | 5.7 | 5.0 |
| Lost workday cases....... | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.6 | 3.3 | 3.1 | 3.1 | 2.8 | 2.8 | 2.9 | 2.5 |
| Lost workdays........ | 77.5 | 79.4 | 83.0 | 81.2 | - | - | - | - | - | - | - | - | - |
| Transportation equipment: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ........ | 17.7 | 17.8 | 18.3 | 18.7 | 18.5 | 19.6 | 18.6 | 16.3 | 15.4 | 14.6 | 13.7 | 13.7 | 12.6 |
| Lost workday cases..... | 6.8 | 6.9 | 7.0 | 7.1 | 7.1 | 7.8 | 7.9 | 7.0 | 6.6 | 6.6 | 6.4 | 6.3 | 6.0 |
| Lost workdays....................... | 138.6 | 153.7 | 166.1 | 186.6 | - | - | - | - | - | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lost workday cases...................... | 2.5 | 2.7 | 2.7 | 2.7 | 2.5 | 2.7 | 2.4 | 2.3 | 2.3 | 1.9 | 1.8 | 2.2 | 2.0 |
| Lost workdays.......... | 55.4 | 57.8 | 64.4 | 65.3 | - | - | - | - | - | - | - | - | - |
| Miscellaneous manufacturing industries: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ...................... | 11.1 | 11.3 | 11.3 | 10.7 | 10.0 | 9.9 | 9.1 | 9.5 | 8.9 | 8.1 | 8.4 | 7.2 | 6.4 |
| Lost workday cases... | 5.1 | 5.1 | 5.1 | 5.0 | 4.6 | 4.5 | 4.3 | 4.4 | 4.2 | 3.9 | 4.0 | 3.6 | 3.2 |
| Lost workdays................................... | 97.6 | 113.1 | 104.0 | 108.2 | - | - | - | - | - | - | - | - | - |

See footnotes at end of table.
54. Continued-Occupational injury and illness rates by industry, United States

| Industry and type of case ${ }^{2}$ | Incidence rates per 100 workers ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1989{ }^{1}$ | 1990 | 1991 | 1992 | $1993{ }^{4}$ | $1994{ }^{4}$ | $1995{ }^{4}$ | $1996{ }^{4}$ | $1997{ }^{4}$ | $1998{ }^{4}$ | $1999{ }^{4}$ | $2000{ }^{4}$ | $2001{ }^{4}$ |
| Nondurable goods: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases | 11.6 | 11.7 | 11.5 | 11.3 | 10.7 | 10.5 | 9.9 | 9.2 | 8.8 | 8.2 | 7.8 | 7.8 | 6.8 |
| Lost workday cases... | 5.5 | 5.6 | 5.5 | 5.3 | 5.0 | 5.1 | 4.9 | 4.6 | 4.4 | 4.3 | 4.2 | 4.2 | 3.8 |
| Lost workdays.. | 107.8 | 116.9 | 119.7 | 121.8 | - | - | - | - | - | - | - | - | - |
| Food and kindred products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases | 18.5 | 20.0 | 19.5 | 18.8 | 17.6 | 17.1 | 16.3 | 15.0 | 14.5 | 13.6 | 12.7 | 12.4 | 10.9 |
| Lost workday cases.. | 9.3 | 9.9 | 9.9 | 9.5 | 8.9 | 9.2 | 8.7 | 8.0 | 8.0 | 7.5 | 7.3 | 7.3 | 6.3 |
| Lost workdays... | 174.7 | 202.6 | 207.2 | 211.9 | - | - | - | - | - | - | - | - | - |
| Tobacco products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ..... | 8.7 | 7.7 | 6.4 | 6.0 | 5.8 | 5.3 | 5.6 | 6.7 | 5.9 | 6.4 | 5.5 | 6.2 | 6.7 |
| Lost workday cases.. | 3.4 | 3.2 | 2.8 | 2.4 | 2.3 | 2.4 | 2.6 | 2.8 | 2.7 | 3.4 | 2.2 | 3.1 | 4.2 |
| Lost workdays... | 64.2 | 62.3 | 52.0 | 42.9 | - | - | - | - | - | - | - | - | - |
| Textile mill products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ........... | 10.3 | 9.6 | 10.1 | 9.9 | 9.7 | 8.7 | 8.2 | 7.8 | 6.7 | 7.4 | 6.4 | 6.0 | 5.2 |
| Lost workday cases.. | 4.2 | 4.0 | 4.4 | 4.2 | 4.1 | 4.0 | 4.1 | 3.6 | 3.1 | 3.4 | 3.2 | 3.2 | 2.7 |
| Lost workdays... | 81.4 | 85.1 | 88.3 | 87.1 | - | - | - | - | - | - | - | - | - |
| Apparel and other textile products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ........... | 8.6 | 8.8 | 9.2 | 9.5 | 9.0 | 8.9 | 8.2 | 7.4 | 7.0 | 6.2 | 5.8 | 6.1 | 5.0 |
| Lost workday cases.. | 3.8 | 3.9 | 4.2 | 4.0 | 3.8 | 3.9 | 3.6 | 3.3 | 3.1 | 2.6 | 2.8 | 3.0 | 2.4 |
| Lost workdays... | 80.5 | 92.1 | 99.9 | 104.6 | - | - | - | - | - | - | - | - | - |
| Paper and allied products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .......... | 12.7 | 12.1 | 11.2 | 11.0 | 9.9 | 9.6 | 8.5 | 7.9 | 7.3 | 7.1 | 7.0 | 6.5 | 6.0 |
| Lost workday cases.. | 5.8 | 5.5 | 5.0 | 5.0 | 4.6 | 4.5 | 4.2 | 3.8 | 3.7 | 3.7 | 3.7 | 3.4 | 3.2 |
| Lost workdays... | 132.9 | 124.8 | 122.7 | 125.9 | - | - | - | - | - | - | - | - | - |
| Printing and publishing: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .............. | 6.9 | 6.9 | 6.7 | 7.3 | 6.9 | 6.7 | 6.4 | 6.0 | 5.7 | 5.4 | 5.0 | 5.1 | 4.6 |
| Lost workday cases.. | 3.3 | 3.3 | 3.2 | 3.2 | 3.1 | 3.0 | 3.0 | 2.8 | 2.7 | 2.8 | 2.6 | 2.6 | 2.4 |
| Lost workdays... | 63.8 | 69.8 | 74.5 | 74.8 | - | - | - | - | - | - | - | - | - |
| Chemicals and allied products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ......................... | 7.0 | 6.5 | 6.4 | 6.0 | 5.9 | 5.7 | 5.5 | 4.8 | 4.8 | 4.2 | 4.4 | 4.2 | 4.0 |
| Lost workday cases.. | 3.2 | 3.1 | 3.1 | 2.8 | 2.7 | 2.8 | 2.7 | 2.4 | 2.3 | 2.1 | 2.3 | 2.2 | 2.1 |
| Lost workdays.. | 63.4 | 61.6 | 62.4 | 64.2 | - | - | - | - | - | - | - | - | - |
| Petroleum and coal products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ............. | 6.6 | 6.6 | 6.2 | 5.9 | 5.2 | 4.7 | 4.8 | 4.6 | 4.3 | 3.9 | 4.1 | 3.7 | 2.9 |
| Lost workday cases... | 3.3 | 3.1 | 2.9 | 2.8 | 2.5 | 2.3 | 2.4 | 2.5 | 2.2 | 1.8 | 1.8 | 1.9 | 1.4 |
| Lost workdays........ | 68.1 | 77.3 | 68.2 | 71.2 | - | - | - | - | - | - | - | - | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .......................................... | 16.2 | 16.2 | 15.1 | 14.5 | 13.9 | 14.0 | 12.9 | 12.3 | 11.9 | 11.2 | 10.1 | 10.7 | 8.7 |
| Lost workday cases.. | 8.0 | 7.8 | 7.2 | 6.8 | 6.5 | 6.7 | 6.5 | 6.3 | 5.8 | 5.8 | 5.5 | 5.8 | 4.8 |
| Lost workdays... | 147.2 | 151.3 | 150.9 | 153.3 | - | - | - | - | - | - | - | - | - |
| Leather and leather products: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ................ | 13.6 | 12.1 | 12.5 | 12.1 | 12.1 | 12.0 | 11.4 | 10.7 | 10.6 | 9.8 | 10.3 | 9.0 | 8.7 |
| Lost workday cases.. | 6.5 | 5.9 | 5.9 | 5.4 | 5.5 | 5.3 | 4.8 | 4.5 | 4.3 | 4.5 | 5.0 | 4.3 | 4.4 |
| Lost workdays......... | 130.4 | 152.3 | 140.8 | 128.5 | - | - | - | - | - | - | - | - | - |
| Transportation and public utilities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .. | 9.2 | 9.6 | 9.3 | 9.1 | 9.5 | 9.3 | 9.1 | 8.7 | 8.2 | 7.3 | 7.3 | 6.9 | 6.9 |
| Lost workday cases.. | 5.3 | 5.5 | 5.4 | 5.1 | 5.4 | 5.5 | 5.2 | 5.1 | 4.8 | 4.3 | 4.4 | 4.3 | 4.3 |
| Lost workdays.. | 121.5 | 134.1 | 140.0 | 144.0 | - | - | - | - | - | - | - | - | - |
| Wholesale and retail trade |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ...... | 8.0 | 7.9 | 7.6 | 8.4 | 8.1 | 7.9 | 7.5 | 6.8 | 6.7 | 6.5 | 6.1 | 5.9 | 6.6 |
| Lost workday cases... | 3.6 | 3.5 | 3.4 | 3.5 | 3.4 | 3.4 | 3.2 | 2.9 | 3.0 | 2.8 | 2.7 | 2.7 | 2.5 |
| Lost workdays... | 63.5 | 65.6 | 72.0 | 80.1 | - | - | - | - | - | - | - | - | - |
| Wholesale trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ..... | 7.7 | 7.4 | 7.2 | 7.6 | 7.8 | 7.7 | 7.5 | 6.6 | 6.5 | 6.5 | 6.3 | 5.8 | 5.3 |
| Lost workday cases. | 4.0 | 3.7 | 3.7 | 3.6 | 3.7 | 3.8 | 3.6 | 3.4 | 3.2 | 3.3 | 3.3 | 3.1 | 2.8 |
| Lost workdays.......... | 71.9 | 71.5 | 79.2 | 82.4 | - | - | - | - | - | - | - | - | - |
| Retail trade: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases | 8.1 | 8.1 | 7.7 | 8.7 | 8.2 | 7.9 | 7.5 | 6.9 | 6.8 | 6.5 | 6.1 | 5.9 | 5.7 |
| Lost workday cases... | 3.4 | 3.4 | 3.3 | 3.4 | 3.3 | 3.3 | 3.0 | 2.8 | 2.9 | 2.7 | 2.5 | 2.5 | 2.4 |
| Lost workdays......... | 60.0 | 63.2 | 69.1 | 79.2 | - | - | - | - | - | - | - | - | - |
| Finance, insurance, and real estate |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases .................... | 2.0 | 2.4 | 2.4 | 2.9 | 2.9 | 2.7 | 2.6 | 2.4 | 2.2 | . 7 | 1.8 | 1.9 | 1.8 |
| Lost workday cases.. | . 9 | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | 1.0 | . 9 | . 9 | . 5 | . 8 | . 8 | . 7 |
| Lost workdays................... | 17.6 | 27.3 | 24.1 | 32.9 | - | - | - | - | - | - | - | - | - |
| Services |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total cases ................ | 5.5 | 6.0 | 6.2 | 7.1 | 6.7 | 6.5 | 6.4 | 6.0 | 5.6 | 5.2 | 4.9 | 4.9 | 4.6 |
| Lost workday cases..... | 2.7 | 2.8 | 2.8 | 3.0 | 2.8 | 2.8 | 2.8 | 2.6 | 2.5 | 2.4 | 2.2 | 2.2 | 2.2 |
| Lost workdays....................... | 51.2 | 56.4 | 60.0 | 68.6 | - | - | - | - | - | - | - | - | - |

${ }^{1}$ Data for 1989 and subsequent years are based on the Standard Industrial Classification Manual, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985-88, which were based on the Standard Industrial Classification Manual, 1972 Edition, 1977 Supplement.
${ }^{2}$ Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries
$\mathrm{N}=$ number of injuries and illnesses or lost workdays;
$\mathrm{EH}=$ total hours worked by all employees during the calendar year; and 200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).
${ }^{4}$ Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.
${ }^{5}$ Excludes farms with fewer than 11 employees since 1976.
${ }^{3}$ The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where
55. Fatal occupational injuries by event or exposure, 1996-2005

| Event or exposure ${ }^{1}$ | $\begin{gathered} \text { 1996-2000 } \\ \text { (average) } \end{gathered}$ | $\begin{aligned} & 2001-2005 \\ & \text { (average) }^{2} \end{aligned}$ | 20053 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 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 $\qquad$ | 264 | 310 | 345 | 6 |
| Noncollision ...................................................... | 372 | 335 | 318 | 6 |
| J ack-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 | 112 | 114 | 136 | 2 |
| Oxygen deficiency ................................................ | 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 IIIness 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.


[^0]:    Note: Dash indicates data not available.
    Source: Organization for Economic Cooperation and Development,

[^1]:    ${ }^{1}$ Constance Sorrentino, "Youth unemployment: an international perspective," Monthly Labor Review, July 1981, pp. 3-15; on the Internet at www.bls. gov/opub/mlr/1981/07/art1full.pdf (visited July 9, 2009). The countries in that study were the United States, Canada, Australia, Japan, France, Italy, Sweden, West Germany, and the United Kingdom excluding Northern Ireland.
    ${ }^{2}$ For other adjustments to the Canadian labor force statistics, see "International Comparisons of Annual Labor Force Statistics, 10 Countries,

[^2]:    ${ }^{5}$ As an example of the routine use of the ratio of youth to adult unemployment, see "Youth unemployment," in Key Indicators of the Labor Market, 4th ed. (International Labor Office, 2006), table 9, pp. 431-42.

[^3]:    ${ }^{1}$ Rice Backgrounder, RCS-2006-01 (U.S. Department of Agriculture, December 2006), p. 3.
    ${ }^{2}$ Ibid.

[^4]:    ${ }^{1}$ Finished goods are commodities that are ready for sale to final-demand users, either as durable or nondurable goods for consumers or as capital equipment for businesses.
    ${ }^{2}$ Intermediate goods consist of material and component inputs for manufacturing and construction, as well as supplies for all types of businesses.
    ${ }^{3}$ Intermediate energy goods are energy products for distribution to businesses, and finished energy goods are energy products for distribution to households.
    ${ }^{4}$ For a detailed discussion of price transmission across stages of processing, see Jonathan Weinhagen, "An empirical analysis of price transmission by stage of processing," Monthly Labor Review, November 2002, pp. 3-11, as well as Jonathan Weinhagen, "Consumer gasoline prices: an empirical investigation," Monthly Labor Review, July 2003, pp. 3-10.
    ${ }^{5}$ The stage-of-processing indexes for finished goods, intermediate goods, and crude goods other than foods and energy are commonly referred to as the

[^5]:    ${ }^{1}$ Determining a value for unpaid household work is a complex undertaking, one that requires a method for valuing that time as well as information about the time involved in these activities. For more information about this subject, see: Katharine G. Abraham and Christopher Mackie, eds., Beyond the Market: Designing Nonmarket Accounts for the United States (Washington, D.C., The National Academies Press, 2005).
    ${ }^{2}$ Information is collected about times when survey respondents had a child "in their care" while doing their primary activities, but this information is not used in this analysis.
    ${ }^{3}$ This analysis uses the 2003-07 pooled data set and corresponding activity coding lexicon, both are available at: www.bls.gov/tus/datafiles_my.htm.
    ${ }^{4}$ More information about the American Time Use Survey is on the Bureau of Labor Statistics Web site at: www.bls.gov/tus/.
    ${ }^{5}$ For survey respondents who are employed, the interviewer asks "Were there any activities that were done as a part of your job?" Respondents with

[^6]:    From table 1,"Historical Highlights: 2002 and Earlier Census Years" (U.S. Census of Agriculture, 2002).

[^7]:    ${ }^{1}$ Specific items included in the task categories listed in the survey were as follows:

    Chores or maintenance: Handling moving objects; general farm or ranch maintenance.

    Machinery-related tasks: Fieldwork driving a tractor or a self-propelled machine; fieldwork as a rider on powered or pulled equipment; maintaining or repairing farm machinery; hitching implements or equipment.

    Animal-related tasks: Caring for animals, including poultry; milking

[^8]:    ${ }^{1}$ The survey, conducted in 2005-06, asked for information on employment patterns "in the preceding 12 months"; hence, the information that was returned preceded the survey by not more than a year.
    ${ }^{2}$ For the purposes of this research summary, the west coast is defined as California, Oregon, and Washington; the south as Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia; the southwest as Arizona, Colorado, Nevada, New Mexico, Oklahoma, Texas, and Utah; and the northeast as Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

[^9]:    ${ }^{1}$ 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

[^10]:    1 Seasonally adjusted. "Quarterly average" is percent change from a Occupational Classification (SOC) system. The NAICS and sOc data shown 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
    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.

[^11]:    See footnotes at end of table

[^12]:    Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory $\mathrm{p}=$ preliminary.

    NOTE: See "Notes on the data" for a description of the most recent benchmark revision. workers in the service-providing industries.

[^13]:    ${ }^{1}$ 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;

[^14]:    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;

[^15]:    1 Average weekly wages were calculated using unrounded data.
    2 Totals for the United States do not include data for Puerto Rico
    or the Virgin Islands.

[^16]:    See footnotes at end of table.

[^17]:    See footnotes at end of table.

[^18]:    ${ }^{1}$ 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.

[^19]:    ${ }^{1}$ Consists of private industry workers (excluding farm and household workers) and American Classification System (NAICS) and the 2000 Standard Occupational 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 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.

[^20]:    See footnotes at end of table.

[^21]:    See footnotes at end of table

[^22]:    ${ }^{1}$ Not seasonally adjusted
    ${ }^{2}$ Indexes on a December $1997=100$ base.
    ${ }^{3}$ Indexes on a December $1982=100$ base .

[^23]:    NOTE: Dash indicates data not available.
    Quarterly figures for France, Germany, Italy, and the Netherlands are calculated by applying annual adjustment factors to current published data and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. Quarterly figures for Sweden are BLS seasonally adjusted estimates derived from Swedish not seasonally adjusted data. For further qualifications and historical annual data, see the BLS report International comparisons of annual labor force statistics, 10 countries (on the internet at

