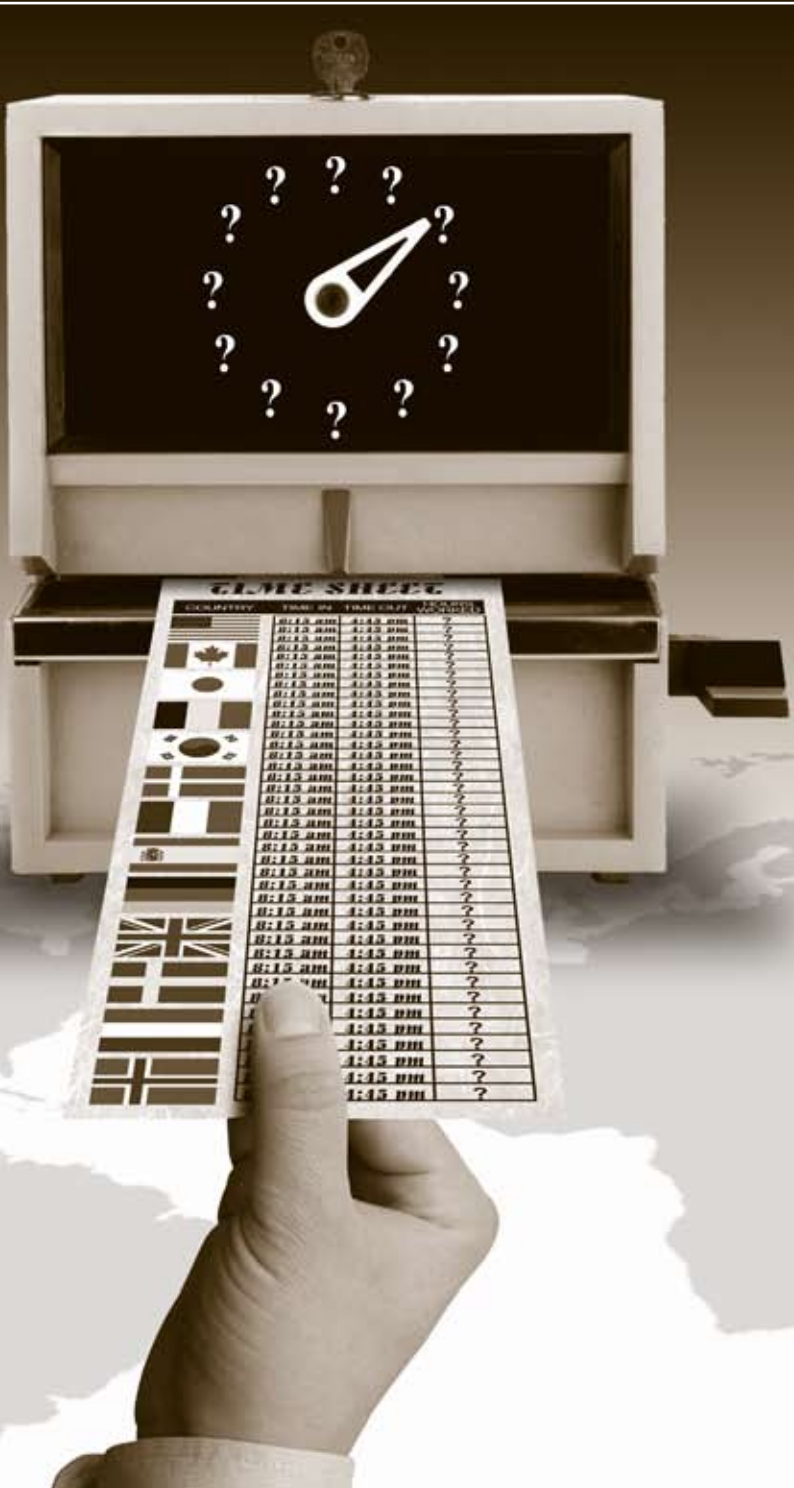
May 2009

BLS 125 YEARS

MONTHLY LABOR REVIEW

U.S. Department of Labor

U.S. Bureau of Labor Statistics



International comparisons of hours worked: an assessment of the statistics

also in this issue:

Job openings and hires decline in 2008

Business employment dynamics: annual tabulations

Comparing Workers' Compensation claims with establishments' responses to the SOII

MONTHLY LABOR
REVIEW

Volume 132, Number 5
May 2009

Departments

The May *Review*

Our lead article this month assesses the sources and quality of international statistics on hours worked. As with any effort at international comparison, much work has to be done to standardize concepts, measures, and sources as much as possible for the comparisons to be meaningful. As the author Susan E. Fleck notes, "Measuring and comparing how many hours people spend at work across countries is not an exact science, despite recent improvements in methodology and data coverage." But, in an era of ever-increasing global markets and trade, it is an invaluable exercise to undertake. The article describes and contrasts data for 13 developed economies as far back as 1980. It particularly emphasizes differences in hours-worked data collected from surveys of businesses and households and those gathered from administrative sources.

2008 was not a good year overall for employment trends in the U.S. labor market. As Katherine Klemmer discusses in her article, job openings and hires both declined in 2008. This downward trend, coupled with an upward trend in layoffs and discharges, should not be surprising in light of the rise in unemployment and decline in employment that have characterized the recession which began at the end of 2007. The author summarizes developments in openings and hires for the nation as a whole, for regions, and by industry.

The Bureau's Business Employment Dynamics (BED) program has become an increasingly watched data source for quarterly insight on the U.S. economy. Three BLS economists—Akbar Sadeghi, James R. Spletzer, and David M. Talan—present new time series from the BED program of annual gross job gains and gross job losses. Their article provides a detailed explanation of how these new series have been created and the unique value added by their availability. They present comparisons of the new series with the quarterly BED statistics and with similar statistics from the U.S. Census Bureau.

There has been a great deal of research and discussion about how workplace injuries and illnesses are measured and whether the current program conducted by the Bureau of Labor Statistics, which collects and tabulates employer reports, is fully accurate. Nicole Nestoriak and Brooks Pierce describe a recent study that compared case records from the BLS program with information from Workers' Compensation claims databases. They present some additional findings by analyzing a subset of the data used in the recent study. Their goal is to extend the aggregate results reported by the other authors in order to shed light on the types of cases the BLS survey may undercount.

BLS news releases

Among the various methods of data dissemination, the news release format has been used by BLS for a very long time. The national office of BLS routinely publishes about 170 or so news releases per year, with many others issued by the regional offices. Some are produced monthly, some quarterly, some annually, and some irregularly. Releases typically contain data published for the first time. They include descriptive and analytical text about the figures, technical information about data sources, methods, and so on, and tables containing data at detailed levels, cross-tabulated by different variables.

It has been quite some time since the Bureau assessed how it uses the news release format and how effective the format is. Starting in the summer of 2008, BLS began such as assessment. It elicited feedback from interested parties in a number of ways: conducting focus groups with journalists, requesting comments from the BLS Data Users Advisory Committee, setting up an evaluation by BLS cognitive psychologists who assist the agency evaluating the clarity of some of its public communications, and having internal reviews conducted by the Bureau's program and publications offices.

As a result of this review process, BLS has decided to produce news releases that focus with greater clarity on the most important analytical points and succinctly provide recent and historical context relevant to each analytical story. Starting in the summer of 2009, BLS will begin to introduce these changes to the news releases that contain data designated as Principal Federal Economic Indicators (PFEIs). The monthly Employment Situation and Consumer Price Index releases are two examples of such news releases. The formats of the text sections of the news releases also will become more standardized. There will be no change in the data published, only in the textual discussion of the data.

In the future, BLS intends to expand the review process to include its other (non-PFEI) news releases and, as a result, may implement similar changes to those releases. Timelines for that phase of the news release review process have not yet been established.

Information on the news release review process can be found on the BLS Web site at **www.bls.gov/bls/changes_to_text_sections_of_nrs.htm**. This page will be updated as more information about the process becomes available. □

International comparisons of hours worked: an assessment of the statistics

A study of 13 countries reveals that measures of hours worked based on administrative sources are relatively low while measures based on establishment and labor force surveys are relatively high; thus, although ever improving, these measures cannot yet be taken at face value and are useful only for broad comparisons

Susan E. Fleck

Public commentators, the press, and governments are interested in the hours people work. Work hours underpin productivity measures. The number of hours individuals work stimulates debate on the quality of life in an international context: do some societies live to work while others work to live? The differences in hours worked between countries fuels discussion of economic growth, employment, and unemployment. Any comparative measure between countries, however, depends on a standardization of concepts, sources, and methods. Measuring and comparing how many hours people spend at work across countries is not an exact science, despite recent improvements in methodology and data coverage.

The recommendation from the International Labor Organization (ILO) is to use actual hours worked, including annual hours actually worked, as the basis for international comparisons. The recommendation to include annual hours actually worked was part of an updated ILO resolution regarding the measurement of working time that was adopted at the International Conference of Labor Statisticians held in the fall of 2008. Background research on working time and hours worked carried out by international statistical organizations and national statistical agencies to prepare for the conference has contributed to a rich debate on hours worked.

This article benefits from the recent exchange of ideas leading up to the 2008 Conference and looks at two data sets on hours worked. The better known of the two is the Organization for Economic Cooperation and Development (OECD) data set on average annual hours actually worked, for all employed persons, for 30 countries, published in the annual OECD *Employment Outlook*.[1] The second data set is the Bureau of Labor Statistics (BLS) underlying hours and employment data in the annual report, "Gross Domestic Product per Employed Person," which presents an international comparison of gross domestic product (GDP) per hour worked for 13 countries. The OECD data set provides an explicit measure of average annual hours worked, while the BLS data set publishes total employment and hours, from which a series for average annual hours worked can be derived. Both hours-worked data series complement output and productivity data published by the respective organizations.

Whereas data users tend to look at the number of average hours worked per year when making comparisons between countries, both BLS and OECD caution that such comparisons are prone to error and that the data series best describe changes over time. This

Susan E. Fleck is Chief, Division of Major Sector Productivity, Office of Productivity and Technology, Bureau of Labor Statistics. This article was prepared when she was a supervisor in the Division of International Labor Comparisons. E-mail: fleck.susan@bls.gov

article provides some context and explanations for the data user on why these comparisons are fraught with difficulty. It considers how concepts, sources, and methods used to construct hours-worked data series affect analyses of data levels and trends. The differences between the BLS and OECD data sets discussed here highlight a major theme of the article, namely, that the estimate of average annual hours actually worked per employed person is just that—an estimate—and it may vary with the sources and methods used. Nonetheless, trends are similar. Finally, the article explains why small differences in hours worked between countries have little meaning, whereas large differences are more likely to be meaningful.

The countries studied are the United States, Canada, Japan, South Korea, and nine European countries: Belgium, Denmark, France, Germany, the Netherlands, Norway, Spain, Sweden, and the United Kingdom. Both BLS and OECD data sets depend on a variety of data sources and concepts used to measure and estimate hours worked. The 13 countries considered here represent a wide variety of developed economies. Additional data used in this article come from special studies by the OECD and the ILO, as well as from studies by researchers and national statistical agencies. When time series are used, data begin with 1980 where available. For both data sets, pre-1991 data for Germany are estimated.

The analysis begins with an explanation of various concepts and sources underpinning hours worked and of their uses and limitations in preparing data series on average annual hours actually worked. This explanation establishes the framework for discussing methods of estimation of average annual hours actually worked and for describing the BLS and OECD data sets, including breaks in series. The levels and trends for each country are compared with the use of a rank von Neumann test, to show how trends can be similar, although levels differ. With this background, the historic trends in the two data series are compared over a quarter-century whenever data are available. Furthermore, changes in the labor market that influence hours worked, such as an expansion of part-time and women's employment, also will be examined. A short overview of changes in laws and norms helps put the trends in context. Comparisons are made between sources for the same country and between countries using similar methodologies. Comparisons between Japan and the United States and between Norway and Sweden highlight discrepancies in levels due to differences in sources and methods. The comparisons are intended to provide the data user with a better understanding of the interplay among concepts, sources, and methods and how they affect the comparisons.

There are a number of explanatory factors underlying the differences in hours worked across countries, such as institutional, legal, and policy differences. Only institutional and legal factors specific to the regulation of normal hours of work will be addressed in this article; the other factors are beyond the scope of the analysis. Furthermore, with the recent passage of the revised ILO resolution on working time, the concepts underlying hours worked have expanded to provide more detail. This study was prepared before the 2008 ILO resolution on working time was finalized and took effect; thus, the concepts presented are based on the original ILO resolution.

Hours of work: concepts and sources

Concepts. Resolutions passed by the tripartite meeting of the International Conference of Labor Statisticians establish recommendations for countries to develop data with enough similarities to be suitable for international comparisons. The October 1962 ILO "Resolution concerning statistics of hours of work" provides guidance on concepts and measurement relating to hours of work and on a basic framework for collecting and analyzing data on hours. The resolution establishes three concepts of hours of work: "normal hours of work," "hours actually worked," and "hours paid."[2] Another concept often used in data collection is "usual hours of work." Note that "hours worked" refers to *measured*, or actual, hours, whereas "hours of work" refers to *scheduled*, or planned, hours.

The box on page 5 lists the components of working time, based on the 1962 resolution. Items 1 through 6 comprise one or more of the hours concepts mentioned in this article. Items 7 and 8 are generally accepted as hours not at work.

Normal hours of work are the maximum number of hours worked beyond which an employer must pay an overtime premium. This concept is partially addressed in item 1 in the box. Normal hours may be fixed by legislation or established by collective-bargaining agreements, depending on the country, industry, and occupation. The vast majority of countries in the world have a normal workweek of 40 or more hours. In the United States, the normal workweek is 40 hours. In Europe, the normal workweek is usually less than 40 hours and ranges widely by industry or occupation both within and between countries. For example, earlier this decade, the normal workweek was 29 hours for Volkswagen production workers in Germany, but now it is 33 hours; in France, the normal workweek has been 35 hours for almost all employees for the past 10 years; and in the Netherlands, the normal workweek can be as

Components of working time

1. Hours actually worked during normal periods of work.

2. Time worked in addition to hours worked during normal periods of work and generally paid at higher rates than normal rates (overtime).

3. Time spent at the workplace on work such as preparation of the workplace, repairs and maintenance, preparation and cleaning of tools, and preparation of receipts, timesheets, and reports.

4. Time spent at the workplace waiting or standing by for such reasons as lack of work, breakdown of machinery, and accidents, or time spent at the workplace during which no work is done, but for which payment is made under a guaranteed employment contract.

5. Time corresponding to short rest periods at the workplace, including tea and coffee breaks.

6. Hours paid for, but not worked, such as paid annual leave, paid public holidays, and paid sick leave.

7. Meal breaks.

8. Time spent on travel from home to work and from work to home.

many as 60 hours for some workers for short periods.[3] Some people call normal hours of work "hypothetical," in that they measure the *ideal* work schedule, not the observable work schedule. On a practical level, employers often arrange work schedules to keep employees' hours at or below the normal-hour threshold, in order to avoid paying overtime wage rates. Data sources for normal hours of work are derived from the aforementioned legislation and collective-bargaining agreements and cover predominantly employees.

The concept of *hours actually worked* encompasses all hours spent working, including overtime hours and excluding absences; these are items 1 through 5 in the box.[4] The concept excludes items 6 through 8—that is, hours paid but not worked, such as paid leave, paid public holidays, and paid sick leave, as well as meal breaks and commuting time. As part-time work has become more prevalent, workers' hours are less than the normal workweek, but are still counted in item 1. Although not explicitly stated in the resolution, hours actually worked are commonly counted as both paid and unpaid hours at work. Data on hours actually worked are collected from household-based surveys, such as labor force surveys and time-use surveys; establishment surveys report data using other hours concepts, which can be adjusted to an actual-hours concept. Hours actually worked usually are reported on a person basis (but can be adjusted to a jobs basis), account for the total hours individuals work on all jobs in a given reference period, and generally include both persons working part time and persons working full time. Yearly estimates usually are calculated to reflect a full-year worker (that is, someone who works throughout the year).

The *hours paid* concept is described in the 1962 resolution, but is not identified as a concept amenable to international comparison. Hours paid generally include items 1 through 5 in the accompanying box and exclude unpaid overtime. Hours paid also include item 6: holidays, vacation, and sick leave. Depending on the terms of the employment contract, items 7 and 8—meal breaks and commuting time—also may be included in the hours-paid concept. Wide variations across countries persist regarding how workers are paid for holidays and nonwork time, particularly sick leave. These differences are the primary reason that international comparisons of hours paid are not made.

Usual hours of work are not addressed in the 1962 ILO resolution on hours, but are included in the 2008 resolution. Usual hours of work are hours that are typical of a certain length of time, such as a day, a week, or a month.[5] The concept encompasses the same components as hours actually worked, but refers only to regularly scheduled hours. Data on usual hours of work commonly refer to the usual work schedule during a week or month and are most commonly collected from household surveys. Some establishment surveys collect data on contractual hours, which are usual hours of work expected to be fulfilled under individual employment agreements. These contractual hours are analogous to normal hours under collective-bargaining agreements.[6]

Sources of hours data. A number of sources are used to capture the hours concepts described in the previous section. For each hours concept, certain sources of data are preferred over others because they provide a better measure of the concept. In the context of creating a comparable international measure of average annual hours worked, each source has its benefits and drawbacks. The chief issues to address in determining the best concept and source of hours to use in estimating average annual hours worked are (1) how well the data collected capture the concept of hours actually worked and (2) what additional data sources have to be used to create the annual estimate, because of either measurement issues or coverage issues. The main concern is whether the source covers detailed industries, all types of workers, and the total economy.

1. Administrative data sources. Data on normal hours of work are available through administrative data sources. The primary purpose of such data often is to manage programs, not to collect statistics. Administrative data are collected by social programs, ministries, or local, regional, and national governments. In addition to covering legislation or collective-bargaining agreements on normal hours, administrative data may cover the use of public services (such as registering in employment offices or being paid sick leave), labor code enforcement, or tax collection. Administrative data also provide information on hours *not* worked, particularly in countries where paid leave is centrally administered, such as Sweden and Norway.

The advantage of an administrative source for data on normal hours is its potentially wide population coverage in those countries with large numbers of employees working under collective-bargaining agreements. European countries have high rates of union coverage and, in some cases, have passed legislation that extends the benefits agreed upon in collective-bargaining contracts to workers who are not union members.[7] These countries collect large amounts of data in administrative databases because they have active social programs and wide-ranging labor regulations. Still, administrative data from collective-bargaining agreements, though a common source of data on normal hours for different occupations, industries, and regions, are not the only source: establishment surveys, such as those conducted in France, also may provide information on normal hours of work.

Of course, there are limitations on administrative data as a source of information on hours. First, the wide range of administrative data on job or labor conditions that provides information on normal hours may exclude some workers, such as part-time workers, workers not covered by collective-bargaining agreements, and the self-employed. For example, in France, small and medium-sized businesses together account for one-fourth of employees, but those employees are not subject to the general limitation of a normal 1,600-hour work year. Thus, if normal hours were to be the basis of an annual measure of hours actually worked for all employed, the additional hours worked by employees in small and medium-sized businesses would be excluded.[8] Also, administrative data are collected by job and not by person, so additional information would be required to account for multiple jobholders if hours worked were to be estimated by person.

Because of limitations on concepts and data sources of normal hours, estimates of annual hours worked based on these sources are likely to be undercounted. Normal hours do not provide a total-economy measure of hours worked without adjustments that expand coverage to all employed persons and all industries. The nature of the data sources—collective-bargaining agreements and other sources of regulated normal hours—guarantees that overtime hours worked are not counted. Thus, estimates of hours actually worked will be biased downwards. As an example, some countries covered in the BLS and OECD data sets base their measure of average annual hours worked on normal hours and deduct all paid annual leave and allowable sick leave. This estimation technique undercounts hours.

2. Survey-based data. Survey-based data have an advantage over administrative data covering normal hours of work, in that surveys provide reports of hours actually worked by individuals and count persons employed or jobs. Data are reported from either individuals or businesses on their actual labor market behavior, not on their expected behavior. Labor force surveys collect data on weekly or daily actual or usual hours worked (or both). Establishment surveys generally collect either weekly or monthly hours data on an hours-paid concept. Advantages and limitations exist with the data provided by each of these types of surveys.

a. Household surveys. Data on actual or usual hours worked are collected from household surveys such as labor force surveys and time-use surveys, the latter being more irregular and with a smaller sample size. Data on hours actually worked and usual hours of work are reported on an employed-person basis and account for the total hours individuals, including both full- and part-time workers, work on all jobs in the reference period.

The two major advantages of labor force survey data

are the ability to report hours actually worked, including paid and unpaid overtime, and the broad coverage of the employed. The concept of hours actually worked captures the variability and irregularity of the number of hours a person works and does not work in a given week or other period, and it can account for shortened workweeks, overtime hours, holidays, sick leave, and vacation. Of course, the concept of usual hours of work also captures paid and unpaid overtime, as long as the overtime hours are a regular part of the work schedule. The problem is that usual hours of work do not fluctuate as much as hours actually worked and do not capture that variability, because they exclude irregular hours not worked, irregular overtime, and short-time work (temporary reductions in the regular workweek). Regarding coverage of the employed, the nature of a labor force survey is to reach into all households with all types of workers. Thus, labor force surveys provide coverage of the self-employed and unpaid family workers, both of whom are excluded in data on normal hours of work.

There are a couple of limitations, however, to using labor force survey data for comparisons of hours worked. First, data collection that is not ongoing (that is, discontinuous data collection) can affect the accuracy of data on both hours actually worked and hours not worked. Because of this problem, European Union member countries recently have moved toward ongoing data collection; hence, their estimates of average annual hours actually worked are based on 52 weeks of the year. But most other developed countries collect data on a discontinuous, albeit regular, basis. By its nature, discontinuous data collection, such as one week a month or one week a quarter, does not account for unexpected irregularities in hours worked and hours not worked—for example, hours not worked on holidays, in bad weather, or because of school closings. Adjustments are made to account for hours not worked, but these adjustments themselves are variable across countries, within a country, and across years, as well as by region or even occupation and industry. It is likely that, as labor force surveys in the European Union and elsewhere expand coverage to all months of the year and all weeks of a month, and as questions and data collection on hours actually worked and hours not worked become more precise, some of these inconsistencies will diminish.

A second common concern regarding labor force surveys is the issue of reliability. Labor force surveys depend on respondent recall and proxy responses; accordingly, survey respondents often do not reliably report their own hours worked and hours not worked, because they are relying on faulty memory, and neither do proxy respondents report such hours reliably, because they lack information about the intended respondent. In essence, in a labor force survey hours actually worked are not observed, but are *reported*, and people can forget the hours they actually worked.

Nonetheless, past concerns over respondent error in labor force surveys seem to be less of a problem than previously thought.[9] The advent of time-use surveys has led to research that sheds light on comparisons between short-term recall of hours worked and longer term recall used in household surveys. For example, comparisons between the 1998 Canadian Labor Force Survey and Time Use Survey found that, overall, average numbers of hours worked are similar between the two surveys.[10] One U.S. study showed that time-use survey responses accurately reflect hours worked when the data are collected in or near the reference period, but that hours are reported at a level 5 percent lower when data are collected during later weeks.[11] Concerns remain over proxy responses.

Finally, a more theoretical concern regarding the use of hours data from labor force surveys in productivity comparisons is the need to convert the data from a national economy concept to a domestic economy concept consistent with national accounts measures.[12] In small countries, such as Belgium, where residents cross national borders to work, employment data from the household, or labor force, survey may not be a corresponding measure of those employed in a country's production of output, thus affecting the corresponding hours measure.

b. Establishment surveys. Data on hours paid are collected from establishment surveys. The purpose of such surveys is to collect data on hours, earnings, number of employees, compensation, and other labor characteristics of firms and their workers. Establishment surveys have at least three advantages. First, the data are deemed reliable, because they are extracted from payroll information and are considered more precise than data based on individual recall.[13] Second, industry coverage and classification also are deemed reliable. This is because establishment survey data often are collected at a detailed industry level, generally complement national accounts output data, and thus also complement industry productivity analysis. Finally, in some countries, such as the United States, establishment survey sample frames are much larger and cover far more workers than labor force surveys can cover.

The limitations on establishment survey data for hours measures are at least fourfold. First, the concept of hours paid typically does not report hours actually worked. Rather, it includes hours paid and worked, such as the regular workweek and paid overtime; and hours paid, but

not worked, such as paid vacation, sick leave, and maternity leave. Second, both the practice and reporting of the collection of data on hours paid differ widely across countries, making comparisons difficult. In some countries, such as Norway, benefits for sick leave or maternity leave are paid by a government or a union, so the hours-paid data from establishment survey sources exclude these benefits; in other countries, such as the United States, paid sick leave is a benefit offered by many employers, so it is counted as hours paid. It is difficult to account for these differences in creating comparative measures of hours paid between countries. Third, survey coverage is limited to employees, and only to certain types of employees. Historically, establishment survey data have been collected on production workers and have excluded supervisory, temporary, or part-time employees. Only in the recent past have establishment surveys expanded their coverage to include supervisory employees. Needless to say, data on self-employed and unpaid family workers must be found to complement establishment survey data on employees. Fourth, in establishment surveys, industry coverage, although complementary to data found in national accounts, may not be representative of all industries. The focus of data collection by establishment surveys always has been the manufacturing sector, although countries have been expanding coverage to include the service sector.

Without adjustment, hours-paid data from establishment surveys do not provide a total-economy measure of hours actually worked that covers all employed persons in all industries. Depending on the adjustment, the estimate may over- or underestimate hours actually worked: on the one hand, hours-paid data that are not adjusted for paid leave will overstate the estimate of hours actually worked; on the other hand, hours-paid data that are adjusted to the hours-worked concept by means of administrative or legislative leave data may understate hours worked if the adjustment assumes that employees take all leave that is offered them.

These concepts and sources of hours worked are the building blocks for the analysis in the next section, which addresses issues related to constructing a series of average annual hours actually worked and examines two data sets from the BLS and the OECD.

Estimating and comparing hours actually worked

In recent years, statistical reporting and measurement have focused on how to create comparable series of average annual hours actually worked. The reasons are twofold. First, if hours worked are to be used as a comparative quality-of-life indicator, they are best measured over a year, to reflect vacation time and other absences from work. Second, demand has grown for measures of annual hours in order to estimate an economy's total productivity. Average annual hours actually worked per capita provides a broad measure of labor utilization, broken down into three components in a recent OECD study: the "intensive," or individual, component of average annual hours actually worked per employed person, the "extensive," or economywide, component of the employment-population ratio, and a demographic factor.[14] Unless otherwise stated, the rest of this article considers instead the narrower, "intensive," measure of *average annual hours actually worked per employed person*—that is, the hours of labor that workers actually put in on the job.

In 2003, the 17th general report by the International Conference of Labor Statisticians highlighted the need to revise existing international recommendations on "*hours actually worked* during short as well as longer reference periods" and suggested that such measures "be broadened to cover all persons in employment, including the self-employed, by extending the content of each of the defining categories of working time to include all work situations, such as irregular, seasonal, work at home, and unpaid work."[15] Furthermore, the report suggests "the development of an international definition of *annual hours of work* that allows for alternative estimation procedures that take into account variations in the type and range of national statistics of working time."[16]

This section looks at the methodologies used to prepare measures of average annual hours actually worked per employed person and the data sets underlying the published measures. The analysis begins with an overview of the concepts and sources used in the BLS and OECD data sets, followed by a comparison of differences in the estimates of average annual hours actually worked per employed person in each data set, for each of the 13 countries examined. A statistical test comparing trends between the two data sets shows that the trends diverge for only 3 of the 13 countries examined: the United States, France, and the Netherlands. The analysis undertaken supports the perspective of the statistical organizations that hours data are best analyzed as trends and not as levels.

Data sources and country methodology. As countries move toward adopting a national accounts framework to measure labor input, or hours worked, concepts across countries are becoming more consistent. It is the source of data and the methodology used, rather than the concepts employed, that are at the heart of the comparability issue.

As Gerard Ypma and Bart van Ark attest in their 2006 analysis of the OECD/Eurostat country survey on employment and hours for national accounts, a country's data sources and data priorities determine the methodology that the country uses to prepare an estimate of hours, employment, and, eventually, average annual hours actually worked per employed person. The direct method of estimation is based on sources that capture hours actually worked, whereas the component method is used to convert normal, paid, or usual hours worked to an hours-actually-worked concept.[17]

Exhibits 1 and 2 together provide a snapshot of the BLS and OECD data sets through 2006, the concept of hours, the sources of hours and employment, and—where information was available—the adjustments to concepts made for each data set.[18] Ypma and van Ark's analysis gives detail where information is lacking. The general term "national accounts concept of hours worked" refers to the 1993 System of National Accounts measure of labor inputs, which in turn refers to the ILO resolution on hours actually worked.[19] Individual countries may adopt measures that include any number of original sources and related concepts of hours and employment, and, as necessary, may subsequently adjust them to expand coverage to all employed persons, to convert measures of paid, normal, or usual hours to hours actually worked, or to include industrial sectors that are otherwise excluded from a survey.[20]

An important detail of the two tables is the unit of measure of hours. Whether that unit of measure—that is, the average annual hours actually worked—is applied per employed person, per job, or on the basis of full-time equivalents—creates differences between levels of data. Because one person can hold more than one job, the average hours worked per employed person will be greater than the average hours worked per job. The concept of full-time equivalent workers consolidates hours worked by part-time workers into a measure of hours that approximates the hours worked by a full-time employed person working a normal workweek. Average annual hours actually worked per full-time equivalent worker will be greater than average annual hours actually worked per employed person. Average annual hours actually worked per employee are estimated when data for the self-employed are not available or are difficult to integrate into the calculations. Average annual hours actually worked per employee are generally lower than those per employed person, because the self-employed work longer hours than employees. This comparison of two data sets highlights how results differ, even for the same country, if a different source of data or unit of measure is used. Eight of the 13 countries have major differences in their data sources or methods.

BLS data set. In the face of continued interest in broad measures of productivity based on hours worked, a 2007 BLS report began to publish international comparisons of GDP per hour worked, as well as GDP per employed person.[21] The underlying data on total hours and total employment are collected from national sources, where available. The report covers 16 countries, but data on hours worked cover only 13 of the 16, all 13 of which are discussed in this article. Efforts are being made to extend coverage to Australia as well. Data for Germany have a break in 1991; data for earlier years are estimates based on the former West Germany's hours and employment. Other breaks in series include a 1997 break for Canada due to changes in classification. The years covered for Japan and the Netherlands begin at 1996 and 1995, respectively.

Sources and concepts of data on hours are available in detail only for some countries. The BLS report publishes an aggregate, rather than average, measure of annual hours worked. The underlying source data used to calculate average annual hours actually worked in the BLS data set are most commonly total-hours-worked measures, available from national accounts, and total employment measures, usually estimated from national labor force surveys or available from national accounts. Data series for three countries—Japan, South Korea, and Belgium—are published as average hours worked. Japan and Belgium publish average annual hours worked in the national accounts and OECD productivity database, respectively.[22] South Korea's average annual hours worked are calculated from average weekly hours worked, based on the labor force survey. Four other countries' hours-worked data are derived partially from labor force surveys. For the United Kingdom, total hours are based on labor force survey data whereas total employment comes from national accounts. For the United States, Canada, and the Netherlands, labor force surveys are the source of total employment data, adjusted, where necessary, to account for the Armed Forces. Total hours data for the United States and Canada are based on establishment and labor force surveys. The source of data for the remaining countries is total hours worked and employment based on national accounts.

Of the countries included in the BLS series, the average hours worked are on an employed-person basis for all but Japan, Norway, Spain, and the United Kingdom. Data on hours worked for Japan refer to employees and exclude the self-employed. Data for Norway are on a full-time equivalent basis, and data for Spain and the United Kingdom are on a jobs basis.

OECD data set. Once a year, the *OECD Employment Outlook* publishes data on average annual hours actually worked per

Exhibit 1. BLS concepts, sources, and methods, 13 countries

Country	Beginning year	Breaks in series	Primary source of data on total hours worked	Other sources of data on total hours worked	Hours concept used in source data[1]	Primary source of data on total employment	Other sources of data on total empoyment	Methodology used to create average annual hours actually worked	Unit of measure
United States	1950	None	Establishment survey	Labor force survey	Hours paid, with adjustment to hours worked	Labor force survey	Data on Armed Forces	Divide total hours by total employment	Per employed person
Canada	1961	1997, NAICS	Labor force survey	Establishment survey	National accounts	Labor force survey	No more known sources	Divide total hours by total employment	Per employed person
Japan	1996	None	National accounts	No more known sources	National accounts	No information available	No information available	No information available	Per employee
South Korea	1980	None	Labor force survey	No more known sources	Average hours worked, by week	No information available	No information available	Average weekly hours × 52	Per employed person
Belgium	1970	None	Administrative data	No more known sources	National accounts	No information available	No information available	No information available	Per employed person
Denmark	1966	None	National accounts	Administrative data	National accounts, based on normal hours	National accounts	No more known sources	Divide total hours by total employment	Per employed person
France	1970	None	National accounts	No more known sources	National accounts	National accounts	No more known sources	Divide total hours by total employment	Per employed person
Germany	1960	1991	National accounts	No more known sources	National accounts	National accounts	No more known sources	Divide total hours by total employment	Per employed person
Netherlands	1995	None	National accounts	No more known sources	Volume of person-hours worked	Labor force survey	Data on Armed Forces	Divide total hours by total employment	Per employed person
Norway	1970	None	National accounts	No more known sources	Man-hours	National accounts	No more known sources	Divide total man-hours worked by total employment	Full-time equivalent
Spain	1979	None	National accounts	No more known sources	No information available	National accounts	No more known sources	Divide total hours by total jobs	Per job
Sweden	1980	None	National accounts	No more known sources	No information available	National accounts	No more known sources	Divide total hours by total employment	Per employed person
United Kingdom	1971	None	Labor force survey	No more known sources	No information available	National accounts	No more known sources	Divide total hours by total jobs	Per job

[1] The national accounts concept of hours worked is hours actually worked, unless otherwise noted.

Exhibit 2. OECD concepts, sources, and methods, 13 countries

Country	Beginning year	Breaks in series	Primary source of data on total hours worked	Other sources of data on total hours worked	Hours concept used in source data[1]	Primary source of data on total employment	Other sources of data on total empoyment	Methodology used to create average annual hours actually worked	Unit of measure
United States	1950	None	Establishment survey	Labor force survey	Hours paid, with adjustment to hours worked	Establishment survey	Labor force survey	(Total hours/ total employment) × multiple-jobholder rate	Per employed person
Canada	1961	1997, NAICS	Labor force survey	Establishment survey	National accounts	No information available	No information available	Direct measure of average actual hours worked, with adjustments for weeks not covered and holidays	Per job
Japan	1970	None	Establishment survey	Labor force survey	Hours worked	Establishment survey	Labor force survey	OECD estimates	Per job
South Korea	1980	None	National accounts based on labor force survey	No other known sources	National accounts	National accounts, based on labor force survey	No more known sources	OECD estimates	Per employed person
Belgium	1983	None	Labor force survey	Administrative data	Usual hours worked	No information available	No information available	OECD estimate, accounting for underreporting of time not worked and public holidays	Per employed person
Denmark	1970	None	National accounts	Administrative data	National accounts	National accounts	No more known sources	OECD estimates	Per employed person
France	1970	None	Administrative data	Establishment and labor force surveys	National accounts, based on hours offered	No information available	No information available	French national accounts	Per employed person
Germany	1991	1991 data series begin	Administrative data	Labor force survey	National accounts, based on normal hours	No information available	No information available	German national accounts	Per employed person
Netherlands	1987	2002, 2003, OECD estimates	Labor force survey	Administrative data	Usual hours worked	No information available	No information available	OECD estimate, accounting for underreporting of time not worked and public holidays	Per employed person

Exhibit 2. Continued—OECD concepts, sources, and methods, 13 countries

Country	Beginning year	Breaks in series	Primary source of data on total hours worked	Other sources of data on total hours worked	Hours concept used in source data[1]	Primary source of data on total employment	Other sources of data on total empoyment	Methodology used to create average annual hours actually worked	Unit of measure
Norway	1962	None	Establishment survey	Labor force survey and administrative data	National accounts	No information available	No information available	Norwegian national accounts	Full-time equivalents
Spain	1977	1987, change in survey	Labor force survey	Establishment survey	Actual and usual hours worked	No information available	No information available	Spanish statistical institute	Full-time equivalents
Sweden	1950	1996, change in data source	Labor force survey	Establishment survey	National accounts	No information available	No information available	Swedish national accounts	Per employed person
United Kingdom	1970	1984, 1992, change in data source; 1994, include Northern Ireland; 1995, change in method	Labor force survey	No more known sources	Actual hours worked	Labor force survey	No more known sources	Average hours actually worked × 52	Per employed person

[1] The national accounts concept of hours worked is hours actually worked, unless otherwise noted.

employed person. The data are based on the OECD productivity database. Data on hours worked are converted, where necessary and possible, to employed persons from jobs. Some data for the *Employment Outlook* hours series are based on sources that differ from the productivity database. The OECD data set covers 30 countries and provides estimates of average annual hours actually worked per employed person (that is, all those employed, including the self-employed and unpaid family workers) and per employee (that is, excluding the self-employed and unpaid family workers).[23] The years covered for Belgium and the Netherlands begin at 1983 and 1987, respectively.

Compared with the BLS data set, the OECD data set provides slightly more metadata, because the organization collects and processes a questionnaire on national accounts from national statistical agencies of member countries. The hours concept used with the OECD data set is consistent with national accounts for 7 of the 13 countries in the data set. (See exhibit 2.) The countries for which data sources are derived not solely from national accounts include the United States, Japan, Belgium, the Netherlands, Spain, and the United Kingdom. For the United States, both hours and employment are taken from the BLS major sector productivity measures. Data for Japan are measured primarily by an establishment survey and are OECD estimates. Estimates of average annual hours actually worked for Belgium and the Netherlands are developed from the European Union labor force survey, using usual hours of work and adjusting for hours not worked. Data for Spain are based on hours actually worked, as well as usual hours of work for those deemed not at work in the labor force survey. The data for the United Kingdom are based completely on the labor force survey, but are compatible with national accounts concepts.

More information on the OECD data set is available from Ypma and van Ark's analysis of 2004 hours-worked data based on the OECD/European Union national accounts questionnaire.[24] South Korea and the United Kingdom are the only two countries for which the dara source is solely the labor force survey. The United States, Canada, and Japan are categorized as using primarily survey (both

labor force and establishment) data and not administrative data. The third category is split between the countries that use survey data more than administrative data—such as Norway, Spain, and Sweden—and those which use primarily administrative data, supplemented by labor force and establishment survey data—such as Denmark, France, and Germany. For Belgium and the Netherlands, OECD prepares an estimate of average hours actually worked based on the labor force survey.

Comparison across BLS and OECD data sets. The next section compares the data on average annual hours actually worked per employed person between the BLS and OECD data sets.[25] In preparation for that analysis, note that differences in data arise because of differences in sources, concepts, coverage, and units of measure. For Denmark, France for 1990–2002, Germany for 1991 onward, Norway, and Sweden, data sources in each data set are the same. For Canada, Japan, South Korea, Denmark, and the Netherlands, average hours are higher in the BLS data set than in the OECD data set. For France in earlier years, and for Belgium and Spain, the OECD estimates are higher than the BLS estimates. For the United States, Germany in earlier years, and the United Kingdom, average annual hours worked are not consistently higher or lower in either data set.

The differences between the data sets for the United States and Japan are difficult to pinpoint, given that coverage, sources, and methodology differ between data sets for both countries. Differences in units of measure affect the different levels among the data sets for Canada, Spain, and the United Kingdom. For Belgium, South Korea, and the Netherlands, the contrast between the BLS and OECD data sets for each country is due to the source of the data: administrative or survey based; the administrative-data adjustment for time not worked affects comparisons for two of the three countries, and the use of normal hours affects the third.

The country-by-country comparison to be presented highlights how data sources, measurement methods, and units of measure matter. The differences can be categorized as follows:

- Administrative sources reporting normal hours of work result in lower estimates of average annual hours actually worked than do data from surveys.
- Among surveys, data that are primarily from establishment surveys using usual hours or paid hours worked produce lower estimates than do data that are primarily from labor force surveys; data from labor force surveys may overstate hours reported, due to proxy reporting.
- Adjustments to exclude hours not worked may overestimate time not worked and lower estimates of hours worked.
- Units of measurement can affect the levels of hours worked that are reported.

1. More similar than different: Denmark, France, Germany, Norway, and Sweden. The Nordic countries covered, as well as Germany, and France for some years, use the same data source in both the BLS and OECD data sets and differ only slightly or not at all across years. For Denmark, average annual hours actually worked for both data sets are from the country's national accounts and run parallel to each other. In 1980, average annual hours per employed person were about 1,650 for both data sets; by 2006, they had fallen to 1,577 (OECD) and 1,608 (BLS). (See chart 1, top panel.) The 30-hour difference between data sources is likely due to differences in rounding or method of calculation.

For France, the source for both data sets is the French national accounts. From 1980 to 1989, differences are not large, averaging about 2 to 4 days a year for any given year. (See chart 1, middle panel.) The two data sets yield identical results for 1990–2002 and diverge only minimally for 2003–06. The BLS methodology of linking data from different sources with similar concepts for the period before 1990 creates slight differences between the two data sets.

For Germany, both data sets use that country's national accounts from 1991 forward. The data sources are identical, and so are the series on average annual hours actually worked. Hours worked in 2006 were among the lowest that year of all the countries studied. The 1,436 average annual hours worked is the equivalent of working 36-hour weeks only 9 months of the year. (See chart 1, bottom panel.)

For both Norway and Sweden, national accounts data were used to prepare estimates of hours worked for both data sets. Nonetheless, the sources of the two countries' data—administrative sources and the labor force survey—create the appearance that there are large differences in the Norwegian and Swedish labor markets when hours measures are compared. In Norway, hours worked were listed as 1,580 in 1980 and had fallen to 1,400 by 2006. (See chart 2, top panel.) In Sweden, hours worked were near 1,500 in 1980 and 1981; peaked in 1999; returned to 1,580, an increase equivalent to 2 weeks of work, by 2002; and mostly held steady since then, coming in at 1,583 in 2006. (See chart 2, bottom panel.) This difference between Sweden and Norway will be examined more carefully in the next section.

2. United States and Japan: countervailing differences. The data sets differ for the United States and Japan. The differences, however, are so varied that it is difficult to pin-

Chart 1. **Average annual hours actually worked, all employed persons, Denmark, France, and Germany, 1980–2006**

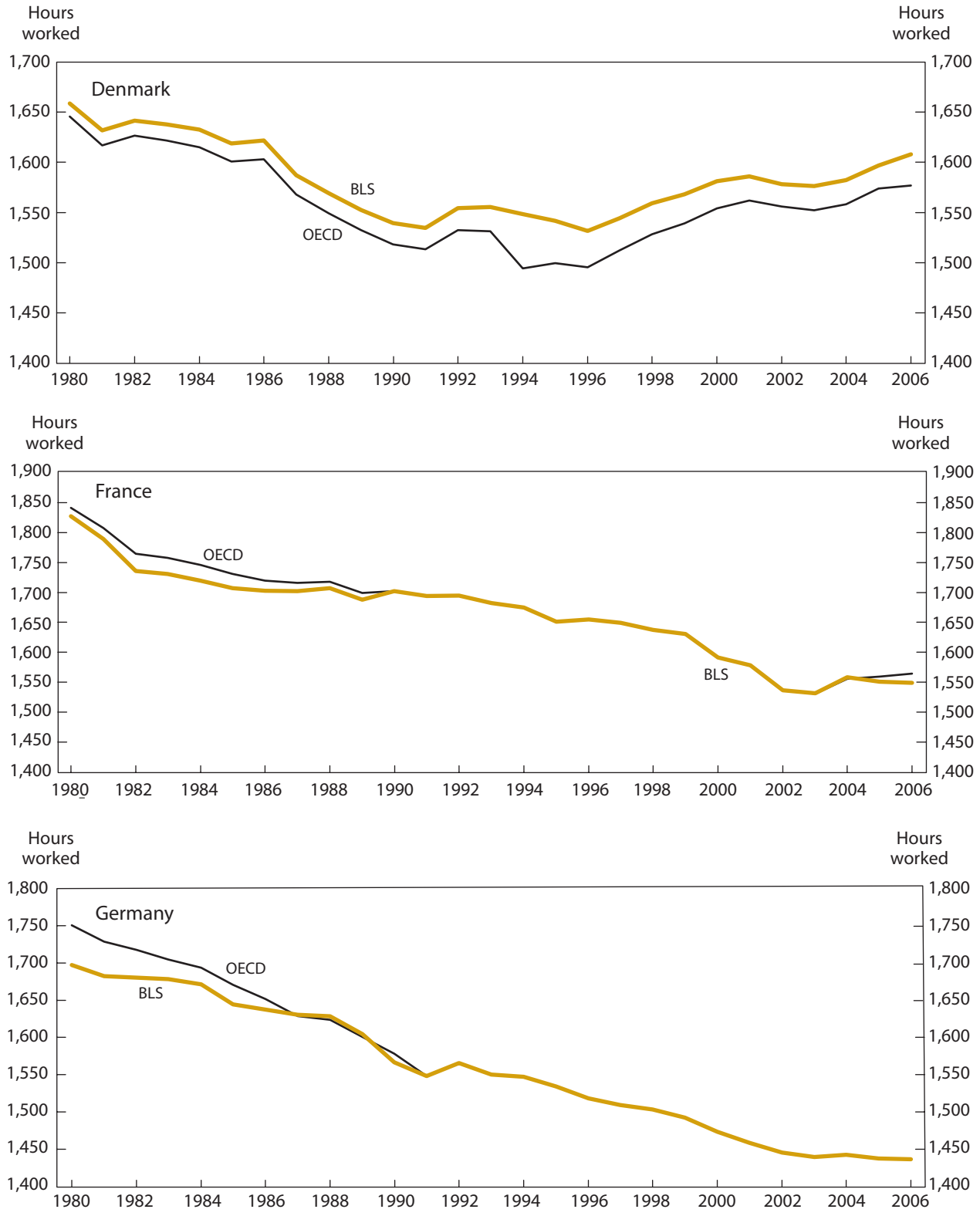


Chart 2. **Average annual hours actually worked, all employed persons, Norway and Sweden, 1980–2006**

[1] For Norway, BLS and OECD data are identical for every year except 1989 and 1999, for which they differ by 1 hour. For Sweden, BLS and OECD data are identical.

point how they might produce differences in time trends. U.S. estimates of hours are produced by the BLS Division of Major Sector Productivity and are based on hours-paid data from an establishment survey on production workers, adjusted to an hours-worked measure by means of the labor cost index and further adjusted to account for industries and categories of workers not otherwise included, as well as self-employed and unpaid family workers, based on the U.S. Current Population Survey.[26] The estimates cover the total economy. The OECD uses aggregate employment data based on the same methodology to create a data series of average annual hours actually worked and then adjusts from a jobs to an employed-person basis. The BLS, by contrast, uses employment data from the national labor force survey, adjusted to include military employment. The differences between the levels of hours published in the OECD and BLS data sets reflect the historically different trends in U.S. employment as measured by establishment and labor force surveys. The overall difference between the two data sets lies in the source of employment data and the underlying differences between the two surveys.[27]

In the case of Japan, the OECD series on average hours actually worked is estimated from Japan's establishment survey for employees and includes labor force survey data on the self-employed. The BLS data set is based on the national accounts data for employees from 1997 onward. Using the categories of differences outlined earlier, labor force survey data are expected to produce higher rates than national accounts data based on administrative or establishment survey data. But for Japan, the OECD hours series based on the labor force survey is lower, on average, than the BLS hours series based on national accounts. Further complicating matters is the fact that hours for all the employed would be expected to be lower than hours for employees, given the nature of self-employment. However, that expectation is not borne out in the case of the two data sets on Japan: the employee data from the national accounts trend *higher* than the OECD data on all employed persons from the labor force. Only in the case of units of measure does the direction of the difference hold. Data on hours worked are on a per-job basis for the OECD and a per-person basis for BLS. This is the only one of three differences that explains why hours-worked data are higher for the BLS data set. Chart 3 shows the average annual hours actually worked by all employed persons, for the United States and Japan.

3. Canada, Spain, and the United Kingdom: units of measure matter. In these three countries, the unit of measure, among other things, drives the differences between the data sets. For Canada, the BLS data series is based on a measure of hours per employed person, whereas the OECD data series is based on a measure of hours per job. All other things being equal, average hours actually worked per employed person are higher than average hours actually worked per job. Also for Canada, the two data sets use the same source for hours-worked data, but different sources for employment data. The source of OECD data is the Canadian national accounts, which combine establishment and labor force survey data; by contrast, the source of BLS data is an employment series for employed persons from the labor force survey. The BLS figure is higher for all years, partly because of the difference in sources and partly because the unit of measurement is employed persons rather than jobs.

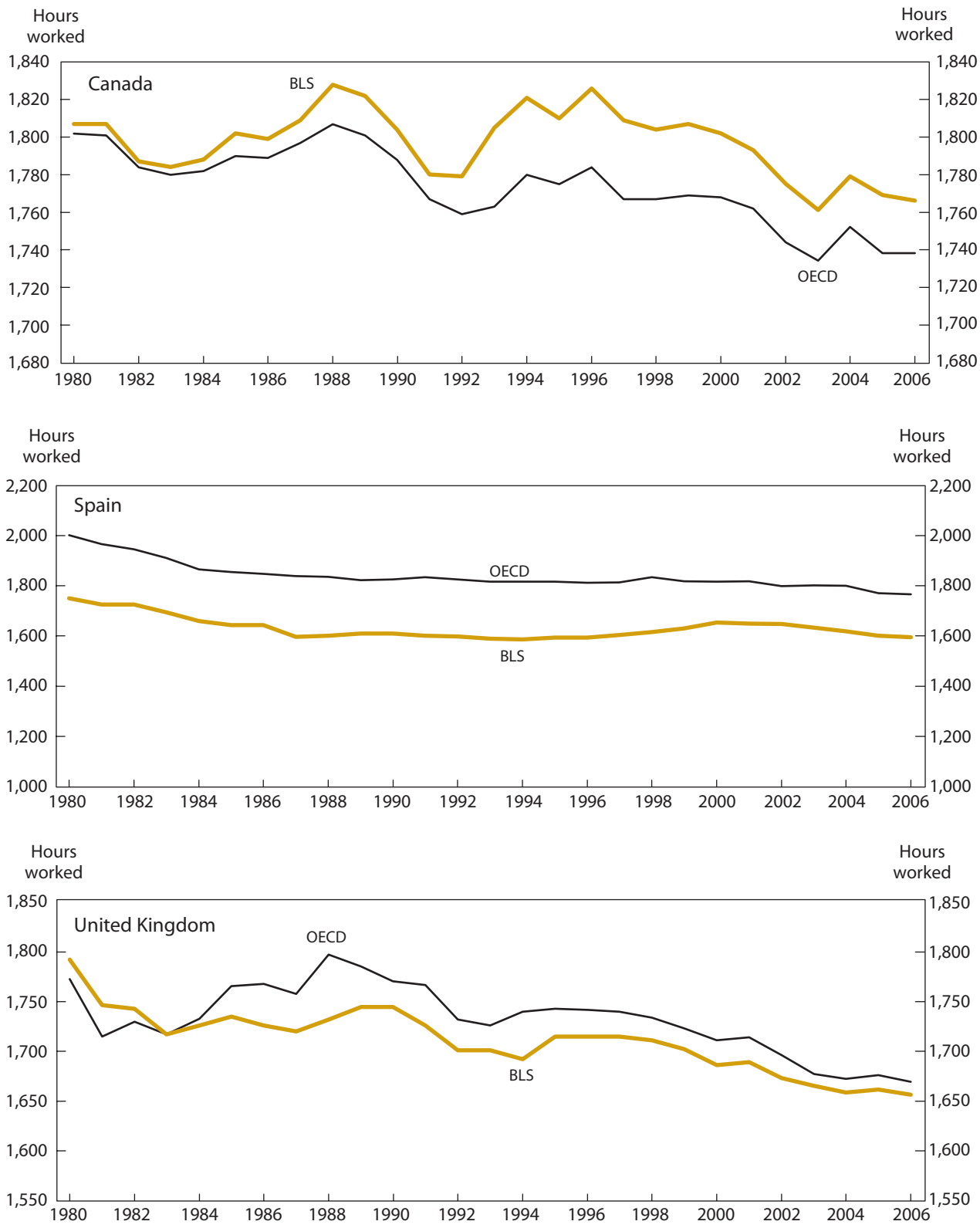
For Spain, the BLS hours series draws from national accounts data based partially on the country's labor force survey and reported on a per-job basis. The OECD data set uses a data series estimated by the national statistical institute, is based on actual and usual hours from the labor force survey, and adopts a full-time-equivalent unit of measure. These differences create two nearly parallel data series, with the BLS series, on the per-job basis, at a lower level than the OECD series. Together, the source and the unit of measure for Spain explain why the BLS data set shows lower levels than the OECD data set.

For the United Kingdom, the BLS and OECD data sets each use that country's labor force survey data on hours actually worked. The source of data on average hours worked per person is the same, but the source of data on employment differs. The BLS data source for employment is a national accounts data series of aggregate jobs that combines data from both establishment and labor force surveys. The employment source for the OECD data series is solely the labor force survey, measured on an employed-person basis. Without more detailed information on the national accounts methodology, it is difficult to determine the extent to which the establishment survey data may affect the hours-worked measure. The unit of measure does explain the difference in the two trends: the trend is lower for the BLS series, which is based on jobs, than it is for the OECD series, which is based on employed persons. Chart 4 shows the average annual hours actually worked by all employed persons, for Canada, Spain, and the United Kingdom.

4. Belgium, South Korea, and the Netherlands: normal hours and time not worked. The inclusion of normal hours based on administrative data to estimate time worked and to adjust for time not worked also drives differences between

Chart 3. **Average annual hours actually worked, all employed persons, United States and Japan, 1980–2006**

Chart 4. **Average annual hours actually worked, all employed persons, Canada, Spain, and United Kingdom, 1980–2006**



data sets. The BLS and OECD data sets show different time trends for Belgium, South Korea, and the Netherlands. Upon analysis, the BLS data series based on normal hours present a lower trend in hours worked, as in the case of Belgium. For South Korea and the Netherlands, the OECD adjustments to time not worked, using normal or administrative data, create an hours-worked series that averages 1½ to 3 weeks less than the BLS series for both countries (except South Korea in earlier years).

For Belgium, BLS uses the average-hours-worked series from the OECD productivity database, which differs from the OECD data set based on the *Employment Outlook*. These data for Belgium are based on administrative data, according to Ypma and van Ark.[28] The OECD data set, by contrast, uses the labor force survey to create an estimate of hours worked. The tendency of administrative data to produce lower estimates, by undercounting overtime and overestimating leave time taken, explains the lower numbers in the BLS data set for Belgium's hours relative to the numbers in the OECD data.

In the case of South Korea, the OECD and BLS data series both use the labor force survey as their primary source of data. On the one hand, the OECD estimates for South Korea are based on that nation's labor force survey and include an adjustment downward to aggregate hours worked in the year, in order to account for time not worked, before dividing by employment. On the other hand, the BLS estimates for South Korea are based on published data on average weekly hours worked for persons at work. The average is multiplied by 52 to create a yearly average, and no adjustments are made for time not worked. The OECD's additional adjustment for time not worked contributes to a lower estimate of average annual hours actually worked compared with the BLS estimate, even though the OECD unit of measure takes account of all those who are employed, as opposed to the BLS employee measure.

For the Netherlands, aggregate hours data for the BLS data set are based on the Dutch national accounts hours-worked data series and employment is from the labor force survey, adjusted to include the Armed Forces. The OECD data set's estimate of average annual hours actually worked is based on the labor force survey's figure for usual hours of work and includes adjustments to time not worked. The different sources provide different data series. For 2006, OECD reports 1,391 average annual hours actually worked—about 2½ person-weeks less than the BLS series figure. One would expect that labor force survey data would produce a higher average-hours-worked series. However, if OECD's adjustments to time not worked overestimate the hours not worked, then the number of hours worked will be underestimated. This would explain the fact that data from the BLS hours-worked series yield higher numbers than do data from the OECD series based on the labor force survey. Chart 5 shows the average annual hours actually worked by all employed persons, for Belgium, South Korea, and the Netherlands.

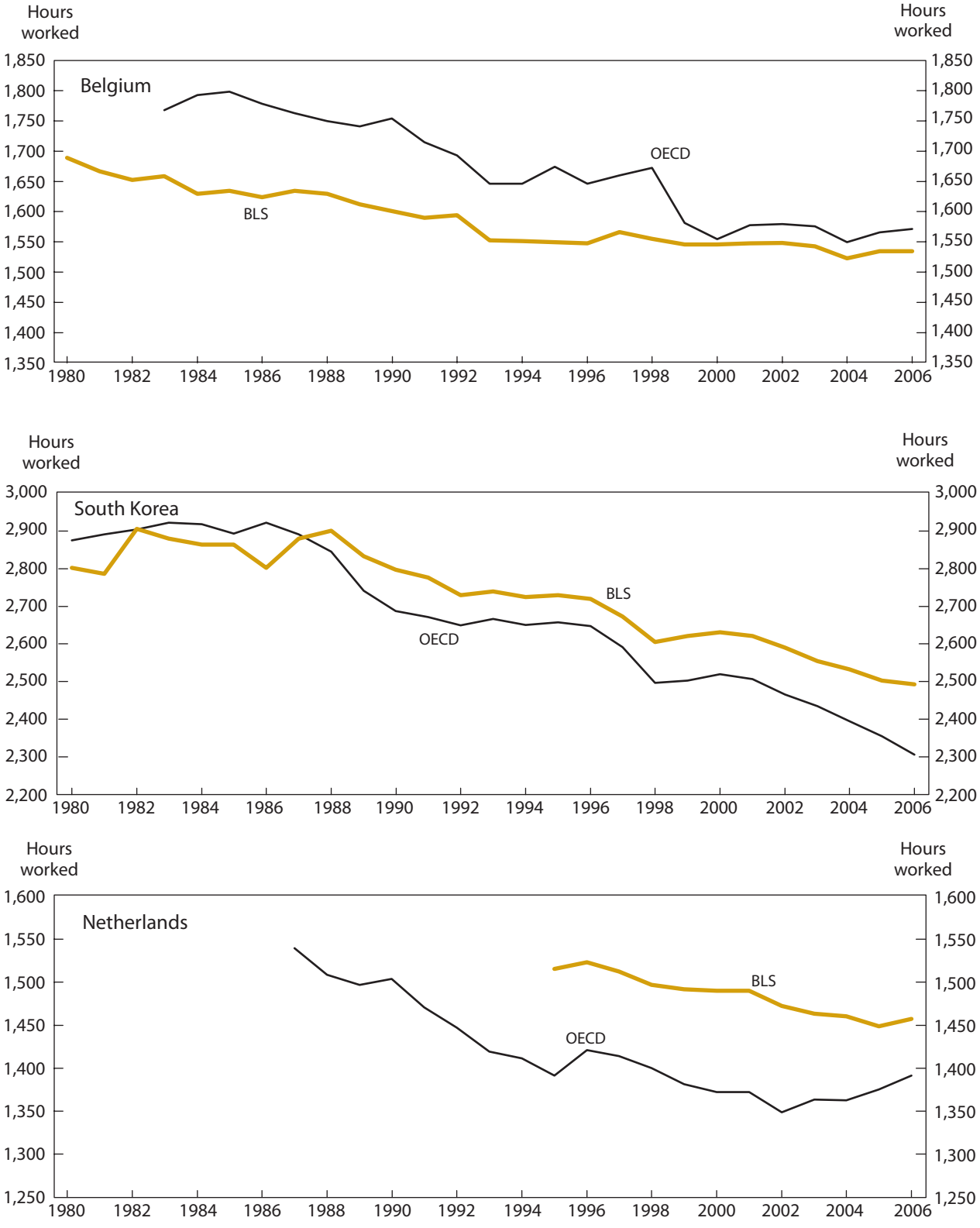
Both the BLS and the OECD suggest that the data user compare the trends over time between countries. A rank von Neumann test comparing the differences in level data between the BLS and OECD data sets for each country determined that the trends are similar for 10 of the 13 countries examined in this article. That is, the only 3 countries that show a significant probability of having experienced a random degree of change between data sets over time were the United States, France, and the Netherlands. Thus, for these 3 countries, there is a variability in the rankings which implies that the two sets of data are not drawn from the same population, which in this case would be represented by the data source. The test results for the other countries show that the rankings of the differences between the levels are not different from each other, indicating that the associated data sets exhibit "trendlike" features. This statistical test provides evidence that, for the majority of the countries examined, the comparison made of trends over time is consistent and useful, even when different sources or methods are used.

Comparison of hours worked and working time

The concept of hours worked, as addressed in this article, is a purely quantitative measure of the number of hours an individual spends at work. Working time, by contrast, is a broader concept that encompasses quality-of-worklife issues, including the scheduling of hours of work, such as overtime, split-shifts, and "just-in-time" flexible work schedules; night work and weekend work; and part-time work.

A cross-country comparison of hours worked for the 13 countries examined in this article, using the OECD data set, reflects a number of institutional changes in both working time and hours worked. Historically, the United States pioneered reductions in working time well in advance of other industrial nations, although Western Europe caught up by the 1980s.[29] Since then, a number of changes in the structure of the labor market have contributed further to a reduction in working time. First, normal hours of work have declined in many developed countries because of changes in laws and collective-bargaining agreements. Second, women have increasingly joined the labor force and work, on average, fewer hours than men.

Chart 5. **Average annual hours actually worked, all employed persons, Belgium, South Korea, and the Netherlands, 1980–2006**



Finally, part-time hours worked in the growing service sector mitigate the overtime work pattern in the relatively smaller manufacturing sector. Each of these labor market conditions merits discussion.

A 2004 OECD report on working time analyzes the broader measure of labor utilization—average annual hours actually worked *per capita*—showing that these hours have barely declined over the past three decades, even as average annual hours actually worked *per employed person* fell significantly.[30] The large decline in average annual hours worked per worker was offset by increases in both the employment rate (or employment-population ratio) and the share of the population that is of working age. The employment rate has risen as more women join the workforce and as older workers stay in their jobs rather than retire. Both women and older workers are more likely to work fewer hours in a full-time job or become part of the growing ranks of part-time workers.

A 10-year snapshot with available data of the employment-population ratio, part-time employment rate, and women's labor force participation rate reflects, to a lesser degree, the 30-year trend just described. (See table 1.) In 9 of the 13 countries examined, there were small increases in the employment-population ratio. (Japan and South Korea saw a small decline and Spain experienced a large increase.) The part-time employment rate grew from a low point in South Korea and Spain; it fell in the United States and Sweden, and it remained steady in Canada, Japan, France, Norway, and the United Kingdom. The part-time employment rate rose in the remaining countries. Dutch policy and legislation provide strong incentives for part-time employment, which are reflected in the fact that more than a third of workers are employed part time in the Netherlands. The women's labor force participation rate inched up in all of the countries studied, except for Japan, where it fell, and the Netherlands and Spain, where it rose dramatically. Nearly a tenth of women in the latter two countries joined the labor force over the 10 years examined.

In both the OECD and BLS data series, 1980–2006 trends in average annual hours actually worked per employed person broadly reflect the institutional norms and laws relating to working time in each of the 13 countries discussed. This section next addresses some of the significant institutional and legislative changes that have occurred in the past 26 years in these countries.[31]

Countries with high working time. Of the countries examined, the United States, Canada, Japan, South Korea—and the United Kingdom and Italy until recently—share some or all of the following characteristics in their labor market institutions and laws:

- a normal workweek of 40 hours or more
- no limit on maximum hours of work allowed per week
- vacation time subject to tenure in job
- wage or leave penalties for absence from work
- limited or no legal entitlement to vacation time.

The United States and Japan impose no legal limit on the maximum number of hours worked per week. Regarding paid time off, business practice in the United States varies

Table 1. Three important international labor market indicators, 1996 and 2006

Country	Employment-population ratio		Part-time employment rate		Women's labor force participation rate	
	1996	2006	1996	2006	1996	2006
United States	63.2	63.1	14.7	13.3	59.3	59.4
Canada	59.1	63.6	19.4	18.5	57.3	62.1
Japan	60.9	57.5	21.8	24.5	49.3	47.9
South Korea	59.4	58.9	4.7	9.7	48.9	50.6
Belgium	45.1	48.8	14.9	19.3	44.0	45.9
Denmark	60.3	62.8	16.9	18.1	58.4	60.8
France	49.1	51.2	14.2	13.3	48.6	51.1
Germany	52.0	52.2	15.2	21.9	47.4	51.2
Netherlands	56.2	62.5	29.7	35.5	49.5	57.8
Norway	60.2	62.6	21.2	21.1	57.2	60.3
Spain	38.9	52.3	7.6	11.1	37.2	47.0
Sweden	57.6	60.4	14.8	13.4	59.4	60.8
United Kingdom	57.3	60.1	23.6	23.4	53.8	56.7

South Korea's long hours worked

South Koreans work longer hours per week than workers in many other OECD countries, despite national legislation that phased in the 40-hour workweek by 2004. The 2007 South Korean labor force survey reports that nearly 60 percent of all employed persons who were at work when the survey was taken actually worked 45 hours or more a week, whereas less than 30 percent worked a 36- to 44-hour workweek. Less than 15 percent of part-time employed persons who were at work when the survey was taken worked 35 or fewer hours a week.

widely, with some businesses granting leave only after a year's tenure, others increasing the number of leave days with job tenure, and about a fourth providing no paid leave at all. Japanese and South Korean labor laws differ from business practice. Businesses are supposed to pay for overtime and to promote leave for employees. In practice, however, workers usually take vacation hours when sick, because sick leave is often unpaid. In some cases, employers penalize workers' absences by deducting or not providing bonus pay or vacation time.[32] Canada, the United Kingdom, South Korea, and Japan require statutory paid vacation time for full-time employees, while there is no requirement in U.S. law to provide vacation time, either paid or unpaid. Of the six countries with high working time, only the United Kingdom and Italy require employers to pay part-time or temporary employees for their annual leave. The European countries are set apart by the fact that they recently adopted the European Union's mandates on working-time restrictions.[33]

Between 1988 and 1997, Japanese laws reduced normal hours of work from 48 to 40 hours per week; between 1997 and 2004, South Korea followed suit. (See box, this page.) There have been few changes in labor laws in the remaining four countries during the past 25 years. In the 1990s, the United Kingdom and Italy complied with the European Union regulations to limit working hours in 2002 and 2003, respectively.

Countries with low working time. Conditions in Belgium, Denmark, France, Germany, the Netherlands, Norway, and Sweden differ from those of the high-working-time countries just described. The aforementioned recent changes to labor laws in the United Kingdom and Italy now place these two countries in the low-working-time category. These countries share some or all of the following characteristics in their labor market institutions and laws:

- a legal or collectively bargained workweek of less than 40 hours
- a limit on the maximum number of hours worked during the week and a limit on the maximum number of overtime hours worked during the year
- statutory paid vacation time of a minimum of 4 weeks per year for full-time workers and prorated for part-time employees
- near-universal entitlement to statutory vacation time
- broad coverage of collective-bargaining agreements that provide even more generous leave entitlements than those written into law.

Revised laws regarding normal hours of work have been implemented throughout Europe as a result of the European Union Directive on Working Time, which was first introduced in 1993 and most recently revised in 2003.[34] These laws (1) limit the hours that employees can work overtime throughout the year and (2) establish vacation rights of 4 weeks per year for full-time employees, with prorated vacations for part-time employees.

Germany, the Netherlands, Norway, and Sweden have a high share of workers covered by collective-bargaining agreements; these countries saw reductions in the workweek as a result of changes in those agreements in the late 1980s. The Netherlands passed national legislation in 2000 that allowed employees to choose the number of hours they want to work. The legislation led to a further growth in part-time employment, which had begun to grow in the 1980s.[35] The trend toward reductions in working time was complemented by the implementation of the European Union Working Time Directive in member countries. The last two of the major European countries to ratify changes in labor laws to comply with the directive were the United Kingdom in 2002 and Italy in 2003.

The case of France is unique, because the reduction in the normal workweek was initiated by laws, not collective-bargaining agreements. A series of laws was passed beginning in the 1990s to reduce the number of hours in the normal workweek, with the primary purpose of decreasing high unemployment. The changes began with the Robien law in 1996, followed by the Aubry laws in 1998 and 2002, effectively reducing the normal workweek from 39 hours to 35 hours.

The trend toward reductions in hours shows signs of

Germany's "minijobs"

Germany's "minijobs" escape measurement. A growing number of people work in such jobs, also called "one-euro jobs"—positions that have a limit on the hours that can be worked and that offer wages on which earnings are not subject to income taxes and employer taxes are reduced. The program was intended to create jobs for the unemployed, but employed workers have taken on minijobs as second jobs because of the tax advantage. In 2004, minijobs accounted for about 12 percent of employment, and 37 percent of minijobs went to people who had another job. Minijobs are excluded from the administrative framework of tax collection, so data on the hours worked at them and the number of jobs they generate are excluded from hours-worked statistics (personal communication, Dr. Ulrich Walwei, Bundesagentur für Arbeit/Institute for Employment Research, Germany, April 2006).

reversing in some countries. French legislation in 2003—specifically, the Fillon law—excluded small businesses from the normal maximum workweek limit of 35 hours, and further revisions in 2007 were intended to provide greater flexibility in scheduling hours for businesses. In Germany, since 2003 a number of collective-bargaining agreements, among them the trend-setting Volkswagen and IGMetall agreements, have seen an increase in the length of the regular workweek (which remains under 40 hours) in exchange for job security. The trend of raising the ceiling on normal hours continues today in contract bargaining, especially in Germany. However, hours-worked statistics do not necessarily reflect this or any other trend. (See box, this page.)

Numerous studies of industrial relations in both the countries with high working time and those with low working time provide detailed information on the institutions, labor markets, and demographics that reinforce the quarter-century trends seen in the OECD and BLS data series on average annual hours actually worked per employed person. Among the findings are high, but declining, hours worked in Asian countries; little change in hours worked in Anglophone countries, where a large share of workers continues to work more than normal hours; and falling hours worked in European countries, because of a reduction in normal and contractual hours and rising part-time employment.[36]

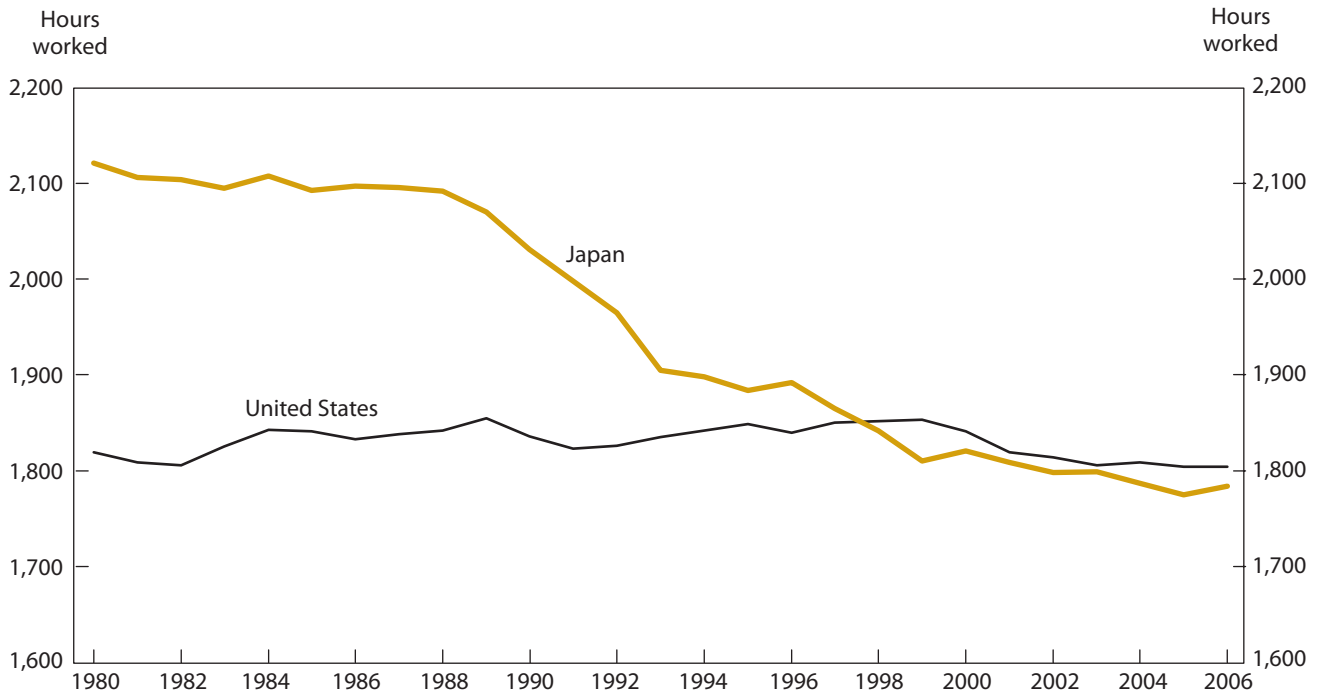
Comparison of Japanese and U.S. hours worked

Pinpointing whether one country's average hours actually worked are more or less than another's for a given year or period is not a precise science. The next two sections look at the data series for two countries whose labor market conditions do not seem to be reflected in their data: Japan and Sweden. Japan's hours-worked series in both the BLS and OECD data sets show that the average hours actually worked by Japanese workers are on a par with those worked by U.S. workers, defying the many references to that country's "long-hours culture" that have become commonplace. On the other end of the spectrum, Sweden's hours worked trended upward during the 25-year period studied, quite unlike the trend in the other 12 countries and, in particular, quite unlike its neighbor Norway, which has similar labor practices. An analysis of the data sources used to construct the various time series, together with a look at alternative sources, provides a further window of understanding into the challenges of international comparisons of data on hours worked. The estimates for Japan and Sweden are compared with those for the United States and Norway, respectively, and with alternative data sources.

The OECD data series for Japan shows that, for 2006, annual average hours actually worked were 1,784, a figure that is 35 hours less than the U.S. estimate of 1,804. (See chart 6; data before 1996 are not available for the BLS data set.) Over a quarter century, Japan's annual average hours actually worked declined by 42 eight-hour workdays and the U.S. average fell by less than 2 eight-hour workdays. Is it possible that U.S. workers now work longer hours than their Japanese counterparts? Further, how does one explain the common practice of employees working unpaid overtime in Japan despite recent regulations restricting overtime hours?[37] Finally, what about the culture of long work hours as exemplified by official recognition of the occupational hazard of death from overwork, a phenomenon the Japanese call *karoshi*?[38]

Some researchers think that the data for Japan undercount unpaid overtime and long hours of work. Evidence on the incidence of overtime work in Japan, shown repeatedly in many special surveys on labor conditions, together with a historical comparison help interpret Japan's data series. The incidence and degree of usual overtime in Japan from 1997 through 2007 are given in table 2, which compares ranges of hours worked by persons who worked at least two-thirds of the year; these workers represent approximately 80 percent of employed persons.[39] In all 3 years shown, 87 percent or more of these year-round employed persons worked at least a 35-hour week. However, from 1997, the year in

Chart 6. **Average annual hours actually worked, all employed persons, the United States and Japan, 1980–2006**



which legislation was passed to reduce the normal workweek from 44 to 40 hours, the share of persons who usually worked 43 or more hours per week shifted slightly upward, from 57 percent in 1997 to 61 percent in 2002. The percentage fell to 59 percent in 2007. Over the year, a number of employees do not take vacation time, even though they are entitled to it. According to one 2005 study, workers take less than half their vacation for the year, accumulating an average of 18 untaken vacation days.[40]

Further evidence of the undercount of hours in the OECD data set is found in Takeshi Mizunoya's research. Mizunoya uses both labor force and establishment surveys to determine the degree to which different survey sources for Japanese data matter. His critique of the OECD annual-hours-worked data series for underreporting hours worked in Japan stems from the type of survey that the OECD uses. Rather than using the establishment survey, as the OECD does, Mizunoya uses the labor force survey for 3 years during the 1990s to account for unpaid overtime, developing an estimate of employees' average annual hours actually worked.[41] Chart 7 compares Mizunoya's estimates with the OECD annual-hours-worked data series. The Mizunoya estimates are greater than the OECD data for each of the years studied—1990, 1995, and 1999—increasing from a 240-hour to a 270-hour difference over the decade, or the equivalent of at least 6 weeks more a year. Because, on average, the self-employed work more hours than employees, the Mizunoya estimate, based on employees, does not fully compensate for the greater number of hours worked by the self-employed.

This example from Japan leaves the lesson that understanding labor markets is key to deciphering the differences in data sources and explaining how those differences affect comparisons.

Swedish and Norwegian hours worked

The BLS and OECD data sets for Sweden and Norway are identical, each using the data prepared by that country's national accounts. However, the data series for Sweden shows that average annual hours actually worked in 2006 were the highest among countries with low working time and were about 175 hours more than those of Sweden's Nordic neighbor Norway. Twenty-five years ago, Sweden's hours were lower than Norway's, but average annual hours actually worked in 2006 were reported to be 1,583 for

Table 2. Percent distribution of weekly hours worked by year-round employed persons, Japan, 1997, 2002, and 2007

Weekly hours worked	1997	2002	2007
All year-round employed persons	53,873,000	50,576,100	51,715,100
Less than 15	.9	1.0	1.2
15–21	1.9	2.4	2.9
22–34	6.0	7.1	8.1
35–42	34.1	29.0	29.0
43–45	15.0	12.5	12.2
46–48	15.4	14.5	13.1
49–59	15.9	19.5	18.9
60 or more	10.6	14.1	14.6

NOTE: Year-round employed persons are those who work more than 200 days per year.

SOURCE: Employment Status Survey, Statistics Bureau, Management and Coordination Agency, Government of Japan.

Sweden and 1,407 for Norway. (See chart 8.) Until the 1990s, hours fell in both countries, but Sweden's hours worked rose throughout the decade and remain the highest among countries with low hours worked. By contrast, Norway's hours worked show a continuously declining trend. Is it possible that Swedes work 5 weeks more per year, on average, than Norwegians? This seems unlikely, for a number of reasons. First, both countries have labor laws that provide generous statutory paid leave of 5 weeks a year—1 more week than that mandated by the European Union Working Time Directive—and full- and part-time workers are eligible for this leave. Second, Sweden has 11 national holidays compared with Norway's 9. Finally, many employees in both countries are covered by collective-bargaining agreements and work less than a 40-hour workweek.

The similarities in labor conditions belie the fact that the two countries' economies experienced different levels of prosperity in the 1990s. Norway's oil wealth cushioned it from the austerity that the Swedish economy had to turn to in the 1990s. Sweden experienced a strong economic downturn and increasing unemployment, and saw its generous social policies curbed throughout the decade.[42] The increase in the country's hours worked in the 1990s is counterintuitive: a weak economy generally contributes to a decline in hours worked, both individually and across the economy. The decline in hours worked as of 2000 can be explained by a number of changes, including continued reductions in normal hours of work through collective-bargaining agreements in the private sector[43] and adverse effects of the expansion of an already generous sick leave policy, leading to a daily rate of absence from work of 20 percent.[44] In light of these developments, Sweden's average annual hours actually worked appear suspiciously high.

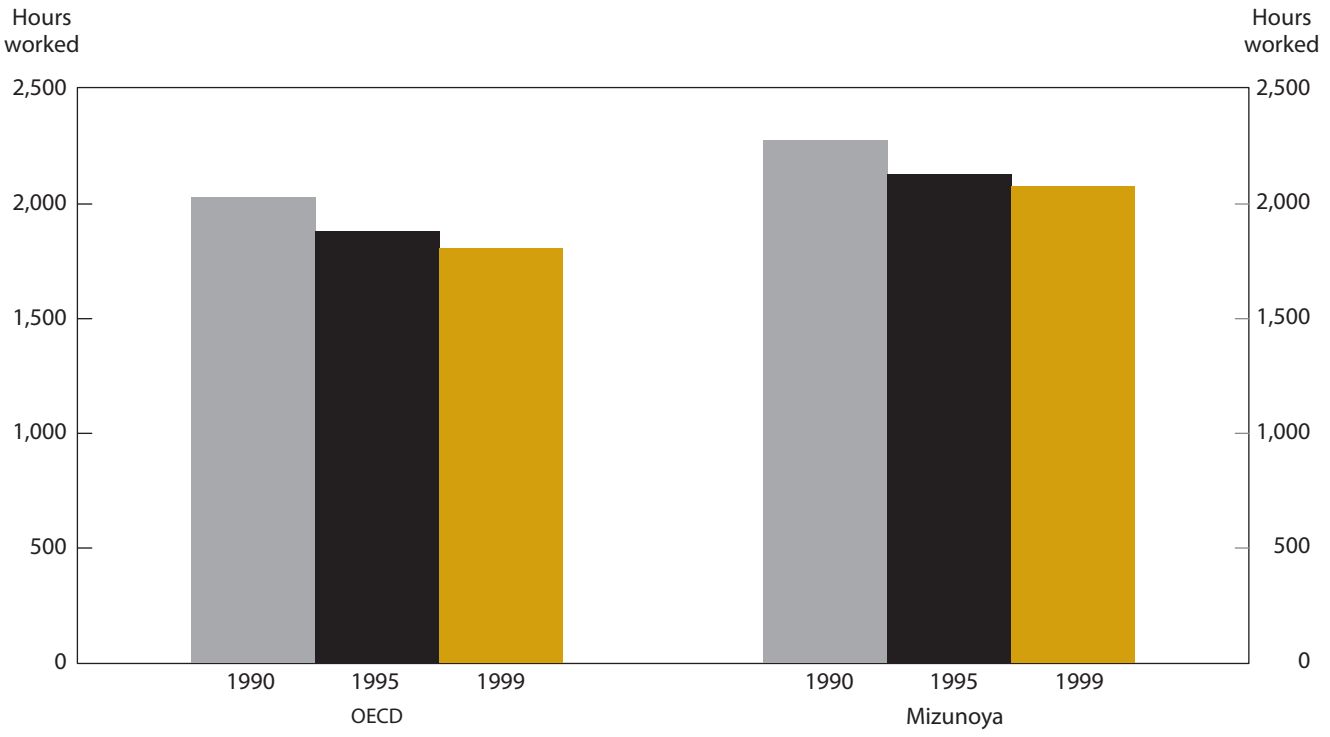
The Swedish national accounts' primary source of data on employment and hours worked is the country's labor force survey. The Norwegian national accounts data, by contrast, are based on normal hours of work reported by administrative data sources. Administrative data used by Norway lead to the lowest estimates of hours actually worked, whereas labor force surveys, such as those used by Sweden's national accounts, produce the highest estimates. These differences in underlying data sources make it difficult to compare the two countries' data series. It is probable that hours actually worked in each country lie somewhere in between the two series' values, but it is highly unlikely that Swedish people work 4 to 5 more weeks a year than Norwegians do.

Using data from similar sources and creating a simple methodology of comparison shrinks the differences between the two countries' hours-worked figures considerably. and increases their levels as well. Harmonized labor force survey data on hours actually worked per week for Norway and Sweden are available for 2006. Because the two countries' labor force surveys are continuous, one can estimate average annual hours actually worked by multiplying the average of hours actually worked per week by 52. The labor force survey reports higher hours overall for both countries and diminishes the difference between them. As the following tabulation shows, the difference between Norway's and Sweden's average annual hours actually worked declines from 4½ weeks to 1½ weeks when comparable data sources and methodologies are used:

	Average annual hours actually worked per employed person, 2006	
Country	*National accounts*	*European Union labor force survey*
Norway	1,407	1,817
Sweden	1,583	1,872

These examples highlight how differences in concepts and

Chart 7. **Average annual hours actually worked per employed person or per employee,[1] Japan, 1990, 1995, and 1999, OECD and Mizunoya data series**



NOTE: OECD data are per employed person; Mizunoya data are per employee.

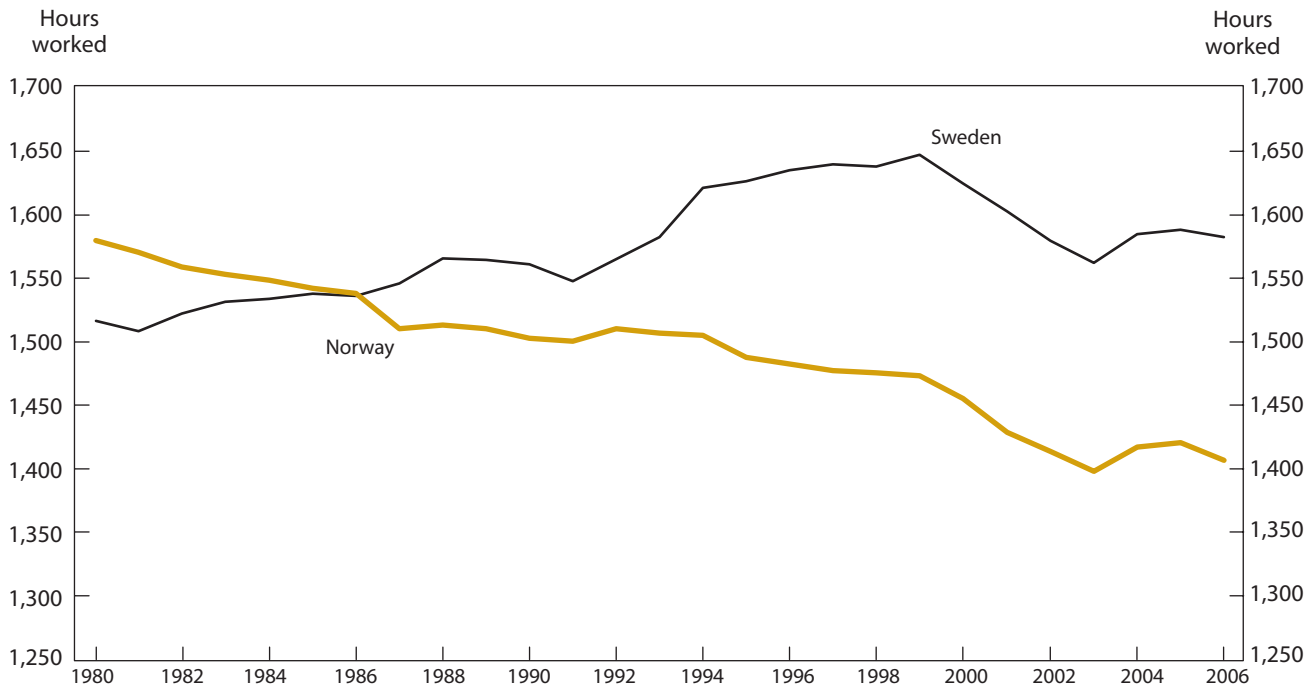
sources can affect estimates of average annual hours actually worked. Despite the problems that are inherent in making comparisons of levels of annual hours worked per person, broad trends are often reliable, reflecting real labor conditions in a country.

Data sources matter

The preceding comparisons between Japan and the United States, on the one hand, and Sweden and Norway, on the other, are complemented by two studies: one by the French researchers Mireille Bruyère and Odile Chagny, and the other by the OECD. Both analyses used usual-hours-worked data from labor force surveys to create estimates of average annual hours actually worked and made adjustments with other data sources to account for hours not worked. Both analyses found that, in general, labor force surveys produce usual-hours-worked estimates that are greater than those based on normal hours worked, but lower than estimates based on hours actual worked.

Bruyère and Chagny's labor force survey estimates from the 1990s showed higher average hours worked for the same year, compared with the OECD estimates described in earlier sections, which are based on hours paid and normal hours for the United States, Japan, France, Germany, and the Netherlands.[45] However, the authors' estimate of average hours worked for the United Kingdom was lower than that prepared for the OECD database, which is based on hours actually worked from the labor force survey. An OECD special study that used data for 2002 and a decomposition method produced results similar to those of Bruyère and Chagny.[46] Using usual hours worked and adjusting for hours not worked, the OECD special study produced estimates for France and Germany that were higher, compared with values from the normal-hours-of-work source of the regular OECD data set. The Dutch data for both OECD publications should be the same as well, but differed inexplicably. The U.K. estimate based on the decomposition method and using normal hours as well as survey sources was lower than the estimate based on the actual-hours-worked estimate.

Chart 8. **Average annual hours actually worked, all employed persons, Sweden and Norway, 1980–2006**



THE EVIDENCE PRESENTED IN THIS ARTICLE confirms that biases are inherent in data sources used to measure hours worked. Data series of average annual hours actually worked based on normal and contractual hours concepts from administrative sources yield low measures of hours worked, whereas series based on establishment and labor force surveys provide relatively higher measures. The highest levels of hours worked are estimated directly from labor force surveys.

The OECD and BLS data series on average annual hours actually worked per employed person reflect broad trends in labor markets. The likelihood that hours worked in Japan are higher than reported, but still falling, is a reasonable conclusion, based on the differences in data sources and changes in legislation in that country. The OECD data series showing that U.S. workers work more hours per year, on average, than their European counterparts appears to be slightly inflated because of differences in sources and methods, but the difference is nonetheless real. Flat trends in hours worked in Anglophone countries reflect those countries' work regulations.

The cases of Japan and Sweden highlight how measures of hours worked cannot be taken at face value. It is unlikely that Japanese workers work fewer hours per year than their U.S. counterparts when a majority of them have a longer workweek and take fewer days of vacation. That Swedish workers work considerably more hours than Norway's workers also seems doubtful.

The cross-country comparisons of hours worked for both employees and those who are employed, using the same method for different countries and different methods for the same country, also provide a valuable lesson. These comparisons show that concepts, sources, and methods matter in building comparable hours-worked data series across countries. Because both survey-based data on hours actually worked and direct estimation produce high hours-worked estimates, and normal and contractual hours worked from administrative data produce low hours-worked estimates, it is important that any data series be transparent in describing sources and methods used in preparing estimates.

The international comparison of hours-worked data, like most international comparisons, is subject to the constraint that national statistics are developed primarily to serve a national purpose. Thus, the best source of hours

available for one country may not be for another. The English-speaking and Asian OECD countries selected for study here recently have made improvements in survey-based data to measure overtime and long work hours more accurately. For example, in 1997, the redesigned Canadian labor force survey expanded and revised its questions on hours worked.[47] Also, some European countries recently revised their labor force surveys to get improved coverage of hours *not* worked. For example, Sweden introduced questions to expand information on absences from work in its 2005 labor force survey,[48] and in March 2002 France revised its labor force questionnaire for the European Union, adding and clarifying questions on average and contractual hours, reasons for days off, and the reference period for usual hours worked.[49]

Improvements in data collection lead to revisions in estimation methods. Statistics Norway is studying the use of the now-continuous labor force survey for actual hours, rather than normal hours, of work—partly because annual average hours based on labor force survey data are nearly 12 percent higher than hours-worked figures based on administrative data using the normal-hours-of-work concept.[50] Improvements in the collection and measurement of data on hours in a number of the OECD countries should lead to improved harmonization of data among these countries in the future. In the meantime, data on average annual hours actually worked remain useful for broad comparisons, but consumers of these data should take heed: small differences between countries may tell a misleading story. □

Notes

ACKNOWLEDGMENT: The author thanks many people for their support, comments, and suggestions. Special thanks go to BLS economists Jennifer Raynor, Richard Esposito, and Marie-Claire Sodergren; to Judy Yang, BLS student trainee in economics; to Constance Sorrentino, for her always helpful guiding eye; and to Pascal Marianna of the Organization for Economic Cooperation and Development (OECD), whose ability to provide more detail on the methodology of the OECD database proved invaluable in producing this article. The article also benefited from the review of Omar Hardardson of Eurostat and Statistics Iceland; Sophie Lawrence of the International Labor Organization; Paul Swaim of the OECD; and Angus Maddison, Emeritus Professor, Faculty of Economics, University of Groningen. The ideas set forth in this article are solely the responsibility of the author and do not necessarily reflect the views of the Bureau of Labor Statistics.

[1] Available on the Internet at **www.oecd.org/statistics** (visited May 22, 2009).

[2] See "Resolution concerning statistics of hours of work, adopted by the Tenth International Conference of Labor Statisticians (October 1962)," on the Internet at **www.ilo.org/public/english/bureau/stat/download/res/hours.pdf** (visited May 22, 2009).

[3] See **www.redorbit.com/news/business/675442/vw_workers_agree_to_33hour_workweek/index.html** (visited May 15, 2009); **www.iht.com/articles/2006/09/29/business/vw.php** (visited May 22, 2009)**; www.justlanded.com/english/Netherlands/Tools/Just-Landed-Guide/Jobs/Working-the-Netherlands** (visited May 22, 2009)**; and docs.minszw.nl/pdf/135/2007/135_2007_1_18401.pdf** (visited May 22, 2009).

[4] The U.S. Current Population Survey calls this concept *hours at work*.

[5] Ralf Hussmanns, Farhad Mehran, and Vijay Verma, *Surveys of economically active population, employment, unemployment and underemployment: An ILO manual on concepts and methods* (Geneva, International Labor Office, 1990), p. 84.

[6] Normal hours are agreed-upon hours based on collective-bargaining agreements and legislation, whereas contractual hours constitute a fixed schedule established by individual agreement. Contractual hours are not covered in this article, given that the concept is not used in the United States and that data on contractual hours have only recently been considered as a possible source of data on hours.

[7] Jelle Visser, "Union membership statistics in 24 countries," *Monthly Labor Review*, January 2006, pp. 38–49; on the Internet at **www.bls.gov/opub/mlr/2006/01/art3full.pdf** (visited May 15, 2009).

[8] The text of the 2003 Fillon Law that documents this exception is at **www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000005635050&dateTexte=20090515** (visited May 15, 2009).

[9] Still, concern over proxy and nonresponse error remains. Statistical methods are used to test and correct for these errors.

[10] Jean-Pierre Maynard, Lucy Chung, and Deborah Sunter (Statistics Canada), "Measuring hours actually worked," paper presented at meeting of Paris Group on Labor Compensation, Lisbon, Portugal, Sept. 29–Oct. 1, 2004.

[11] Harley Frazis and Jay Stewart, "What can time-use data tell us about hours of work?" *Monthly Labor Review*, December 2004, pp. 3–9.

[12] See Gerard Ypma and Bart van Ark, "Employment and Hours Worked in National Accounts: A Producer's View on Methods and a User's View on Applicability," EU KLEMS working paper no. 10, 2006, on the Internet at **www.euklems.net/pub/no10(online).pdf** (visited May 22, 2009). The national economy of a given country has to do with the production of individuals and national businesses, no matter where they are located, within or outside of that country. The domestic economy takes into account only production within the borders of the country.

[13] Adriana Mata Greenwood, "The hours that we work: the data we need, the data we get," *ILO Bulletin of Labor Statistics, 2001–1*, on the Internet at **www.ilo.org/public/english/bureau/stat/download/articles/2001-1.pdf** (visited May 15, 2009).

[14] *OECD Employment Outlook, 2004* (Paris, OECD, 2004), pp. 24–34.

[15] General report, Seventeenth International Conference of Labor Statisticians, November 24–December 3, 2003 (Geneva, International Labor Organization, 2003), p. 59, on the Internet at **www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/---stat/documents/meetingdocument/wcms_087585.pdf** (visited May 15, 2009).

[16] *Ibid.*, p. 60. The Paris Group on Labor and Compensation contributed in great part to the report of the 17th International Conference of Labor Statisticians. The Paris Group on Labor and Compensation was established in 1997 in response to an April 1996 recommendation by the U.N. Statistical Commission's working party on international statistical programs, with the aim of examining, assessing, and reconciling sources of information used to measure the labor market and of contributing to improving concepts and their implementation. In the past 10 years, meetings of this U.N. "City Group" have addressed topics dealing with measurements of working time and hours worked. Information on the Paris Group is at the French Statistical Institute (Institut National des Statistiques et Études Économiques, or INSEE) Web site, **www.**

insee.fr/en/nom_def_met/colloques/citygroup/citygroup.htm (visited May 22, 2009), and the U.N. Web site, **unstats.un.org/unsd/methods/citygroup/paris.htm** (visited May 22, 2009).

[17] Ypma and van Ark, "Employment and Hours Worked in National Accounts."

[18] The data sets use the data sources and adjustments based, respectively, on the GDP report of June 2007 (on the Internet at **www.bls.gov/ilc;** visited May 22, 2009) and on the data prepared for the statistical annex of *OECD Employment Outlook, 2007* (Paris, OECD, 2007), on the Internet at **www.oecd.org/dataoecd/29/27/38749309.pdf** (visited May 15, 2009). Further details on the national accounts methodology for some of the countries in the OECD data set also are found in Ypma and van Ark, "Employment and Hours Worked in National Accounts."

[19] See United Nations Statistics Division, System of National Accounts, 1993, chapter 17, on the Internet at **unstats.un.org/unsd/sna1993/tocLev8.asp?L1=17&L2=2** (visited May 22, 2009).

[20] For more details on methods of compiling annual estimates, see Adriana Mata Greenwood, "The hours that we work: the data we need, the data we get," *ILO Bulletin of Labor Statistics, 2001-1* (Geneva, International Labor Office, 2001), on the Internet at **www.ilo.org/global/What_we_do/Statistics/lang--en/docName--WCMS_087906/index.htm** (visited May 22, 2009); and "Review of the experimental status of international comparisons of productivity—GDP per hour worked" (United Kingdom, National Statistics Office, Oct. 9, 2002), on the Internet at **www.statistics.gov.uk/downloads/theme_economy/review_of_hourly_ICP.pdf** (visited May 22, 2009).

[21] *Comparative real gross domestic product per capita and per employed person: 16 countries, 1960–2007* (Bureau of Labor Statistics, Office of Productivity and Technology, July 7, 2008), on the Internet at **www.bls.gov/fls/flsgdp.pdf** (visited May 22, 2009).

[22] The OECD productivity database provides data on average annual hours actually worked. For Belgium, as well as some other countries, data sources in that database differ from those in the *OECD Employment Outlook* database. The BLS measure for Belgium from the OECD productivity database is based on administrative data.

[23] See Table F in the Statistical Annex of *OECD Employment Outlook,* 2007, p. 263. Data also are updated annually online at **OECD.stat** (visited May 22, 2009).

[24] Ypma and van Ark, "Employment and Hours Worked in National Accounts," pp. 15–16.

[25] See table A–1 for the underlying data used in the comparison. Data for this article were the most current at that time, but have since been updated.

[26] See "Supplementary Information Used to Calculate Hours Data for Major Sector Productivity and Costs Series" (Bureau of Labor Statistics, Jan. 17, 2007), on the Internet at **www.bls.gov/lpc/hoursdatainfo.htm** (visited May 22, 2009).

[27] Mary Bowler and Teresa Morisi, "Understanding the employment measures from the CPS and CES survey," *Monthly Labor Review*, February 2006, pp. 23–38; on the Internet at **www.bls.gov/opub/mlr/2006/02/art2full.pdf** (visited May 22, 2009).

[28] Ypma and van Ark, "Employment and Hours Worked in National Accounts."

[29] John Owen, "Work-time reduction in the U.S. and Western Europe," *Monthly Labor Review*, December 1988, pp. 41–45, on the Internet at **www.bls.gov/opub/mlr/1988/12/rpt3full.pdf** (visited May 22, 2009).

[30] *OECD Employment Outlook 2004*, pp. 24–34.

[31] For a more complete review of industrial relations in the countries covered, see William K. Roche, Brian Fynes, and Terri Morrissey, "Working time and employment: A review of international evidence," *International Labor Review*, vol. 135, no. 2 (1996), pp. 129–57; Gerhard Bosch, Peter Dawkins, and François Michon, *Times are changing: working time in 14 industrialised countries* (Geneva, International Institute for Labor Studies, 1994); Jon C. Messenger (ed.), *Working Time and Workers' Preferences in Industrialized Countries, Finding the Balance* (New York, Routledge, 2004); Sangheon Lee, "Working-hour gaps: trends and issues," in Messenger, *Working Time and Workers' Preferences*, pp. 29–59; and Greg Bamber and Russell Lansbury (eds.), *International and Comparative Employment Relations: A study of industrialised market economies*, 3d ed. (St. Leonards, U.K., Allen & Unwin, 1998).

[32] See "Restriction on Dismissal, Holidays & Leave" (South Korean Ministry of Labor, Apr. 29, 2009), on the Internet at **english.molab.go.kr/english/Working/Standard_Restriction.jsp** (visited May 22, 2009); and Kazuya Ogura, "Annual paid leave in Japan," *Japan Labor Review*, Spring 2004, pp. 100–08, on the Internet at **www.jil.go.jp/english/documents/JLR02_ogura.pdf** (visited May 22, 2009).

[33] Prior to 1998, when the United Kingdom began complying with the European Union's Working Time Directive (discussed in detail shortly), U.K. labor laws had a higher ceiling on maximum weekly hours. The United Kingdom consistently has had higher average actual and usual weekly hours worked, compared with its other European neighbors. Despite the legislative changes wrought by the European Union's directive, many companies in the United Kingdom use the "individual opt-out" clause of the directive to loosen restrictions placed on maximum work hours. The limit was 60 hours a week before the country revised the labor law in 1998; it has since been reduced to 48. (See Catherine Barnard, Simon Deakin, and Richard Hobbs, "Opting out of the 48-hour week: employer necessity or individual choice? An empirical study of the operation of article 18(1)(b) of the Working Time Directive in the UK," *Industrial Law Journal,* December 2003, pp. 223–52.)

[34] "Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003 concerning certain aspects of the organisation of working time" (European Union, Nov. 18, 2003), on the Internet at **www.lex.unict.it/eurolabor/en/documentation/dirapprovate/dir(03)-88en.pdf** (visited May 15, 2009). Recent information on efforts to revise the 2003 directive are in Stefan Lücking, "Political agreement reached on working time and temporary work directives" (Munich, European Industrial Relations Observatory On-line, Oct. 15, 2008), on the Internet at **www.eurofound.europa.eu/eiro/2008/07/articles/eu0807049i.htm** (visited May 15, 2009).

[35] See *Working Hours (Adjustment) Act—Netherlands* (Geneva, International Labor Organization, June 20, 2002), on the Internet at **www.ilo.org/public/english/employment/gems/eeo/law/nether/l_wa.htm** (visited May 15, 2009); and Sheri Todd, *Improving work-life balance—what are other countries doing? The Netherlands* (Ottawa, Labor Program, Human Resources and Skills Development Canada, 2004), on the Internet at **www.hrsdc.gc.ca/eng/lp/spila/wlb/pdf/improving-work-life-balance.pdf** (visited May 15, 2009).

[36] For a more complete review of trends in industrial relations and hours in the countries covered herein, see Bamber and Lansbury, *International and Comparative Employment Relations*; Gerhard Bosch, "Working time tendencies and emerging issues," *International Labor Review*, vol. 138, no. 2 (1999), pp. 131–49; Bosch, Dawkins, and Michon, *Times are changing*; Messenger, *Working Time and Workers' Preferences*; Lee, "Working-hour gaps"; Roche, Fynes, and Morrisey, "Working time and employment"; "Australian social trends, 1999" (Canberra, Australian Bureau of Statistics, June 24, 1999), and "Australian social trends, 2002" (Canberra, Australian Bureau of Statistics, June 4, 2002), special sections on employment arrangements, document 4102.0, on the Internet at **www.abs.gov.au/AUSTATS/abs@.nsf/mf/4102.0?opendocument?utm_id=LN** (go to "Past and Future Releases") (visited May 15, 2009); "Working hours: latest trends and policy initiatives," in *OECD Employment Outlook, 1998* (Paris, OECD, 1998), pp. 153–88; "Recent labor market developments and prospects," in *OECD Employment Outlook, 1994* (Paris, OECD, 2004), pp. 17–60; and Sheri Todd, "Improving Work-Life Balance—What Are Other Countries Doing?" (Ottawa, Human Resources and Skills Development Canada, 2004), on the Internet at **www.hrsdc.gc.ca/en/lp/spila/wlb/pdf/improving-work-life-balance.pdf** (visited May 15, 2009).

[37] See Yoichi Shimada, "Future of the system of regulations on working hours for white-collar workers in Japan," *Japanese Journal of Labor Studies*, October 2003, abstract on the Internet at **www.jil.go.jp/english/ejournal/2003.html** (visited May 15, 2009); Lee, "Working-hour gaps"; and Kazuya Ogura and Takashi Fujimoto, *Empirical Study on Long Working Hours and Unpaid Working Time in Japan* (Tokyo, Japan Institute for Labor Policy and Training, research report no. 22, March 2005), on the Internet at **www.jil.go.jp/english/reports/jilpt_01.html.**

[38] Death from overwork is an occupational hazard when one dies after having worked more than 24 continuous hours or 16 hours daily for 7 consecutive days. (See Takeshi Mizunoya, "An International Comparison of Unpaid Overtime Work Among Industrialized Countries," originally published in Japanese in *Journal of the Society of Economic Statistics*, no. 81, 2001, on the Internet in English at **www.ilo.org/public/english/bureau/stat/download/articles/2002-3.pdf** (visited May 22, 2009).)

[39] Data are from the Employment Status Survey, a representative household survey that collects information on type and hours of work.

[40] Susumu Noda, "Legal Issues on Long-Term Leave: Conflicting Structure of Leave Benefits," *Japan Labor Review*, summer 2006, pp. 55–73, on the Internet at **www.jil.go.jp/english/documents/JLR11_noda.pdf** (click on "English" to view the English-language document) (visited May 22, 2009).

[41] Mizunoya, "International Comparison of Unpaid Overtime Work."

[42] One such policy was the special part-time pension scheme that allowed people to work and, at the same time, draw a pension. The plan was phased out beginning in 1994 and was eliminated in 2001 (only to be replaced in 2003 by a similar scheme among state employers). (See Eskil Wadensjö, "Part-time pensions and part-time work in Sweden," Institute for the Study of Labor Discussion Paper No. 2273 (Bonn, IZA, August 2006), on the Internet at **ftp://repec.iza.org/RePEc/Discussionpaper/dp2273.pdf** (visited May 22, 2009).)

[43] European industrial relations observatory on-line, "2004 Annual Review for Sweden," on the Internet at **eurofound.europa.eu/eiro/2005/01/feature/se0501102f.htm** (visited May 22, 2009).

[44] David Rae, "How to Reduce Sickness Absences in Sweden: Lessons from International Experience," OECD Economics Department Working Paper No. 442, in *Economic Survey of Sweden 2005* (Paris, OECD, 2005).

[45] Mireille Bruyère and Odile Chagny, "Comparaisons internationales des durées du travail."

[46] *OECD Employment Outlook, 2004*.

[47] Statistics Canada, "Labour Force Survey, Detailed Information for April 2006," on the Internet at **www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SurvId=3701&SurvVer=0&InstaId=13986&InstaVer=67&DispYear=2006&SDDS=3701&lang=en&db=imdb&adm=8&dis=2** (visited May 22, 2009).

[48] Simon Bolling, "Hours of absence, overtime and hours actually worked," paper prepared for the Paris group meeting, Lisbon, September 2004 (Statistics Sweden, 20044), on the Internet at **www.insee.fr/en/insee-statistique-publique/colloques/citygroup/pdf/S-2-Paper_Statistics-Sweden_040916.pdf** (visited May 22, 2009).

[49] Stephane Lhermitte, "Measurement of working time: comparison between the new and the former labour force surveys in France," paper prepared for the Paris Group Meeting, London, September 2003, on the Internet at **www.insee.fr/en/insee-statistique-publique/colloques/citygroup/pdf/France-comparison-ALFS-CLFS.pdf** (visited May 22, 2009).

[50] See Helge Naesheim, "Statistics on working time, report from Norway," paper prepared for the Paris Group meeting, London, September 4–5, 2003 (Statistics Norway, July 2, 2003), on the Internet at **www.insee.fr/en/insee-statistique-publique/colloques/citygroup/pdf/Norway-general.pdf**; and "Definition and measurement of annual hours," paper prepared for the Paris group meeting, Lisbon, September 2004 (Statistics Norway, Aug. 28, 2004), on the Internet at **www.insee.fr/en/insee-statistique-publique/colloques/citygroup/pdf/Norway-3-country-paper.pdf** (visited May 22, 2009).

Table A-1. Average annual hours actually worked, all employed persons, 13 countries, 1980–2006

Year	United States		Canada		Japan		South Korea		Belgium		Denmark		France	
	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS
1980	1,819	1,824	1,802	1,807	2,121	–	2,876	2,803	–	1,690	1,646	1,659	1,842	1,828
1981	1,809	1,807	1,801	1,807	2,106	–	2,892	2,787	–	1,667	1,617	1,632	1,808	1,790
1982	1,806	1,795	1,784	1,787	2,104	–	2,905	2,907	–	1,653	1,627	1,642	1,765	1,736
1983	1,825	1,804	1,780	1,784	2,095	–	2,923	2,881	1,768	1,659	1,622	1,638	1,758	1,731
1984	1,843	1,820	1,782	1,788	2,108	–	2,919	2,865	1,793	1,630	1,615	1,633	1,746	1,720
1985	1,841	1,825	1,790	1,802	2,093	–	2,894	2,865	1,799	1,635	1,601	1,619	1,731	1,707
1986	1,833	1,806	1,789	1,799	2,097	–	2,923	2,803	1,779	1,624	1,603	1,622	1,720	1,703
1987	1,838	1,809	1,797	1,809	2,096	–	2,892	2,881	1,763	1,635	1,568	1,587	1,716	1,702
1988	1,842	1,823	1,807	1,828	2,092	–	2,846	2,902	1,750	1,630	1,549	1,569	1,718	1,707
1989	1,855	1,837	1,801	1,822	2,070	–	2,742	2,834	1,741	1,612	1,532	1,552	1,699	1,688
1990	1,836	1,818	1,788	1,804	2,031	–	2,688	2,798	1,754	1,601	1,518	1,539	1,702	1,702
1991	1,823	1,810	1,767	1,780	1,998	–	2,672	2,777	1,715	1,590	1,513	1,534	1,694	1,694
1992	1,826	1,802	1,759	1,779	1,965	–	2,650	2,730	1,693	1,594	1,532	1,554	1,695	1,695
1993	1,835	1,819	1,763	1,805	1,905	–	2,667	2,740	1,646	1,552	1,531	1,555	1,682	1,682
1994	1,842	1,836	1,780	1,821	1,898	–	2,651	2,725	1,646	1,551	1,494	1,548	1,675	1,675
1995	1,849	1,855	1,775	1,810	1,884	–	2,658	2,730	1,674	1,549	1,499	1,541	1,651	1,651
1996	1,840	1,852	1,784	1,826	1,892	1,924	2,648	2,720	1,646	1,547	1,495	1,531	1,655	1,655
1997	1,850	1,865	1,767	1,809	1,865	1,894	2,592	2,673	1,660	1,566	1,512	1,544	1,649	1,649
1998	1,852	1,879	1,767	1,804	1,842	1,872	2,496	2,605	1,672	1,555	1,528	1,559	1,637	1,637
1999	1,853	1,887	1,769	1,807	1,810	1,851	2,502	2,621	1,581	1,545	1,539	1,568	1,630	1,630
2000	1,841	1,864	1,768	1,802	1,821	1,865	2,520	2,631	1,554	1,545	1,554	1,581	1,591	1,591
2001	1,819	1,841	1,762	1,793	1,809	1,846	2,506	2,621	1,577	1,547	1,562	1,586	1,578	1,578
2002	1,814	1,822	1,744	1,775	1,798	1,832	2,465	2,590	1,579	1,548	1,556	1,578	1,536	1,536
2003	1,806	1,795	1,734	1,761	1,799	1,832	2,434	2,553	1,575	1,542	1,552	1,576	1,530	1,531
2004	1,809	1,797	1,752	1,779	1,787	1,836	2,394	2,532	1,549	1,522	1,558	1,582	1,555	1,558
2005	1,804	1,793	1,738	1,769	1,775	1,823	2,354	2,501	1,565	1,534	1,574	1,597	1,559	1,550
2006	1,804	1,792	1,738	1,766	1,784	1,832	2,305	2,491	1,571	1,534	1,577	1,608	1,564	1,548

Year	Germany [1]		Netherlands		Norway		Spain		Sweden		United Kingdom	
	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS	OECD	BLS
1980	1,751	1,698	–	–	1,580	1,580	2,003	1,753	1,517	1,517	1,773	1,793
1981	1,729	1,683	–	–	1,570	1,570	1,968	1,727	1,508	1,508	1,715	1,747
1982	1,718	1,681	–	–	1,559	1,559	1,946	1,727	1,523	1,523	1,730	1,743
1983	1,705	1,679	–	–	1,553	1,553	1,912	1,696	1,532	1,532	1,717	1,717
1984	1,694	1,672	–	–	1,548	1,548	1,865	1,660	1,534	1,534	1,733	1,726
1985	1,671	1,645	–	–	1,542	1,542	1,855	1,643	1,538	1,538	1,766	1,735
1986	1,652	1,638	–	–	1,538	1,538	1,847	1,643	1,536	1,536	1,768	1,726
1987	1,629	1,631	1,540	–	1,511	1,511	1,838	1,595	1,546	1,546	1,758	1,720
1988	1,624	1,629	1,509	–	1,513	1,513	1,835	1,600	1,566	1,566	1,798	1,732
1989	1,601	1,605	1,497	–	1,511	1,510	1,822	1,608	1,565	1,565	1,786	1,745
1990	1,578	1,567	1,504	–	1,503	1,503	1,824	1,608	1,561	1,561	1,771	1,745
1991	1,548	1,548	1,471	–	1,500	1,500	1,833	1,600	1,548	1,548	1,767	1,726
1992	1,566	1,566	1,447	–	1,510	1,510	1,825	1,596	1,565	1,565	1,732	1,701
1993	1,550	1,550	1,419	–	1,507	1,507	1,816	1,587	1,582	1,582	1,726	1,701
1994	1,547	1,547	1,411	–	1,505	1,505	1,816	1,584	1,621	1,621	1,740	1,692
1995	1,534	1,534	1,391	1,516	1,488	1,488	1,815	1,592	1,626	1,626	1,743	1,715
1996	1,518	1,518	1,421	1,524	1,483	1,483	1,811	1,592	1,635	1,635	1,742	1,715
1997	1,509	1,509	1,414	1,513	1,478	1,478	1,813	1,602	1,639	1,639	1,740	1,715
1998	1,503	1,503	1,400	1,497	1,476	1,476	1,834	1,614	1,638	1,638	1,734	1,711
1999	1,492	1,492	1,381	1,492	1,473	1,474	1,817	1,629	1,647	1,647	1,723	1,702
2000	1,473	1,473	1,372	1,490	1,455	1,455	1,815	1,653	1,625	1,625	1,711	1,686
2001	1,458	1,458	1,372	1,490	1,429	1,429	1,817	1,649	1,603	1,603	1,714	1,689
2002	1,445	1,445	1,348	1,472	1,414	1,414	1,798	1,647	1,580	1,580	1,696	1,673
2003	1,439	1,439	1,363	1,463	1,399	1,399	1,800	1,632	1,562	1,562	1,677	1,665
2004	1,442	1,442	1,362	1,460	1,417	1,417	1,799	1,618	1,585	1,585	1,672	1,658
2005	1,437	1,437	1,375	1,448	1,421	1,421	1,769	1,599	1,588	1,588	1,676	1,661
2006	1,436	1,436	1,391	1,457	1,407	1,407	1,764	1,594	1,583	1,583	1,669	1,656

[1] Data prior to 1991 are for West Germany.

Job openings and hires decline in 2008

Downward trends in job openings, hires, and quits were geographically widespread and affected almost every industry

Katherine Klemmer

Job openings and hires declined during 2008. The number of job openings, a stock measure referenced to the last day of the month, dropped from 4.4 million, seasonally adjusted, in December 2007 to 3.2 million in December 2008 after trending down steadily over the year. Hires, which is a measure of worker flows, also trended down steadily over the year. Hires dropped from 5.1 million, seasonally adjusted, in December 2007 to a low of 4.2 million in November 2008 and then increased to 4.5 million in December 2008. Job openings and hires also declined in 2007.[1]

The total separations level which was 5.0 million, seasonally adjusted, in December 2007, fluctuated over the course of the year reaching a high of 5.2 million in April 2008 and returned to 5.0 million in December 2008. The level of layoffs and discharges increased from 1.8 million in December 2007 to 2.4 million in December 2008 and the level of quits dropped from 2.9 million in December 2007 to 2.1 million in December 2008.

In December 2008, the National Bureau of Economic Research announced that the current recession had begun in December 2007.[2] The downward trend in job openings, hires, and quits, and the upward trend in layoffs and discharges are consistent with recessionary trends in other economic statistics. Recessionary trends are evident in increasing unemployment and declining employment levels. For example, the unemployment rate, 4.9 percent in December 2007, climbed to 7.2 by of December 2008.[3] Also, since December 2007, nonfarm employment dropped from 138 million to 135 million for the month of December 2008, a net employment loss of approximately 3 million over the course of 2008.[4] Chart 1 shows JOLTS total private job openings compared to CES total private employment levels since December 2000. The job openings leveled off and began to fall prior to December 2007 when employment levels began to fall.

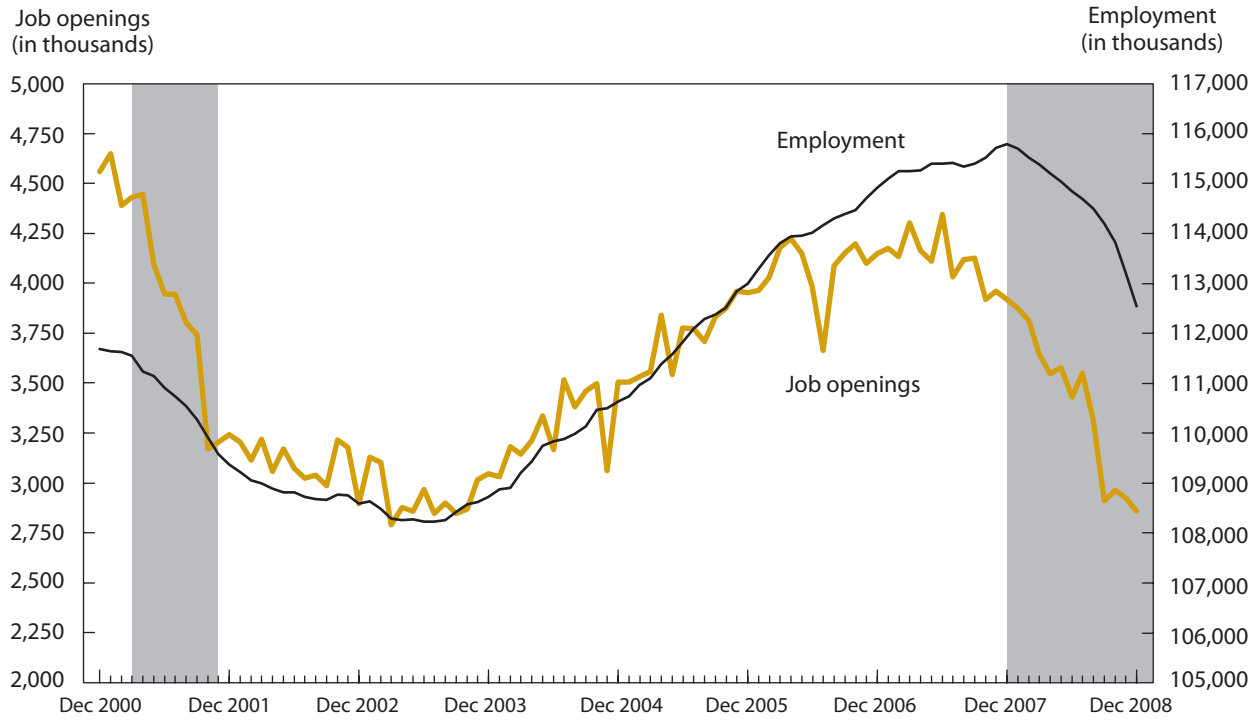
The Job Openings and Labor Turnover Survey program (JOLTS) measures job openings, hires, and separations on a monthly basis by industry and geographic region. The JOLTS statistics gauge labor demand by collecting data monthly from a sample of approximately 16,000 nonfarm business establishments and is aligned monthly with the BLS Current Employment Statistics (CES) program. Published JOLTS data are available from December 2000 forward. In 2008, JOLTS added seasonally-adjusted arts, entertainment, and recreation series for all data types and seasonally-adjusted layoffs and discharges for the Total Nonfarm, Total Private, and Government industries. Also, the entire JOLTS data series was retabulated on the basis of new methodology concurrent with the release of the January 2009 preliminary estimates.[5] Unless otherwise noted, JOLTS data used in this report are seasonally adjusted.

National level trends: job openings

The job openings rate at the national level experienced a downward trend for 2008 and

Katherine Klemmer is an economist in the Division of Administrative Statistics and Labor Turnover, Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. Klemmer.Katherine@bls.gov

Chart 1. **JOLTS total private job openings and CES total private employment, seasonally adjusted, December 2000–December 2008**



NOTE: Shaded regions represent recessions as designated by the National Bureau of Economic Research.

reached a low in December 2008 of 2.3 percent. Fewer job openings mean fewer opportunities for job-seekers to find employment. An economic expansion is characterized by a rising number of job openings and falling unemployment while an economic contraction is characterized by rising unemployment and a falling number of job openings. Chart 2 illustrates the inverse relationship between job openings and unemployment.[6] As the economy began to weaken prior to the beginning of the current recession, unemployment climbed while job openings dropped.

The ratio between unemployment and job openings is an indication of how the number of unemployed persons per job opening changes over time. The ratio increased from mid-2006 where it hovered around 1.5 unemployed persons per job opening to a ratio of approximately 3.5 unemployed persons per job opening in December 2008.[7] (See chart 3.)

National level trends: hires

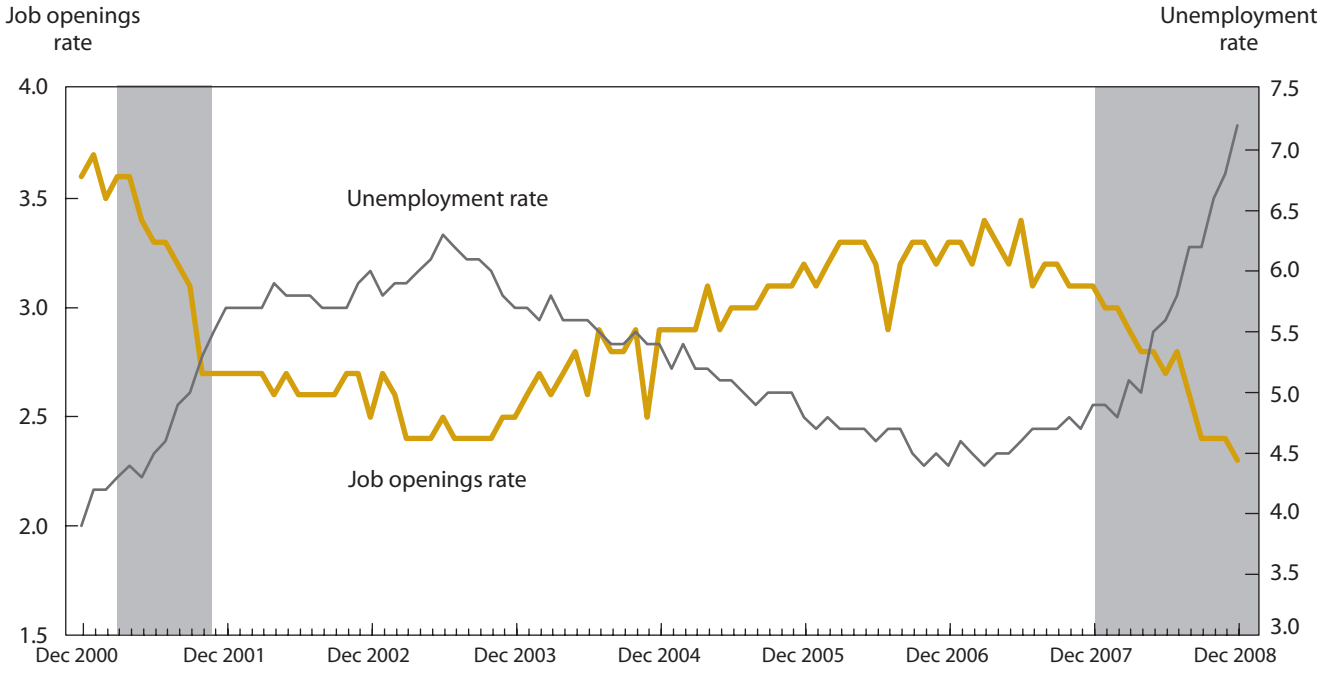
Hires are defined as the total number of additions to the payroll occurring at any time during the reference month. In November 2008, hires reached a series low of 4.2 million. The series declined from a high of 5.0 million in February 2008 to 4.2 million in November 2008 and then increased in December 2008 to 4.5 million hires. The downward trend that concluded in November 2008 began in mid-2006. The annual hires rate dropped to a series low of 41.2 percent in 2008. (See table 1.)

When comparing hires to total separations, it is indicative of an economic contraction when total separations exceed hires. For 11 consecutive months, from February 2008 through December 2008, separations exceeded hires. Prior to that point, hires exceeded separations in 49 of the 53 months from September 2003 through January 2008. None of the four exceptions occurred in consecutive months. (See chart 4.)

National level trends: total separations

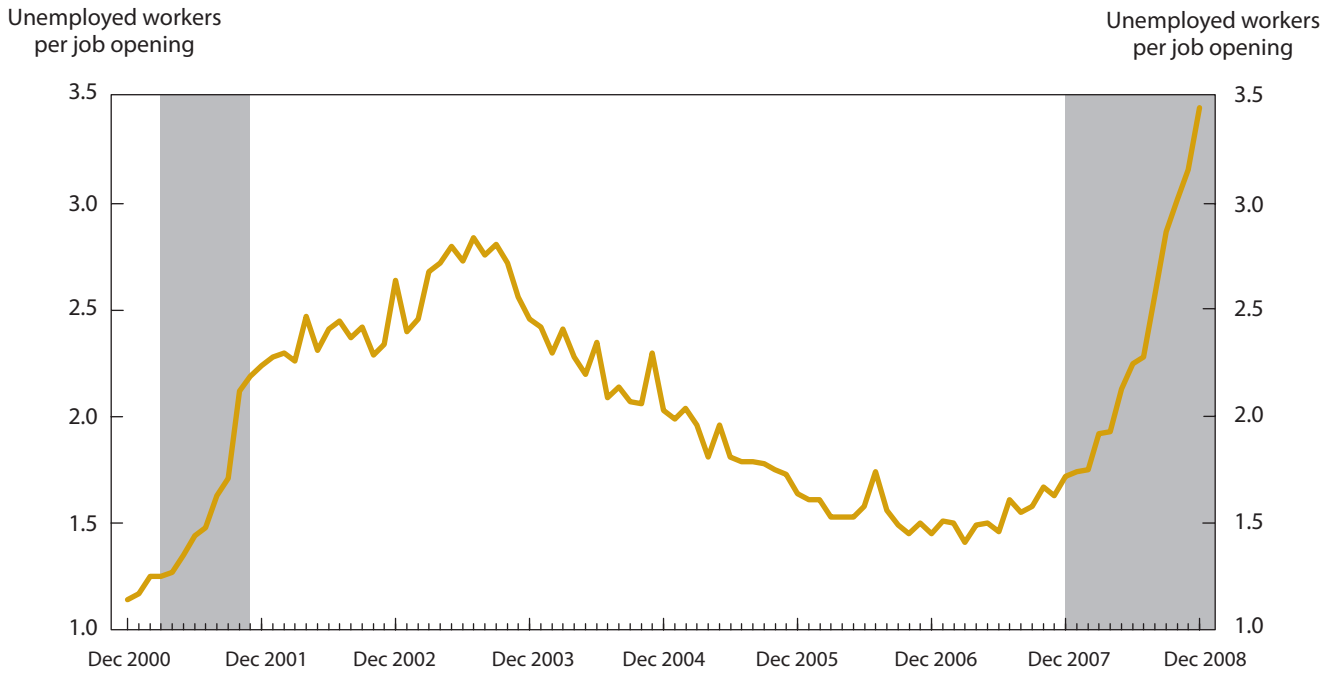
Total separations is defined as the total number of terminations of employment occurring at any time during the reference month and includes quits, layoffs and discharges, and other separations such as retirements. In 2008, monthly total separations peaked in April at 5.2 million, dropped to 4.8 million in July, and then trended upward

Chart 2. **JOLTS job openings rate and CPS unemployment rate, seasonally adjusted, December 2000–December 2008**



NOTE: Shaded regions represent recessions as designated by the National Bureau of Economic Research.

Chart 3. **Ratio of CPS unemployment to JOLTS job openings, seasonally adjusted, December 2000–December 2008**



NOTE: Shaded regions represent recessions as designated by the National Bureau of Economic Research.

Table 1. Annual hires rates [1] and levels [2]

Industry and region	Rates (percent)				Levels (in thousands)			
	2007	2008	Change	Percent change	2007	2008	Change	Percent change
Total	46.1	41.2	– 4.9	–10.6	63,381	56,496	–6,885	–10.9
Industry								
Total private	51.0	46.1	– 4.9	– 9.6	58,833	52,807	–6,026	–10.2
Natural resources and mining	47.9	49.4	1.5	3.1	347	382	35	10.1
Construction	63.1	64.0	.9	1.4	4,811	4,618	–193	– 4.0
Manufacturing	33.3	27.2	– 6.1	–18.3	4,617	3,651	–966	–20.9
Durable goods	30.5	24.6	– 5.9	–19.3	2,687	2,089	–598	–22.3
Nondurable goods	38.1	31.5	– 6.6	–17.3	1,930	1,561	–369	–19.1
Trade, transportation, and utilities	49.6	44.0	– 5.6	–11.3	13,215	11,602	–1,613	–12.2
Wholesale trade	36.8	31.7	– 5.1	–13.9	2,212	1,892	–320	–14.5
Retail trade	58.8	51.3	– 7.5	–12.8	9,121	7,876	–1,245	–13.6
Transportation, warehousing, and utilities	36.9	36.2	– .7	– 1.9	1,881	1,833	–48	– 2.6
Information	32.4	27.2	– 5.2	–16.0	983	814	–169	–17.2
Financial activities	38.0	32.5	– 5.5	–14.5	3,158	2,649	–509	–16.1
Finance and insurance	34.1	28.3	– 5.8	–17.0	2,089	1,704	–385	–18.4
Real estate and rental and leasing	49.3	44.4	– 4.9	– 9.9	1,070	945	–125	–11.7
Professional and business services	64.0	56.9	– 7.1	–11.1	11,475	10,112	–1,363	–11.9
Education and health services.	35.1	34.8	– .3	– .9	6,438	6,553	115	1.8
Educational services	30.9	30.9	.0	.0	910	939	29	3.2
Health care and social assistance	35.9	35.5	– .4	– 1.1	5,529	5,616	87	1.6
Leisure and hospitality	83.4	74.0	– 9.4	–11.3	11,194	9,965	–1,229	–11.0
Arts, entertainment, and recreation	83.2	74.8	– 8.4	–10.1	1,639	1,473	–166	–10.1
Accommodations and food services	83.4	73.9	– 9.5	–11.4	9,554	8,492	–1,062	–11.1
Other services	47.3	44.5	– 2.8	– 5.9	2,600	2,462	–138	– 5.3
Government	20.5	16.4	– 4.1	–20.0	4,549	3,688	–861	–18.9
Federal	30.9	12.1	–18.8	–60.8	844	335	–509	–60.3
State and local	19.0	17.0	– 2.0	–10.5	3,705	3,351	–354	– 9.6
Region [3]								
Northeast	39.0	36.0	– 3.0	– 7.7	10,010	9,237	–773	– 7.7
South	49.0	42.1	– 6.9	–14.1	24,360	20,846	–3,514	–14.4
Midwest	45.4	40.7	– 4.7	–10.4	14,239	12,690	–1,549	–10.9
West	47.8	44.6	– 3.2	– 6.7	14,774	13,721	–1,053	– 7.1

[1] The annual hires rate is the number of hires during the entire year as a percent of annual average employment.

[2] The annual hires level is the total number of hires during the entire year.

[3] The States (including the District of Columbia) that comprise the regions are: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

to 5.0 million in December.

The annual total separations rate reached a series low of 43.3 percent in 2008. The annual total separations rate is the sum of total separations levels for the 12 months of the year divided by the annual average employment level multiplied by 100. This annual rate has declined for the last three years. However, while annual total separations rates have decreased over the past three years, the relative proportion of annual layoffs and discharges within total separations has increased. Layoffs and discharges rose from 34 percent of total separations in 2006 (prior to the current economic downturn) to 41 percent of total separations in 2008. The quits rate dropped from a high of 58 percent of total separations in 2006 to 52 percent of total separations in 2008, while the other separations rate slipped from 8 percent of total separations in 2006 to 7 percent of total separations in 2008. (See tables 2–5.) Note the difference between the composition of total

Table 2. Annual total separations rates [1] and levels [2]

Industry and region	Rates (percent)				Levels (in thousands)			
	2007	2008	Change	Percent change	2007	2008	Change	Percent change
Total	45.1	43.3	– 1.8	– 4.0	62,104	59,343	–2,761	– 4.4
Industry								
Total private	50.1	48.7	– 1.4	– 2.8	57,860	55,808	–2,052	– 3.5
Natural resources and mining	43.0	43.2	.2	.5	311	334	23	7.4
Construction	65.2	72.7	7.5	11.5	4,971	5,242	271	5.5
Manufacturing	35.1	33.3	– 1.8	– 5.1	4,871	4,475	–396	– 8.1
Durable goods	32.7	31.8	– .9	– 2.8	2,880	2,695	–185	– 6.4
Nondurable goods	39.2	35.9	– 3.3	– 8.4	1,988	1,780	–208	–10.5
Trade, transportation, and utilities	48.4	47.3	– 1.1	– 2.3	12,889	12,488	–401	– 3.1
Wholesale trade	35.3	35.1	– .2	– .6	2,126	2,093	–33	– 1.6
Retail trade	57.5	54.9	– 2.6	– 4.5	8,928	8,424	–504	– 5.6
Transportation, warehousing, and utilities	36.0	38.9	2.9	8.1	1,835	1,970	135	7.4
Information	32.9	29.9	– 3.0	– 9.1	999	897	–102	–10.2
Financial activities	39.3	35.2	– 4.1	–10.4	3,259	2,870	–389	–11.9
Finance and insurance	35.6	30.9	– 4.7	–13.2	2,181	1,856	–325	–14.9
Real estate and rental and leasing	49.7	47.6	– 2.1	– 4.2	1,078	1,013	–65	– 6.0
Professional and business services	62.3	60.9	– 1.4	– 2.2	11,183	10,823	–360	– 3.2
Education and health services	32.3	32.1	– .2	– .6	5,911	6,055	144	2.4
Educational services	28.9	28.3	– .6	– 2.1	850	858	8	.9
Health care and social assistance	32.9	32.9	.0	.0	5,060	5,199	139	2.7
Leisure and hospitality	81.5	75.5	– 6.0	– 7.4	10,938	10,158	–780	– 7.1
Arts, entertainment, and recreation	81.3	76.6	– 4.7	– 5.8	1,601	1,509	–92	– 5.7
Accommodations and food services	81.5	75.3	– 6.2	– 7.6	9,341	8,648	–693	– 7.4
Other services	46.0	44.6	– 1.4	– 3.0	2,529	2,467	–62	– 2.5
Government	19.1	15.7	– 3.4	–17.8	4,242	3,534	–708	–16.7
Federal	30.2	11.6	–18.6	–61.6	825	322	–503	–61.0
State and local	17.6	16.3	– 1.3	– 7.4	3,420	3,210	–210	– 6.1
Region [3]								
Northeast	37.1	38.0	.9	2.4	9,530	9,742	212	2.2
South	48.0	44.2	– 3.8	– 7.9	23,852	21,891	–1,961	– 8.2
Midwest	44.2	41.8	– 2.4	– 5.4	13,862	13,024	–838	– 6.0
West	48.1	47.8	– .3	– .6	14,857	14,686	–171	– 1.2

[1] The annual total separations rate is the number of total separations during the entire year as a percent of annual average employment.

[2] The annual total separations level is the total number of total separations during the entire year.

[3] See footnote 3, Table 1.

separations in 2006, prior to the economic downturn, and the composition of total separations in 2008, subsequent to the economic downturn, as shown in chart 5.

With the exception of 2007, the JOLTS total separations series has trended closely with CES employment annually, increasing and decreasing in a procyclical manner in conjunction with increases and decreases in employment levels.[8] Total separations are procyclical with employment in most instances because quits are also procyclical. In 2007, however, the quits component of total separations decreased while total employment continued to increase and the layoffs and discharges component of total separations increased.

Quits. Quits are voluntary separations by employees, excluding retirements. During 2008, quits steadily declined from a high of 2.9 million in January to a low of 2.1 million in December. The downward trend in quits can be explained by worker behavior during an economic slowdown. Individuals are less willing to quit their current job

Table 3. Annual quits rates [1] and levels [2]

Industry and region	Rates (percent)				Levels (in thousands)			
	2007	2008	Change	Percent change	2007	2008	Change	Percent change
Total	25.5	22.6	– 2.9	–11.4	35,103	31,004	–4,099	–11.7
Industry								
Total private	28.7	25.6	– 3.1	–10.8	33,095	29,344	–3,751	–11.3
Natural resources and mining	25.3	24.2	– 1.1	– 4.3	183	187	4	2.2
Construction	24.9	23.1	– 1.8	– 7.2	1,903	1,664	–239	–12.6
Manufacturing	18.1	14.4	– 3.7	–20.4	2,512	1,929	–583	–23.2
Durable goods	16.2	12.6	– 3.6	–22.2	1,423	1,072	–351	–24.7
Nondurable goods.	21.5	17.3	– 4.2	–19.5	1,088	855	–233	–21.4
Trade, transportation, and utilities	28.7	25.9	– 2.8	– 9.8	7,652	6,824	–828	–10.8
Wholesale trade	19.5	16.8	– 2.7	–13.8	1,170	999	–171	–14.6
Retail trade	35.8	31.7	– 4.1	–11.5	5,553	4,861	–692	–12.5
Transportation, warehousing, and utilities	18.2	19.1	.9	4.9	927	965	38	4.1
Information	19.2	15.5	– 3.7	–19.3	581	465	–116	–20.0
Financial activities	22.8	18.8	– 4.0	–17.5	1,896	1,528	–368	–19.4
Finance and insurance	22.8	17.4	– 5.4	–23.7	1,400	1,047	–353	–25.2
Real estate and rental and leasing	23.1	22.6	– .5	– 2.2	500	481	–19	– 3.8
Professional and business services.	32.3	28.9	– 3.4	–10.5	5,797	5,145	–652	–11.2
Education and health services	20.4	18.7	– 1.7	– 8.3	3,732	3,531	–201	– 5.4
Educational services	14.1	12.7	– 1.4	– 9.9	414	386	–28	– 6.8
Health care and social assistance	21.6	19.9	– 1.7	– 7.9	3,315	3,148	–167	– 5.0
Leisure and hospitality	55.4	49.7	– 5.7	–10.3	7,443	6,685	–758	–10.2
Arts, entertainment, and recreation	32.1	28.9	– 3.2	–10.0	632	570	–62	– 9.8
Accommodations and food services	59.4	53.2	– 6.2	–10.4	6,810	6,115	–695	–10.2
Other services.	25.5	25.1	– .4	– 1.6	1,400	1,387	–13	– .9
Government	9.0	7.4	– 1.6	–17.8	2,008	1,661	–347	–17.3
Federal	10.5	3.8	– 6.7	–63.8	287	105	–182	–63.4
State and local.	8.8	7.9	– .9	–10.2	1,722	1,555	–167	– 9.7
Region [3]								
Northeast	18.3	18.0	– .3	– 1.6	4,708	4,616	–92	– 2.0
South	29.1	25.0	– 4.1	–14.1	14,478	12,393	–2,085	–14.4
Midwest	24.1	21.8	– 2.3	– 9.5	7,552	6,800	–752	–10.0
West	27.1	23.4	– 3.7	–13.7	8,366	7,191	–1,175	–14.0

[1] The annual quits rate is the number of quits during the entire year as a percent of annual average employment.

[2] The annual quits level is the total number of quits during the entire year.

[3] See footnote 3, Table 1.

if they believe it will be difficult to find a new job. They are also less willing to relocate for new jobs.[9] In 2008, this downward trend in quits could be tied to the collapse of the housing market, high gas prices in the first half of the year, and economic uncertainty in general.[10]

In December 2008, the Consumer Confidence Index™, a leading indicator, reached a historic low of 38.6,[11] down from 90.6 in December 2007. Over time, the JOLTS quits rate series has trended closely with the Consumer Confidence Index.[12] If consumers are not confident in the economy, they are less likely to quit their jobs. (See chart 6.)

Layoffs and Discharges. Layoffs and discharges are involuntary separations initiated by the employer. While there was some fluctuation in the month-to-month levels during 2008, layoffs and discharges have trended up over the year. In January 2008, there were 1.8 million layoffs and discharges. By December 2008, the number of layoffs and discharges rose to 2.4 million.

Because unemployment insurance claims are usually filed after job loss, they trend closely with the layoffs and discharges series. Similar to the upward trend in layoffs and discharges, unemployment insurance claims rose over the course of 2008.[13] Chart 7 shows that both series reflect

Table 4. Annual layoffs and discharges rates [1] and levels [2]

Industry and region	Rates (percent)				Levels (in thousands)			
	2007	2008	Change	Percent change	2007	2008	Change	Percent change
Total	16.4	17.8	1.4	8.5	22,539	24,370	1,831	8.1
Industry								
Total private	18.4	20.2	1.8	9.8	21,176	23,146	1,970	9.3
Natural resources and mining	12.6	15.1	2.5	19.8	91	117	26	28.6
Construction	37.3	46.4	9.1	24.4	2,848	3,347	499	17.5
Manufacturing	14.1	16.5	2.4	17.0	1,963	2,217	254	12.9
Durable goods	13.7	16.7	3.0	21.9	1,205	1,413	208	17.3
Nondurable goods	14.9	16.2	1.3	8.7	757	801	44	5.8
Trade, transportation, and utilities	13.6	16.3	2.7	19.9	821	973	152	18.5
Retail trade	17.7	18.9	1.2	6.8	2,753	2,907	154	5.6
Transportation, warehousing, and utilities	13.9	16.0	2.1	15.1	707	811	104	14.7
Information	10.4	12.2	1.8	17.3	315	365	50	15.9
Financial activities	13.3	13.5	.2	1.5	1,107	1,100	−7	−.6
Finance and insurance	9.9	10.6	.7	7.1	605	640	35	5.8
Real estate and rental and leasing	23.1	21.6	−1.5	− 6.5	500	461	−39	−7.8
Professional and business services	26.4	28.7	2.3	8.7	4,744	5,110	366	7.7
Education and health services	9.5	11.0	1.5	15.8	1,737	2,069	332	19.1
Educational services	13.2	14.0	.8	6.1	387	426	39	10.1
Health care and social assistance	8.8	10.4	1.6	18.2	1,350	1,644	294	21.8
Leisure and hospitality	23.6	23.4	− .2	− .8	3,174	3,152	−22	− .7
Arts, entertainment, and recreation	46.2	45.6	− .6	−1.3	910	898	−12	−1.3
Accommodations and food services	19.7	19.6	− .1	− .5	2,262	2,256	−6	− .3
Other services	16.6	17.7	1.1	6.6	914	977	63	6.9
Government	6.1	5.5	− .6	−9.8	1,364	1,227	−137	−10.0
Federal	8.2	3.9	− 4.3	−52.4	225	109	−116	−51.6
State and local	5.8	5.6	− .2	−3.4	1,137	1,114	−23	− 2.0
Region [3]								
Northeast	15.6	16.9	1.3	8.3	3,996	4,326	330	8.3
South	15.9	16.5	.6	3.8	7,909	8,162	253	3.2
Midwest	16.8	17.0	.2	1.2	5,276	5,302	26	.5
West	17.3	21.4	4.1	23.7	5,357	6,582	1,225	22.9

[1] The annual layoffs and discharges rate is the number of layoffs and discharges during the entire year as a percent of annual average employment.

[2] The annual layoffs and discharges level is the total number of layoffs and discharges during the entire year.

[3] See footnote 3, Table 1.

increases beginning well before the start of the recession.

Other Separations. Other separations includes separations due to retirement, transfer to other locations of the same firm, death, and disability. Other separations, not seasonally adjusted, declined from 334,000 in December 2007 to 289,000 in December 2008. The annual other separations rate also reached a low in 2008 of 2.9 percent of annual average employment. This decline in other separations may represent a tendency to forestall retirement during a recession.

Regional trends: job openings

Just as job openings at the national level experienced a downward trend in 2008, the job openings rates for all four regions also experienced downward movements in 2008. The Midwest regional job openings rate reached a low of 1.9 percent in December 2008.

Using Local Area Unemployment Statistics unemployment data, ratios for the number of unemployed persons per job opening were computed by region.[14] The highest ratio is currently in the Midwest where the number of

Table 5. Annual other separations rates[1] and levels[2]

Industry and region	Rates (percent)				Levels (in thousands)			
	2007	2008	Change	Percent change	2007	2008	Change	Percent change
Total	3.2	2.9	– 0.3	– 9.4	4,463	3,969	–494	–11.1
Industry								
Total private	3.1	2.9	– .2	– 6.5	3,591	3,319	–272	– 7.6
Natural resources and mining	4.8	3.6	– 1.2	–25.0	35	28	–7	–20.0
Construction	2.9	3.2	.3	10.3	220	233	13	5.9
Manufacturing	2.8	2.5	– .3	–10.7	393	332	–61	–15.5
Durable goods	2.9	2.5	– .4	–13.8	252	209	–43	–17.1
Nondurable goods	2.8	2.5	– .3	–10.7	142	124	–18	–12.7
Trade, transportation, and utilities	3.6	3.7	.1	2.8	956	974	18	1.9
Wholesale trade	2.2	2.0	– .2	– 9.1	134	120	–14	–10.4
Retail trade	4.0	4.3	.3	7.5	623	658	35	5.6
Transportation, warehousing, and utilities	3.9	3.9	.0	.0	201	196	–5	– 2.5
Information	3.3	2.3	– 1.0	–30.3	100	68	–32	–32.0
Financial activities	3.1	3.0	– .1	– 3.2	257	245	–12	– 4.7
Finance and insurance	2.8	2.9	.1	3.6	174	172	–2	– 1.1
Real estate and rental and leasing	3.7	3.4	– .3	– 8.1	80	73	–7	– 8.8
Professional and business services	3.6	3.2	– .4	–11.1	644	568	–76	–11.8
Education and health services	2.4	2.4	.0	.0	444	454	10	2.3
Educational services	1.7	1.6	– .1	– 5.9	50	48	–2	– 4.0
Health care and social assistance	2.6	2.6	.0	.0	395	406	11	2.8
Leisure and hospitality	2.4	2.4	.0	.0	324	322	–2	– .6
Arts, entertainment, and recreation	3.0	2.1	– .9	–30.0	59	42	–17	–28.8
Accommodations and food services	2.3	2.4	.1	4.3	267	278	11	4.1
Other services	3.9	1.8	– 2.1	–53.8	217	102	–115	–53.0
Government	3.9	2.9	– 1.0	–25.6	872	647	–225	–25.8
Federal	11.4	4.0	– 7.4	–64.9	312	110	–202	–64.7
State and local	2.9	2.7	– .2	– 6.9	559	538	–21	– 3.8
Region[3]								
Northeast	3.2	3.1	– .1	– 3.1	821	799	–22	– 2.7
South	3.0	2.7	– .3	–10.0	1,475	1,342	–133	– 9.0
Midwest	3.3	2.9	– .4	–12.1	1,034	919	–115	–11.1
West	3.7	3.0	– .7	–18.9	1,132	909	–223	–19.7

[1] The annual other separations rate is the number of other separations during the entire year as a percent of annual average employment.

[2] The annual other separations level is the total number of other separations during the entire year.

[3] See footnote 3, Table 1.

unemployed per job opening is approaching 4 to 1. All four regions show a similar trend of an increasing ratio beginning in mid-2007.

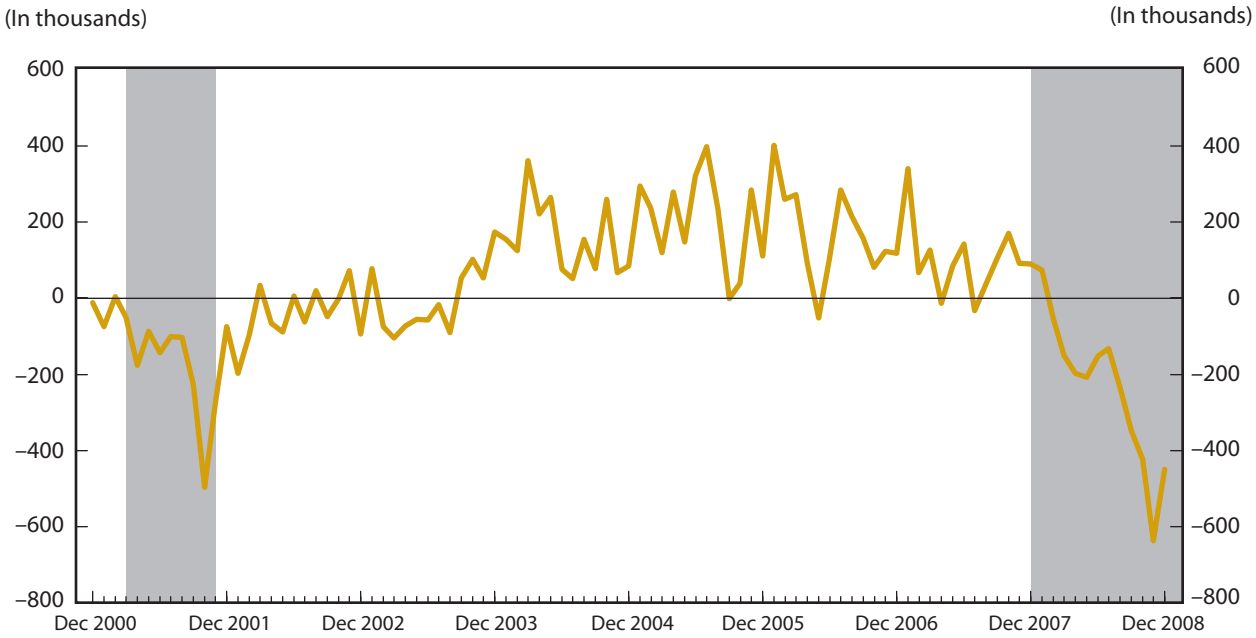
Regional trends: hires

Similar to the trend at the national level, hires have trended downward at the regional level in 2008. All four regions have dropped to series low hires rates, seasonally adjusted. In 2008, after peaking at a hires rate of 4.2 percent in April, the West region reached a series low of 3.4 percent in October. The Northeast and Midwest both experienced slight increases in hires rate in June 2008 at 3.2 and 3.6 percent, respectively, but then the hires rates fell to 2.6 percent in the Northeast and 3.0 percent in the Midwest by November 2008. The South region showed a steady decline in hires to a low of 3.2 percent in November 2008 and then increased to 3.4 percent in December.

Regional trends: total separations

Total separations increased in the Northeast and West regions and decreased in the Midwest and South regions. From December 2007 to December 2008, separations in-

Chart 4. **Difference between monthly hires and separations, seasonally adjusted, December 2000–December 2008**



NOTE: Shaded regions represent recessions as designated by the National Bureau of Economic Research.

Chart 5. **Composition of total separations: 2006 and 2008**

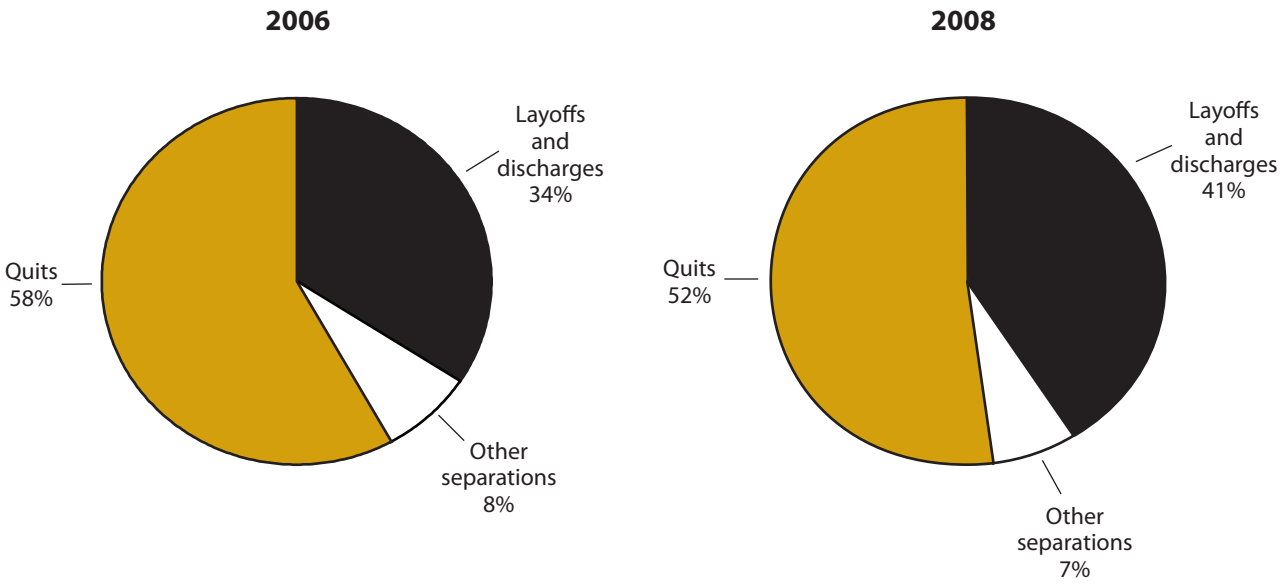
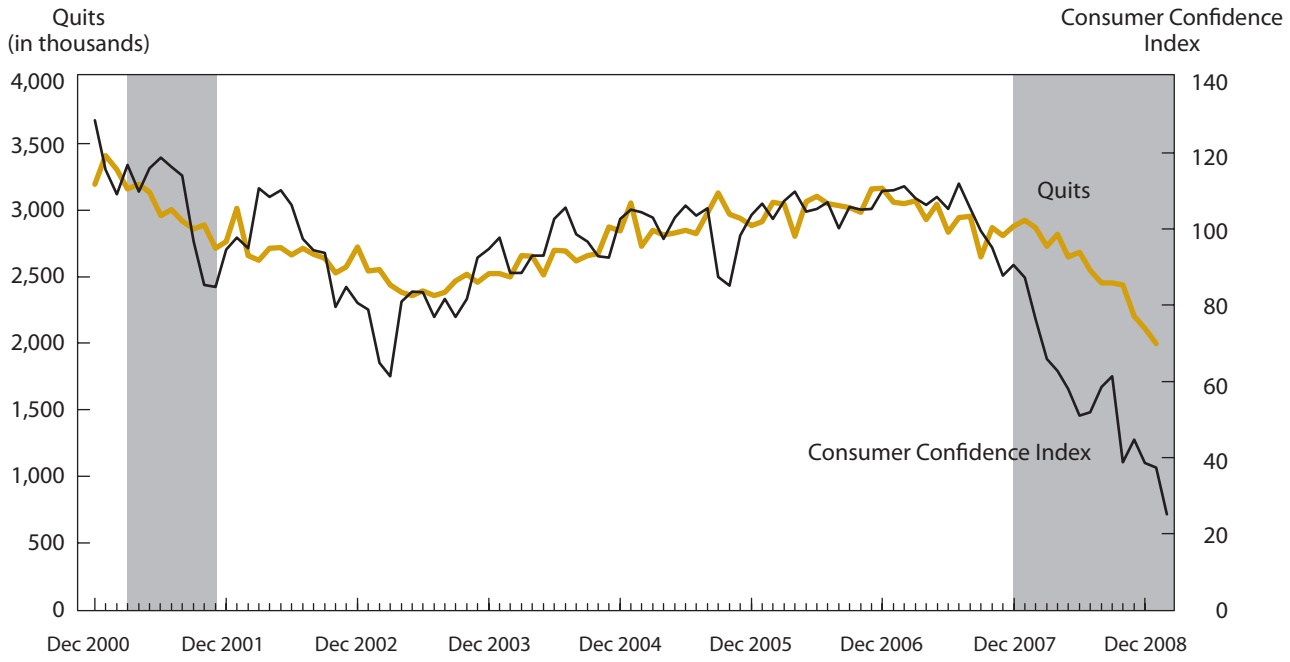
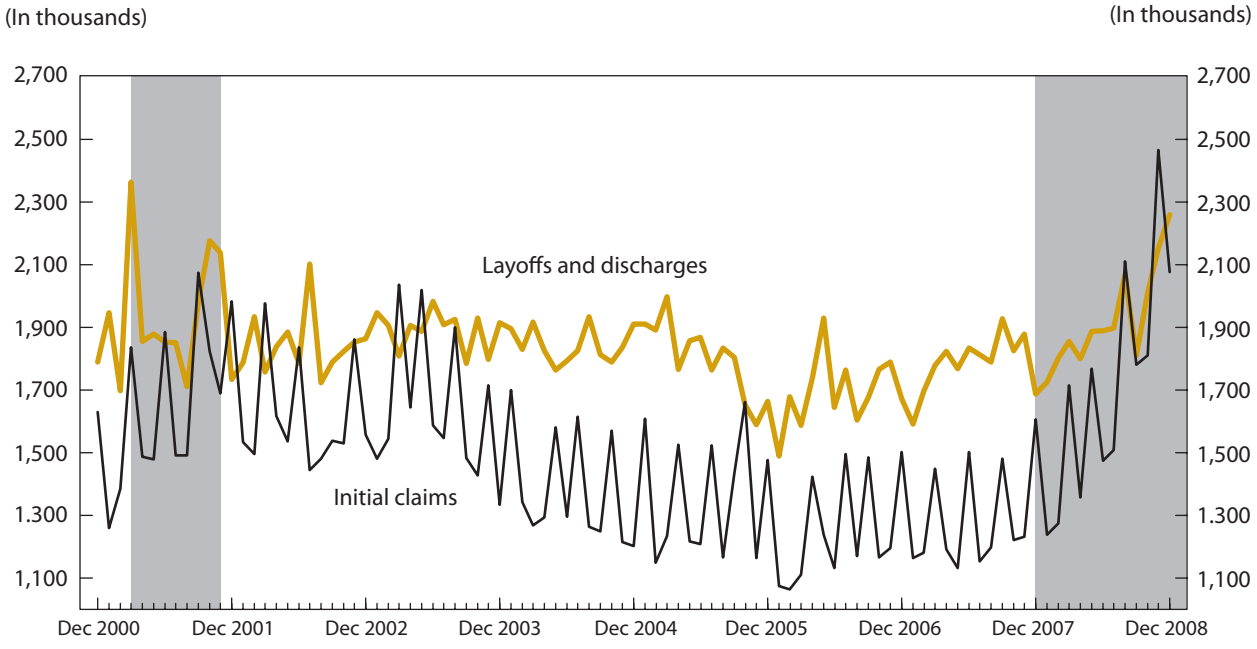


Chart 6. **JOLTS quits and the Conference Board Consumer Confidence Index™, seasonally adjusted, December 2000–December 2008**



NOTE: Shaded regions represent recessions as designated by the National Bureau of Economic Research.

Chart 7. **JOLTS layoffs and discharges and initial unemployment insurance claims, seasonally adjusted, December 2000–December 2008**



NOTE: Shaded regions represent recessions as designated by the National Bureau of Economic Research.

creased in the Northeast from 2.8 percent to 3.2 percent and in the West from 3.9 percent to 4.0 percent. During the same time period, total separations in the South decreased from 3.8 percent to 3.7 percent and in the Midwest from 3.6 percent to 3.5 percent.

Relative contributions of the components of total separations varied by region. Layoffs and discharges in the West showed the highest annual percentage of total separations of the four census regions at 44.8 percent in 2008. The South showed the lowest contribution of layoffs and discharges to total separations at 37.3 percent. Quits were high in the South at 56.6 percent of that region's total separations. The Northeast showed the lowest contribution of quits to total separations of the four Census regions at 47.4 percent. Other separations were highest in the Northeast as a percentage of that region's total separations at 8.2 percent while the South again shows the lowest contribution at 6.1 percent.

Industry trends in 2008

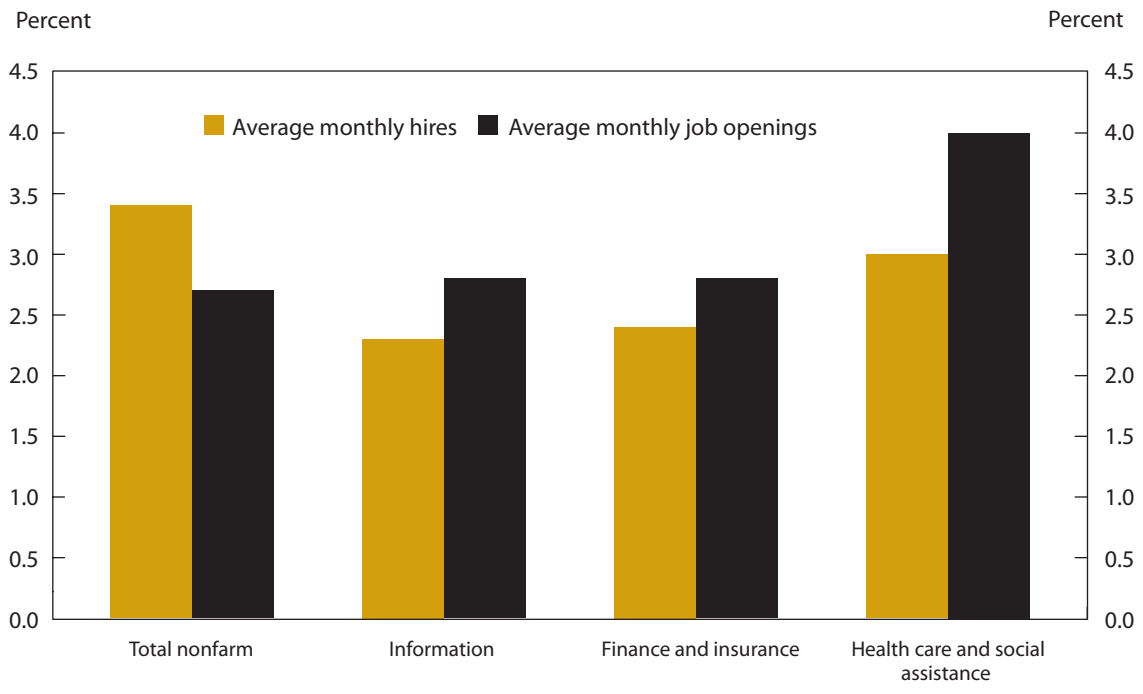
The overall pattern of declining job openings, declining hires, increasing layoffs and discharges, and declining quits and other separations was consistent across most industries. For the majority of industries job openings declined from December 2007 to December 2008. The following industries reached series lows during 2008 for their job openings rates, seasonally adjusted: construction in December 2008; professional and business services in November 2008; and accommodation and food services in November 2008.

Hires rates also declined in the majority of industries over 2008. The following industries dropped to series low seasonally-adjusted hires rates during 2008: manufacturing in November 2008; retail trade in November 2008; professional and business services in September 2008; arts, entertainment, and recreation in November 2008; and accommodation and food services in December 2008.

Typically, average monthly hires exceed average monthly job openings. This is true in 2008 at the total nonfarm level. However, there are several industries in which average monthly job openings exceeded average monthly hires in 2008 indicating areas where, in spite of the current recession, demand for some types of labor may be greater than the supply. These industries include information; finance and insurance; and health care and social assistance. (See chart 8.)

Total separations rates at the industry level showed a

Chart 8. Monthly hires and job openings rates, annual averages, 2008



mix of increases and decreases over the year: construction; manufacturing; trade, transportation, and utilities; and professional and business services experienced increasing seasonally-adjusted total separations numbers over the course of 2008. The remaining industries experienced seasonally-adjusted declines in total separations during 2008, with the exception of education and health services, which remained unchanged. Series lows occurred in the following seasonally-adjusted separations series: arts, entertainment, and recreation; and government. In the remaining separations series, which are not seasonally adjusted, total separations increased from December 2007 to December 2008 with the following exceptions: finance and insurance; educational services; and Federal Government.

Industry level layoffs and discharges, which are not seasonally adjusted, have increased over the year in almost all industries with the exceptions of finance and insurance; Federal Government; and State and local government which showed declines. In December 2008, wholesale trade reached a series high for layoffs and discharges at 2.4 percent of total employment, not seasonally adjusted. In a number of cases, layoffs and discharges remained stable until after the summer months when the climb in layoffs and discharges began.

Quits have declined in all of the seasonally adjusted industry series from over the year with most industries dropping to series low quit rates. For the not seasonally adjusted series, Federal Government quits dropped to a series low rate of 0.1 percent of total employment in November 2008.

Other separations, which are not seasonally adjusted, were fairly stable over 2008, trending downward only slightly in most industries. Notably, mining and logging showed a 0.3 percent decline from December 2007 to December 2008 in other separations as did wholesale trade. Real estate and rental and leasing on the other hand showed an increase in other separations of 0.4 percent of total employment.

Leisure and Hospitality. Leisure and hospitality showed large changes over the course of 2008 in job openings, hires, and total separations. The job openings rate, seasonally adjusted, declined steadily over the year from 4.1 percent in December 2007 to 2.3 percent in December 2008, a series low. Hires, seasonally adjusted, declined from a high of 6.9 percent in February 2008 to a low of 5.3 percent in November 2008. In May, the hires rate increased to 6.7 percent but then resumed the downward trend. Total separations in the leisure and hospitality industry showed a downward trend from a high of 6.9 percent in February 2008 to a low of 5.7 percent in December 2008.

In arts, entertainment, and recreation, job openings dropped slightly by 0.3 percent while hires declined by 1.1 percent, seasonally adjusted, from December 2007 to December 2008. Quits reached a series low of 1.5 percent in December 2008, seasonally adjusted. Accommodation and food services showed a downward trend for 2008 in job openings. Job openings, seasonally adjusted, went from 4.4 percent in December 2007 to 2.4 percent in December 2008. Hires for accommodation and food services, seasonally adjusted, trended downward over 2008. From December 2007 to December 2008, total separations dropped from 6.8 percent to 5.7 percent, seasonally adjusted.

Durable Goods Manufacturing. The durable goods manufacturing industry experienced declining job openings and hires, and increasing total separations. An analysis of the annual data provides another look at the impact of the recession on the durable goods industry.

On an annual basis, the share of layoffs and discharges as a percent of total separations showed a larger increase in durable goods manufacturing from 2007 to 2008 than any other industry. The contribution of layoffs and discharges went from 41.8 percent in 2007 to 52.4 percent in 2008, an increase of 10.6 points. Quits also declined from 49.4 percent contribution to total separations in 2007 to 39.8 percent in 2008, a decrease of 9.6 points. This represents a larger decline in quits as a portion of total separations than any other industry as well.

Construction. The construction industry experienced a drop in job openings rate from 1.8 percent in December 2007 to a low of 0.9 percent in December 2008 while hires experienced an increase from 5.0 percent in December 2007 to 5.3 percent in December 2008, seasonally adjusted. Total separations, seasonally adjusted, were up from 5.4 percent to 6.6 percent for the same time period. The layoffs and discharges rate, not seasonally adjusted, experienced a large increase from 3.8 percent in December 2007 to 5.8 percent in December 2008. The increase in layoffs and discharges in the construction industry can be explained by the severe problems in the financial and housing markets during the recession. According to CES employment figures, national construction employment went from 7.5 million employees in December 2007 to 6.8 million employees in December 2008, seasonally adjusted.

Conclusion

The current recession continued to impact labor market demand in 2008; job openings and hires declined and layoffs and discharges increased while quits decreased at the national level. For all four Census regions, job openings declined as did hires. Total separations increased in the Northeast and remained relatively unchanged in the remaining regions. At the industry level, declining job openings, declining hires, increasing layoffs and discharges, and declining quits and other separations were measured across most industries. □

NOTES

[1] Zhi Boon, "Job openings, hires, and turnover decrease in 2007," *Monthly Labor Review* (May 2008): 14-23.

[2] National Bureau of Economic Research. *Determination of the December 2007 Peak in Economic Activity*, December 1, 2008. **http://www.nber.org/cycles/dec2008.html** (visited Dec. 11, 2008).

[3] U.S. Department of Labor. Bureau of Labor Statistics. Data on the unemployment rates are available from Current Population Survey at **http://stats.bls.gov/cps/#news** (visited Mar. 18, 2009).

[4] U.S. Department of Labor. Bureau of Labor Statistics. Data on the annual employment levels are available from the Current Employment Statistics at **http://stats.bls.gov/ces/home.htm** (visited Mar. 18, 2009).

[5] U.S. Department of Labor. Bureau of Labor Statistics. *Job Openings and Labor Turnover Survey News Release: Job Openings and Labor Turnover: January 2009*, March 10, 2009, **http://stats.bls.gov/news.release/archives/jolts_03102009.htm** (visited Mar. 10, 2009).

[6] "Economic Jolt: Job Openings and Labor Turnover December 2008," *Paper Economy*, February 10, 2009, **http://paper-money.blogspot.com/2009/02/economic-jolt-job-openings-and-labor.html#links** (visited Mar. 18, 2009).

[7] Diane Stafford, "10 million job hunters for 3 million jobs," Kansas City Star, December 14, 2008, **http://economy.kansascity.com/?q=node/513** (visited Mar. 18, 2009). The article uses JOLTS data dating from before the most recent retabulations and methodology updates.

[8] U.S. Department of Labor. Bureau of Labor Statistics. Data on the annual employment levels are available from the Current Employment Statistics at **http://stats.bls.gov/ces/home.htm** (visited Mar. 18, 2009).

[9] Nick Zieminski, "Workers less willing to move or switch jobs," *Reuters*, August 1, 2008, **http://www.reuters.com/article/reutersEdge/idUSN0143860920080801** (visited Mar. 18, 2009).

[10] *Ibid*.

[11] Sue Kirchhoff, "Consumer confidence hits new low; home values continue to slide," *USA Today*, January 27, 2009, **http://www.usatoday.com/money/economy/housing/2009-01-27-case-shiller_N.htm**. (visited Mar. 18, 2009).

[12] Conference Board. Data on the Consumer Confidence Index are available from the Consumer Confidence Survey at **http://www.conference-board.org/economics/consumer.cfm** (visited Mar. 18, 2009).

[13] U.S. Department of Labor. Employment and Training Administration. Data from the Unemployment Insurance Claims are available on the internet at **http://www.dol.gov/opa/media/press/eta/ui/eta20090005.htm** (visited Mar. 24, 2009). Monthly claims calculations shown on graph sum the weekly initial unemployment claims by month.

[14] U.S. Department of Labor. Bureau of Labor Statistics. Data on the local area unemployment rates are available from the Local Area Unemployment Statistics program at **http://www.bls.gov/lau/** (visited Mar. 18, 2009).

Business employment dynamics: annual tabulations

The Business Employment Dynamics program releases quarterly gross job gain and gross job loss statistics, and this year it is releasing annual statistics for the first time; the annual data show over-the-year growth and decline of employment at the establishment level

Akbar Sadeghi,
James R. Spletzer,
and
David M. Talan

Business Employment Dynamics (BED) data from the U.S. Bureau of Labor Statistics are quarterly statistics that quantify levels of gross job gains and gross job losses in the United States. Gross job gains are defined as the sum of all employment gains at expanding and opening establishments. Gross job losses are defined as the sum of all employment losses at contracting and closing establishments. In the second quarter of 2008, on a seasonally adjusted basis, 1.8 million establishments expanded or opened, creating 7.3 million jobs, and 2.0 million establishments contracted or closed, eliminating 7.8 million jobs. The difference between the 7.3 million gross job gains and the 7.8 million gross job losses is a net employment loss of 0.5 million jobs (seasonally adjusted). The gross job gain and gross job loss statistics, which are substantially larger numbers than the net employment change, illustrate how dynamic the U.S. labor market is from quarter to quarter.

Since their initial release in 2003, BED statistics have become an important component of the Nation's statistical infrastructure. BED data are routinely cited by policymakers, researchers, and the business community, as well as the popular press. One request that BLS has heard consistently from users is for the production of annual gross job gain and loss statistics, which would enable a comparison of BED statistics with gross job gain and loss statistics from the U.S. Census Bureau and from other countries. The statistics that the BED program historically has produced cannot be compared with statistics from other statistical agencies, because the BED statistics are quarterly and other gross job gain and loss statistics are annual; four quarters of gross job gains and losses cannot be summed to create an annual measure of gross job gains and losses.

This article presents a new BED time series of annual gross job gain and gross job loss statistics. The article begins with a detailed documentation of how BLS has created annual BED statistics, and it discusses the value added by annual statistics notwithstanding the availability of quarterly statistics. The heart of the article is a comparison of the annual BED statistics with the quarterly BED statistics and a comparison of the annual BED statistics with similar statistics from the U.S. Census Bureau.

Business Employment Dynamics

An overview of quarterly BED data. The BED program's quarterly measures of gross job gains and gross job losses are constructed from Quarterly Census of Employment and Wages (QCEW) microdata. These microdata represent quarterly contribution reports submitted to the States by employers. QCEW data are a comprehensive and accurate source of information on employment and wages, and they provide a near census (98 percent

Akbar Sadeghi, James R. Spletzer, and David M. Talan are economists in the Office of Employment and Unemployment Statistics, Bureau of Labor Statistics. E-mail: sadeghi.akbar@bls.gov, spletzer.jim@bls.gov, talan.david@bls.gov

complete) of employees on nonfarm payrolls.[1] The QCEW is the sampling frame for BLS establishment-based surveys and is the employment benchmark for the Current Employment Statistics survey and other BLS establishment-based surveys. In the second quarter of 2008, QCEW statistics show an employment level of 136.6 million jobs in 9.1 million establishments in the U.S. economy. BLS publishes employment and wage data from the QCEW approximately 7 months after the end of each quarter.

All employers subject to State unemployment insurance laws must submit quarterly contribution reports to the State employment security agencies. These reports detail the establishments' level of employment by month and their wages by quarter. BED quarterly gross job gain and gross job loss statistics are tabulated by linking establishment-level microdata from the QCEW across quarters and then classifying establishments as expanding, opening, contracting, closing, or not changing their employment level. Following establishments across time using microdata is a complex and challenging exercise. BLS has developed a multistep process to link business-establishment microdata over time. This linkage process consists of two distinct administrative matches based on unique establishment identifiers maintained by the States, a probability-based weighted match, and an analyst review match.

The basic product of the BED program is statistics measuring quarterly gross job gains and gross job losses. BLS publishes quarterly BED data approximately 8 months after the end of the quarter.[2] Seasonally adjusted quarterly gross job gain and gross job loss statistics are plotted in chart 1. (The BED time series starts in the third quarter of 1992.) The 2001 recession is immediately evident in the chart. Both gross job gains and the gross job losses were climbing at relatively constant rates between 1992 and 1999, and then in 2001 gross job gains dropped substantially and gross job losses climbed dramatically. This shows that the net employment losses during the 2001 recession are the result of both falling gross job gains (a slowdown in the jobs created by establishment expansions and openings) and rising gross job losses (an increase in the jobs lost from establishment contractions and closings).

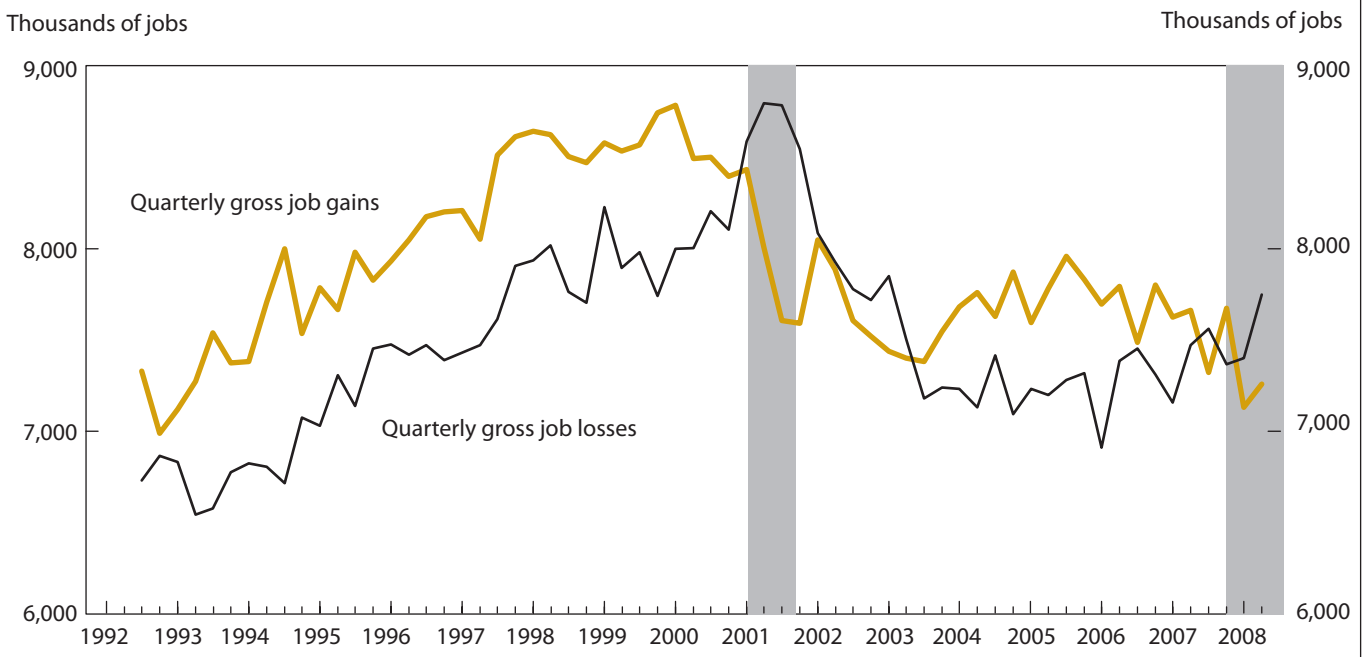
Reasons for creating annual BED statistics. There are three main reasons that annual measures of gross job gains and gross job losses should be produced despite the availability of quarterly measures. The first is to enhance people's understanding of labor market dynamics. Many establishments are seasonal and exhibit consistent patterns of growth and decline during the four quarters of the year. These seasonal expansions and contractions are short-term changes that reverse themselves in other quarters during the year. The seasonal variations in establishment-level employment are accounted for in the quarterly gross job gain and gross job loss statistics. However, gross job gains and gross job losses measured on an annual basis—the first quarter of each year, for example—are not affected by any seasonal employment variation that occurs during the year. As such, the annual statistics are arguably better measures of over-the-year growth and decline at the establishment level.

The second reason to produce annual statistics is related to the internal structure of the BED program. The BED program publishes statistics on establishment births and establishment deaths, and the definitions of births and deaths differ from the definitions of openings and closings that underlie the statistics that have been published thus far.[3] Businesses are allowed to and often do report zero employment to the State unemployment insurance systems for several quarters after they have effectively closed. This undoubtedly occurs when a business owner temporarily shuts down the business but anticipates starting it up again when economic conditions improve. By reporting zero employment and wages on the quarterly contributions form, the business owner can keep his or her unemployment insurance account active in preparation for reopening the business. As a result, in any given quarter one observes many businesses closing, but which of these businesses will start up again and which will die cannot be determined for several more quarters. The BED definition of establishment death requires four consecutive quarters of no positive employment, and implementing this definition requires longitudinally linking five consecutive quarters of cross-sectional QCEW microdata. An output derived from this five-quarter linkage is annual gross job gain and gross job loss statistics.

The third reason for creating annual BED statistics is to satisfy demands from users of BED data. As stated previously, users want annual BED data in order to compare the BED gross job gain and gross job loss statistics from BLS with similar statistics from the U.S. Census Bureau and from statistical agencies in other countries.

The method of constructing annual BED statistics. Creating annual BED statistics from quarterly cross-sectional QCEW microdata is difficult. The difficulty arises from trying to follow establishments through mergers, restructurings, and other ownership and administrative changes. It is important to do this correctly because the quality of longitudinal statistics hinges upon the ability to accurately follow establishments across time. Failure to follow an es-

Chart 1. Quarterly gross job gains and gross job losses, third quarter 1992 through second quarter 2008, seasonally adjusted



NOTE: The first quarter of each year ends in March, and the first quarter's endpoint is represented by the year's long tick mark. The shorter tick marks represent the endpoints of the second, third, and fourth quarters. The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions, one running March 2001–November 2001 and the other beginning in December 2007. An endpoint for the more recent recession has yet to be designated.

tablishment through mergers or other corporate restructurings would break a continuous longitudinal linkage and result in a spurious establishment closing and a concomitant spurious establishment opening. Annual BED gross job gain and gross job loss statistics must accurately measure the growth and decline of establishment-level employment rather than be distorted because of missed linkages due to changes in establishment identifiers in the administrative source data.

BLS has thoroughly researched the best way to create annual BED statistics from quarterly QCEW microdata and has determined that information from all quarters within the year needs to be used when creating an annual link.[4] BLS' research has shown that the annual gross job gain and gross job loss statistics would be biased upward by almost 10 percent if quarterly linkage information from within the year were not taken into account. This upward bias would result from establishments that go through mergers or other corporate restructurings and are incorrectly classified as establishments that have opened and/or closed during the year. It took a long time to develop the longitudinal-linkage algorithm that underlies the BED annual statistics, but the increases in data quality resulting from the complex new algorithm have made the effort worthwhile.

Annual tabulations

Basic results. Table 1 presents quarterly and annual tabulations of BED statistics. The statistics in table 1 are not seasonally adjusted. In the first quarter of 2007 there were 111,994,015 private-sector jobs, and in the first quarter of 2008 there were 112,130,509 private-sector jobs. The annual net employment change of approximately 136,000 jobs is the sum of the four seasonally unadjusted quarterly changes during the year: an increase of 2,932,000 jobs between the first and second quarters of 2007, a decline of 738,000 jobs between the second and third quarters, an increase of 323,000 jobs between the third and fourth quarters, and a decline of 2,380,000 jobs between the fourth quarter of 2007 and the first quarter of 2008. (The statistics do not add precisely because of rounding.) These quarterly and annual net employment changes are listed in the final column of table 1.

The annual net employment change of 136,000 jobs in table 1 is the difference between the annual gross job gains

Table 1. Quarterly and annual gross job gains and gross job losses, first quarter 2007 through first quarter 2008, not seasonally adjusted

(in thousands)

Timespan	Employment		Gross job gains			Gross job losses			Net employment change
	Beginning quarter	Ending quarter	Total	Gains from expansions	Gains from openings	Total	Losses from contractions	Losses from closings	
Quarterly:									
2007:Q1 – 2007:Q2	111,994	114,926	9,164	7,533	1,631	6,232	5,002	1,230	2,932
2007:Q2 – 2007:Q3	114,926	114,188	6,620	5,330	1,290	7,358	6,137	1,221	–738
2007:Q3 – 2007:Q4	114,188	114,511	7,648	6,321	1,327	7,325	6,077	1,248	323
2007:Q4 – 2008:Q1	114,511	112,131	6,485	4,984	1,501	8,865	7,108	1,757	–2,380
Quarterly average			7,479	6,042	1,437	7,445	6,081	1,364	
Annual:									
2007:Q1 – 2008:Q1	111,994	112,131	12,706	8,705	4,001	12,570	8,721	3,849	136

NOTE: Statistics may not add up precisely because of rounding.

and the annual gross job losses. Looking at the bottom row of table 1, one can see that between the first quarter of 2007 and the first quarter of 2008, employment in expanding establishments grew by 8.7 million jobs and employment in opening establishments grew by 4.0 million jobs. The number of annual gross job gains was 12.7 million. Employment in contracting establishments declined by 8.7 million jobs, and closing establishments accounted for a loss of 3.8 million jobs. The level of annual gross job losses was 12.6 million jobs. The difference between the 12.7 million jobs gained and 12.6 million jobs lost is the net employment change of 136,000 jobs.

The annual gross job gain and loss statistics in table 1 are higher in magnitude than the quarterly gross job gain and loss statistics from any quarter within the year. The quarterly gross job gains, on a non-seasonally adjusted basis, range from 6.5 million to 9.2 million during the first quarter 2007 to first quarter 2008 period. The average level of quarterly gross job gains is 7.5 million jobs, which is substantially less than the annual gross job gains of 12.7 million jobs. Similarly, the average number of quarterly gross job losses is 7.4 million, which is less than the annual gross job losses of 12.6 million jobs.

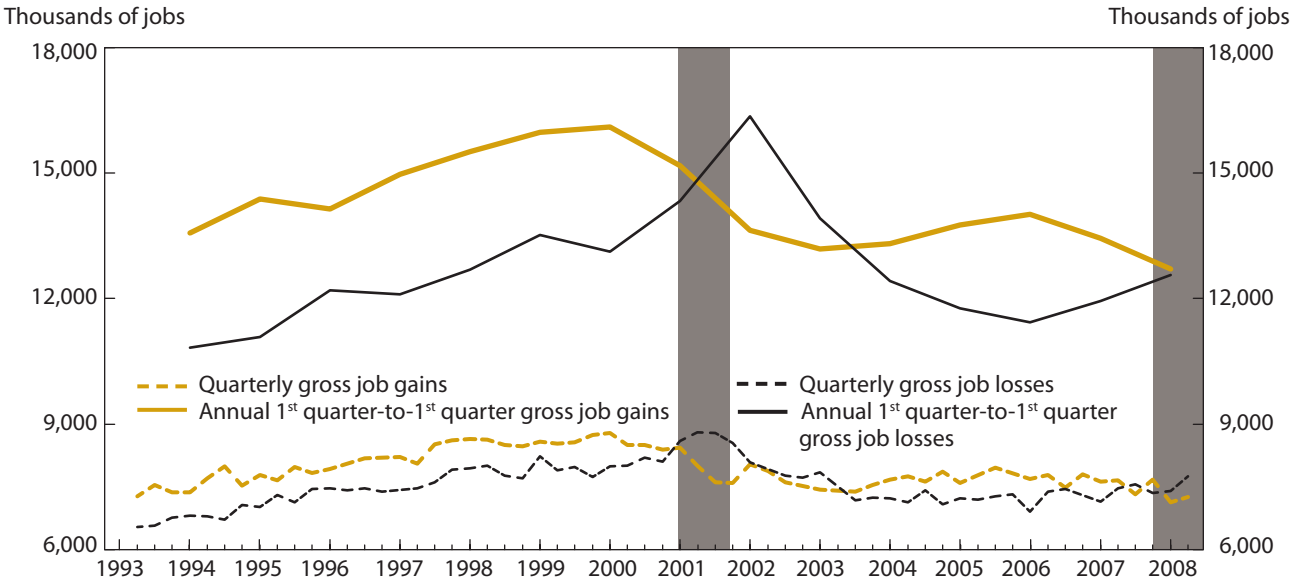
The difference between the annual and the average quarterly gross job gains is more prominent in the statistics on opening establishments than in the statistics on expanding establishments. When gross job gains are measured on an average quarterly basis, 81 percent of gross job gains are found to be due to expanding establishments (6,042/7,479 in table 1), whereas, when measured on an annual basis, 69 percent of gross job gains are found to be due to expanding establishments (8,705/12,706 in table 1). Similar computations show that 82 percent of quarterly gross job losses are due to contracting establishments, whereas 69 percent of annual gross job losses are due to contracting establishments. This greater importance of expansions and contractions in the quarterly statistics relative to the annual statistics is attributable to the transitory and seasonal nature of quarterly establishment-level employment changes that often reverse themselves during other quarters of the year.

The transitory nature of quarterly establishment-level employment changes is also the reason that the sum of four quarterly gross job gains or losses does not equal annual gross job gains or losses. The sum of the four quarterly gross job gain statistics in table 1 is approximately 30 million, yet this statistic has no clear interpretation.[5] The new BED annual gross job gain and gross job loss statistics make clear that it is not appropriate to use the sum of the four quarterly gross job flows statistics as an annual gross job flows statistic.

Chart 2 compares the time series of quarterly and annual BED gross job gain and gross job loss statistics. In this chart, the quarterly statistics are seasonally adjusted but the annual statistics are not. The quarterly statistics are identical to those in chart 1 (bearing in mind that charts 1 and 2 have different scales on their vertical axes). The annual statistics in chart 2 were tabulated by linking business establishments from the first quarter of the reference year to the first quarter of the previous year.

Consistent with the statistics in table 1, the annual gross job gains and losses in chart 2 are higher in magnitude than the quarterly gross job gains and losses. The magnitude of the annual gross job gains is 1.7 times greater,

Chart 2. **Quarterly and annual gross job gains and gross job losses, second quarter 1993 through second quarter 2008, quarterly data seasonally adjusted and annual data not seasonally adjusted**



NOTE: The first quarter of each year ends in March, and the first quarter's endpoint is represented by the year's long tick mark. The datum for each first quarter-to first quarter year is plotted at the end of the year in question (in March). The shorter tick marks represent the endpoints of the second, third, and fourth quarters. The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions, one running March 2001–November 2001 and the other beginning in December 2007. An endpoint for the more recent recession has yet to be designated.

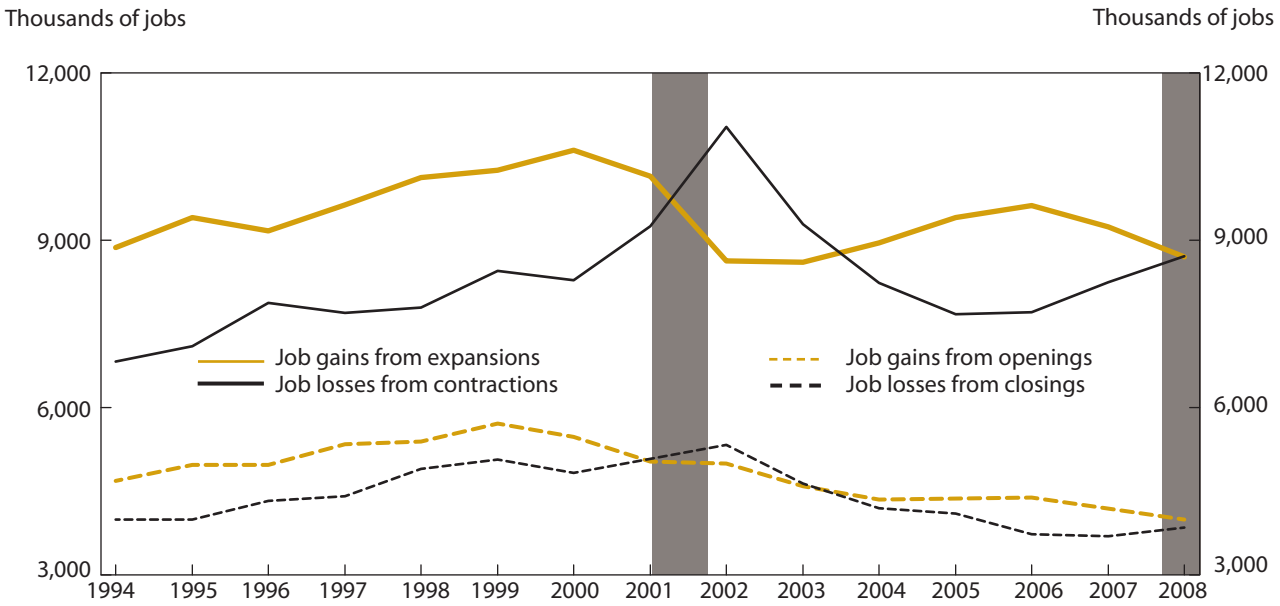
on average, than the magnitude of the quarterly gross job gains. Similarly, the magnitude of the annual gross job losses is 1.7 times greater, on average, than the magnitude of the quarterly gross job losses. Recall that the difference between gross job gains and gross job losses is net employment change. The fact that the gap between the annual gross job gains and losses in chart 2 is often larger than the gap between the quarterly gross job gains and losses should not be of concern, because annual first quarter-to-first quarter net employment growth is the sum of four quarters of net employment growth during the year.

It is important to note the ways in which the quarterly and the annual gross job gains and losses in chart 2 relate to the business cycle. During the 2001 recession, the difference between the quarterly gross job gain series and quarterly gross job loss series reaches its peak in the third quarter of the year. In this quarter, quarterly gross job losses are estimated to be 8.8 million and quarterly gross job gains are estimated to be 7.6 million, with a quarterly net employment decline of 1.2 million jobs. The annual first quarter-to-first quarter series shows the difference between gross job gains and losses peaking in the first quarter of 2002. In the first quarter of 2002, the annual gross job losses measure 16.4 million and the annual gross job gains measure 13.6 million, with an annual net employment decline of 2.8 million jobs. This difference in timing should not be surprising: annual gross job gain and gross job loss statistics measure activity that occurred during the previous year.

The annual first quarter-to first quarter gross job gains at expanding and opening establishments and the annual first quarter-to first quarter gross job losses at contracting and closing establishments are presented in chart 3. When gross job gains and losses are measured annually, expanding establishments account for approximately two-thirds of jobs gained and contracting establishments account for approximately two-thirds of jobs lost. Both expansions and contractions, as well as openings and closings, behave about as one would expect throughout the business cycle. The net employment change attributable to expansions and contractions is positive in the 1990s, turns negative in the early 2000s, and becomes positive again in the mid-2000s. The net employment change attributable to openings and closings shows the same pattern, yet the magnitude of changes in net employment is greater overall in the expanding and contracting establishments than in the opening and closing establishments.

Annual statistics based on other quarters. The annual BED statistics presented in table 1 and charts 2–3 are based on comparisons of establishment-level employment from the first quarter of one year to the first quarter of the follow-

Chart 3. Annual first quarter-to-first quarter gross job gains and gross job losses,1994–2008, not seasonally adjusted



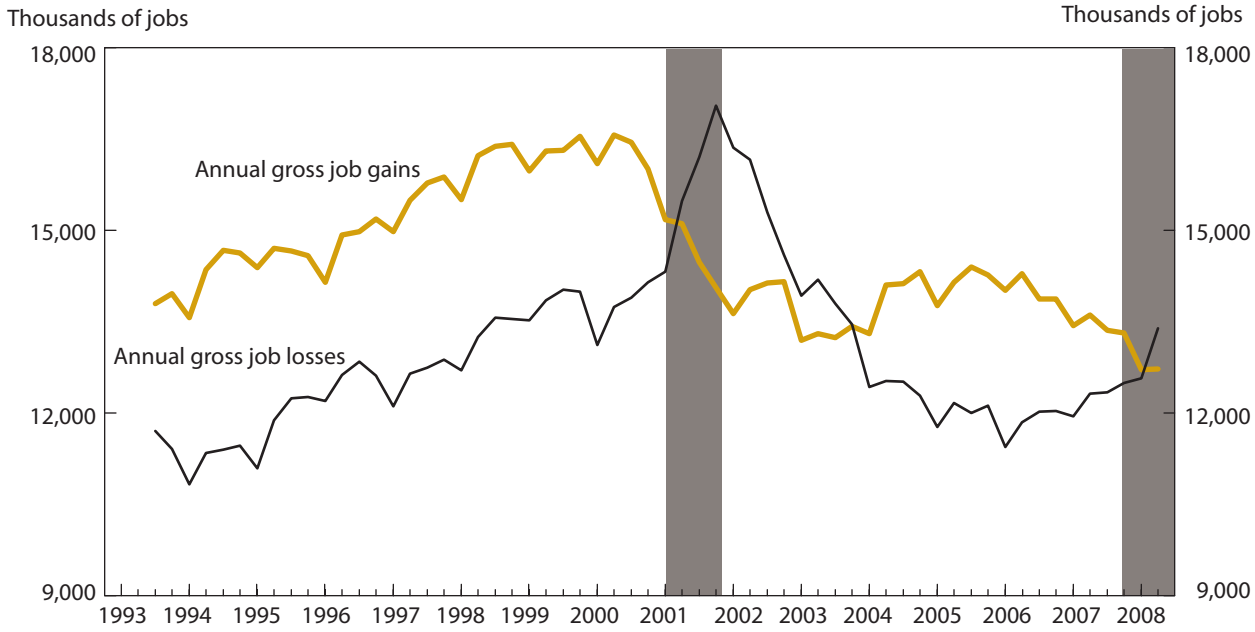
NOTE: The first quarter of each year ends in March, and the first quarter's endpoint is represented by the year's tick mark. The datum for each first quarter-to first quarter year is plotted at the end of the year in question (in March). The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions, one running March 2001–November 2001 and the other beginning in December 2007. An endpoint for the more recent recession has yet to be designated.

ing year. It is possible to calculate annual gross job gains and gross job losses for all quarters of the year. Chart 4 presents statistics that measure annual gross job gains and losses from first quarter to first quarter, from second quarter to second quarter, from third quarter to third quarter, and from fourth quarter to fourth quarter. These annual statistics in chart 4 are not seasonally adjusted. The long-term pattern of the annual gross job gains and losses, computed for every quarter within the year, appears similar to the pattern of the quarterly statistics in chart 1. The 2001 recession is particularly evident in the annual statistics: the annual gross job gains exceed the annual gross job losses for all quarters prior to 2001, and then during 2001 the gross job gains fall and the gross job losses rise.

The statistics in chart 4 are not seasonally adjusted, and a careful look reveals some seasonal properties in the annual gross job gains and losses when they are tabulated for every quarter of the year. Looking at the 1990s, where the seasonal pattern is quite evident in chart 4, one can see that the annual first quarter-to first quarter gross job gains are somewhat less than the annual gross job gains tabulated for second quarter-to-second quarter, third quarter-to-third quarter, and fourth quarter-to-fourth quarter. Similarly, the annual first quarter-to first quarter gross job losses are somewhat less than the annual gross job losses tabulated for the other three quarters of the year. This seasonal pattern is much more evident in chart 5, which is the same as chart 4 except that it covers only retail trade, which is a very seasonal industry. In retail trade, annual gross job gains and gross job losses are low when computed first quarter-to-first quarter and are high when computed fourth quarter-to-fourth quarter. The resulting annual net employment change for retail trade, computed as the difference between the annual gross job gains and annual gross job losses, exhibits no seasonal pattern.

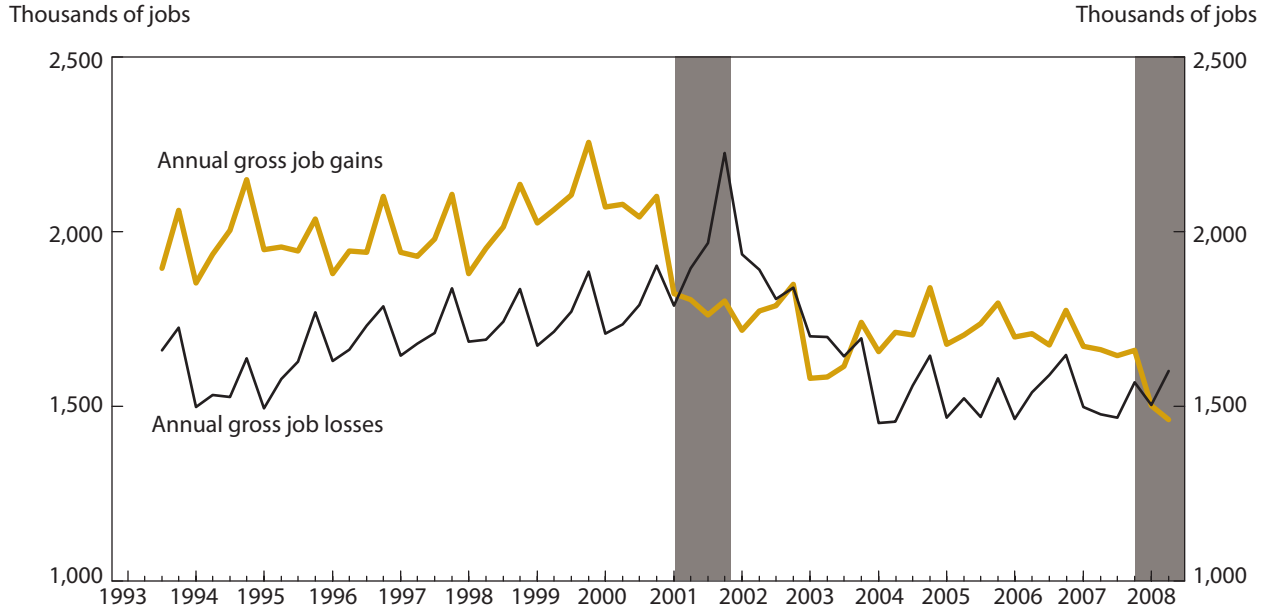
Annual gross job gains and losses, when tabulated for every quarter of the year, show a well-defined seasonal pattern in charts 4 and 5. The key to understanding this seasonal pattern begins with noting that the annual gross job gain series and gross job loss series for retail trade in chart 5 have the same seasonal pattern—both are low in the first quarter and both are high in the fourth quarter. This is different from the pattern of the non-seasonally adjusted quarterly gross job gains and gross job losses for retail trade, in which the quarterly gross job gains jump in the fourth quarter as establishments hire for the holiday

Chart 4. **Annual gross job gains and losses; first quarter-to-first quarter, second-to-second, third-to-third, and fourth-to-fourth; third quarter 1993 through second quarter 2008; not seasonally adjusted**



NOTE: The first quarter of each year ends in March, and the first quarter's endpoint is represented by the year's long tick mark. Each datum for each year of measurement is plotted at the end of the year in question. For example, the year from third quarter 1992 to third quarter 1993 is plotted in September 1993. The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions, one running March 2001–November 2001 and the other beginning in December 2007. An endpoint for the more recent recession has yet to be designated.

Chart 5. **Annual gross job gains and losses in retail trade; first quarter-to-first quarter, second-to-second, third-to-third, and fourth-to-fourth; first quarter 1993 through second quarter 2008; not seasonally adjusted**



NOTE: The first quarter of each year ends in March, and the first quarter's endpoint is represented by the year's long tick mark. Each datum for each year of measurement is plotted at the end of the year in question. For example, the year from third quarter 1992 to third quarter 1993 is plotted in September 1993. The shaded bars denote National Bureau of Economic Research (NBER)-designated recessions, one running March 2001–November 2001 and the other beginning in December 2007. An endpoint for the more recent recession has yet to be designated.

season and then the quarterly gross job losses jump in the first quarter as the temporary holiday employees leave the retail establishments.

The source of the seasonality in chart 5 can be best explained with a simple example. Assume a simple economy with three establishments in the retail trade industry. All three of these establishments have 10 employees in the first, second, and third quarters, and all three establishments want to have 15 employees in the fourth quarter. If the first establishment manages to have 15 employees in the fourth quarter of every year, the annual gross job gains and gross job losses for this establishment will be zero whether they are measured from first quarter to first quarter, second quarter to second quarter, third to third, or fourth to fourth. Now assume that the second establishment has 14 employees in the fourth quarter of one year and 16 employees in the fourth quarter of the following year. The annual gross job gain for this establishment will be two employees when comparing employment from the fourth quarter of one year with the fourth quarter of the next year. To complete the example, assume that the third establishment has 16 employees in the fourth quarter of one year and 14 employees in the fourth quarter of the following year. The annual gross job loss for this establishment will be two employees when comparing employment from the fourth quarter of one year with the fourth quarter of the next.

In this simple example, industry employment is always 45 employees in the fourth quarter, but a seasonal spike occurs in the annual fourth quarter-to-fourth quarter gross job gains and gross job losses. Such a seasonal spike originates from establishment-level variation in the number of additional workers each establishment hires during its seasonal peak in employment. This illustration shows that one should expect annual gross job gain and gross job loss data to exhibit seasonal spikes when they are tabulated for every quarter of the year.

Comparisons with other annual series

This section of the paper compares the BED annual gross job gain and loss statistics with the U.S. Census Bureau's Business Dynamics Statistics (BDS) data.[6] The Census Bureau released the first BDS data in December 2008.[7] The BDS program uses concepts and definitions that are similar to those of the BED program, as one can see by reading the technical documentation for the new BDS data: "The BDS data measure the net change in employment at the establishment level. These changes come about in one of four ways. A net increase in employment can come from either opening establishments or expanding establishments. A net decrease in employment can come from either closing establishments or contracting establishments. Gross job gains include the sum of all jobs added at either opening or expanding establishments. Gross job losses include the sum of all jobs lost in either closing or contracting establishments. The net change in employment is the difference between gross job gains and gross job losses."[8]

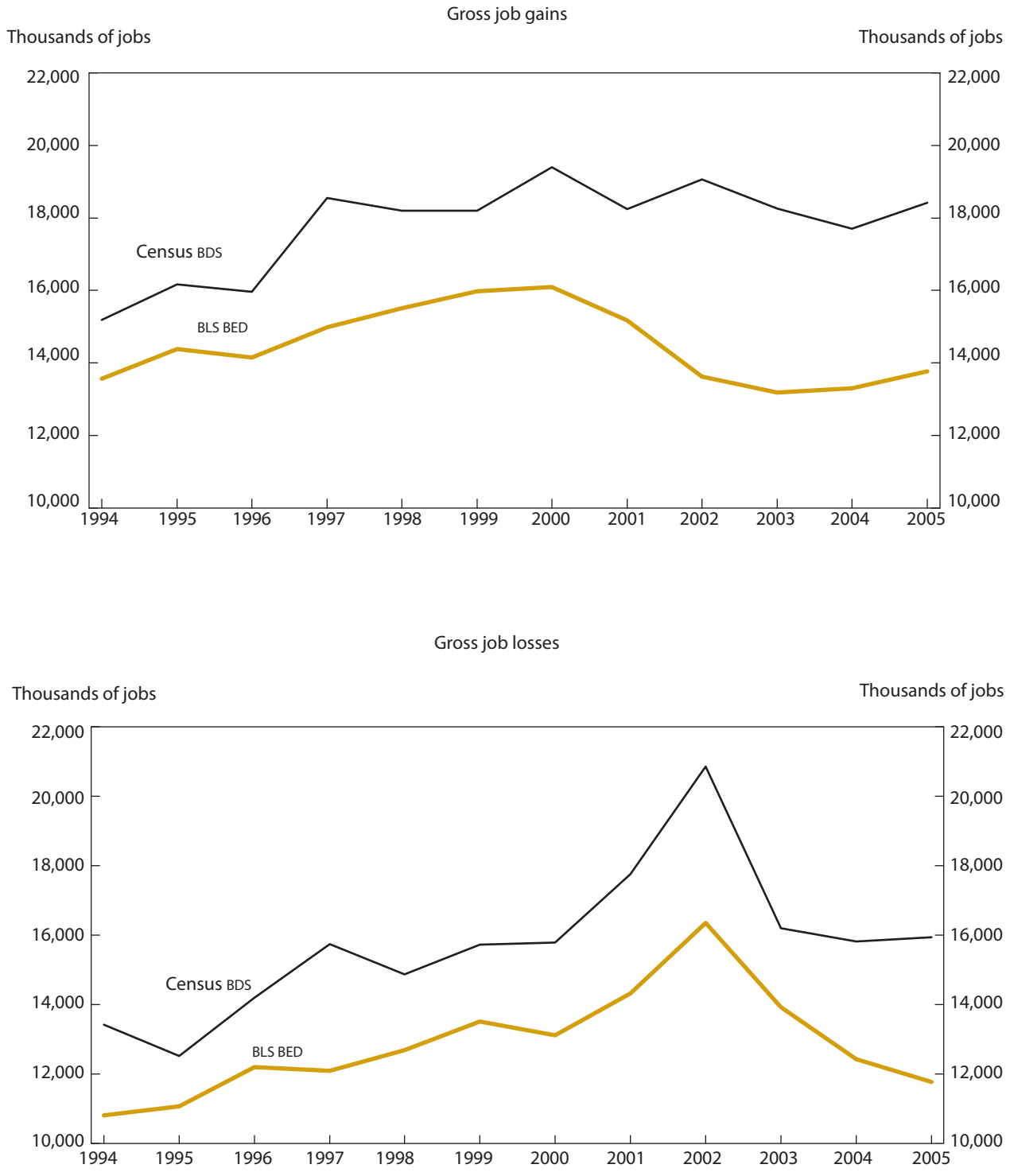
To compare the BED annual gross job gain and loss statistics with the Census Bureau's BDS data, this article uses the first quarter-to-first quarter BED data since the BDS data are tabulated as first quarter-to-first quarter comparisons. The BDS data are available for the years 1977–2005, whereas the BED annual data are available for the years 1994–2008. Charts 6 and 7 cover the 1994–2005 period, during which the two series overlap.[9]

Chart 6 shows gross job gains and gross job losses for the BED and BDS series. One can immediately see that every year, the BDS annual gross job gains and gross job losses are greater in magnitude than those of the BED program. In the 1994–99 period, the BDS gross job gains are 15 percent higher than the BED gains, and the BDS gross job losses are 20 percent higher than the BED losses. In the 2002–05 period, the BDS gross job gains are 36 percent higher than those of the BED program, and the BDS gross job losses are 27 percent higher than those of the BED program.

There are three plausible explanations for these differences in magnitude. First, the level of employment in the BDS data is consistently higher than the level of employment in the BED data, so it would be expected for the BDS statistics to fluctuate by larger numbers of jobs than do the BED statistics.[10] The BDS data show approximately 5 percent greater employment in the average year, and the magnitudes of the gross job gains and losses in the BDS statistics are 15 to 36 percent higher than they are in the BED statistics. As such, differences in employment levels can explain only some of the differences in magnitude observed in chart 6.

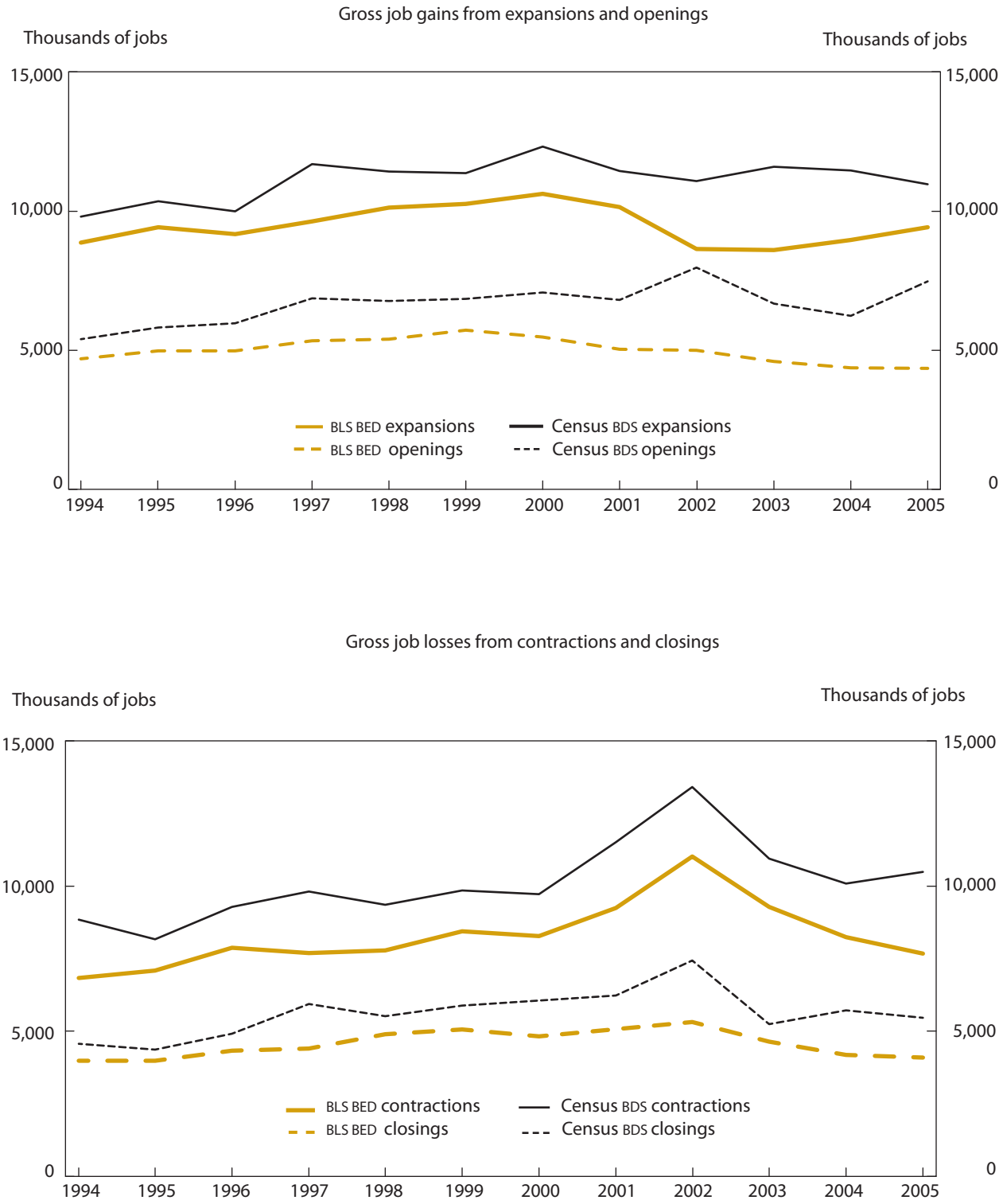
A second explanation for the higher levels of gross job gains and gross job losses in the BDS statistics relative to the BED statistics might be the failure to properly link data. As noted previously, analysis of the BED statistics has shown that gross job gain and loss data that do not take account of linkage information within the year lead to levels of gross job gains and losses that are about 10 percent higher. However, this hypothesis of missing links suggests that almost all of the difference between the BDS and the BED statistics should be in the openings and closings data, with only a small difference in the expansions

Chart 6. **BLS BED and Census BDS annual first quarter-to-first quarter series, 1994–2005, not seasonally adjusted**



Sources: Data are from the U.S. Census Bureau's Business Dynamics Statistics (BDS) program and the U.S. Bureau of Labor Statistics' Business Employment Dynamics (BED) program.

Chart 7. **BLS BED and Census BDS annual first quarter-to-first quarter series, 1994–2005, not seasonally adjusted**



Sources: Data are from the U.S. Census Bureau's Business Dynamics Statistics (BDS) program and the U.S. Bureau of Labor Statistics' Business Employment Dynamics (BED) program.

and contractions data. As will be shown later, this is not the case.

A third possible explanation for the difference in magnitudes is fundamental differences in the underlying source data. It could be that the QCEW microdata used to create the BED statistics have less year-to-year establishment-level employment variation than do the underlying cross-sectional microdata used to create the BDS statistics. Other than linking the BED and BDS microdata and comparing employment changes for matched establishments, there does not appear to be any simple way to evaluate the validity of the hypothesis of differences in the underlying source data.

Several other facts about the BED and BDS data in chart 6 are also apparent in the graphs. Looking at the time series, one can see that both the BED and the BDS data show a dramatic temporary increase in gross job losses in the first quarter 2001 to first quarter 2002 period. However, only the BED data show a decrease in gross job gains in the first quarter 2001 to first quarter 2002 period. This difference is important. Much of our knowledge of the labor market dynamics during the 2001 recession comes from quarterly BED data—the net employment decline during the 2001 recession is characterized by rising gross job losses and falling gross job gains. The annual first quarter-to-first quarter BED data show the same labor market dynamics as the quarterly BED data, albeit with an annual rather than quarterly reference period that makes it difficult to interpret short-run employment changes. (The 2001 recession was only 8 months in duration, as dated by the National Bureau of Economic Research.) However, trying to understand the 2001 recession using only the BDS data would miss the employment losses attributable to falling gross job gains.

Chart 7 explores the components of the BED and BDS gross job gain and gross job loss data. The first graph shows the employment gains from expansions and openings, and the second graph shows the employment losses from contractions and closings.[11] One can see that the BDS data on gross job gains from expansions and on gross job gains from openings are greater in magnitude than the corresponding BED data. One can also see that the BDS data on gross job losses from contractions and on gross job losses from closings are greater in magnitude than the corresponding BED data.

The most interesting difference between the BED and the BDS data in chart 7 is evident in the 2002 values for jobs gained from openings and jobs lost from closings. The BDS statistics for both have an upward blip in trend in this year. The number of jobs created from establishment openings according to the BDS statistics is 6.8 million in 2001, 8.0 million in 2002, and 6.7 million in 2003. The equivalent BED numbers are 5.0 million in 2001, 5.0 million in 2002, and 4.6 million in 2003. One possibility is that this difference in trend results from the processing of the 2002 quinquennial Economic Census.

QUARTERLY BUSINESS EMPLOYMENT DYNAMICS STATISTICS were initially released in 2003, and the BED program has expanded ever since. The program released industry statistics in 2004, size-class statistics in 2005, State statistics in 2007, size-of-employment-change statistics in 2008, birth and death statistics in 2009, and annual statistics in 2009. Annual statistics respond to needs of BED customers, and they also enhance people's understanding of labor market dynamics. This article has described how annual BED statistics are created, how they compare with quarterly BED statistics, and how they compare with the U.S. Census Bureau's BDS statistics. □

NOTES

[1] This endnote summarizes the data sources and flows underlying the QCEW data. All employers subject to State unemployment insurance laws are required to submit quarterly contribution reports detailing their level of employment by month and wages by quarter to the State employment security agencies. The raw data require substantial editing and review. In addition, BLS directs the States to conduct two supplemental surveys that are necessary to yield accurate data at the local level. The first is the Annual Refiling Survey, for which the States contact nearly 2 million businesses each year to obtain or update business names, addresses, industry codes, and related contact information. The second survey is the Multiple Worksite Report, which collects employment and wage information for each establishment in multiunit firms within the State. The Multiple Worksite Report covers about 110,000 businesses (1.4 percent of all firms, 16 percent of all establishments, and 39 percent of employment) each quarter, allowing for the matching of employment and wage data with the correct county and industry. After the raw data are augmented by the data from the Annual Refiling Survey and Multiple Worksite Report and are then thoroughly edited by the State Labor Market Information staff, the States submit these data and other business identification information to BLS as part of the QCEW program.

[2] For more detail on the construction of the BED data, see James R. Spletzer, R. Jason Faberman, Akbar Sadeghi, David M. Talan, and Richard L. Clayton, "Business employment dynamics: new data on gross job gains and losses," *Monthly Labor Review*, April 2004, pp. 29–42.

[3] For more detail on the definitions of establishment births and establishment deaths, see Akbar Sadeghi, "The births and deaths of business establishments in the United States," *Monthly Labor Review*, December 2008, pp. 3–18. BED

birth and death statistics are available at the BED website at **www.bls.gov/bdm** (visited May 21, 2009).

[4] Three research papers document this finding. First, see Joshua C. Pinkston and James R. Spletzer, "Annual Measures of Job Creation and Job Destruction Created from Quarterly Microdata," *American Statistical Association 2002 Proceedings of the Section on Business and Economic Statistics*, pp. 3311–16. Second, see Joshua C. Pinkston and James R. Spletzer, "Annual measures of gross job gains and gross job losses," *Monthly Labor Revie*w, November 2004, pp. 3–13. And third, see Sadeghi, "The births and deaths of business establishments."

[5] For a more complete discussion of the differences between an annual statistic and the sum of four quarterly statistics, see Pinkston and Spletzer, "Annual measures of gross job gains and gross job losses."

[6] The authors acknowledge and appreciate the comments of Ron Jarmin and Javier Miranda of the U.S. Census Bureau, who reviewed a prepublication draft of this article.

[7] The press release from the U.S. Census Bureau announcing the BDS data series can be found at **www.census.gov/Press-Release/www/releases/archives/employment_occupations/013012.html** (visited April 2, 2009).

[8] This quote is from **www.ces.census.gov/index.php/bds/bds_overview#_Concepts_and_Methodology** (visited April 2, 2009). Note that the BDS program uses the terms "gross job gains" and "gross job losses" in its technical documentation, yet it uses the terms "job creation" and "job destruction" in its downloadable database. This article uses the terms "gross job gains" and "gross job losses" when comparing BED data with BDS data.

[9] The two series have strengths and weaknesses relative to each other. Users who want data that are more current will need to use the BED data, whereas users who want a time series dating back to the 1970s will need to use the BDS data.

[10] In the BDS database, the level of employment for the second quarter of 1998 is 106.6 million jobs. This is 4.4 million higher than the BED level of employment for the second quarter of 1998 (as published in Pinkston and Spletzer, "Annual measures of gross job gains and gross job losses"). The BDS level of employment is consistently higher than the BED level, and the difference grows over the 1998–2002 period; the difference is 6.4 million in the first quarter of 2002.

[11] The BDS program's technical documentation focuses on the terms openings and closings, whereas the downloadable BDS database uses the terms "entries" and "exits" as well as births and deaths. This article uses the terms openings and closings.

Comparing Workers' Compensation claims with establishments' responses to the SOII

Comparing elements of the Workers' Compensation database with data from the Survey of Occupational Injuries and Illnesses is a useful way to determine which types of injuries and illnesses the SOII is most likely to undercount

Nicole Nestoriak
and
Brooks Pierce

The Bureau of Labor Statistics' Survey of Occupational Injuries and Illnesses (SOII) collects and tabulates employer reports on work-related injuries and illnesses. SOII estimates are the primary source of information on nonfatal work-related injuries and illnesses in the United States.

Recent work comparing SOII microdata with other administrative sources of work-related injury and illness data, in particular Workers' Compensation (WC) claims databases, concludes that the SOII substantially undercounts cases. This article focuses on the paper "Capture-Recapture Estimates of Nonfatal Workplace Injuries and Illnesses" by Leslie I. Boden and Al Ozonoff, which compares SOII case records with WC microdata for several States. Their findings indicate that the SOII detects between 50 percent and 75 percent of cases in the States studied.[1]

The present article describes the Boden-Ozonoff study and reports some additional findings that were obtained by analyzing a subset of the data that the Boden-Ozonoff paper used. This new research extends the aggregate results reported by Boden and Ozonoff in order to determine which types of cases the SOII is most likely to undercount. In particular, the present article focuses on differences in the SOII capture rate by establishment type, by time of case filing, and by type of injury.

Methods

The basic method underlying the Boden-Ozonoff study involves comparing the SOII list of injury and illness cases with an analogous list, covering the same workforce, from the Workers' Compensation administrative system to determine to what extent the lists overlap. Cases in the WC claims microdata that are not found in the SOII sample are considered missed by the SOII and form the basis of the estimated SOII undercount.

Although this method is logically straightforward, it is difficult to carry out. Because any given injury is processed independently and represented differently in the two systems, it is not always possible to definitively link the case's representation in the SOII with its representation in the WC data. Further, it is often difficult to determine whether or not a reported WC injury or illness case occurred in an establishment that was within the SOII sample. Finally, in comparing the SOII and WC data it is critical to exclude cases outside the scope of one or the other of the data sources; otherwise a simple difference in scope will be misinterpreted as underreporting.[2] It is some-

Nicole Nestoriak and Brooks Pierce are economists in the Office of Compensation and Working Conditions, Bureau of Labor Statistics. E-mail: nestoriak.nicole@bls.gov, pierce.brooks@bls.gov.

times challenging, however, to determine whether or not a given case is in scope for WC or the SOII.

Data sources

This section describes the data sources for the article and describes in particular the aspects of the data relevant to the matching exercise.

The SOII is an annual establishment survey that most recently sampled approximately 176,000 establishments in private industry. Because the SOII is a survey, it does not give a complete listing of the experiences of every private-sector establishment. Rather, sampled establishments in effect represent the greater universe of establishments. Sampling is a valid approach for producing estimates, but the fact that the SOII is based on a sample rather than a census does make the matching exercise in Boden and Ozonoff's paper more challenging.

SOII respondents are directed to report from on-site injury logs maintained as part of the Occupational Safety and Health Administration's record-keeping requirements. The record-keeping rules dictate that records be maintained at an establishment's physical location; accordingly, BLS samples data at the establishment level rather than at the firm level.[3] Firms with multiple sites or establishments may have some, none, or all of their establishments sampled in any given year. Data for a given survey year are reported to BLS in the first half of the year following the survey year.

For more serious injury or illness cases—those involving at least 1 day away from work beyond the date of injury or onset of illness—the SOII collects detailed information describing the incident and the affected employee. The SOII program refers to these cases as "days away from work" cases. The information that is collected includes the nature and source of the injury or illness, the part of the body affected, and the date of the onset of the injury or illness, as well as the employee's name, date of birth, sex, and race. These data, as well as information on the employer, are used to help identify cases for the purposes of matching SOII records with WC administrative records.

The Boden-Ozonoff group obtained permission from several States to match WC claims microdata with SOII microdata. Because the SOII data are confidential, all data analysis was carried out at BLS. And because WC data include confidential information, there were some data to which BLS did not have access. However, BLS did obtain permission from one State, Wisconsin, to further analyze its 1998–2001 WC data. Boden and Ozonoff also made their intermediate data sets available to BLS, which made this article's detailed analysis possible.

Workers' Compensation systems differ from State to State, but on the whole they have similar features. Most States mandate coverage of nearly all private-sector workers. WC typically covers almost all medical expenses arising from a work-related injury or illness, it recompenses portions of lost earnings due to temporary injuries or illnesses if the duration of the injury or illness exceeds a minimum waiting period, and it provides partial or total disability payments in the event of permanent injury or illness. Temporary injury and illness cases in Wisconsin from 1998 to 2001 were compensable under WC if they satisfied a 3-day waiting period. An employee generally has 2 years to report a workplace injury to his or her employer, although most injuries are reported much earlier. Some traumatic injuries (vision loss, total loss of a hand or arm, permanent brain injury, etc.) and some occupational diseases (carpal tunnel syndrome, hearing loss, etc.) have no time limit for filing a claim.

Under the WC system, cases may be claimed by workers but disputed by the employer.[4] An employer may believe a given injury is not work related, or the employer may dispute the degree of disability. In such cases the employee may request that the State office of WC resolve the dispute via a hearing before an administrative law judge. Negotiated settlements are possible. The WC data that this article uses include some contested cases and negotiated settlements, but they are not identified separately from the other cases. The Wisconsin WC system reported on average about 50,000 lost-time claims per year over the 2000–06 period. Of these, about 18 percent (an annual average of about 9,200 claims) were marked as denials, as injuries or illnesses that that did not require days away from work, or as noncompensable cases. About 13.6 percent (6,800) of claims were litigated annually.[5]

The Boden-Ozonoff study imposes scope restrictions on each data source; the intent is for every data source to refer to the same sets of at-risk private-sector employees. As an example, mining and railroad sector data are excluded because the SOII program does not collect those data through its normal survey instrument. (Rather, it relies on administrative files from the Mine Safety and Health Administration and the Federal Railroad Administration.) As another example, injury and illness cases in the SOII involving fewer than 3 days away from work are excluded, as such cases do not meet the Wisconsin WC system waiting period requirements.[6] Perhaps the most important scope restriction calls for the discarding of WC cases that arose in establishments which are not in the SOII sample. To do so accurately requires that one

identify the establishments from the SOII sample in the WC data, which may be difficult—especially in the case of multiestablishment firms as described earlier. In general one expects such scope restrictions to cause some degree of error beyond the margin of error that would normally be expected. Some of the numerical results in this article are consequently subject to some additional error because of issues of scope caused by data limitations in the Boden-Ozonoff study.

In the end, there are 4 years of SOII and WC injury and illness case data available. These data comprise approximately 217,000 distinct cases.[7] The SOII and WC case lists overlap substantially, but not completely: the SOII list covers about 70 percent of all observed SOII and WC cases, and the WC list covers about 81 percent. In other words, the Boden-Ozonoff study suggests that the SOII estimates undercount observed cases by about 30 percent.[8]

Single-establishment and multiestablishment firms

Whereas the SOII data come from establishments chosen for the sample, the WC data tend to reflect reporting by firms. Consequently, the WC data are not detailed enough to allow one to consistently determine where within firms injuries and illnesses have occurred. The issue is a problem when a firm has multiple establishments of which only some are sampled by the SOII. Is an injury case apparently missed by the SOII truly a missed case, or rather is it an injury that occurred at an establishment not in the sample? In this circumstance there is some ambiguity about whether to treat the case as one that was misreported to the SOII.

The Boden-Ozonoff study recognizes this issue and makes a statistical adjustment in the instances in which it arises. Nevertheless, because the issue is an important one, it makes sense to show separate results for single-establishment and multiestablishment firms. The data, when organized in this way, show that the SOII appears to miss more cases in multiestablishment firms. This may be due to an intrinsic difference between single-establishment and multiestablishment firms, or it may result from the method used for matching.

Table 1 presents statistics by establishment status. Of the cases in either the Wisconsin WC data or the SOII data, roughly 56 percent are in single-establishment firms and 36 percent are in multiestablishment firms. The remaining 8 percent are of unknown status because there is not enough information available to label them as either single-establishment or multiestablishment firms.[9]

Table 1 shows that the SOII capture rates are higher when only single-establishment firms are considered: according to the calculations, the SOII captures 77.5 percent of the estimated cases in this subset of the data. The SOII's rate of capture of injuries and illnesses in multiunit establishments is 62.2 percent. In establishments of unknown status, the capture rate is 52.8 percent. The data for establishments of unknown status appear to behave—both here and in other tabulations—more like the multiestablishment than the single-establishment data.

One possible explanation for the differences in capture rates across establishment types is that the single-establishment firms actually do not report their behavior in the same way that establishments in multiestablishment firms do. Note, however, that the WC capture rate is similar across the establishment types. Thus, there appears to be some particular reporting or measurement effect that differs by establishment status within the SOII but not within the WC administrative system.

Another possibility is that the single-establishment firm subset of the data yields more accurate estimates because the method used to adjust the multiestablishment results introduces error. For the single-establishment firm

Table 1. Capture propensities by status of establishments, 1998–2001

	Single-establishment firms	Establishments within multiestablishment firms	Establishments within firms of unknown status
Total number of cases	121,567	77,967	17,798
Percent of cases captured by the SOII	77.5	62.2	52.8
Percent of cases captured by Workers' Compensation	79.7	83.3	84.0

NOTE: The "percent captured" rows show the percentage of observed cases captured by the Survey of Occupational Injuries and Illnesses and by Workers' Compensation. Data are calculated using Workers' Compensation cases from single-establishment firms in Wisconsin.

subset of the data, it is rarer to encounter ambiguity concerning whether or not a given WC claim case occurred in an establishment sampled by the SOII. Distinguishing between these two possibilities is an important topic for further study.

The remainder of this article focuses on cases involving single-establishment firms. Although these cases do not represent the full spectrum of cases, using only data from single-establishment firms allows one to avoid situations in which one does not know whether an observed WC case is within the SOII sample or not. Restricting the sample in this manner is akin to restricting the scope of the two data sources in the hope that each data source refers to the same set of workers and injury and illness cases.

SOII capture propensity by time of WC filing

The timing of the collection of injury and illness data is another characteristic that differs between WC and the SOII, and it may explain part of the undercount. The SOII collects data in the first 6 months of the year following the year of incidence and only contains cases that are recognized as valid, work-related cases of injuries or illnesses that occurred during or just after the survey year. Cases that are not recognized prior to data collection obviously are not included in the SOII counts. The WC administrative data, however, cover cases that were recorded up to 2 years following the date of incidence.

The extract of the Wisconsin WC data used in this article does not include a list of cases' filing dates. However, the WC system assigns case identifiers sequentially, and the case identifier embeds the year of the filing. From the case identifier one can therefore generate a year and an imputed month of filing for cases in the WC system.[10] Out of the 121,567 cases in single-establishment firms that the SOII captured, 96,884 cases are also in the WC system and are used in this analysis. The remaining 24,683 are in the SOII records but not the WC records, and they therefore will be dropped from the remainder of this analysis as, by definition, there is no time-of-WC-filing information available for these cases.

Table 2 shows case counts and the "SOII capture propensity" as functions of the year of the WC filing. SOII's "capture propensity" is defined here as the percent of WC cases that appear in the SOII. A case with a date of injury in 1998 and a WC system identifier indicating a filing in 2000 would be included in the row "2 years after close of survey year." Note that about 12.8 percent of cases are filed in the year following the survey year. We refer to these as "1-year-after" data for simplicity. A little over 1 percent of cases are filed with a greater lag. The final column shows the SOII capture propensity.

Two broad facts are clear in these data. First, there are a substantial number of cases filed under the WC program after the close of the SOII survey year. Second, the SOII capture propensity is much lower for these particular cases. Together these facts suggest that the WC data include many cases that are not known to SOII respondents, or have not been deemed work related, at the time of the survey response.

Aside from the year of filing, another known fact is the order in which cases are entered into the WC system. Cases in the 1-year-after data occur disproportionately early in the filing sequence. About half of these cases appear to have been filed early in the calendar year following the SOII survey year. For that half, the SOII capture rate is fairly high, approximately 60–65 percent. For the other half of the 1-year-after data, the SOII capture rate is approximately one-third. Thus, the 1-year-after capture rate of 48.0 in table 2 masks variation within the year.

One reasonable conclusion to make is that about half of the 1-year-after filings are either: 1. delayed WC filings from workers in establishments that replied to the SOII with accurate responses, 2. injury and illness cases that

Table 2. SOII capture propensity by year of WC filing, 1998–2001

Year of WC case filing	Number of cases	Distribution	SOII capture propensity
Same year as survey year	83,256	86.0	76.1
1 year after close of survey year	12,406	12.8	48.0
2 years after close of survey year	917	.9	19.2
3 years after close of survey year	203	.2	4.9

NOTE: Data are calculated using Workers' Compensation cases from single-establishment firms in Wisconsin.

occurred late in the year and were known to SOII respondents at the time they responded, or 3. a combination of 1 and 2. The remaining half of the 1-year-after filings may reflect continuing or late-developing lost-workday cases attributed to past injuries. There also exist other possibilities, such as reconciled disputes that enter the books late. While the SOII program would obviously like to collect information on all workplace injuries and illnesses occurring in the survey year, the completeness of the data needs to be weighed against the timeliness in generating statistics.

Other indicators of low SOII capture propensity

The results in the previous section indicate that some WC injury and illness cases are reported well after the close of the survey year, and this raises the question of whether or not these cases are identifiably different in the WC system. In other words, are they recognized by the WC system as distinct from the cases reported within the survey year? The WC system maintains a variety of fields used to aid in administration. Some of these fields have data that correlate with the data that are reported late, and this correlation may help in understanding some of the difficulties in matching administrative data from the WC system with survey data from the SOII.

To understand WC system data, it helps to understand WC filing requirements. If an injury or illness results in days away from work beyond Wisconsin's 3-day waiting period, the employer or its insurer must file a first report of injury within 7 days of onset. The first report contains basic information on the employee and the injury or illness. The employer or its insurer must also file a supplementary report within 30 days of onset. This supplementary report either indicates the amount and type of WC payments to the employee—including whether the payments are for temporary total or temporary partial disability—or otherwise must indicate a claim denial or investigation. Additional supplementary reports must be filed as payments are changed—for example, because of a change in status from temporary to permanent disability—or stopped, usually by the employee's return to work. The WC data system generates a status flag on the basis of the initial supplementary report, which typically captures payment information soon after the onset of the injury or illness. As shown in table 3, there are clear differences in the SOII capture propensity across status flag values.

The WC data system maintains information on days of Total Temporary Disability (TTD), information that is based on the cumulative supplementary report filings for a given claim. A day of temporary total disability is roughly analogous to a lost workday in the SOII. Although the data are restricted to lost-workday cases in this analysis, many of the claims have a TTD-day value of zero in the WC system.[11]

In an analysis conducted for this article, it was found that cases reported late tend to have a disproportionately high number of atypical status flag values and a disproportionately high number of cases with zero TTD days recorded. It was also found that SOII capture propensity tends to vary by WC status flag and by the incidence of zero TTD days recorded, even among WC cases reported prior to the close of the survey year.

Table 3 shows some of the relevant statistics. The table displays SOII capture rates, the prevalence of zero-TTD-day cases, median case durations, and WC filing lags, all by WC status flag. The average WC filing lag is based on the imputed month of filing, as discussed previously. "Case

Table 3. SOII capture propensity and other case characteristics, by Workers' Compensation status flag, 1998–2001

WC status flag	SOII capture propensity	Percent with zero TTD days	Median case duration (in days)	Average filing lag (in months)	Number of cases
Total	71.8	11.8	10	2.1	96,884
Award	20.2	89.8	0	7.8	1,787
Electronic	67.5	9.5	10	1.7	15,986
Final	74.2	10.1	10	1.9	78,145
Under Investigation	0	0	142	3.0	7
Not final	37.4	38.1	4	11.6	12
No lost time	44.2	32.1	3	6.3	833
Not required	13.0	100.0	0	19.8	97

NOTE: Data are calculated using Workers' Compensation cases from single-establishment firms in Wisconsin.

duration" refers to the number of days away from work due to the injury or illness in question.[12]

About 97 percent of WC cases have a status flag of "electronic" or "final." Cases marked as "final" have WC payment information included in the initial supplementary filing. A case marked as final is likely to be a rather typical case that has been provisionally recognized by the employer. Cases marked as "electronic" are those filed electronically; unfortunately, there is little else that this status flag reveals about cases. Cases marked as "final" or "electronic" are not expected to be especially unusual as a group. These cases are on average reported relatively promptly to the office that handles WC claims, and they have typical durations.

Of the remaining 3 percent of WC cases, the majority have the "award" status. Cases marked as "award" are those for which a formal order has been written providing compensation for the claim. Cases with award status are typically disputed cases adjudicated in the claimant's favor or settled by the claimant and the employer's insurer. The SOII only captures 20 percent of the cases with an "award" status code. When a case is disputed, the final determination of whether the injury or illness is work related can occur long after the year of injury and can result in a lump-sum payment without distinguishing the number of TTD days involved. This reasoning is consistent with the fact that about 90 percent of award-status cases have zero TTD days recorded. The cases with zero TTD days were likely not perceived as recordable cases by the SOII respondents at the time of the survey. The status code "no lost time" indicates the case was initially coded as having no lost workdays. Consequently, a case coded as "no lost time" can be one that did not involve days away from work prior to the initial supplementary report but did involve lost workdays afterward. The category of no lost time is small, and cases in the category tend to have low SOII capture rates, shorter durations than average, and some lag in reporting.

One of the main points of table 3 is that in the WC system, both the type of injury or illness case and the length of time between the onset of the injury or illness and the filing date of the case are related to the likelihood of the case being reported to the SOII. Certain cases or case types are less likely to be captured by the SOII. The SOII probably misses some cases that it should have captured, but because of difficulty in determining which cases are in and out of scope, some of the cases that the SOII is found to "miss" actually could be cases that are outside its scope. In order to provide more clarity, the next section of the article documents the types of injury and illness cases that are more likely to be reported to the SOII.

Better detection of some injuries and illnesses than others

Both the SOII and WC databases contain information on the broad type of injury or illness relevant to each case. This information is referred to as the "nature" of the case, and it identifies the principal physical characteristics of the injury or illness. It is easy to imagine that some case types are easier to identify in general, or are easier to identify specifically as work related, or are more likely to be perceived as severe and therefore presumably more likely to be reported in the SOII or in WC claims.

Table 4 shows the most common nature-of-injury-or-illness codes in the WC administrative data, ranked in descending order by the SOII capture propensity.[13] Like table 3, table 4 also reports the percent of cases with zero TTD days reported, median case durations, and the average WC filing lag.

Categories within the nature-of-injury-or-illness column that cover problems one could reasonably view as severe, easily identifiable, or having a sudden onset tend to be better captured by the SOII. For example, the capture propensities for amputation cases and severance cases are both about 90 percent. At least according to these data, the vast majority of amputations are reported in the SOII. Cases involving concussions, fractures, punctures and the like also tend to have relatively high SOII capture rates.

Case types such as lacerations, contusions, and strains, in which one might expect somewhat greater heterogeneity of severity or ease of identification, tend to show average SOII capture rates. Given that these kinds of injuries are quite common, documenting sources of heterogeneity within this subset of cases is expected to be an important element of future research.

Injuries that become apparent or worsen over time such as inflammation or carpal tunnel are reported in the SOII much less frequently than the average injury or illness. These case types also tend to show longer-than-average lags between the onset of the injury or illness and the WC filing. Presumably, some of these cases develop too late for inclusion in the SOII's collection of data; alternatively, the cases may be reported less often to the SOII because of greater difficulty in determining whether or not they are work related.

Note that the SOII appears to capture virtually zero of the hearing loss cases. These cases tend to have long reporting lags and are overwhelmingly reported as having zero TTD days. SOII respondents may not believe these injuries and illnesses to be recordable by the Occupational Safety and Health Administration, or they may simply

Table 4. SOII capture propensity and other case characteristics, by nature of injury or illness, 1998–2001

Nature of injury or illness	SOII capture propensity	Percent of cases with zero TTD days	Median case duration (days away from work)	Average filing lag (in months)	Number of cases
Total	71.8	11.8	10	2.1	96,884
Amputation	90.6	13.7	11	1.6	858
Severance	90.0	6.6	13	1.1	122
Dislocation	88.4	5.6	12	1.4	414
Foreign body	87.5	7.4	5	1.4	410
Multiple physical injuries	84.4	10.1	14	1.7	2,080
Fracture	82.8	8.9	18	1.2	6,846
Burn	82.5	5.6	6	.9	1,322
Infection	82.3	21.7	7	1.7	143
Puncture	82.0	6.9	6	.9	676
Concussion	81.9	2.7	7	.9	149
Hernia	79.5	3.3	16	2.7	2,481
Crushing	79.0	12.2	12	1.2	1,243
Dermatitis	76.4	40.5	10	3.3	304
Sprain	75.2	8.0	8	1.3	4,937
Laceration	75.2	10.8	9	1.6	5,285
Contusion	73.3	8.2	8	1.5	5,773
Strain	70.9	11.9	9	1.9	45,296
Other specific injuries	69.1	10.6	10	2.5	10,941
Respiratory disorders	60.3	19.6	6	3.0	147
Rupture	58.5	12.7	25	6.4	461
Carpal tunnel syndrome	58.4	9.3	24	4.6	2,649
Inflammation	57.3	13.2	12	2.5	1,266
Other cumulative injuries	51.1	24.4	9	4.1	1,620
Loss of hearing	7.4	94.1	0	10.4	714
Hearing loss (traumatic)	0	100.0	0	11.4	167

NOTE: Data are calculated using Workers' Compensation cases from single-establishment firms in Wisconsin.

not know they exist at the time of report. Additionally, these may be cases for which employees have stronger incentives to file a WC claim, as hearing aids are not covered by most health insurance plans.

The general patterns in table 4 suggest that the SOII does a very good job of capturing certain classes of cases, but they also suggest that the SOII fails to capture a noticeable fraction of cases—a quarter or more—within certain frequently occurring case types such as strains and sprains. It is possible that differences in circumstances among similar injuries and illnesses within these categories influence measurability. If such an underlying heterogeneity exists, identifying it would be a useful step toward understanding the root causes of the estimated SOII undercount.

THE PURPOSE OF THIS ARTICLE IS TO SHOW some of the dimensions of the estimated SOII undercount. The patterns of variation of the SOII capture rate shown in tables 1–4 suggest various possible explanations for the undercount. It may be that certain types of cases are inherently difficult to identify as work related, especially in a timely manner. Further, there may be some yet-unknown differences in scope between WC and the SOII. As an example, some of the WC cases with zero reported TTD days may be cases with no lost worktime, cases which by design should not appear in the SOII as days-away-from-work cases. Finally, a precise matching of cases from these two different databases may require data that are better suited for matching than those currently available. That is, some of the estimated undercount may be due to outstanding methodological issues that are difficult to resolve absent finer data. Clearly, there are various hypotheses that have been proposed with the aim of explaining the discrepancies between the WC and SOII databases. These hypotheses will need to be scrutinized and tested further in order to achieve a full understanding of the differences between the ways in which the WC and SOII systems measure workplace injuries and illnesses. □

NOTES

[1] Leslie I. Boden and Al Ozonoff, "Capture-Recapture Estimates of Nonfatal Workplace Injuries and Illnesses," *Annals of Epidemiology*, June 2008, pp. 500–06. See also John Ruser, "Examining evidence on whether BLS undercounts workplace injuries and illnesses," *Monthly Labor Review*, August 2008, pp. 20–32.

[2] Boden and Ozonoff are aware of such difficulties in comparing the SOII and WC data and take great effort to account for them in their calculations. When making the less straightforward calculations in their study, they often purposefully err on the side of producing a smaller estimate of the SOII undercount. Of course, the SOII and WC data were not designed in anticipation of comparing them, and one should therefore expect some data-related problems to remain.

[3] To construct the SOII sampling frame, BLS takes all units within scope for the SOII from a universe of establishments that report on unemployment insurance. BLS then makes some improvements to this sampling frame on the basis of historical collection experience. The intent is to construct a frame of physical establishment locations; however, in some cases firms are Statewide reporters, in which case they file only one report in each State in which they operate, and the report covers all their establishments in the State. Firms sometimes also have other ways of filing one report that covers multiple establishments (and therefore multiple physical locations).

[4] For evidence on incentives to report injuries to the WC program, see Jeff Biddle and Karen Roberts, "Claiming Behavior in Workers' Compensation," *The Journal of Risk and Insurance*, December 2003, pp. 759–80.

[5] See **www.dwd.state.wi.us/wc/WC_Basic_Facts.htm#WC_Claim_and_Indemnity_Information** (visited May 1, 2009).

[6] There are also situations in which the SOII, to ease respondent burden, collects data for only a subset of the cases occurring in a reporting establishment. Other times—though rarely—not all establishments of a given firm are actually able to provide data on all their cases of injuries and illnesses; this often occurs because the boundaries of establishments can be unclear. In such a situation, some sampled units are permitted to provide data that cover more or fewer employees than are officially in the establishment. When, for any of the aforementioned reasons, the SOII does not have data on all the cases in a given establishment, weighting adjustments enable the SOII to statistically account for all cases. However, these situations require further scope adjustments for the purposes of matching SOII data to WC data. The Boden-Ozonoff study makes scope adjustments for establishments from which the SOII, to ease respondent burden, collects data for only a subset of injury and illness cases. It is not able to make scope adjustments when sampled units are permitted to provide data that cover more or fewer employees than are officially in the establishment.

[7] All case totals in this article are weighted totals that are calculated using SOII sampling weights.

[8] The Boden-Ozonoff study imputes that approximately 24,000 cases are missed by both the WC and SOII systems, and the authors report that the SOII undercount is larger than that of the WC program. The statistics presented here do not include imputations for cases missed by both surveillance systems.

[9] An establishment is identified as part of a multiestablishment firm if there are multiple establishments within the same unemployment insurance reporting number during the survey year. This method of identification oversimplifies because firms can encompass business lines across more than one unemployment insurance reporting number. The establishments of unknown status have unemployment insurance reporting numbers that exist in the sampling frame at the time the sample is drawn, but not during the survey year. These establishments either merged with other establishments, went out of business, or were otherwise redefined in the sampling frame at some point between the date of the drawing of the sample and the survey year.

[10] This is done by assuming a constant rate of filing over the course of the year. That is, a claim with an assigned claim number in the bottom fourth of the distribution of numbers is imputed to have been filed in the first quarter. The imputed-month-of-filing data are not error free, but they do correlate well with the date-of-injury-or-illness data recorded in the BLS system for matched cases. The imputation is therefore believed to be useful.

[11] There are a number of scenarios that can lead to a claim being marked as having zero TTD days in the WC administrative data. As one example, the employer can continue regular salary payments to an employee whose injury or illness has caused days away from work, such that no compensation for lost earnings is due to the employee. As another example, the insurer can erroneously make WC payments (which would initiate a claim in the system) though the waiting period has not been satisfied. Another possibility is for compromise settlements to be recorded as having no compensable TTD days due. One cannot determine the reason that a given case has been designated as a zero-TTD case, but the scenarios noted here suggest that these cases are probably more difficult to capture in the SOII. Cases that truly involve no lost workdays, such as cases of an immediate permanent disability upon injury, are presumably excluded from these data.

[12] The number of days away from work is reported consistently to the SOII. For cases that are in the WC database but not in the SOII database, the number of days away from work is imputed using TTD days.

[13] The nature-of-injury-or-illness codes used in the Wisconsin WC system differ from the codes used by BLS in its publications. Therefore, cases identified as, for example, punctures in table 4 would not necessarily be identified as punctures under the BLS categorization.

The Economics of Sustainable Development. By Sisay Asefa, editor, Kalamazoo, MI, W.E. Upjohn Institute for Employment Research, 2005, 191 pp., $40/cloth, $15/paperback.

Most of us are fairly certain that sustainable development is important. Trouble is, we are not quite sure what the term means. This and many other related issues are taken up in *The Economics of Sustainable Development*, edited by Sisay Asefa, professor of economics at Western Michigan University. This volume assembles six papers presented during the annual Werner Sichel Economics Lecture-Seminar Series at Western Michigan University within an international development context, emphasizing topics such as poverty, agriculture, inequality, population growth, and property rights.

The introduction provides an extensive summary and brief synthesis of the papers that follow. In the first paper, Malcom Gillis tells us that although there is no universal agreement on what is meant by sustainable development, the weight of the knowledge suggests that sustainable development has to do with discovering a path for growth that maximizes net benefits for society after taking into account the costs of environmental degradation. This definition is indeed consistent with those found in environmental economics textbooks.

The second and third papers deal with two issues that are critical for the developing world: avoiding humanitarian disasters and securing greater agricultural production through productivity gains. Next we learn from David Lam about how falling mortality rates brought on a world population explosion during the 1950s and 1960s, and how declining fertility rates brought it to an end. Since the 1970s and continuing to the present, parents are having fewer children and investing more in schooling and health care, a cause for optimism.

In the fifth paper, Daniel Bromley offers a philosophical discussion of the connection between property rights and environmental sustainability. The final paper by Scott Swinton examines whether poor farmers are forced to overuse natural resources in order to survive in the short-run. He finds that the poor are not necessarily bad stewards of natural resources, but face capacity constraints not encountered by farmers in richer countries. He theorizes that poor farmers would respond to the proper mix of incentives that promote sustainable resource usage, including clearly defined and durable property rights, support from local institutions, and an efficient transportation and communication system.

Clearly, the volume deals with quite a diverse set of topics. Some readers may have difficulty finding commonalities between the six very different essays. More attention to an introductory synthesis would have been helpful in this regard. One theme that they do have in common is the notion of capacity building: What institutions, policies, and capabilities lead to the path of sustainable development in the developing world?

A minor discomfort with this volume has to do with the title: *The Economics of Sustainable Development* suggests to the reader that what follows is a survey of the economics of sustainability, which is not the case. A better title would have been *Essays in Sustainable Development*, suggesting a more loose collection of papers around a general theme.

In general, *The Economics of Sustainable Development* offers valuable attention to specific issues that may be of interest to a variety of scholars in interested in economic development and sustainability.

—David A. Penn
Director and Associate Professor of Economics
Middle Tennessee State University
Murfreesboro, TN

Credit and debit card rewards

From their origin in the 1980s to today, payment card rewards programs in the United States have become more and more widespread. In addition, the types of rewards offered for using payment cards have become more diverse, and consumers' return on each dollar spent has been increasing. The word "rewards" implies that the programs are beneficial; nonetheless, one must ask, as economist Fumiko Hayashi does in a recent paper, "Do U.S. Consumers Really Benefit from Payment Card Rewards?" (*Economic Review*, Federal Reserve Bank of Kansas City, first quarter 2009).

There are two main payment structures for card transactions. In one, the card issuer bills the cardholder; pockets the "merchant fee," which averages 1.88 percent of the transaction; and sends the rest of the money to a "merchant acquirer." The merchant acquirer takes a smaller cut of the money and sends the remainder of the value of the purchase to the merchant. Debit cards that require consumers to input a PIN generally charge lower fees than other types of cards. The other type of payment structure is similar to the first but skips the step of the merchant acquirer.

The value of rewards for credit card users is typically around 1 percent of purchases. It is difficult to pinpoint a source of the money that funds rewards programs, but there is evidence suggesting that more generous card rewards lead to greater fees for merchants. If businesses pass on merchant fees to consumers in the form of higher prices, then in fact payment cards are not beneficial to consumers as a whole (because merchant fees are generally a larger percentage of the transaction than are rewards).

Even if more lavish rewards effect higher merchant fees and the elevated merchant fees lead to higher consumer prices, it is likely that some type of rewards structure for payment cards would still be beneficial to society. This is because cash and check transactions also cost money to process. The most efficient card programs likely would include transaction-based fees for cardholders in addition to rewards. The size of the transaction would help determine whether the cardholder pays a fee or receives an award for the transaction. Rewards only maximize efficiency when the benefit to the merchant for conducting the card transaction is superior to the cost of the transaction to the payment service providers. Hayashi acknowledges that more data are needed to make a strong case, but she concludes that available evidence and models indicate that payment card rewards programs currently are too generous and are therefore inefficient.

Regional effects of the most recent recession

What are the likely long-term economic effects of the most recent recession on the Nation's regions? In "How the Crash Will Reshape America" (Atlantic Monthly, March 2009), University of Toronto business professor and urban theorist Richard Florida offers some interesting and well-reasoned speculations in answer to that question. Professor Florida analyzes economic and demographic trends in the major regions of the United States and argues that in the long run, geographic location is still of primary importance to economic growth. For various reasons, which the author attempts to explain, some areas will be hit harder by the recession that began in 2007 than others. In addition, some areas are likely to recover more quickly than others—some will even be strengthened—while others might never fully recover.

Professor Florida begins with New York City, by most measures the world's largest financial center and the place where the financial crisis began. He makes the important point that, throughout modern history, "capitalist power centers" like New York have remained remarkably stable. Amsterdam was the leading financial center in the world from the 17th century to the early 19th century when it was displaced by London. Although the U.S. economy was larger than the British economy by 1900, New York did not surpass London to emerge as the world's largest financial center until after World War II. Because these centers tend to be densely populated urban areas, with high concentrations of educated professionals (financial specialists, accountants, lawyers, and so forth) from various industries, they are very difficult to duplicate elsewhere. As a result, these areas tend to be more economically stable and thus able to endure the effects of recessions better than other areas, where the economies are often more dependent upon just a few industries.

Florida predicts that New York will emerge from the most recent recession economically stronger that it was prior to the downturn. He argues that the portion of the New York economy represented by the financial sector had grown too large during the "recent bubble," and that the shift in jobs from the financial sector to other services will strengthen the economy in the long run. Moreover, the rest of the country will continue to be strongly influenced by the New York economy, and New York will remain the financial capital of the world for some time to come.

The areas of the country that are likely to suffer the worst effects of the most recent recession are the older manufacturing centers, such as the Rust Belt. The U.S. manufacturing sector has declined from about 30 percent of total nonfarm employment in 1950 to about 10 percent currently. Professor Florida argues that other areas, such as the Sun Belt, will also emerge weaker, in part because their recent booms were driven by "real-estate speculation, overdevelopment, and fictitious housing wealth." □

Current Labor Statistics
Monthly Labor Review
May 2009

NOTE: Many of the statistics in the following pages were subsequently revised. These pages have not been updated to reflect the revisions.

To obtain BLS data that reflect all revisions, see http://www.bls.gov/data/home.htm

For the latest set of "Current Labor Statistics," see http://www.bls.gov/opub/mlr/curlabst.htm

Notes on Current Labor Statistics

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

General notes

The following notes apply to several tables in this section:

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

Seasonally adjusted data appear in tables 1–14, 17–21, 48, and 52. Seasonally adjusted labor force data in tables 1 and 4–9 and seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 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 All-Items CPI. Only seasonally adjusted percent changes are available for this series.

Adjustments for price changes. Some data—such as the "real" earnings shown in table 14—are adjusted to eliminate the effect of changes in price. These adjustments are made by dividing current-dollar values by the Consumer Price Index or the appropriate component of the index, then multiplying by 100. For example, given a current hourly wage rate of $3 and a current price index number of 150, where 1982 = 100, the hourly rate expressed in 1982 dollars is $2 ($3/150 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 Review*. Additional data on international prices appear in monthly news releases.

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

www.bls.gov/lpc/

For additional information on international comparisons data, see *International Comparisons of Unemployment,* Bulletin 1979.

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

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

Symbols

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

Comparative Indicators

(Tables 1–3)

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

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

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

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

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

Notes on the data

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

Employment and Unemployment Data

(Tables 1; 4–29)

Household survey data

Description of the series

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

Definitions

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

Unemployed persons are those who did not work during the survey week, but were available for work except for temporary illness and had looked for jobs within the preceding 4 weeks. Persons who did not look for work because they were on layoff are also counted among the unemployed. **The unemployment rate** represents the number unemployed as a percent of the civilian labor force.

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

Notes on the data

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

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

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally 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 service-providing industries, data are collected for nonsupervisory workers, which include most employees except those in executive, managerial, and supervisory positions. Those

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

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

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

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

Notes on the data

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

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

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

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

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review).* When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Fourth-quarter data are 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 ES-202 data, are the most complete enumeration of employment and wage information by industry at the national, State, metropolitan area, and county levels. They have broad economic significance in evaluating labor

market trends and major industry developments.

Definitions

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

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

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

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

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

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

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

Covered employers in most States report total **wages** paid during the calendar quarter, regardless of when the services were performed. A few State laws, however, specify that wages be reported for, or based on the period during which services are performed rather than the period during which compensation is paid. Under most State laws or regulations, wages include bonuses, stock options, the cash value of meals and lodging, tips and other gratuities, and, in some States, employer contributions to certain deferred compensation plans such as 401(k) plans.

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

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

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

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

Notes on the data

Beginning with the release of data for 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 county-level data are the most detailed available from the Quarterly Census of Employment and Wages. The NECMA is a county-based alternative to the city- and town-based metropolitan areas in New England. The NECMA for a Metropolitan Statistical Area (MSA) include: (1) the county containing the first-named city in that MSA title (this county may include the first-named cities of other MSA, and (2) each additional county having at least half its population in the MSA in which first-named cities are in the county identified in step 1. The NECMA is officially defined areas that are meant to be used by statistical programs that cannot use the regular metropolitan area definitions in New England.

For additional information on the covered employment and wage data, contact the Division of Administrative Statistics and Labor Turnover at (202) 691–6567.

Job Openings and Labor Turnover Survey

Description of the series

Data for the **Job Openings and Labor Turnover Survey** (JOLTS) are collected and compiled from a sample of 16,000 business establishments. Each month, data are collected for total employment, job openings, hires, quits, layoffs and discharges, and other separations. The JOLTS program covers all private nonfarm establishments such as factories, offices, and stores, as well as Federal, State, and local government entities in the 50 States and the District of Columbia. The JOLTS sample design is a random sample drawn from a universe of more than eight million establishments compiled as part of the operations of the Quarterly Census of Employment and Wages, or QCEW, program. This program includes all employers subject to State unemployment insurance (UI) laws and Federal agencies subject to Unemployment Compensation for Federal Employees (UCFE).

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

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

Definitions

Establishments submit **job openings** infor-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 part-time, permanent, short-term and seasonal employees, employees recalled to the location after a layoff lasting more than 7 days, on-call or intermittent employees who returned to work after having been formally separated, and transfers from other locations. The hires count does not include transfers or promotions within the reporting site, employees returning from strike, employees of temporary help agencies or employee leasing companies, outside contractors, or consultants. The hires rate is computed by dividing the number of hires by employment, and multiplying that quotient by 100.

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

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

Notes on the data

The JOLTS data series on job openings, hires, and separations are relatively new. The full sample is divided into panels, with one panel enrolled each month. A full complement of panels for the original data series based on the 1987 Standard Industrial Classification (SIC) system was not completely enrolled in the survey until January 2002. The 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 12th of the month, while the reference period for hires and separations is the calendar month; and (2) payroll employment can vary from month to month simply because part-time and on-call workers may not always work during the pay period that includes the 12th of the month. Additionally, research has found that some reporters systematically underreport separations relative to hires due to a number of factors, including the nature of their payroll systems and practices. The shortfall appears to be about 2 percent or less over a 12-month period.

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

Compensation and Wage Data

(Tables 1–3; 30–37)

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

Employment Cost Index

Description of the series

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

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

Sample establishments are classified by industry categories based on the 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 period—December 2003 = 100 for many Producer Price Indexes (unless otherwise noted), 1982–84 = 100 for many Consumer Price Indexes (unless otherwise noted), and 1990 = 100 for International Price Indexes.

Consumer Price Indexes

Description of the series

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

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

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

Notes on the data

In January 1983, the Bureau changed the way in which homeownership costs are 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 comparisons—that is, series that measure changes over time—rather than level comparisons. BLS does *not* recommend using these series for level comparisons because of technical problems.

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

The data for recent years are based on the United Nations System of National Accounts 1993 (SNA 93). Manufacturing is generally defined according to the International Standard Industrial Classification (ISIC). However, the measures for France include parts of mining as well. For the United States and Canada, manufacturing is defined according to the North American Industry Classification System (NAICS 97).

Definitions

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

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

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

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

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

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

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

Notes on the data

The measures for recent years may be based on current indicators of manufacturing output (such as industrial production indexes), employment, average hours, and hourly compensation until national 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 Division of International Labor Comparison at (202) 691–5654.

Occupational Injury and Illness Data

(Tables 54–55)

Survey of Occupational Injuries and Illnesses

Description of the series

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

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

Definitions

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

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

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

Lost workday injuries and illnesses are cases that involve days away from work, or days of restricted work activity, or both.

Lost workdays include the number of workdays (consecutive or not) on which the employee was either away from work or at work in some restricted capacity, or both,

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

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

Notes on the data

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

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

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

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

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

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

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

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

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events. The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

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

Definition

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

Notes on the data

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

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

1. Labor market indicators

Selected indicators	2007	2008	2007				2008				2009
			I	II	III	IV	I	II	III	IV	I
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[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. Service-providing industries include all other private sector industries.

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

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

Selected measures	2007	2008	2007				2008				2009
			I	II	III	IV	I	II	III	IV	I
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:											
Civilian nonfarm	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
Capital equipment	1.8	2.8	.3	-.1	-.1	1.2	.7	.6	1.0	1.6	.2
Intermediate materials, supplies, and components	4.1	10.5	1.5	3.2	.1	2.0	5.0	6.9	.7	-13.0	-2.7
Crude materials	12.1	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
Nonfarm business sector	1.4	2.8	-.6	4.8	7.0	-.5	2.6	4.7	2.2	-.6	.8
Nonfinancial corporations[5]	.7	-	-.6	3.8	3.0	1.2	-.4	8.5	6.4	-3.9	-

[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 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				2009	2008				2009
	I	II	III	IV	I	I	II	III	IV	I
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

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

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

[3] Excludes Federal and private household workers.

4. 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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
TOTAL															
Civilian noninstitutional population[1]	231,867	233,788	232,995	233,198	233,405	233,627	233,864	234,107	234,360	234,612	234,828	235,035	234,739	234,913	235,086
Civilian labor force	153,124	154,287	153,843	153,932	154,510	154,400	154,506	154,823	154,621	154,878	154,620	154,447	153,716	154,214	154,048
Participation rate	66.0	66.0	66.0	66.0	66.2	66.1	66.1	66.1	66.0	66.0	65.8	65.7	65.5	65.6	65.5
Employed	146,047	145,362	146,023	146,257	145,974	145,738	145,596	145,273	145,029	144,657	144,144	143,338	142,099	141,748	140,887
Employment-population ratio[2]	63.0	62.2	62.7	62.7	62.5	62.4	62.3	62.1	61.9	61.7	61.4	61.0	60.5	60.3	59.9
Unemployed	7,078	8,924	7,820	7,675	8,536	8,662	8,910	9,550	9,592	10,221	10,476	11,108	11,616	12,467	13,161
Unemployment rate	4.6	5.8	5.1	5.0	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	8.5
Not in the labor force	78,743	79,501	79,152	79,267	78,895	79,227	79,358	79,284	79,739	79,734	80,208	80,588	81,023	80,699	81,038
Men, 20 years and over															
Civilian noninstitutional population[1]	103,555	104,453	104,052	104,152	104,258	104,371	104,490	104,613	104,741	104,869	104,978	105,083	104,902	104,999	105,095
Civilian labor force	78,596	79,047	78,866	78,820	78,913	79,055	79,286	79,308	79,392	79,380	79,335	78,998	78,585	78,687	78,578
Participation rate	75.9	75.7	75.8	75.7	75.7	75.7	75.9	75.8	75.8	75.7	75.6	75.2	74.9	74.9	74.8
Employed	75,337	74,750	75,216	75,147	74,992	74,949	74,973	74,737	74,503	74,292	74,045	73,285	72,613	72,293	71,655
Employment-population ratio[2]	72.8	71.6	72.3	72.2	71.9	71.8	71.8	71.4	71.1	70.8	70.5	69.7	69.2	68.9	68.2
Unemployed	3,259	4,297	3,650	3,673	3,921	4,106	4,313	4,572	4,889	5,088	5,290	5,714	5,972	6,394	6,923
Unemployment rate	4.1	5.4	4.6	4.7	5.0	5.2	5.4	5.8	6.2	6.4	6.7	7.2	7.6	8.1	8.8
Not in the labor force	24,959	25,406	25,186	25,332	25,345	25,315	25,204	25,305	25,349	25,489	25,643	26,085	26,318	26,312	26,516
Women, 20 years and over															
Civilian noninstitutional population[1]	111,330	112,260	111,902	111,990	112,083	112,183	112,290	112,401	112,518	112,633	112,731	112,825	112,738	112,824	112,908
Civilian labor force	67,516	68,382	68,174	68,118	68,367	68,421	68,273	68,666	68,385	68,700	68,753	68,891	68,584	68,917	68,977
Participation rate	60.6	60.9	60.9	60.8	61.0	61.0	60.8	61.1	60.8	61.0	61.0	61.1	60.8	61.1	61.1
Employed	64,799	65,039	65,079	65,196	65,114	65,169	65,103	65,003	65,008	64,975	64,902	64,860	64,298	64,271	64,148
Employment-population ratio[2]	58.2	57.9	58.2	58.2	58.1	58.1	58.0	57.8	57.8	57.7	57.6	57.5	57.0	57.0	56.8
Unemployed	2,718	3,342	3,095	2,923	3,252	3,252	3,170	3,662	3,377	3,725	3,851	4,031	4,286	4,646	4,828
Unemployment rate	4.0	4.9	4.5	4.3	4.8	4.8	4.6	5.3	4.9	5.4	5.6	5.9	6.2	6.7	7.0
Not in the labor force	43,814	43,878	43,728	43,872	43,716	43,762	44,017	43,736	44,133	43,933	43,978	43,935	44,154	43,907	43,931
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	16,982	17,075	17,041	17,056	17,064	17,073	17,084	17,092	17,101	17,110	17,118	17,126	17,098	17,090	17,083
Civilian labor force	7,012	6,858	6,803	6,993	7,231	6,924	6,947	6,849	6,844	6,799	6,531	6,557	6,547	6,610	6,493
Participation rate	41.3	40.2	39.9	41.0	42.4	40.6	40.7	40.1	40.0	39.7	38.2	38.3	38.3	38.7	38.0
Employed	5,911	5,573	5,729	5,914	5,868	5,620	5,520	5,533	5,518	5,390	5,196	5,194	5,188	5,184	5,083
Employment-population ratio[2]	34.8	32.6	33.6	34.7	34.4	32.9	32.3	32.4	32.3	31.5	30.4	30.3	30.3	30.3	29.8
Unemployed	1,101	1,285	1,075	1,079	1,363	1,304	1,427	1,316	1,326	1,408	1,335	1,363	1,359	1,427	1,410
Unemployment rate	15.7	18.7	15.8	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	21.7
Not in the labor force	9,970	10,218	10,237	10,063	9,834	10,149	10,137	10,243	10,257	10,311	10,587	10,568	10,551	10,480	10,590
White[3]															
Civilian noninstitutional population[1]	188,253	189,540	189,019	189,147	189,281	189,428	189,587	189,747	189,916	190,085	190,221	190,351	190,225	190,331	190,436
Civilian labor force	124,935	125,635	125,208	125,198	125,759	125,712	125,979	125,987	125,844	126,298	126,029	125,634	125,312	125,703	125,599
Participation rate	66.4	66.3	66.2	66.2	66.4	66.4	66.4	66.4	66.3	66.4	66.3	66.0	65.9	66.0	66.0
Employed	119,792	119,126	119,580	119,644	119,611	119,417	119,432	119,082	118,964	118,722	118,226	117,357	116,692	116,481	115,693
Employment-population ratio[2]	63.6	62.8	63.3	63.3	63.2	63.0	63.0	62.8	62.6	62.5	62.2	61.7	61.3	61.2	60.8
Unemployed	5,143	6,509	5,628	5,554	6,148	6,295	6,547	6,904	6,880	7,577	7,803	8,277	8,621	9,222	9,906
Unemployment rate	4.1	5.2	4.5	4.4	4.9	5.0	5.2	5.5	5.5	6.0	6.2	6.6	6.9	7.3	7.9
Not in the labor force	63,319	63,905	63,811	63,949	63,523	63,716	63,608	63,761	64,072	63,787	64,193	64,718	64,913	64,628	64,837
Black or African American[3]															
Civilian noninstitutional population[1]	27,485	27,843	27,709	27,746	27,780	27,816	27,854	27,896	27,939	27,982	28,021	28,059	28,052	28,085	28,118
Civilian labor force	17,496	17,740	17,688	17,755	17,737	17,708	17,744	17,949	17,733	17,768	17,708	17,796	17,791	17,703	17,542
Participation rate	63.7	63.7	63.8	64.0	63.8	63.7	63.7	64.3	63.5	63.5	63.2	63.4	63.4	63.0	62.4
Employed	16,051	15,953	16,090	16,200	16,009	16,041	15,989	16,026	15,709	15,762	15,703	15,674	15,546	15,336	15,212
Employment-population ratio[2]	58.4	57.3	58.1	58.4	57.6	57.7	57.4	57.4	56.2	56.3	56.0	55.9	55.4	54.6	54.1
Unemployed	1,445	1,788	1,598	1,555	1,728	1,667	1,755	1,923	2,024	2,006	2,005	2,122	2,245	2,368	2,330
Unemployment rate	8.3	10.1	9.0	8.8	9.7	9.4	9.9	10.7	11.4	11.3	11.3	11.9	12.6	13.4	13.3
Not in the labor force	9,989	10,103	10,022	9,991	10,043	10,109	10,111	9,947	10,206	10,214	10,313	10,263	10,261	10,382	10,576

See footnotes at end of table.

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

[Numbers in thousands]

Employment status	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Hispanic or Latino ethnicity															
Civilian noninstitutional population[1]	31,383	32,141	31,820	31,911	31,998	32,087	32,179	32,273	32,369	32,465	32,558	32,649	32,417	32,501	32,585
Civilian labor force	21,602	22,024	21,778	21,920	22,125	22,100	22,062	22,201	22,259	22,187	22,074	22,134	21,931	22,100	22,175
Participation rate	68.8	68.5	68.4	68.7	69.1	68.9	68.6	68.8	68.8	68.3	67.8	67.8	67.7	68.0	68.1
Employed	20,382	20,346	20,251	20,392	20,565	20,391	20,396	20,404	20,506	20,232	20,168	20,096	19,800	19,684	19,640
Employment-population ratio[2]	64.9	63.3	63.6	63.9	64.3	63.5	63.4	63.2	63.4	62.3	61.9	61.6	61.1	60.6	60.3
Unemployed	1,220	1,678	1,527	1,528	1,560	1,709	1,665	1,797	1,752	1,955	1,906	2,038	2,132	2,416	2,536
Unemployment rate	5.6	7.6	7.0	7.0	7.0	7.7	7.5	8.1	7.9	8.8	8.6	9.2	9.7	10.9	11.4
Not in the labor force	9,781	10,116	10,042	9,990	9,873	9,987	10,117	10,072	10,111	10,278	10,484	10,515	10,486	10,401	10,410

[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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Characteristic															
Employed, 16 years and older	146,047	145,362	146,023	146,257	145,974	145,738	145,596	145,273	145,029	144,657	144,144	143,338	142,099	141,748	140,887
Men	78,254	77,486	77,985	78,029	77,932	77,726	77,683	77,484	77,249	76,938	76,577	75,847	75,092	74,777	74,053
Women	67,792	67,876	68,038	68,228	68,042	68,012	67,913	67,789	67,780	67,720	67,567	67,491	67,007	66,970	66,834
Married men, spouse present	46,314	45,860	45,975	45,968	45,871	45,902	46,093	45,804	45,887	45,787	45,610	45,182	44,712	44,502	44,470
Married women, spouse present	35,832	35,869	35,825	36,144	36,122	36,189	36,110	35,994	35,864	35,590	35,649	35,632	35,375	35,563	35,481
Persons at work part time[1]															
All industries:															
Part time for economic reasons	4,401	5,875	4,937	5,240	5,290	5,495	5,813	5,879	6,292	6,848	7,323	8,038	7,839	8,626	9,049
Slack work or business conditions	2,877	4,169	3,349	3,580	3,658	3,905	4,220	4,240	4,418	4,953	5,399	6,020	5,766	6,443	6,857
Could only find part-time work	1,210	1,389	1,364	1,325	1,305	1,359	1,300	1,412	1,514	1,514	1,585	1,617	1,667	1,764	1,839
Part time for noneconomic reasons	19,756	19,343	19,402	19,792	19,396	19,428	19,348	19,690	19,275	19,083	18,886	18,922	18,864	18,855	18,833
Nonagricultural industries:															
Part time for economic reasons	4,317	5,773	4,826	5,152	5,218	5,390	5,693	5,802	6,167	6,742	7,209	7,932	7,705	8,543	8,942
Slack work or business conditions	2,827	4,097	3,276	3,537	3,599	3,839	4,160	4,171	4,279	4,889	5,304	5,938	5,660	6,390	6,773
Could only find part-time work	1,199	1,380	1,354	1,328	1,297	1,340	1,287	1,385	1,541	1,499	1,579	1,619	1,658	1,760	1,850
Part time for noneconomic reasons	19,419	19,005	19,078	19,436	18,997	19,036	18,992	19,269	18,930	18,808	18,635	18,642	18,567	18,562	18,493

[1] Excludes persons "with a job but not at work" during the survey period for such reasons as vacation, illness, or industrial disputes.

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

6. Selected unemployment indicators, monthly data seasonally adjusted

[Unemployment rates]

Selected categories	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Characteristic															
Total, 16 years and older	4.6	5.8	5.1	5.0	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	8.5
Both sexes, 16 to 19 years	15.7	18.7	15.8	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	21.7
Men, 20 years and older	4.1	5.4	4.6	4.7	5.0	5.2	5.4	5.8	6.2	6.4	6.7	7.2	7.6	8.1	8.8
Women, 20 years and older	4.0	4.9	4.5	4.3	4.8	4.8	4.6	5.3	4.9	5.4	5.6	5.9	6.2	6.7	7.0
White, total [1]	4.1	5.2	4.5	4.4	4.9	5.0	5.2	5.5	5.5	6.0	6.2	6.6	6.9	7.3	7.9
Both sexes, 16 to 19 years	13.9	16.8	13.2	14.2	16.5	17.0	19.1	17.3	17.5	18.6	18.4	18.7	18.4	19.1	20.0
Men, 16 to 19 years	15.7	19.1	14.6	15.2	18.1	18.7	22.4	19.5	19.7	22.6	21.4	21.4	21.8	22.2	23.3
Women, 16 to 19 years	12.1	14.4	11.8	13.1	14.8	15.3	15.6	15.0	15.2	14.4	15.3	16.0	14.8	16.0	16.7
Men, 20 years and older	3.7	4.9	4.1	4.2	4.5	4.6	4.8	5.1	5.5	5.8	6.1	6.5	6.8	7.4	8.0
Women, 20 years and older	3.6	4.4	4.1	3.7	4.1	4.2	4.2	4.7	4.2	4.9	5.1	5.5	5.8	6.1	6.5
Black or African American, total [1]	8.3	10.1	9.0	8.8	9.7	9.4	9.9	10.7	11.4	11.3	11.3	11.9	12.6	13.4	13.3
Both sexes, 16 to 19 years	29.4	31.2	30.8	24.6	32.3	29.8	32.0	29.3	29.8	32.9	32.2	33.7	36.5	38.8	32.5
Men, 16 to 19 years	33.8	35.9	38.6	27.8	39.9	35.4	37.7	29.8	32.9	37.2	42.0	35.2	44.0	45.6	41.2
Women, 16 to 19 years	25.3	26.8	24.7	22.0	25.2	24.4	26.8	28.9	26.7	27.8	23.2	32.2	29.8	32.1	25.2
Men, 20 years and older	7.9	10.2	8.5	8.6	9.2	9.7	10.3	10.6	11.9	11.8	12.1	13.4	14.1	14.9	15.4
Women, 20 years and older	6.7	8.1	7.6	7.6	8.2	7.5	7.5	9.1	9.3	8.9	9.0	8.9	9.2	9.9	9.9
Hispanic or Latino ethnicity	5.6	7.6	7.0	7.0	7.0	7.7	7.5	8.1	7.9	8.8	8.6	9.2	9.7	10.9	11.4
Married men, spouse present	2.5	3.4	2.8	2.8	3.0	3.1	3.3	3.7	3.9	4.1	4.2	4.4	5.0	5.5	5.8
Married women, spouse present	2.8	3.6	3.4	3.0	3.2	3.4	3.4	3.7	3.5	4.2	4.3	4.5	4.7	5.1	5.4
Full-time workers	4.6	5.8	5.0	5.0	5.5	5.6	5.8	6.3	6.3	6.8	7.0	7.5	8.0	8.6	9.2
Part-time workers	4.9	5.5	5.3	5.0	5.5	5.4	5.6	5.7	5.9	5.7	5.8	5.9	5.9	5.8	5.9
Educational attainment [2]															
Less than a high school diploma	7.1	9.0	8.2	7.9	8.4	8.9	8.6	9.7	9.8	10.4	10.6	10.9	12.0	12.6	13.3
High school graduates, no college [3]	4.4	5.7	5.1	5.0	5.2	5.2	5.3	5.8	6.3	6.5	6.9	7.7	8.0	8.3	9.0
Some college or associate degree	3.6	4.6	3.9	4.0	4.3	4.4	4.6	5.0	5.1	5.3	5.5	5.6	6.2	7.0	7.2
Bachelor's degree and higher [4]	2.0	2.6	2.1	2.1	2.3	2.4	2.5	2.7	2.6	3.1	3.2	3.7	3.8	4.1	4.3

[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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Less than 5 weeks	2,542	2,932	2,797	2,496	3,257	2,733	2,884	3,242	2,864	3,108	3,255	3,267	3,658	3,404	3,371
5 to 14 weeks	2,232	2,804	2,549	2,529	2,478	3,012	2,853	2,874	3,083	3,055	3,141	3,398	3,519	3,969	4,041
15 weeks and over	2,303	3,188	2,444	2,652	2,808	2,966	3,168	3,447	3,662	4,109	3,964	4,517	4,634	5,264	5,715
15 to 26 weeks	1,061	1,427	1,143	1,277	1,238	1,345	1,450	1,568	1,621	1,834	1,757	1,927	1,987	2,347	2,534
27 weeks and over	1,243	1,761	1,300	1,375	1,570	1,621	1,718	1,878	2,041	2,275	2,207	2,591	2,647	2,917	3,182
Mean duration, in weeks	16.8	17.9	16.1	17.0	16.8	17.6	17.3	17.6	18.7	19.8	18.9	19.7	19.8	19.8	20.1
Median duration, in weeks	8.5	9.4	8.2	9.3	8.3	10.1	9.8	9.3	10.3	10.6	10.0	10.6	10.3	11.0	11.2

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Job losers[1]	3,515	4,789	4,161	4,043	4,319	4,465	4,595	4,994	5,348	5,811	6,156	6,471	6,980	7,696	8,243
On temporary layoff	976	1,176	1,064	1,103	1,121	1,106	1,041	1,279	1,396	1,367	1,413	1,524	1,441	1,488	1,557
Not on temporary layoff	2,539	3,614	3,097	2,939	3,197	3,358	3,554	3,715	3,952	4,443	4,744	4,946	5,539	6,208	6,686
Job leavers	793	896	792	860	881	847	875	999	982	946	940	1,007	917	820	887
Reentrants	2,142	2,472	2,126	2,145	2,522	2,562	2,668	2,678	2,587	2,650	2,655	2,777	2,751	2,834	2,974
New entrants	627	766	695	625	832	761	818	829	822	825	760	829	780	1,005	868
Percent of unemployed															
Job losers[1]	49.7	53.7	53.5	52.7	50.5	51.7	51.3	52.6	54.9	56.8	58.6	58.4	61.1	62.3	63.5
On temporary layoff	13.8	13.2	13.7	14.4	13.1	12.8	11.6	13.5	14.3	13.4	13.4	13.8	12.6	12.0	12.0
Not on temporary layoff	35.9	40.5	39.8	38.3	37.4	38.9	39.7	39.1	40.6	43.4	45.1	44.6	48.5	50.2	51.5
Job leavers	11.2	10.0	10.2	11.2	10.3	9.8	9.8	10.5	10.1	9.2	8.9	9.1	8.0	6.6	6.8
Reentrants	30.3	27.7	27.3	28.0	29.5	29.7	29.8	28.2	26.6	25.9	25.3	25.1	24.1	22.9	22.9
New entrants	8.9	8.6	8.9	8.1	9.7	8.8	9.1	8.7	8.4	8.1	7.2	7.5	6.8	8.1	6.7
Percent of civilian labor force															
Job losers[1]	2.3	3.1	2.7	2.6	2.8	2.9	3.0	3.2	3.5	3.8	4.0	4.2	4.5	5.0	5.4
Job leavers	.5	.6	.5	.6	.6	.5	.6	.6	.6	.6	.6	.7	.6	.5	.6
Reentrants	1.4	1.6	1.4	1.4	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9
New entrants	.4	.5	.5	.4	.5	.5	.5	.5	.5	.5	.5	.5	.5	.7	.6

[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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Total, 16 years and older	4.6	5.8	5.1	5.0	5.5	5.6	5.8	6.2	6.2	6.6	6.8	7.2	7.6	8.1	8.5
16 to 24 years	10.5	12.8	11.4	11.0	13.1	12.9	13.5	13.3	13.4	13.8	13.9	14.7	14.8	15.5	16.3
16 to 19 years	15.7	18.7	15.8	15.4	18.9	18.8	20.5	19.2	19.4	20.7	20.4	20.8	20.8	21.6	21.7
16 to 17 years	17.5	22.1	18.7	20.2	21.5	23.2	24.9	22.2	21.7	23.1	24.1	24.1	21.4	22.9	23.7
18 to 19 years	14.5	16.8	14.2	13.4	17.6	15.9	17.6	17.4	17.8	18.4	18.3	19.1	20.2	21.0	20.9
20 to 24 years	8.2	10.2	9.4	9.0	10.3	10.2	10.4	10.7	10.8	10.6	11.1	12.1	12.1	12.9	14.0
25 years and older	3.6	4.6	4.0	4.0	4.2	4.4	4.5	5.0	5.0	5.3	5.6	6.0	6.4	6.9	7.2
25 to 54 years	3.7	4.8	4.2	4.2	4.5	4.6	4.7	5.2	5.3	5.5	5.8	6.3	6.7	7.2	7.6
55 years and older	3.1	3.8	3.4	3.1	3.3	3.4	3.7	4.1	4.2	4.6	4.8	4.9	5.2	5.6	6.2
Men, 16 years and older	4.7	6.1	5.2	5.2	5.7	5.9	6.2	6.4	6.8	7.2	7.4	7.9	8.3	8.8	9.5
16 to 24 years	11.6	14.4	12.5	12.1	14.1	14.1	15.3	14.6	14.8	16.5	16.1	16.9	17.1	17.6	19.3
16 to 19 years	17.6	21.2	17.8	17.0	20.8	20.8	23.5	21.1	21.4	24.7	24.0	23.3	24.4	24.9	25.7
16 to 17 years	19.4	25.2	22.4	22.5	23.7	26.1	29.3	24.5	23.2	27.3	28.8	27.0	26.5	26.5	28.2
18 to 19 years	16.5	19.0	15.2	14.5	19.8	17.5	20.1	19.0	20.4	21.7	21.2	21.5	22.8	24.7	24.6
20 to 24 years	8.9	11.4	10.3	10.0	11.1	11.2	11.7	11.7	11.9	12.9	12.9	14.2	14.1	14.6	16.7
25 years and older	3.6	4.8	4.0	4.0	4.3	4.5	4.8	5.1	5.5	5.6	5.9	6.4	6.9	7.5	7.9
25 to 54 years	3.7	5.0	4.2	4.3	4.5	4.7	5.0	5.3	5.8	5.8	6.1	6.7	7.3	7.9	8.3
55 years and older	3.2	3.9	3.3	3.0	3.5	3.5	3.8	4.3	4.5	4.7	5.1	5.1	5.3	6.0	6.3
Women, 16 years and older	4.5	5.4	5.0	4.8	5.3	5.3	5.3	5.9	5.5	5.9	6.1	6.4	6.7	7.3	7.5
16 to 24 years	9.4	11.2	10.1	9.8	11.9	11.5	11.6	12.0	11.9	10.7	11.5	12.4	12.2	13.3	13.1
16 to 19 years	13.8	16.2	13.8	13.9	16.7	16.8	17.4	17.3	17.3	16.5	16.7	18.2	17.1	18.3	17.8
16 to 17 years	15.7	19.1	15.3	18.1	19.2	20.4	20.5	20.1	20.3	19.2	19.7	21.2	16.2	19.8	19.4
18 t0 19 years	12.5	14.3	13.1	12.2	15.2	14.1	14.9	15.6	14.9	14.7	15.1	16.6	17.5	17.0	17.2
20 to 24 years	7.3	8.8	8.3	7.7	9.5	8.9	8.9	9.5	9.4	8.1	9.2	9.8	10.0	10.9	11.0
25 years and older	3.6	4.4	4.1	3.9	4.1	4.2	4.2	4.9	4.4	5.1	5.2	5.4	5.8	6.2	6.5
25 to 54 years	3.8	4.6	4.2	4.1	4.4	4.5	4.4	5.1	4.6	5.2	5.4	5.7	6.0	6.4	6.7
55 years and older[1]	3.0	3.7	3.4	2.8	2.8	3.4	4.3	4.5	3.9	4.3	4.3	4.3	5.4	5.3	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	Feb. 2008	Jan. 2009[p]	Feb. 2009[p]	State	Feb. 2008	Jan. 2009[p]	Feb. 2009[p]
Alabama	4.1	7.8	8.4	Missouri	5.5	8.1	8.3
Alaska	6.5	7.8	7.9	Montana	4.0	5.6	6.0
Arizona	4.5	7.0	7.4	Nebraska	3.0	4.3	4.3
Arkansas	4.8	6.4	6.4	Nevada	5.5	9.4	10.0
California	6.2	10.1	10.6	New Hampshire	3.7	5.2	5.7
Colorado	4.5	6.6	7.2	New Jersey	4.7	7.3	8.2
Connecticut	5.2	7.3	7.4	New Mexico	3.8	5.1	5.4
Delaware	4.0	6.7	7.3	New York	4.6	7.0	7.8
District of Columbia	6.1	9.2	9.9	North Carolina	5.2	9.7	10.7
Florida	5.2	8.8	9.6	North Dakota	3.0	4.2	4.3
Georgia	5.4	8.5	9.2	Ohio	5.9	8.8	9.5
Hawaii	3.1	6.1	6.5	Oklahoma	3.2	5.0	5.5
Idaho	3.9	6.5	6.7	Oregon	5.4	9.8	10.7
Illinois	5.9	7.8	8.6	Pennsylvania	4.8	7.0	7.5
Indiana	5.0	9.3	9.4	Rhode Island	6.5	10.3	10.5
Iowa	3.9	4.8	4.9	South Carolina	5.7	10.3	10.9
Kansas	4.0	5.8	5.9	South Dakota	2.7	4.4	4.6
Kentucky	5.6	8.8	9.3	Tennessee	5.5	8.6	9.0
Louisiana	3.8	5.1	5.7	Texas	4.5	6.4	6.5
Maine	4.9	7.7	7.8	Utah	3.3	4.6	5.1
Maryland	3.7	6.2	6.8	Vermont	4.4	6.8	7.1
Massachusetts	4.6	7.4	7.7	Virginia	3.5	6.0	6.6
Michigan	7.4	11.6	12.0	Washington	4.7	7.8	8.3
Minnesota	5.0	7.5	8.0	West Virginia	4.2	5.2	6.0
Mississippi	5.9	8.7	9.1	Wisconsin	4.5	7.0	7.8
				Wyoming	2.8	3.7	3.9

[p] = preliminary

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

State	Feb. 2008	Jan. 2009[p]	Feb. 2009[p]	State	Feb. 2008	Jan. 2009[p]	Feb. 2009[p]
Alabama	2,166,519	2,146,896	2,145,502	Missouri	3,015,452	3,010,154	3,019,674
Alaska	355,101	358,893	358,704	Montana	505,044	503,529	501,843
Arizona	3,085,076	3,156,606	3,157,285	Nebraska	991,468	990,459	992,445
Arkansas	1,365,006	1,369,899	1,377,064	Nevada	1,349,138	1,403,121	1,403,105
California	18,241,516	18,538,119	18,580,954	New Hampshire	739,534	739,717	742,425
Colorado	2,721,376	2,738,452	2,731,554	New Jersey	4,483,931	4,503,013	4,514,619
Connecticut	1,865,639	1,889,549	1,890,346	New Mexico	954,767	957,791	957,436
Delaware	441,211	439,918	440,145	New York	9,612,699	9,689,161	9,756,388
District of Columbia	332,077	332,151	331,791	North Carolina	4,525,319	4,550,518	4,584,277
Florida	9,163,690	9,267,985	9,263,707	North Dakota	367,766	371,349	371,315
Georgia	4,833,087	4,814,641	4,811,586	Ohio	5,964,848	5,959,911	5,993,089
Hawaii	649,807	648,894	650,254	Oklahoma	1,732,653	1,760,691	1,757,714
Idaho	751,005	752,620	752,227	Oregon	1,942,131	1,989,651	1,997,891
Illinois	6,738,121	6,601,591	6,603,239	Pennsylvania	6,349,244	6,446,871	6,459,235
Indiana	3,226,342	3,249,440	3,241,553	Rhode Island	568,420	562,709	566,039
Iowa	1,674,591	1,672,080	1,668,976	South Carolina	2,126,910	2,186,244	2,189,322
Kansas	1,487,658	1,508,667	1,511,388	South Dakota	443,880	445,137	447,025
Kentucky	2,029,409	2,069,935	2,080,623	Tennessee	3,035,123	3,033,462	3,051,531
Louisiana	2,053,380	2,090,968	2,085,337	Texas	11,588,581	11,816,124	11,839,609
Maine	704,859	710,624	708,027	Utah	1,376,386	1,391,116	1,389,134
Maryland	2,990,060	2,978,371	2,969,663	Vermont	354,704	357,112	358,111
Massachusetts	3,417,581	3,426,505	3,427,365	Virginia	4,093,737	4,146,570	4,160,683
Michigan	4,972,864	4,862,172	4,857,714	Washington	3,447,185	3,524,564	3,554,065
Minnesota	2,920,482	2,941,072	2,951,001	West Virginia	808,069	798,534	794,137
Mississippi	1,307,396	1,322,792	1,326,532	Wisconsin	3,084,478	3,102,241	3,122,806
				Wyoming	290,524	293,013	292,605

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
TOTAL NONFARM	137,598	137,066	137,814	137,654	137,517	137,356	137,228	137,053	136,732	136,352	135,755	135,074	134,333	133,682	133,019
TOTAL PRIVATE	115,380	114,566	115,373	115,203	115,029	114,834	114,691	114,497	114,197	113,813	113,212	112,542	111,793	111,139	110,481
GOODS-PRODUCING	22,233	21,419	21,800	21,679	21,612	21,507	21,432	21,351	21,247	21,063	20,814	20,532	20,127	19,842	19,537
Natural resources and mining	724	774	756	756	763	770	777	787	794	794	793	789	781	772	754
Logging	60.1	57.0	57.8	58.6	57.3	56.0	55.8	56.1	56.5	56.6	56.6	55.7	55.2	54.7	51.7
Mining	663.8	717.0	697.7	697.8	705.5	713.8	721.3	730.6	737.7	737.7	736.8	733.3	725.3	717.3	702.2
Oil and gas extraction	146.2	161.6	156.2	155.1	158.8	160.7	162.7	164.7	166.3	166.5	167.4	169.4	167.7	167.9	167.6
Mining, except oil and gas[1]	223.4	227.7	223.6	222.9	226.3	226.9	227.6	230.0	230.2	230.5	230.7	229.2	227.9	226.1	224.8
Coal mining	77.2	80.6	77.9	78.1	79.2	79.6	79.5	81.7	82.5	83.1	84.3	84.5	84.9	84.6	84.6
Support activities for mining	294.3	327.7	317.9	319.8	320.4	326.2	331.0	335.9	341.2	340.7	338.7	334.7	329.7	323.3	309.8
Construction	7,630	7,215	7,401	7,337	7,293	7,232	7,201	7,177	7,131	7,066	6,939	6,841	6,706	6,599	6,473
Construction of buildings	1,774.2	1,659.3	1,712.6	1,693.8	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	1,509.7	1,476.3
Heavy and civil engineering	1,005.4	970.2	993.6	980.5	982.1	972.2	970.9	966.1	960.2	952.6	942.5	933.2	926.6	920.5	910.1
Speciality trade contractors	4,850.2	4,585.3	4,694.5	4,662.3	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	4,168.8	4,086.2
Manufacturing	13,879	13,431	13,643	13,586	13,556	13,505	13,454	13,387	13,322	13,203	13,082	12,902	12,640	12,471	12,310
Production workers	9,975	9,649	9,853	9,795	9,770	9,723	9,672	9,608	9,543	9,425	9,322	9,174	8,946	8,800	8,654
Durable goods	8,808	8,476	8,637	8,587	8,567	8,533	8,502	8,439	8,392	8,300	8,216	8,085	7,881	7,753	7,628
Production workers	6,250	5,986	6,146	6,099	6,077	6,040	6,006	5,948	5,898	5,805	5,741	5,633	5,458	5,348	5,233
Wood products	515.3	459.6	479.8	477.3	468.3	462.9	458.4	451.9	446.4	438.8	429.8	416.2	403.9	389.4	389.2
Nonmetallic mineral products	500.5	468.1	479.4	477.2	473.0	469.7	466.4	464.5	460.2	458.2	450.1	441.2	434.3	424.5	415.2
Primary metals	455.8	443.3	450.9	449.7	447.9	446.6	444.8	440.8	441.1	438.6	429.8	419.6	409.3	395.5	387.0
Fabricated metal products	1,562.8	1,528.3	1,557.5	1,546.0	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	1,398.5	1,370.8
Machinery	1,187.1	1,185.6	1,193.8	1,193.1	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	1,100.6	1,073.6
Computer and electronic products[1]	1,272.5	1,247.6	1,257.9	1,255.7	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	1,198.6	1,193.3
Computer and peripheral equipment	186.2	182.8	183.8	184.0	183.6	182.1	182.5	182.6	182.8	182.4	181.8	180.0	180.3	176.6	175.1
Communications equipment	128.1	129.0	128.3	129.1	129.1	130.2	129.1	129.1	129.2	128.6	129.5	129.1	129.6	129.4	130.0
Semiconductors and electronic components	447.5	432.4	439.2	437.0	434.4	431.2	431.9	432.3	431.0	428.4	423.2	417.4	410.5	403.8	400.6
Electronic instruments	443.2	441.6	443.6	442.9	443.1	442.4	441.8	442.6	442.5	440.2	438.8	437.5	433.8	431.6	430.8
Electrical equipment and appliances	429.4	424.9	427.4	428.5	428.5	428.3	428.4	425.5	422.6	421.3	417.5	412.0	406.1	400.3	391.3
Transportation equipment	1,711.9	1,606.5	1,653.8	1,632.1	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	1,424.2	1,398.3
Furniture and related products	531.1	481.0	501.4	495.2	491.6	488.0	483.4	475.7	470.3	458.8	449.6	440.6	428.6	416.6	406.4
Miscellaneous manufacturing	641.7	630.8	635.2	632.5	631.4	629.0	627.9	630.1	629.4	628.5	624.2	618.4	611.0	604.5	602.4
Nondurable goods	5,071	4,955	5,006	4,999	4,989	4,972	4,952	4,948	4,930	4,903	4,866	4,817	4,759	4,718	4,682
Production workers	3,725	3,663	3,707	3,696	3,693	3,683	3,666	3,660	3,645	3,620	3,581	3,541	3,488	3,452	3,421
Food manufacturing	1,484.1	1,484.8	1,485.7	1,483.2	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	1,467.0	1,464.2
Beverages and tobacco products	198.2	199.0	198.9	201.6	201.4	200.6	200.0	199.2	199.3	197.2	196.4	195.8	194.2	191.5	192.8
Textile mills	169.7	151.0	158.5	155.9	154.3	150.7	149.0	149.5	147.5	145.6	140.6	136.8	133.6	130.2	128.2
Textile product mills	157.7	147.5	151.0	150.1	149.1	147.1	146.2	145.2	145.5	144.5	143.5	141.2	137.4	134.3	129.4
Apparel	214.6	198.4	203.8	202.5	200.8	200.0	199.5	200.4	197.3	192.8	187.1	183.5	178.9	177.2	174.8
Leather and allied products	33.8	33.6	33.2	33.6	33.6	34.2	33.0	34.5	34.3	33.9	32.6	32.6	32.4	31.8	31.6
Paper and paper products	458.2	445.8	449.9	450.6	449.8	448.2	447.1	444.7	441.9	439.7	437.1	433.4	427.3	422.0	418.6
Printing and related support activities	622.1	594.1	607.4	605.6	601.2	594.8	591.5	591.5	587.6	582.3	574.1	567.0	558.1	550.0	542.1
Petroleum and coal products	114.5	117.1	116.3	115.9	117.1	117.6	118.1	118.0	117.9	117.8	117.2	116.9	114.2	114.6	114.4
Chemicals	860.9	849.8	854.0	854.1	854.2	852.8	850.0	847.3	844.3	843.4	842.6	837.1	832.7	829.7	825.8
Plastics and rubber products	757.2	734.2	747.3	745.5	744.3	743.4	739.3	734.7	729.7	721.1	705.9	694.9	679.7	669.5	659.7
SERVICE-PROVIDING	115,366	115,646	116,014	115,975	115,905	115,849	115,796	115,702	115,485	115,289	114,941	114,542	114,206	113,840	113,482
PRIVATE SERVICE-PROVIDING	93,147	93,146	93,573	93,524	93,417	93,327	93,259	93,146	92,950	92,750	92,398	92,010	91,666	91,297	90,944
Trade, transportation, and utilities	26,630	26,385	26,629	26,562	26,503	26,467	26,425	26,354	26,257	26,157	26,005	25,843	25,735	25,614	25,502
Wholesale trade	6,015.2	5,963.7	6,012.5	5,995.9	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	5,778.9	5,747.7
Durable goods	3,121.5	3,060.7	3,099.8	3,087.2	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	2,928.3	2,901.9
Nondurable goods	2,062.2	2,053.0	2,063.0	2,060.9	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	2,009.2	2,006.0
Electronic markets and agents and brokers	831.5	850.1	849.7	847.8	847.4	849.9	851.2	852.9	855.9	853.5	851.8	847.0	845.8	841.4	839.8
Retail trade	15,520.0	15,356.3	15,506.0	15,457.6	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	14,940.7	14,892.9
Motor vehicles and parts dealers[1]	1,908.3	1,844.5	1,890.9	1,885.1	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	1,716.4	1,700.3
Automobile dealers	1,242.2	1,186.0	1,227.6	1,220.9	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	1,078.8	1,066.9
Furniture and home furnishings stores	574.6	542.8	550.4	549.5	547.6	546.5	545.8	542.3	538.4	532.4	522.6	514.2	508.3	500.0	497.7
Electronics and appliance stores	549.4	549.6	552.9	554.5	555.0	552.9	553.0	551.0	547.1	545.1	541.5	538.6	535.5	536.4	526.2

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
Building material and garden supply stores	1,309.3	1,253.1	1,264.9	1,254.5	1,256.0	1,252.2	1,244.1	1,245.9	1,248.4	1,245.9	1,235.8	1,227.8	1,214.9	1,206.4	1,193.0
Food and beverage stores	2,843.6	2,858.4	2,874.7	2,866.7	2,864.0	2,863.2	2,863.4	2,853.8	2,846.5	2,851.9	2,843.5	2,835.1	2,835.3	2,827.1	2,826.7
Health and personal care stores	993.1	1,002.4	1,007.7	1,006.9	1,004.8	1,003.6	1,005.4	999.0	998.9	995.9	989.4	991.2	985.7	986.0	985.1
Gasoline stations	861.5	843.4	854.2	848.5	838.1	845.8	843.0	840.9	834.8	836.1	836.9	834.4	833.0	832.2	831.3
Clothing and clothing accessories stores	1,500.0	1,484.2	1,498.2	1,495.0	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	1,443.6	1,437.4
Sporting goods, hobby, book, and music stores	656.3	646.7	653.8	646.2	649.2	646.9	642.2	645.8	641.6	641.2	633.1	624.3	620.8	613.8	611.4
General merchandise stores[1]	3,020.6	3,047.1	3,060.7	3,052.9	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	3,043.4	3,057.2
Department stores	1,591.5	1,557.0	1,583.5	1,576.4	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	1,533.7	1,533.4
Miscellaneous store retailers	865.4	847.8	854.5	855.0	851.8	849.4	848.3	845.6	844.3	845.0	838.3	825.0	819.5	815.7	808.3
Nonstore retailers	437.9	436.3	443.1	442.8	441.9	438.5	437.7	436.1	435.5	433.6	427.7	424.0	422.7	419.7	418.3
Transportation and warehousing	4,540.9	4,505.0	4,553.4	4,551.7	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	4,324.0	4,290.0
Air transportation	491.8	492.6	505.4	501.9	498.3	494.9	492.9	488.1	483.2	482.1	481.6	477.8	476.8	475.1	473.0
Rail transportation	233.7	229.5	231.4	231.1	230.3	227.1	230.1	228.8	227.6	229.5	229.0	226.8	227.1	225.3	224.9
Water transportation	65.5	65.2	66.0	66.2	65.8	66.1	66.4	64.9	64.5	63.9	62.6	60.3	59.7	60.5	59.8
Truck transportation	1,439.2	1,391.1	1,414.6	1,410.4	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	1,310.4	1,295.5
Transit and ground passenger transportation	412.1	418.1	420.0	423.0	418.8	421.9	420.8	422.7	414.4	413.8	411.7	410.1	408.1	406.6	405.0
Pipeline transportation	39.9	42.0	40.8	40.9	41.7	42.3	42.7	42.5	43.1	43.3	43.2	43.3	43.1	43.0	42.8
Scenic and sightseeing transportation	28.6	28.0	28.7	28.4	28.1	28.1	27.6	27.3	27.1	27.1	27.2	27.2	26.9	26.6	26.4
Support activities for transportation	584.2	589.9	591.2	593.0	591.5	590.9	592.8	592.1	589.5	588.0	582.2	579.5	569.3	560.4	553.2
Couriers and messengers	580.7	575.9	577.5	577.8	578.9	579.2	577.7	575.7	572.9	570.5	565.7	564.6	563.2	563.7	558.6
Warehousing and storage	665.2	672.8	677.8	679.0	677.8	677.5	675.8	673.6	670.9	668.4	663.2	659.5	656.9	652.4	650.8
Utilities	553.4	559.5	557.4	557.1	557.0	558.2	559.7	559.3	560.5	562.8	564.0	564.6	569.3	570.0	570.9
Information	3,032	2,997	3,023	3,017	3,013	3,006	2,995	2,990	2,986	2,982	2,965	2,940	2,924	2,917	2,907
Publishing industries, except Internet	901.2	882.6	893.3	893.2	890.4	886.8	882.9	879.4	876.6	872.6	863.6	857.8	846.3	834.8	827.2
Motion picture and sound recording industries	380.6	381.6	385.2	384.5	383.3	383.5	380.1	380.0	381.7	388.7	385.0	377.2	376.7	389.0	395.0
Broadcasting, except Internet.	325.2	315.9	319.0	317.3	317.7	315.7	315.9	313.8	313.0	312.9	313.1	308.1	306.5	302.3	299.7
Internet publishing and broadcasting															
Telecommunications	1,030.6	1,021.4	1,028.0	1,025.5	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	1,000.3	996.4
ISPs, search portals, and data processing	267.8	261.6	263.4	263.2	263.3	261.8	260.5	259.8	259.6	258.9	257.5	256.4	257.0	255.4	255.2
Other information services	126.3	133.6	134.2	132.9	132.5	132.2	133.0	133.6	133.6	134.1	135.1	136.5	135.7	134.9	133.7
Financial activities	8,301	8,146	8,204	8,190	8,179	8,162	8,154	8,141	8,115	8,088	8,043	8,010	7,954	7,910	7,867
Finance and insurance	6,132.0	6,015.2	6,055.8	6,050.8	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	5,863.3	5,838.0
Monetary authorities—central bank	21.6	22.2	22.4	22.7	22.5	22.3	22.3	22.3	22.3	22.1	21.5	21.3	21.0	21.0	20.8
Credit intermediation and related activities[1]	2,866.3	2,735.8	2,763.3	2,756.6	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	2,652.9	2,637.7
Depository credit intermediation[1]	1,823.5	1,819.5	1,824.9	1,827.9	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	1,792.7	1,785.2
Commercial banking	1,351.4	1,359.9	1,362.0	1,363.4	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	1,342.4	1,336.0
Securities, commodity contracts, investments	848.6	858.1	867.5	867.4	865.8	864.4	860.4	861.4	851.4	847.8	842.1	839.9	826.5	819.7	812.4
Insurance carriers and related activities	2,306.8	2,308.8	2,313.3	2,313.4	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	2,279.0
Funds, trusts, and other financial vehicles	88.7	90.3	89.3	90.7	90.0	90.3	90.2	90.5	90.6	91.4	91.4	90.0	90.2	88.6	88.1
Real estate and rental and leasing	2,169.1	2,130.2	2,148.5	2,139.6	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	2,047.0	2,029.1
Real estate	1,500.4	1,481.1	1,489.4	1,486.9	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	1,435.1	1,423.4
Rental and leasing services	640.3	620.9	630.6	624.3	624.8	622.5	624.4	619.4	617.7	609.7	603.8	599.3	589.9	583.6	577.1
Lessors of nonfinancial intangible assets	28.4	28.2	28.5	28.4	27.9	27.9	28.5	28.2	28.4	28.1	28.3	28.3	28.4	28.3	28.6
Professional and business services	17,942	17,778	17,954	17,950	17,887	17,824	17,788	17,727	17,675	17,612	17,488	17,356	17,205	17,027	16,894
Professional and technical services[1]	7,659.5	7,829.7	7,818.8	7,833.7	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	7,728.8	7,697.5
Legal services	1,175.4	1,163.7	1,168.8	1,166.6	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	1,149.2	1,146.5
Accounting and bookkeeping services	935.9	950.1	948.8	954.1	944.9	948.3	947.5	947.9	945.6	946.4	941.0	933.7	927.5	926.3	927.9
Architectural and engineering services	1,432.2	1,444.8	1,450.9	1,451.7	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	1,392.5	1,376.2

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
Computer systems design and related services	1,372.1	1,450.3	1,432.4	1,441.7	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	1,463.9	1,460.0
Management and technical consulting services	952.7	1,008.9	997.1	999.2	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	1,020.6	1,014.5
Management of companies and enterprises	1,866.4	1,894.6	1,906.7	1,903.8	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	1,865.3	1,859.0
Administrative and waste services	8,416.3	8,053.7	8,228.2	8,212.0	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	7,432.9	7,337.3
Administrative and support services[1]	8,061.3	7,693.5	7,870.7	7,853.6	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	7,070.9	6,976.6
Employment services[1]	3,545.9	3,144.4	3,304.7	3,285.6	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	2,628.4	2,540.0
Temporary help services	2,597.4	2,342.6	2,486.8	2,464.0	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	1,888.5	1,816.8
Business support services	817.4	823.2	831.1	828.4	822.6	818.1	817.4	814.9	818.1	820.8	823.7	816.0	817.6	806.8	804.4
Services to buildings and dwellings	1,849.5	1,847.0	1,853.7	1,853.8	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	1,798.7	1,791.1
Waste management and remediation services	355.0	360.2	357.5	358.4	358.9	358.5	359.3	361.6	361.3	362.8	364.1	361.9	364.4	362.0	360.7
Educational and health services	18,322	18,855	18,698	18,752	18,798	18,843	18,888	18,950	18,957	18,981	19,044	19,080	19,119	19,141	19,149
Educational services	2,941.4	3,036.6	3,006.5	3,017.4	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	3,087.1	3,080.3
Health care and social assistance	15,380.2	15,818.5	15,691.1	15,734.1	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	16,053.5	16,068.3
Ambulatory health care services[1]	5,473.5	5,660.7	5,599.3	5,622.6	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	5,768.2	5,775.9
Offices of physicians	2,201.6	2,265.7	2,243.7	2,251.8	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	2,304.9	2,308.1
Outpatient care centers	512.0	532.5	527.5	530.4	531.5	531.2	535.4	537.2	534.8	536.6	536.9	536.7	538.0	538.5	539.2
Home health care services	913.8	958.0	943.3	948.7	951.8	955.3	961.1	963.4	966.8	968.6	975.6	980.7	981.4	989.5	992.2
Hospitals	4,515.0	4,641.1	4,599.1	4,610.4	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	4,710.6	4,709.9
Nursing and residential care facilities[1]	2,958.3	3,008.1	3,001.3	3,006.1	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	3,034.1	3,040.6
Nursing care facilities	1,602.6	1,613.7	1,614.7	1,615.0	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	1,617.7	1,620.7
Social assistance[1]	2,433.4	2,508.7	2,491.4	2,495.0	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	2,540.6	2,541.9
Child day care services	850.4	859.2	861.7	859.9	863.3	853.8	844.6	851.6	862.5	862.3	863.2	864.3	862.7	861.4	858.8
Leisure and hospitality	13,427	13,459	13,528	13,512	13,495	13,490	13,473	13,454	13,428	13,395	13,344	13,304	13,268	13,240	13,200
Arts, entertainment, and recreation	1,969.2	1,969.3	1,996.1	1,984.9	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	1,943.7	1,935.1
Performing arts and spectator sports	405.0	406.3	409.3	409.5	409.4	409.7	406.9	406.2	402.9	402.5	398.8	401.4	405.7	403.7	403.1
Museums, historical sites, zoos, and parks	130.3	131.8	133.2	132.9	133.9	132.2	132.1	132.1	130.6	129.6	130.6	130.8	130.3	130.6	129.5
Amusements, gambling, and recreation	1,433.9	1,431.2	1,453.6	1,442.5	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	1,409.4	1,402.5
Accommodations and food services	11,457.4	11,489.3	11,532.0	11,527.5	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	11,296.2	11,264.7
Accommodations	1,866.9	1,857.3	1,883.9	1,881.1	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	1,750.9	1,728.3
Food services and drinking places	9,590.4	9,632.0	9,648.1	9,646.4	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	9,545.3	9,536.4
Other services	5,494	5,528	5,537	5,541	5,542	5,535	5,536	5,530	5,532	5,535	5,509	5,477	5,461	5,448	5,425
Repair and maintenance	1,253.4	1,228.2	1,242.2	1,242.2	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	1,176.7	1,166.4
Personal and laundry services	1,309.7	1,326.6	1,324.2	1,324.9	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	1,313.3	1,304.7
Membership associations and organizations	2,931.1	2,973.3	2,970.2	2,973.5	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	2,958.1	2,953.8
Government	22,218	22,500	22,441	22,451	22,488	22,522	22,537	22,556	22,535	22,539	22,543	22,532	22,540	22,543	22,538
Federal	2,734	2,764	2,751	2,758	2,763	2,765	2,776	2,768	2,771	2,775	2,783	2,778	2,793	2,795	2,802
Federal, except U.S. Postal Service	1,964.7	2,016.8	1,989.6	1,996.4	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	2,070.7	2,079.1
U.S. Postal Service	769.1	747.5	761.5	761.3	755.7	750.5	755.8	740.6	736.5	731.9	730.1	720.9	726.9	724.0	722.8
State	5,122	5,178	5,152	5,159	5,167	5,175	5,184	5,204	5,192	5,194	5,197	5,196	5,192	5,187	5,184
Education	2,317.5	2,359.0	2,334.7	2,340.0	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	2,378.8	2,379.2
Other State government	2,804.3	2,818.9	2,817.3	2,819.4	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	2,808.5	2,804.6
Local	14,362	14,557	14,538	14,534	14,558	14,582	14,577	14,584	14,572	14,570	14,563	14,558	14,555	14,561	14,552
Education	7,986.8	8,075.6	8,076.4	8,066.2	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	8,081.1	8,080.3
Other local government	6,375.5	6,481.8	6,461.5	6,467.6	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	6,479.5	6,471.8

[1] Includes other industries not shown separately.

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

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
TOTAL PRIVATE	33.9	33.6	33.8	33.8	33.7	33.6	33.6	33.7	33.6	33.5	33.4	33.3	33.3	33.3	33.2
GOODS-PRODUCING	40.6	40.2	40.6	40.4	40.2	40.3	40.3	40.2	39.9	39.8	39.5	39.4	39.3	39.2	38.9
Natural resources and mining	45.9	45.1	46.2	45.0	44.6	44.9	44.8	45.3	44.5	44.7	45.3	44.3	44.2	44.0	43.2
Construction	39.0	38.5	38.9	38.9	38.5	38.7	38.7	38.6	38.3	38.3	37.7	38.0	37.9	38.1	37.8
Manufacturing	41.2	40.8	41.2	41.0	40.9	40.9	41.0	40.8	40.5	40.4	40.2	39.9	39.8	39.5	39.3
Overtime hours	4.2	3.7	4.0	4.0	3.9	3.8	3.7	3.7	3.5	3.5	3.2	2.9	2.9	2.7	2.7
Durable goods	41.5	41.1	41.5	41.4	41.2	41.2	41.2	41.1	40.6	40.6	40.4	40.0	39.8	39.5	39.3
Overtime hours	4.2	3.7	4.1	4.0	3.9	3.8	3.7	3.7	3.4	3.4	3.1	2.8	2.7	2.5	2.5
Wood products	39.4	38.6	38.7	38.6	39.0	39.1	38.8	38.8	38.4	38.1	37.6	36.8	36.9	37.0	36.8
Nonmetallic mineral products	42.3	42.1	43.2	42.3	42.3	42.0	42.6	42.2	41.9	41.8	40.9	40.9	40.2	40.0	39.8
Primary metals	42.9	42.2	43.0	42.6	42.4	42.5	42.2	42.5	41.8	41.4	40.9	40.5	40.4	39.9	40.1
Fabricated metal products	41.6	41.3	41.8	41.6	41.5	41.2	41.2	41.1	40.9	40.8	40.8	40.3	39.7	39.4	38.9
Machinery	42.6	42.3	42.8	42.5	42.2	42.1	42.1	42.5	42.1	41.8	41.4	41.1	40.9	40.5	40.2
Computer and electronic products	40.6	41.0	41.0	41.1	41.1	41.2	41.1	41.0	40.8	40.8	41.3	40.4	40.7	40.5	39.9
Electrical equipment and appliances	41.2	40.9	41.3	41.0	41.1	40.9	40.8	40.8	41.0	40.4	40.2	39.7	39.4	38.8	38.2
Transportation equipment	42.8	42.0	42.4	42.5	41.9	42.1	42.6	41.7	40.9	41.3	40.9	40.9	40.4	40.1	40.1
Furniture and related products	39.2	38.1	38.7	38.7	38.8	38.7	38.3	37.9	37.4	37.4	37.2	37.3	37.7	37.5	37.9
Miscellaneous manufacturing	38.9	38.9	39.2	39.3	39.2	39.0	39.1	39.4	38.7	38.9	38.5	38.3	38.4	38.2	38.2
Nondurable goods	40.8	40.4	40.7	40.5	40.5	40.4	40.6	40.4	40.2	40.2	39.9	39.7	39.7	39.4	39.4
Overtime hours	4.1	3.7	3.9	3.9	3.8	3.8	3.7	3.8	3.6	3.6	3.4	3.1	3.2	3.0	3.0
Food manufacturing	40.7	40.5	40.8	40.8	40.8	40.6	40.6	40.5	40.3	40.3	39.9	39.8	40.1	39.9	40.0
Beverage and tobacco products	40.7	38.8	40.1	39.4	39.5	38.8	38.7	38.2	38.2	38.1	37.9	36.7	37.0	36.8	35.7
Textile mills	40.3	38.7	38.8	38.4	38.9	38.8	39.2	39.5	38.9	38.4	37.7	37.0	37.1	36.5	36.6
Textile product mills	39.7	38.6	39.3	38.3	38.7	38.9	39.1	38.7	38.1	37.9	37.9	37.1	37.0	37.0	37.0
Apparel	37.2	36.4	36.7	36.6	36.0	36.4	37.0	36.5	35.9	36.3	36.2	36.0	36.0	35.6	36.1
Leather and allied products	38.2	37.5	38.6	38.6	38.8	38.4	38.2	37.5	37.5	36.9	34.4	34.7	34.0	33.1	33.3
Paper and paper products	43.1	42.9	43.6	43.3	42.6	42.7	42.6	42.9	42.4	42.2	42.1	41.9	41.6	41.5	41.1
Printing and related support activities	39.1	38.3	38.6	38.5	38.6	38.1	38.0	38.2	38.3	38.3	38.2	38.0	37.7	37.5	37.5
Petroleum and coal products	44.1	44.6	43.7	43.2	44.1	44.6	45.5	45.6	45.2	45.2	44.4	45.3	45.1	43.8	43.9
Chemicals	41.9	41.5	41.9	41.3	41.2	41.6	41.9	41.4	41.3	41.5	41.3	41.1	41.1	41.0	40.9
Plastics and rubber products	41.3	41.0	41.2	41.0	40.9	41.0	41.3	41.0	40.7	40.6	40.6	40.0	39.9	39.5	39.4
PRIVATE SERVICE-PROVIDING	32.4	32.3	32.4	32.4	32.4	32.3	32.3	32.4	32.3	32.3	32.2	32.2	32.2	32.1	32.1
Trade, transportation, and utilities	33.3	33.2	33.3	33.3	33.2	33.2	33.2	33.2	33.2	33.1	33.0	32.9	32.9	32.8	32.8
Wholesale trade	38.2	38.2	38.4	38.3	38.3	38.3	38.4	38.3	38.1	38.2	38.1	37.8	38.1	37.9	37.7
Retail trade	30.2	30.0	30.2	30.2	30.1	30.0	30.0	30.0	30.1	29.9	29.8	29.7	29.7	29.8	29.7
Transportation and warehousing	37.0	36.4	36.6	36.6	36.4	36.4	36.4	36.4	36.4	36.3	36.1	36.2	36.0	35.7	36.0
Utilities	42.4	42.7	43.2	42.6	42.5	43.0	42.4	42.3	42.7	42.5	42.4	42.9	42.6	43.1	42.2
Information	36.5	36.7	36.5	36.6	36.6	36.7	36.7	36.8	36.9	36.9	37.0	37.0	37.2	36.9	36.8
Financial activities	35.9	35.8	35.8	35.9	35.9	35.8	35.7	36.1	36.0	35.9	36.1	35.9	36.2	36.2	36.1
Professional and business services	34.8	34.8	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
Education and health services	32.6	32.5	32.7	32.6	32.7	32.5	32.5	32.6	32.5	32.5	32.4	32.4	32.4	32.3	32.4
Leisure and hospitality	25.5	25.2	25.3	25.4	25.3	25.3	25.2	25.2	25.2	25.1	25.0	25.0	24.8	25.0	24.8
Other services	30.9	30.8	30.9	30.8	30.8	30.7	30.8	30.9	30.7	30.7	30.7	30.6	30.7	30.6	30.6

[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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
TOTAL PRIVATE															
Current dollars	$17.43	$18.08	$17.90	$17.94	$17.99	$18.04	$18.10	$18.18	$18.21	$18.28	$18.34	$18.40	$18.43	$18.47	$18.50
Constant (1982) dollars	8.33	8.30	8.28	8.29	8.27	8.20	8.16	8.20	8.21	8.33	8.54	8.65	8.64	8.62	8.64
GOODS-PRODUCING	18.67	19.33	19.17	19.16	19.20	19.27	19.36	19.43	19.48	19.56	19.63	19.69	19.72	19.78	19.84
Natural resources and mining	20.97	22.50	22.28	21.77	21.79	22.04	22.54	23.01	23.08	23.03	23.28	23.23	23.14	23.12	23.30
Construction	20.95	21.87	21.58	21.62	21.72	21.77	21.85	22.02	22.09	22.17	22.28	22.41	22.43	22.44	22.61
Manufacturing	17.26	17.74	17.64	17.64	17.68	17.73	17.80	17.78	17.81	17.89	17.94	17.96	17.99	18.06	18.08
Excluding overtime	16.43	16.97	16.82	16.82	16.88	16.94	17.03	17.01	17.07	17.15	17.25	17.33	17.36	17.46	17.48
Durable goods	18.20	18.70	18.58	18.61	18.63	18.70	18.78	18.74	18.74	18.84	18.91	18.94	18.99	19.07	19.16
Nondurable goods	15.67	16.15	16.05	16.01	16.08	16.11	16.16	16.19	16.28	16.35	16.37	16.39	16.43	16.50	16.44
PRIVATE SERVICE-PROVIDING	17.11	17.77	17.58	17.63	17.69	17.74	17.79	17.87	17.90	17.97	18.03	18.10	18.14	18.17	18.20
Trade,transportation, and utilities	15.78	16.16	16.07	16.08	16.13	16.16	16.17	16.23	16.20	16.23	16.29	16.31	16.36	16.38	16.38
Wholesale trade	19.59	20.14	20.04	20.05	20.07	20.11	20.15	20.28	20.20	20.22	20.29	20.31	20.41	20.49	20.56
Retail trade	12.75	12.87	12.83	12.84	12.87	12.87	12.88	12.92	12.91	12.89	12.93	12.94	12.97	12.96	12.98
Transportation and warehousing	17.72	18.41	18.25	18.31	18.39	18.41	18.42	18.48	18.47	18.58	18.66	18.66	18.72	18.72	18.69
Utilities	27.88	28.84	28.79	28.54	28.81	29.12	28.67	28.89	28.86	28.91	28.91	29.16	29.22	29.67	29.25
Information	23.96	24.77	24.58	24.56	24.71	24.78	24.87	24.95	24.90	24.99	24.94	24.91	24.98	25.07	25.19
Financial activities	19.64	20.27	20.12	20.17	20.23	20.24	20.26	20.37	20.43	20.43	20.41	20.53	20.53	20.56	20.64
Professional and business services	20.15	21.19	20.78	20.90	20.96	21.08	21.19	21.38	21.47	21.63	21.78	21.97	22.04	22.20	22.33
Education and health services	18.11	18.88	18.69	18.74	18.80	18.84	18.92	18.96	19.04	19.08	19.13	19.20	19.18	19.23	19.21
Leisure and hospitality	10.41	10.84	10.75	10.81	10.83	10.85	10.87	10.89	10.90	10.92	10.90	10.94	10.97	10.98	10.98
Other services	15.42	16.08	15.94	16.00	16.04	16.09	16.13	16.17	16.20	16.24	16.29	16.29	16.30	16.25	16.24

[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.

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

Industry	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
TOTAL PRIVATE	$17.43	$18.08	$17.97	$17.95	$17.94	$18.00	$18.02	$18.10	$18.25	$18.27	$18.40	$18.40	$18.49	$18.57	$18.56
Seasonally adjusted	–	–	17.90	17.94	17.99	18.04	18.10	18.18	18.21	18.28	18.34	18.40	18.43	18.47	18.50
GOODS-PRODUCING	18.67	19.33	19.06	19.09	19.15	19.26	19.39	19.53	19.63	19.61	19.65	19.75	19.64	19.64	19.72
Natural resources and mining	20.97	22.50	22.29	21.78	21.52	21.75	22.45	23.06	23.19	22.98	23.31	23.53	23.41	23.20	23.28
Construction	20.95	21.87	21.44	21.49	21.61	21.69	21.90	22.16	22.34	22.28	22.32	22.52	22.32	22.26	22.48
Manufacturing	17.26	17.74	17.62	17.64	17.65	17.73	17.73	17.75	17.84	17.86	17.94	18.06	18.03	18.07	18.07
Durable goods	18.20	18.70	18.56	18.59	18.60	18.70	18.66	18.72	18.80	18.81	18.92	19.06	18.99	19.08	19.16
Wood products	13.68	14.20	13.92	14.00	14.11	14.16	14.25	14.25	14.37	14.44	14.58	14.66	14.69	14.76	14.70
Nonmetallic mineral products	16.93	16.90	16.79	17.12	16.89	16.97	16.93	16.85	16.94	16.92	16.85	16.73	16.82	17.05	17.23
Primary metals	19.66	20.18	20.23	20.21	20.24	20.26	20.43	20.28	20.36	20.01	19.98	20.05	19.80	19.68	19.62
Fabricated metal products	16.53	16.99	16.86	16.82	16.85	16.93	16.94	17.08	17.14	17.18	17.21	17.36	17.24	17.29	17.31
Machinery	17.72	17.97	17.87	17.91	18.01	17.90	17.96	17.97	18.08	18.11	18.18	18.15	18.16	18.21	18.32
Computer and electronic products	19.94	21.03	20.76	20.86	20.95	21.02	21.11	21.21	21.23	21.42	21.37	21.44	21.46	21.37	21.60
Electrical equipment and appliances	15.93	15.78	15.64	15.74	15.66	15.72	15.85	15.94	15.99	15.83	15.74	15.88	15.81	15.94	15.99
Transportation equipment	23.04	23.83	23.52	23.59	23.59	23.86	23.75	23.88	24.05	24.10	24.37	24.58	24.66	24.68	24.79
Furniture and related products	14.32	14.54	14.42	14.45	14.48	14.58	14.52	14.59	14.54	14.55	14.77	14.92	14.95	14.86	14.96
Miscellaneous manufacturing	14.66	15.19	15.08	14.96	14.97	15.15	15.35	15.33	15.31	15.33	15.42	15.60	15.66	15.97	15.97
Nondurable goods	15.67	16.15	16.01	16.03	16.05	16.08	16.20	16.15	16.30	16.32	16.35	16.43	16.51	16.49	16.39
Food manufacturing	13.55	14.00	13.85	13.88	13.91	13.97	14.03	14.02	14.15	14.10	14.17	14.26	14.34	14.29	14.25
Beverages and tobacco products	18.54	19.35	19.73	19.41	19.19	18.74	19.02	18.60	18.97	19.41	19.98	19.95	20.07	20.33	20.37
Textile mills	13.00	13.57	13.45	13.45	13.50	13.58	13.77	13.67	13.72	13.71	13.69	13.80	13.90	13.71	13.77
Textile product mills	11.78	11.73	11.77	11.77	11.86	11.80	11.80	11.78	11.81	11.62	11.59	11.72	11.59	11.53	11.33
Apparel	11.05	11.40	11.35	11.51	11.43	11.35	11.35	11.28	11.48	11.38	11.35	11.38	11.46	11.44	11.27
Leather and allied products	12.04	12.96	12.81	12.63	12.88	12.88	12.85	12.94	12.98	13.14	13.61	13.47	14.10	14.31	14.25
Paper and paper products	18.44	18.88	18.70	18.64	18.79	18.93	19.11	18.81	19.04	19.11	18.89	19.11	19.27	18.99	18.86
Printing and related support activities	16.15	16.75	16.64	16.63	16.66	16.77	16.81	16.83	16.90	16.99	16.86	17.01	16.79	16.85	16.76
Petroleum and coal products	25.21	27.46	27.06	26.96	26.85	26.99	27.54	27.69	28.25	28.69	28.28	28.17	29.13	29.57	29.66
Chemicals	19.55	19.49	19.31	19.35	19.33	19.29	19.41	19.53	19.77	19.67	19.77	19.72	19.89	19.92	19.76
Plastics and rubber products	15.39	15.85	15.72	15.80	15.74	15.72	15.87	15.86	15.94	16.03	16.13	16.24	16.24	16.23	16.17
PRIVATE SERVICE-PROVIDING	17.11	17.77	17.70	17.67	17.64	17.68	17.68	17.73	17.90	17.94	18.10	18.09	18.23	18.33	18.31
Trade, transportation, and utilities	15.78	16.16	16.14	16.13	16.12	16.17	16.18	16.21	16.27	16.24	16.26	16.14	16.37	16.47	16.43
Wholesale trade	19.59	20.14	20.08	20.01	19.93	20.05	20.12	20.23	20.20	20.21	20.41	20.36	20.44	20.64	20.63
Retail trade	12.75	12.87	12.88	12.89	12.89	12.90	12.92	12.93	13.01	12.89	12.85	12.74	12.96	12.98	13.02
Transportation and warehousing	17.72	18.41	18.20	18.30	18.35	18.46	18.54	18.52	18.53	18.55	18.69	18.62	18.68	18.77	18.62
Utilities	27.88	28.84	28.90	28.70	28.84	29.02	28.49	28.64	28.95	29.00	28.96	29.28	29.27	29.68	29.38
Information	23.96	24.77	24.62	24.56	24.65	24.78	24.75	24.87	25.03	25.06	25.03	24.86	25.03	25.11	25.26
Financial activities	19.64	20.27	20.17	20.21	20.19	20.26	20.19	20.29	20.42	20.41	20.54	20.50	20.48	20.67	20.69
Professional and business services	20.15	21.19	21.00	20.91	20.88	21.09	21.06	21.12	21.31	21.45	21.97	22.01	22.16	22.52	22.56
Education and health services	18.11	18.88	18.74	18.75	18.76	18.79	18.96	18.95	19.08	19.04	19.10	19.23	19.26	19.25	19.22
Leisure and hospitality	10.41	10.84	10.77	10.81	10.83	10.78	10.73	10.79	10.89	10.93	10.93	11.05	11.03	11.07	10.99
Other services	15.42	16.08	16.11	16.09	16.11	16.10	16.06	16.10	16.22	16.17	16.24	16.27	16.34	16.33	16.37

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
TOTAL PRIVATE	$590.04	$607.99	$607.39	$603.12	$602.78	$613.80	$607.27	$613.59	$613.20	$613.87	$620.08	$610.88	$608.32	$616.52	$616.19
Seasonally adjusted	–	–	605.02	606.37	606.26	606.14	608.16	612.67	611.86	612.38	612.56	612.72	613.72	615.05	614.20
GOODS-PRODUCING	757.34	776.60	770.02	767.42	769.83	783.88	781.42	794.87	791.09	788.32	782.07	778.15	762.03	758.10	763.16
Natural resources and mining	962.64	1,013.78	1,018.65	969.21	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	1,006.88	991.73
CONSTRUCTION	816.66	842.36	825.44	825.22	834.15	854.59	858.48	875.32	869.03	866.69	845.93	840.00	828.07	823.62	838.50
Manufacturing	711.56	724.23	724.18	723.24	721.89	730.48	719.84	727.75	729.66	726.90	726.57	727.82	712.19	708.34	708.34
Durable goods	754.77	767.56	768.38	767.77	766.32	776.05	761.33	775.01	770.80	767.45	766.26	771.93	750.11	747.94	751.07
Wood products	539.34	547.81	533.14	540.40	554.52	566.40	560.03	561.45	561.87	551.61	549.67	538.02	524.43	531.36	532.14
Nonmetallic mineral products	716.78	711.30	715.25	722.46	717.83	724.62	726.30	726.24	725.03	719.10	692.54	677.57	654.30	658.13	675.42
Primary metals	843.26	850.84	869.89	854.88	854.13	871.18	860.10	865.96	861.23	832.42	817.18	818.04	797.94	779.33	786.76
Fabricated metal products	687.20	701.47	703.06	699.71	697.59	699.21	692.85	707.11	707.88	707.82	707.33	706.55	680.98	677.77	671.63
Machinery	754.19	759.92	764.84	761.18	758.22	755.38	750.73	763.73	764.78	760.62	758.11	755.04	740.93	737.51	734.63
Computer and electronic products	808.80	861.43	851.16	853.17	861.05	872.33	861.29	869.61	874.68	876.08	891.13	883.33	866.98	861.21	861.84
Electrical equipment and appliances	656.46	645.60	644.37	643.77	638.93	647.66	640.34	650.35	660.39	645.86	642.19	646.32	621.33	613.69	607.62
Transportation equipment	986.79	999.94	999.60	1,002.58	988.42	1,016.44	978.50	1,002.96	990.86	1,002.56	994.30	1,022.53	993.80	989.67	994.08
Furniture and related products	560.84	554.20	555.17	553.44	557.48	571.54	557.57	566.09	549.61	542.72	546.49	563.98	559.13	548.33	565.49
Miscellaneous manufacturing	569.99	591.73	594.15	586.43	583.83	595.40	594.05	608.60	595.56	593.27	593.67	600.60	599.78	605.26	611.65
Nondurable goods	639.99	652.20	648.41	647.61	646.82	652.85	652.86	654.08	663.41	659.33	658.91	657.20	650.49	644.76	642.49
Food manufacturing	551.32	566.91	558.16	560.75	566.14	568.58	568.22	572.02	581.57	575.28	572.47	573.25	569.30	561.60	564.30
Beverages and tobacco products	755.22	750.18	787.23	770.58	765.68	738.36	741.78	716.10	720.86	729.82	767.23	726.18	728.54	740.01	721.10
Textile mills	524.40	524.93	521.86	515.14	522.45	529.62	535.65	542.70	544.68	525.09	520.22	514.74	510.13	493.56	502.61
Textile product mills	467.77	453.12	463.74	449.61	454.24	468.46	462.56	460.60	452.32	438.07	441.58	441.84	423.04	425.46	420.34
Apparel	411.39	415.17	418.82	423.57	412.62	415.41	416.55	410.59	409.84	411.96	414.28	410.82	407.98	403.83	409.10
Leather and allied products	459.50	486.49	499.59	491.31	502.32	501.03	485.73	481.37	486.75	484.87	462.74	476.84	470.94	465.08	475.95
Paper and paper products	795.58	809.21	809.71	805.25	791.06	806.42	808.35	806.95	818.72	812.18	802.83	814.09	797.78	782.39	767.60
Printing and related support activities	632.02	642.50	643.97	638.59	638.08	633.91	630.38	644.59	655.72	659.21	652.48	654.89	627.95	628.51	630.18
Petroleum and coal products	1,112.73	1,224.26	1,158.17	1,156.58	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	1,266.48
Chemicals	819.54	808.80	809.09	799.16	790.60	808.25	809.40	810.50	820.46	814.34	822.43	814.44	811.51	816.72	806.21
Plastics and rubber products	635.63	649.04	646.09	647.80	645.34	650.81	647.50	650.26	655.13	652.42	658.10	657.72	647.98	637.84	633.86
PRIVATE SERVICE-PROVIDING	554.89	574.31	575.25	568.97	569.77	579.90	572.83	576.23	578.17	577.67	588.25	578.88	579.71	592.06	589.58
Trade, transportation, and utilities	526.07	535.79	537.46	533.90	533.57	544.93	538.79	541.41	543.42	535.92	536.58	531.01	530.39	538.57	538.90
Wholesale trade	748.94	769.91	775.09	764.38	761.33	779.95	770.60	774.81	767.60	772.02	787.83	767.57	770.59	786.38	779.81
Retail trade	385.11	386.39	386.40	385.41	386.70	393.45	391.48	391.78	395.50	384.12	381.65	380.93	378.43	384.21	385.39
Transportation and warehousing	654.95	670.33	667.94	662.46	664.27	681.17	674.86	679.68	676.35	671.51	680.32	679.63	663.14	664.46	672.18
Utilities	1,182.65	1,231.19	1,242.70	1,225.49	1,222.82	1,250.76	1,205.13	1,205.74	1,244.85	1,238.30	1,236.59	1,256.11	1,243.98	1,282.18	1,233.96
Information	874.65	908.44	903.55	891.53	892.33	919.34	910.80	917.70	926.11	924.71	936.12	917.33	921.10	931.58	932.09
Financial activities	705.13	726.37	730.15	721.50	718.76	737.46	718.76	726.38	728.99	728.64	753.82	731.85	735.23	760.66	755.19
Professional and business services	700.82	738.25	737.10	727.67	726.62	748.70	730.78	739.20	739.46	750.75	775.54	761.55	762.30	785.95	787.34
Education and health services	590.09	614.30	612.80	607.50	609.70	614.43	618.10	617.77	620.10	616.90	624.57	621.13	622.10	625.63	622.73
Leisure and hospitality	265.52	273.27	272.48	272.41	274.00	280.28	276.83	278.38	272.25	273.25	273.25	270.73	264.72	276.75	272.55
Other services	477.06	494.99	497.80	493.96	494.58	500.71	496.25	500.71	497.95	496.42	501.82	496.24	498.37	501.33	500.92

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.
Dash indicates data not available.
p = preliminary.

17. Diffusion indexes of employment change, seasonally adjusted

[In percent]

Timespan and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	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	21.4	22.0									
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	15.3	16.4									
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	18.6	15.7									
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	22.5	20.1									
	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	11.4	15.7									
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	3.0	6.0									
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	6.0	3.6									
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	7.2									

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

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

Data for the two most recent months are preliminary.

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

Industry and region	Levels[1] (in thousands)							Percent						
	2008				2009			2008				2009		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
Total[2]	3,346	3,390	3,311	3,224	2,920	2,973	2,717	2.4	2.4	2.4	2.3	2.1	2.2	2.0
Industry														
Total private[2]	2,913	2,964	2,928	2,861	2,461	2,606	2,361	2.5	2.5	2.5	2.5	2.2	2.3	2.1
Construction	152	79	76	66	55	58	48	2.1	1.1	1.1	0.9	0.8	0.9	0.7
Manufacturing	236	230	203	188	115	141	123	1.7	1.7	1.5	1.4	0.9	1.1	1.0
Trade, transportation, and utilities	525	564	624	495	488	488	414	2.0	2.1	2.3	1.9	1.9	1.9	1.6
Professional and business services	608	603	505	562	501	482	431	3.3	3.3	2.8	3.1	2.8	2.8	2.5
Education and health services	624	646	697	685	636	589	558	3.2	3.3	3.5	3.5	3.2	3.0	2.8
Leisure and hospitality	427	417	302	315	272	332	296	3.1	3.0	2.2	2.3	2.0	2.4	2.2
Government	431	427	378	345	417	367	352	1.9	1.9	1.6	1.5	1.8	1.6	1.5
Region[3]														
Northeast	644	636	582	633	560	607	587	2.5	2.4	2.2	2.4	2.2	2.4	2.3
South	1,269	1,314	1,267	1,245	1,109	1,109	977	2.5	2.6	2.5	2.5	2.2	2.2	2.0
Midwest	674	698	644	607	587	563	510	2.1	2.2	2.0	1.9	1.9	1.8	1.7
West	785	734	767	689	655	638	570	2.5	2.3	2.5	2.2	2.1	2.1	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, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest**: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

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

[p] = preliminary.

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

Industry and region	Levels[1] (in thousands)							Percent						
	2008				2009			2008				2009		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
Total[2]	4,505	4,486	4,226	4,508	4,460	4,339	4,172	3.3	3.3	3.1	3.3	3.3	3.2	3.1
Industry														
Total private[2]	4,263	4,160	3,928	4,214	4,141	4,042	3,877	3.7	3.7	3.5	3.7	3.7	3.6	3.5
Construction	365	380	340	366	381	370	376	5.1	5.4	4.9	5.3	5.7	5.6	5.8
Manufacturing	305	290	257	252	237	257	245	2.3	2.2	2.0	2.0	1.9	2.1	2.0
Trade, transportation, and utilities	959	933	852	891	949	814	882	3.7	3.6	3.3	3.4	3.7	3.2	3.5
Professional and business services	787	788	783	786	762	730	688	4.5	4.5	4.5	4.5	4.4	4.3	4.1
Education and health services	506	544	528	528	539	527	489	2.7	2.9	2.8	2.8	2.8	2.8	2.6
Leisure and hospitality	814	769	706	711	743	704	703	6.1	5.7	5.3	5.3	5.6	5.3	5.3
Government	278	318	281	271	306	275	269	1.2	1.4	1.2	1.2	1.4	1.2	1.2
Region[3]														
Northeast	742	759	661	726	753	837	719	2.9	3.0	2.6	2.9	3.0	3.3	2.9
South	1,643	1,652	1,572	1,659	1,663	1,566	1,502	3.3	3.4	3.2	3.4	3.4	3.2	3.1
Midwest	1,038	1,051	934	1,009	1,003	904	946	3.3	3.4	3.0	3.3	3.3	3.0	3.1
West	1,088	1,043	1,043	1,053	1,002	960	952	3.6	3.4	3.4	3.5	3.3	3.2	3.2

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

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

[3] **Northeast**: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

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

[p] = preliminary.

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

Industry and region	Levels[1] (in thousands)							Percent						
	2008				2009			2008				2009		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
Total[2]	4,852	4,910	4,863	4,958	4,949	4,833	4,737	3.5	3.6	3.6	3.7	3.7	3.6	3.6
Industry														
Total private[2]	4,553	4,607	4,571	4,673	4,686	4,555	4,465	4.0	4.0	4.0	4.1	4.2	4.1	4.0
Construction	412	440	472	452	524	463	488	5.8	6.2	6.8	6.6	7.8	7.0	7.5
Manufacturing	371	404	384	419	476	424	401	2.8	3.1	2.9	3.2	3.8	3.4	3.3
Trade, transportation, and utilities	1,046	1,034	1,030	1,041	1,049	920	984	4.0	4.0	4.0	4.0	4.1	3.6	3.9
Professional and business services	809	906	909	898	866	951	776	4.6	5.1	5.2	5.2	5.0	5.6	4.6
Education and health services	488	507	466	498	494	498	479	2.6	2.7	2.4	2.6	2.6	2.6	2.5
Leisure and hospitality	830	794	773	755	763	731	758	6.2	5.9	5.8	5.7	5.7	5.5	5.7
Government	294	294	282	278	277	271	262	1.3	1.3	1.3	1.2	1.2	1.2	1.2
Region[3]														
Northeast	734	743	767	799	813	783	848	2.9	2.9	3.0	3.2	3.2	3.1	3.4
South	1,767	1,782	1,841	1,815	1,898	1,742	1,762	3.6	3.6	3.8	3.7	3.9	3.6	3.7
Midwest	1,116	1,168	1,105	1,088	1,120	1,121	1,082	3.6	3.8	3.6	3.5	3.7	3.7	3.6
West	1,184	1,209	1,205	1,227	1,180	1,188	1,065	3.9	4.0	4.0	4.0	3.9	4.0	3.6

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

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

[3] **Northeast:** Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin; **West:** Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

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

[p] = preliminary

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

Industry and region	Levels[1] (in thousands)							Percent						
	2008				2009			2008				2009		
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
Total[2]	2,454	2,436	2,201	2,114	2,063	1,911	1,831	1.8	1.8	1.6	1.6	1.5	1.4	1.4
Industry														
Total private[2]	2,319	2,305	2,076	1,984	1,945	1,831	1,766	2.0	2.0	1.8	1.8	1.7	1.6	1.6
Construction	128	107	109	92	85	87	85	1.8	1.5	1.6	1.3	1.3	1.3	1.3
Manufacturing	147	143	122	87	105	105	78	1.1	1.1	.9	.7	.8	.8	.6
Trade, transportation, and utilities	580	548	489	518	469	372	450	2.2	2.1	1.9	2.0	1.8	1.5	1.8
Professional and business services	368	477	349	297	326	310	274	2.1	2.7	2.0	1.7	1.9	1.8	1.6
Education and health services	290	294	251	256	248	258	244	1.5	1.5	1.3	1.3	1.3	1.3	1.3
Leisure and hospitality	514	516	469	461	443	431	430	3.8	3.8	3.5	3.5	3.3	3.3	3.3
Government	134	132	122	130	105	115	110	.6	.6	.5	.6	.5	.5	.5
Region[3]														
Northeast	338	347	321	302	278	271	278	1.3	1.4	1.3	1.2	1.1	1.1	1.1
South	971	949	879	847	790	759	765	2.0	1.9	1.8	1.7	1.6	1.6	1.6
Midwest	577	595	491	452	491	468	428	1.9	1.9	1.6	1.5	1.6	1.5	1.4
West	560	541	510	498	492	453	397	1.8	1.8	1.7	1.6	1.6	1.5	1.3

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

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

[p] = preliminary.

22. Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2008.

County by NAICS supersector	Establishments, third quarter 2008 (thousands)	Employment		Average weekly wage[1]	
		September 2008 (thousands)	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	([4])
Financial activities	24.1	233.8	-5.4	1,482	.1
Professional and business services	42.5	583.7	([4])	1,104	([4])
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	([4])	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	([4])
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	([4])	1,287	2.6
Professional and business 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
Other services	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	Establishments, third quarter 2008 (thousands)	Employment		Average weekly wage[1]	
		September 2008 (thousands)	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]	
		September 2008 (thousands)	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
Iowa	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

[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.

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
	UI 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	1,000 or more workers
Total all industries[2]										
Establishments, first quarter	8,572,894	5,189,837	1,407,987	933,910	648,489	220,564	124,980	30,568	11,049	5,510
Employment, March	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
Employment, March	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										
Establishments, first quarter	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.

[2] Includes data for unclassified establishments, not shown separately.

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

26. Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	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

See footnotes at end of table.

26. Continued — Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	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
Iowa 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 area[2]	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

See footnotes at end of table.

26. Continued — Average annual wages for 2006 and 2007 for all covered workers[1] by metropolitan area

Metropolitan area[2]	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	39,273	3.0
Orlando, FL	37,776	38,633	2.3
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	48,647	50,611	4.0
Phoenix-Mesa-Scottsdale, AZ	42,220	43,697	3.5
Pine Bluff, 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	34,408	36,375	5.7
Poughkeepsie-Newburgh-Middletown, NY	39,528	40,793	3.2
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	45,784	47,657	4.1
Sandusky, OH	33,526	33,471	-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[1] by metropolitan area

Metropolitan area[2]	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 Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs.

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

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

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

27. Annual data: Employment status of the population

[Numbers in thousands]

Employment status	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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (in dollars)	646.34	675.47	700.86	730.88	737.77	760.45	777.25	805.08	850.42	873.63	907.02
Financial activities:											
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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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 earnings (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,[1] 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[2]	104.2	105.0	106.1	106.7	107.6	108.3	109.2	109.5	109.9	0.4	2.1
Workers by occupational group											
Management, professional, and related	104.7	105.5	106.7	107.2	108.3	109.0	110.1	110.4	110.9	.5	2.4
Management, business, and financial	104.4	105.2	106.2	106.6	108.2	108.9	109.7	109.8	110.0	.2	1.7
Professional and related	104.9	105.7	107.0	107.6	108.4	109.0	110.4	110.7	111.3	.5	2.7
Sales and office	103.8	104.8	105.5	106.4	106.8	107.7	108.2	108.3	108.4	.1	1.5
Sales and related	102.4	103.6	104.1	105.2	105.0	106.1	106.0	105.5	104.3	-1.1	-.7
Office and administrative support	104.7	105.5	106.4	107.1	108.0	108.6	109.5	110.0	110.8	.7	2.6
Natural resources, construction, and maintenance	104.1	105.1	106.1	106.8	107.7	108.4	109.3	109.8	110.1	.3	2.2
Construction and extraction	104.3	105.7	106.5	107.4	108.5	109.6	110.3	110.8	111.0	.2	2.3
Installation, maintenance, and repair	103.7	104.4	105.6	106.2	106.7	107.0	108.0	108.6	109.1	.5	2.2
Production, transportation, and material moving	102.7	103.5	104.2	104.7	105.6	106.2	106.9	107.2	108.0	.7	2.3
Production	102.1	102.8	103.3	104.1	104.8	105.3	105.9	106.2	107.2	.9	2.3
Transportation and material moving	103.4	104.4	105.3	105.6	106.6	107.3	108.1	108.4	108.9	.5	2.2
Service occupations	104.8	105.5	106.9	107.7	108.4	109.1	110.2	110.6	111.5	.8	2.9
Workers by industry											
Goods-producing	102.9	103.9	104.4	105.0	106.1	106.8	107.3	107.5	108.0	.5	1.8
Manufacturing	102.0	102.9	103.2	103.8	104.7	105.1	105.6	105.9	106.5	.6	1.7
Service-providing	104.4	105.2	106.4	107.0	107.8	108.5	109.5	109.8	110.3	.5	2.3
Education and health services	104.9	105.5	107.2	107.9	108.6	109.2	110.8	111.1	111.7	.5	2.9
Health care and social assistance	105.4	106.1	107.1	107.9	108.9	109.6	110.4	110.8	111.7	.8	2.6
Hospitals	105.1	105.7	106.7	107.5	108.4	109.2	110.2	110.8	111.7	.8	3.0
Nursing and residential care facilities	104.5	105.0	105.6	106.3	107.3	108.2	109.0	109.6	110.3	.6	2.8
Education services	104.5	104.9	107.3	107.9	108.3	108.9	111.1	111.3	111.8	.4	3.2
Elementary and secondary schools	104.6	105.0	107.4	107.9	108.2	108.8	111.1	111.4	111.9	.4	3.4
Public administration[3]	105.6	106.6	108.0	109.1	109.7	110.1	111.6	112.0	113.0	.9	3.0
Private industry workers	104.0	104.9	105.7	106.3	107.3	108.0	108.7	108.9	109.3	.4	1.9
Workers by occupational group											
Management, professional, and related	104.6	105.5	106.4	106.8	108.1	108.9	109.6	109.9	110.4	.5	2.1
Management, business, and financial	104.3	105.1	106.0	106.3	108.0	108.7	109.3	109.5	109.6	.1	1.5
Professional and related	104.9	105.9	106.7	107.3	108.3	109.0	109.9	110.3	111.0	.6	2.5
Sales and office	103.7	104.7	105.3	106.1	106.6	107.5	107.9	107.9	107.9	.0	1.2
Sales and related	102.4	103.6	104.2	105.2	105.0	106.2	106.0	105.5	104.3	-1.1	-.7
Office and administrative support	104.5	105.4	106.0	106.7	107.8	108.5	109.2	109.6	110.5	.8	2.5
Natural resources, construction, and maintenance	104.0	105.0	105.9	106.7	107.6	108.3	109.0	109.6	109.9	.3	2.1
Construction and extraction	104.4	105.7	106.5	107.4	108.6	109.7	110.3	110.8	110.9	.1	2.1
Installation, maintenance, and repair	103.5	104.1	105.2	105.8	106.3	106.6	107.4	108.1	108.6	.5	2.2
Production, transportation, and material moving	102.5	103.3	103.9	104.5	105.5	106.0	106.6	106.9	107.7	.7	2.1
Production	102.1	102.8	103.2	104.0	104.8	105.2	105.8	106.1	107.1	.9	2.2
Transportation and material moving	103.1	104.1	104.9	105.3	106.4	107.2	107.7	107.9	108.4	.5	1.9
Service occupations	104.5	105.2	106.4	107.0	107.8	108.7	109.4	109.8	110.7	.8	2.7
Workers by industry and occupational group											
Goods-producing industries	102.9	103.9	104.4	105.0	106.1	106.8	107.2	107.5	107.9	.4	1.7
Management, professional, and related	102.7	103.8	104.3	104.4	106.1	106.6	106.7	106.6	106.8	.2	.7
Sales and office	103.0	103.7	104.1	104.8	105.1	106.3	106.7	107.1	107.3	.2	2.1
Natural resources, construction, and maintenance	104.0	105.3	106.1	107.0	108.1	109.0	109.8	110.4	110.4	.0	2.1
Production, transportation, and material moving	102.1	102.9	103.3	104.0	104.8	105.3	105.8	106.2	107.0	.8	2.1
Construction	104.7	105.9	106.9	107.6	108.9	110.1	110.6	110.9	110.9	.0	1.8
Manufacturing	102.0	102.9	103.2	103.8	104.7	105.1	105.6	105.9	106.5	.6	1.7
Management, professional, and related	102.0	103.3	103.3	103.5	104.9	105.2	105.4	105.4	105.7	.3	.8
Sales and office	102.4	103.2	103.5	104.3	105.0	106.1	106.7	107.0	107.3	.3	2.2
Natural resources, construction, and maintenance	101.7	102.4	102.8	103.9	104.6	104.5	105.3	106.0	106.6	.6	1.9
Production, transportation, and material moving	101.9	102.6	103.1	103.8	104.5	105.0	105.5	105.8	106.7	.9	2.1
Service-providing industries	104.3	105.2	106.1	106.7	107.7	108.5	109.1	109.4	109.8	.4	1.9
Management, professional, and related	105.0	105.9	106.8	107.3	108.5	109.3	110.2	110.6	111.1	.5	2.4
Sales and office	103.7	104.8	105.4	106.3	106.8	107.7	108.0	108.0	108.0	.0	1.1
Natural resources, construction, and maintenance	104.0	104.5	105.7	106.2	106.7	107.3	107.8	108.4	109.0	.6	2.2
Production, transportation, and material moving	103.0	104.0	104.7	105.2	106.4	107.0	107.6	107.8	108.5	.6	2.0
Service occupations	104.5	105.3	106.4	107.1	107.9	108.7	109.5	109.8	110.7	.8	2.6
Trade, transportation, and utilities	103.1	104.2	104.7	105.5	106.1	107.3	107.6	107.5	107.8	.3	1.6

See footnotes at end of table.

30. Continued—Employment Cost Index, compensation,[1] 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

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

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

[3] Consists of legislative, judicial, administrative, and regulatory activities.

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

31. 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	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	103.9	104.7	105.4	106.0	107.1	108.0	108.6	109.0	109.2	.2	2.0
Management, professional, and related	104.4	105.3	105.9	106.0	107.7	108.4	108.7	108.8	109.3	.5	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]

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	103.8	104.8	104.0	105.2	105.2	107.2	106.8	106.4	106.8	0.4	1.5
Retail trade	103.1	104.2	105.1	106.1	106.4	107.6	108.1	108.1	108.3	.2	1.8
Transportation and warehousing	102.5	103.7	104.1	104.2	105.0	106.0	106.7	106.9	107.2	.3	2.1
Utilities	104.3	105.5	106.1	106.8	108.0	109.3	109.3	109.6	111.0	1.3	2.8
Information	103.8	104.9	105.2	105.3	105.3	106.3	107.3	107.5	107.8	.3	2.4
Financial activities	104.7	104.9	106.0	105.9	107.2	107.7	107.7	107.2	106.8	-.4	-.4
Finance and insurance	105.4	105.5	106.5	106.6	107.9	108.4	108.2	107.6	107.1	-.5	-.7
Real estate and rental and leasing	101.6	102.4	103.6	103.1	104.5	104.7	105.3	105.7	105.6	-.1	1.1
Professional and business services	104.8	105.9	106.7	107.5	109.1	110.0	111.0	111.9	112.3	.4	2.9
Education and health services	104.8	105.6	106.9	107.7	108.6	109.2	110.2	110.6	111.4	.7	2.6
Education services	104.2	104.6	106.4	107.4	107.9	108.6	110.8	110.8	111.1	.3	3.0
Health care and social assistance	104.9	105.8	107.0	107.8	108.7	109.4	110.1	110.6	111.5	.8	2.6
Hospitals	104.6	105.4	106.5	107.2	108.2	109.2	110.3	111.1	111.8	.6	3.3
Leisure and hospitality	105.7	106.4	108.1	108.8	109.7	109.9	111.4	112.3	113.1	.7	3.1
Accommodation and food services	106.0	106.5	108.4	109.0	110.0	110.4	111.9	112.8	113.7	.8	3.4
Other services, except public administration	105.7	106.1	107.3	107.9	109.2	109.9	110.4	110.4	111.4	.9	2.0
State and local government workers	104.1	104.6	106.4	107.1	107.7	108.2	110.1	110.4	110.9	.5	3.0
Workers by occupational group											
Management, professional, and related	104.0	104.3	106.3	107.0	107.6	108.2	110.1	110.4	110.7	.3	2.9
Professional and related	103.9	104.2	106.3	107.0	107.5	108.1	110.1	110.3	110.6	.3	2.9
Sales and office	104.5	104.8	106.3	107.0	107.4	107.9	109.3	109.7	110.5	.7	2.9
Office and administrative support	104.7	105.0	106.5	107.3	107.8	108.3	109.7	110.1	111.0	.8	3.0
Service occupations	104.5	105.2	106.5	107.7	108.3	108.6	110.4	110.9	112.0	1.0	3.4
Workers by industry											
Education and health services	104.0	104.2	106.3	107.1	107.5	108.1	110.2	110.5	110.7	.2	3.0
Education services	103.7	103.9	106.1	106.8	107.2	107.7	109.9	110.1	110.4	.3	3.0
Schools	103.6	103.9	106.1	106.8	107.2	107.7	109.9	110.1	110.4	.3	3.0
Elementary and secondary schools	103.6	103.8	106.0	106.6	106.9	107.5	109.8	110.1	110.3	.2	3.2
Health care and social assistance	106.6	107.2	108.2	109.2	110.1	111.0	112.8	113.4	113.1	-.3	2.7
Hospitals	105.7	106.5	107.6	108.6	109.8	110.3	111.4	112.1	112.8	.6	2.7
Public administration [2]	104.5	105.2	106.4	107.4	108.2	108.6	109.9	110.4	111.3	.8	2.9

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

[2] Consists of legislative, judicial, administrative, and regulatory activities.

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

32. Employment Cost Index, benefits, by occupation and industry group

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
Civilian workers	104.0	105.1	106.1	106.8	107.6	108.1	108.9	109.1	109.7	0.5	2.0
Private industry workers	103.2	104.3	105.0	105.6	106.5	107.0	107.5	107.7	108.2	.5	1.6
Workers by occupational group											
Management, professional, and related	103.8	104.9	105.6	106.0	107.3	107.9	108.5	108.5	108.8	.3	1.4
Sales and office	103.4	104.3	105.2	106.0	106.5	107.0	107.6	107.8	108.0	.2	1.4
Natural resources, construction, and maintenance	103.4	104.8	105.3	105.9	106.5	107.0	107.5	107.7	108.2	.5	1.6
Production, transportation, and material moving	101.2	102.4	102.7	103.7	104.4	104.5	104.8	105.1	106.4	1.2	1.9
Service occupations	104.2	105.1	106.0	106.7	107.6	108.5	108.7	108.8	109.7	.8	2.0
Workers by industry											
Goods-producing	100.9	102.2	102.4	103.2	104.0	104.4	104.6	104.7	105.4	.7	1.3
Manufacturing	99.6	101.0	100.7	101.7	102.3	102.2	102.3	102.5	103.5	1.0	1.2
Service-providing	104.1	105.2	106.0	106.6	107.6	108.1	108.7	108.9	109.3	.4	1.6
State and local government workers	107.0	108.0	110.3	111.0	111.4	111.8	113.9	114.2	115.2	.9	3.4

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

33. Employment Cost Index, private industry workers by bargaining status and region

[December 2005 = 100]

Series	2007				2008				2009	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2009	
COMPENSATION											
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											
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-time	18	20	19	21	23
Union	83	81	85	80	81
Non-union	45	47	46	47	47
Average wage less than $15 per hour	35	36	35	36	36
Average wage $15 per hour or higher	70	71	71	70	69
Goods-producing industries	63	63	64	64	61
Service-providing industries	45	47	47	47	48
Establishments with 1-99 workers	35	37	37	37	37
Establishments with 100 or more workers	65	67	67	67	66
Take-up rate (all workers)[3]	-	-	85	85	84
Defined Benefit					
Percentage of workers with access					
All workers	20	21	22	21	21
White-collar occupations[2]	23	24	25	23	-
Management, professional, and related	-	-	-	-	29
Sales and office	-	-	-	-	19
Blue-collar occupations[2]	24	26	26	25	-
Natural resources, construction, and maintenance	-	-	-	-	26
Production, transportation, and material moving	-	-	-	-	26
Service occupations	8	6	7	8	8
Full-time	24	25	25	24	24
Part-time	8	9	10	9	10
Union	74	70	73	70	69
Non-union	15	16	16	15	15
Average wage less than $15 per hour	12	11	12	11	11
Average wage $15 per hour or higher	34	35	35	34	33
Goods-producing industries	31	32	33	32	29
Service-providing industries	17	18	19	18	19
Establishments with 1-99 workers	9	9	10	9	9
Establishments with 100 or more workers	34	35	37	35	34

See footnotes at end of table.

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

Series	Year				
	2003	2004	2005	2006	2007 [1]
Percentage of workers participating					
All workers	20	21	21	20	20
White-collar occupations[2]	22	24	24	22	-
Management, professional, and related	-	-	-	-	28
Sales and office	-	-	-	-	17
Blue-collar occupations[2]	24	25	26	25	-
Natural resources, construction, and maintenance	-	-	-	-	25
Production, transportation, and material moving	-	-	-	-	25
Service occupations	7	6	7	7	7
Full-time	24	24	25	23	23
Part-time	8	9	9	8	9
Union	72	69	72	68	67
Non-union	15	15	15	14	15
Average wage less than $15 per hour	11	11	11	10	10
Average wage $15 per hour or higher	33	35	34	33	32
Goods-producing industries	31	31	32	31	28
Service-providing industries	16	18	18	17	18
Establishments with 1-99 workers	8	9	9	9	9
Establishments with 100 or more workers	33	34	36	33	32
Take-up rate (all workers)[3]	-	-	97	96	95
Defined Contribution					
Percentage of workers with access					
All workers	51	53	53	54	55
White-collar occupations[2]	62	64	64	65	-
Management, professional, and related	-	-	-	-	71
Sales and office	-	-	-	-	60
Blue-collar occupations[2]	49	49	50	53	-
Natural resources, construction, and maintenance	-	-	-	-	51
Production, transportation, and material moving	-	-	-	-	56
Service occupations	23	27	28	30	32
Full-time	60	62	62	63	64
Part-time	21	23	23	25	27
Union	45	48	49	50	49
Non-union	51	53	54	55	56
Average wage less than $15 per hour	40	41	41	43	44
Average wage $15 per hour or higher	67	68	69	69	69
Goods-producing industries	60	60	61	63	62
Service-providing industries	48	50	51	52	53
Establishments with 1-99 workers	38	40	40	41	42
Establishments with 100 or more workers	65	68	69	70	70
Percentage of workers participating					
All workers	40	42	42	43	43
White-collar occupations[2]	51	53	53	53	-
Management, professional, and related	-	-	-	-	60
Sales and office	-	-	-	-	47
Blue-collar occupations[2]	38	38	38	40	-
Natural resources, construction, and maintenance	-	-	-	-	40
Production, transportation, and material moving	-	-	-	-	41
Service occupations	16	18	18	20	20
Full-time	48	50	50	51	50
Part-time	14	14	14	16	18
Union	39	42	43	44	41
Non-union	40	42	41	43	43
Average wage less than $15 per hour	29	30	29	31	30
Average wage $15 per hour or higher	57	59	59	58	57
Goods-producing industries	49	49	50	51	49
Service-providing industries	37	40	39	40	41
Establishments with 1-99 workers	31	32	32	33	33
Establishments with 100 or more workers	51	53	53	54	53
Take-up rate (all workers)[3]	-	-	78	79	77

See footnotes at end of table.

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

Series	Year				
	2003	2004	2005	2006	2007 [1]
Employee Contribution Requirement					
Employee contribution required	-	-	61	61	65
Employee contribution not required	-	-	31	33	35
Not determinable	-	-	8	6	0
Percent of establishments					
Offering retirement plans	47	48	51	48	46
Offering defined benefit plans	10	10	11	10	10
Offering defined contribution plans	45	46	48	47	44

[1] The 2002 North American Industry Classification System (NAICS) replaced the 1987 Standard Industrial Classification (SIC) System. Estimates for goods-producing and service-providing (formerly service-producing) industries are considered comparable. Also introduced was the 2000 Standard Occupational Classification (SOC) to replace the 1990 Census of Population system. Only service occupations are considered comparable.

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

[3] The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

35. National Compensation Survey: Health insurance benefits in private industry by access, 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

See footnotes at end of table.

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					
All workers	32	37	36	36	36
White-collar occupations[2]	37	43	42	41	-
Management, professional, and related	-	-	-	-	51
Sales and office	-	-	-	-	33
Blue-collar occupations[2]	33	40	39	38	-
Natural resources, construction, and maintenance	-	-	-	-	36
Production, transportation, and material moving	-	-	-	-	38
Service occupations	15	16	17	18	20
Full-time	40	46	45	44	44
Part-time	6	8	9	10	9
Union	51	68	67	63	62
Non-union	30	33	33	33	33
Average wage less than $15 per hour	22	26	24	23	23
Average wage $15 per hour or higher	47	53	52	52	51
Goods-producing industries	42	49	49	49	45
Service-providing industries	29	33	33	32	33
Establishments with 1-99 workers	21	24	24	24	24
Establishments with 100 or more workers	44	52	51	50	49
Take-up rate (all workers)[3]	-	-	78	78	77
Vision care					
Percentage of workers with access	25	29	29	29	29
Percentage of workers participating	19	22	22	22	22
Outpatient Prescription drug coverage					
Percentage of workers with access	-	-	64	67	68
Percentage of workers participating	-	-	48	49	49
Percent of estalishments offering healthcare benefits	58	61	63	62	60
Percentage of medical premium paid by Employer and Employee					
Single coverage					
Employer share	82	82	82	82	81
Employee share	18	18	18	18	19
Family coverage					
Employer share	70	69	71	70	71
Employee share	30	31	29	30	29

[1] The 2002 North American Industry Classification System (NAICS) replaced the 1987 Standard Industrial Classification (SIC) System. Estimates for goods-producing and service-providing (formerly service-producing) industries are considered comparable. Also introduced was the 2000 Standard Occupational Classification (SOC) to replace the 1990 Census of Population system. Only service occupations are considered comparable.

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

[3] The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

36. National Compensation Survey: Percent of workers in private industry with access to selected benefits, 2003-2007

Benefit	Year				
	2003	2004	2005	2006	2007
Life insurance	50	51	52	52	58
Short-term disabilty insurance	39	39	40	39	39
Long-term disability insurance	30	30	30	30	31
Long-term care insurance	11	11	11	12	12
Flexible work place	4	4	4	4	5
Section 125 cafeteria benefits					
Flexible benefits	-	-	17	17	17
Dependent care reimbursement account	-	-	29	30	31
Healthcare reimbursement account	-	-	31	32	33
Health Savings Account	-	-	5	6	8
Employee assistance program	-	-	40	40	42
Paid leave					
Holidays	79	77	77	76	77
Vacations	79	77	77	77	77
Sick leave	-	59	58	57	57
Personal leave	-	-	36	37	38
Family leave					
Paid family leave	-	-	7	8	8
Unpaid family leave	-	-	81	82	83
Employer assistance for child care	18	14	14	15	15
Nonproduction bonuses	49	47	47	46	47

Note: Where applicable, dashes indicate no employees in this category or data do not meet publication criteria.

37. Work stoppages involving 1,000 workers or more

Measure	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]	Mar.[p]
Number of stoppages:															
Beginning in period	21	15	2	1	2	2	1	2	2	1	0	0	0	0	0
In effect during period	23	16	4	2	4	2	1	2	2	2	1	0	0	0	0
Workers involved:															
Beginning in period (in thousands)	189.2	72.2	5.7	2.3	4.2	4.2	8.5	7.0	28.2	6.0	0.0	0.0	0.0	0.0	0.0
In effect during period (in thousands)	220.9	136.8	11.8	5.9	10.1	4.2	8.5	7.0	28.2	33.0	0.0	0.0	0.0	0.0	0.0
Days idle:															
Number (in thousands)	1264.8	1954.1	128.8	102.2	129.0	12.3	42.5	100.6	469.8	600.0	0.0	0.0	0.0	0.0	0.0
Percent of estimated working time [1]	0.01	0.01	0	0	0	0	0	0	0.02	0.02	0	0	0	0	0

[1] Agricultural and government employees are included in the total employed and total working time; private household, forestry, and fishery employees are excluded. An explanation of the measurement of idleness as a percentage of the total time worked is found in "Total economy measures of strike idleness," *Monthly Labor Review*, October 1968, pp. 54–56.

NOTE: p = preliminary.

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	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	207.3	215.303	213.528	214.823	216.632	218.815	219.964	219.086	218.783	216.573	212.425	210.228	211.143	212.193	212.709
All items (1967 = 100)	621.1	644.951	639.636	643.515	648.933	655.474	658.915	656.284	655.376	648.758	636.332	629.751	632.491	635.637	637.182
Food and beverages	203.3	214.225	209.692	211.365	212.251	213.383	215.326	216.419	217.672	218.705	218.752	218.839	219.729	219.333	218.794
Food	202.9	214.106	209.385	211.102	212.054	213.243	215.299	216.422	217.696	218.738	218.749	218.805	219.675	219.205	218.600
Food at home	201.2	214.125	208.203	210.851	211.863	213.171	215.785	217.259	218.629	219.660	219.086	218.683	219.744	218.389	217.110
Cereals and bakery products	222.1	244.853	236.261	240.034	244.192	245.758	250.321	250.080	250.924	252.832	252.723	253.063	254.445	254.187	253.698
Meats, poultry, fish, and eggs	195.6	204.653	199.775	200.770	200.960	202.914	205.075	207.488	209.937	210.706	209.602	208.890	208.616	207.963	206.348
Dairy and related products[1]	194.8	210.396	206.171	207.680	207.778	209.117	213.981	214.748	213.533	212.733	213.102	210.838	209.632	204.537	199.687
Fruits and vegetables	262.6	278.932	268.446	272.746	276.481	277.957	280.209	283.296	285.986	285.484	283.677	281.706	282.601	278.721	274.759
Nonalcoholic beverages and beverage materials	153.4	160.045	158.089	159.730	158.336	158.320	159.346	160.055	161.499	163.727	163.015	162.750	164.882	164.213	165.656
Other foods at home	173.3	184.166	178.238	181.806	182.680	183.804	185.725	186.991	187.944	189.348	189.301	190.203	192.492	192.404	192.234
Sugar and sweets	176.8	186.577	182.214	184.878	185.097	185.558	187.067	187.813	189.929	190.515	191.756	193.312	197.429	196.676	197.137
Fats and oils	172.9	196.751	182.808	190.640	193.364	196.150	201.205	203.059	206.274	208.300	205.806	206.710	206.886	205.359	204.776
Other foods	188.2	198.103	192.597	195.993	196.787	197.888	199.566	200.961	201.388	202.993	203.058	203.902	206.343	206.621	206.367
Other miscellaneous foods[1,2]	115.1	119.924	117.321	118.500	118.744	118.453	120.510	121.033	121.144	122.699	123.543	123.791	124.012	122.580	122.402
Food away from home[1]	206.7	215.769	212.537	213.083	213.967	215.015	216.376	217.063	218.225	219.290	220.043	220.684	221.319	221.968	222.216
Other food away from home[1,2]	144.1	150.640	148.564	148.667	149.666	149.873	151.120	151.133	152.040	153.544	153.978	154.062	153.402	154.726	154.414
Alcoholic beverages	207.0	214.484	212.407	213.503	213.532	213.912	214.394	215.094	216.055	216.972	217.492	217.975	219.113	219.682	219.999
Housing	209.6	216.264	214.389	214.890	215.809	217.941	219.610	219.148	218.184	217.383	216.467	216.073	216.928	217.180	217.374
Shelter	240.6	246.666	245.995	246.004	246.069	247.083	248.075	247.985	247.737	247.844	247.463	247.085	248.292	248.878	249.597
Rent of primary residence	234.7	243.271	240.874	241.474	241.803	242.640	243.367	244.181	244.926	245.855	246.681	247.278	247.974	248.305	248.639
Lodging away from home	142.8	143.664	149.434	146.378	145.634	148.621	153.032	149.146	143.597	141.140	133.555	129.157	133.559	135.809	137.715
Owners' equivalent rent of primary residence[3]	246.2	252.426	250.966	251.418	251.576	252.170	252.504	252.957	253.493	253.902	254.669	254.875	255.500	255.779	256.321
Tenants' and household insurance[1,2]	117.0	118.843	117.701	118.422	118.411	119.092	118.764	118.562	119.944	119.916	120.232	120.019	120.402	120.683	120.737
Fuels and utilities	200.6	220.018	209.221	213.302	219.881	231.412	239.039	235.650	228.450	221.199	216.285	215.184	215.232	213.520	210.501
Fuels	181.7	200.808	189.693	194.121	201.212	213.762	221.742	217.455	209.501	201.176	195.599	194.335	194.149	192.168	188.736
Fuel oil and other fuels	251.5	334.405	332.139	342.811	363.872	389.423	395.706	367.794	349.164	318.667	281.869	256.209	247.163	242.264	230.837
Gas (piped) and electricity	186.3	202.212	190.105	194.379	200.999	213.375	221.805	218.656	210.950	203.503	199.435	199.487	199.791	197.886	194.752
Household furnishings and operations	126.9	127.800	127.423	127.332	127.598	127.625	127.884	128.013	128.584	128.789	128.554	128.535	128.761	129.170	129.669
Apparel	119.0	118.907	120.881	122.113	120.752	117.019	114.357	116.376	121.168	122.243	121.262	117.078	114.764	118.825	122.545
Men's and boys' apparel	112.4	113.032	114.994	116.653	116.479	112.011	109.669	110.180	112.720	115.067	114.239	110.767	110.797	115.202	117.748
Women's and girls' apparel	110.3	107.460	110.645	111.221	108.722	104.312	100.049	104.211	111.774	111.833	110.588	105.456	100.638	105.777	111.079
Infants' and toddlers' apparel[1]	113.9	113.762	116.037	116.358	114.582	111.555	109.218	109.558	113.494	116.158	116.010	112.568	112.321	113.544	115.548
Footwear	122.4	124.157	124.407	126.212	125.537	123.568	122.421	121.982	124.907	126.442	126.788	124.093	122.363	124.301	126.707
Transportation	184.7	195.549	195.189	198.608	205.262	211.787	212.806	206.739	203.861	192.709	173.644	164.628	166.738	169.542	169.647
Private transportation	180.8	191.039	191.067	194.574	201.133	207.257	208.038	201.779	199.153	187.976	168.527	159.411	161.788	164.871	165.023
New and used motor vehicles[2]	94.3	93.291	94.318	93.973	93.705	93.598	93.650	93.260	92.480	92.071	91.618	91.408	91.831	92.224	92.109
New vehicles	136.3	134.194	135.727	135.175	134.669	134.516	134.397	133.404	132.399	132.264	132.359	132.308	133.273	134.186	134.611
Used cars and trucks[1]	135.7	133.951	137.225	136.787	136.325	135.980	135.840	135.405	132.916	129.733	126.869	125.883	124.863	122.837	121.061
Motor fuel	239.1	279.652	278.739	294.291	322.124	347.418	349.731	323.822	315.078	268.537	187.189	149.132	156.604	167.395	168.404
Gasoline (all types)	238.0	277.457	276.497	291.910	319.787	344.981	347.357	321.511	313.535	266.382	184.235	146.102	154.488	166.118	167.826
Motor vehicle parts and equipment	121.6	128.747	126.325	126.049	126.824	127.824	129.118	130.327	131.048	131.917	132.947	133.077	133.414	134.108	134.484
Motor vehicle maintenance and repair	223.0	233.859	229.765	230.528	231.730	233.162	234.788	236.125	237.121	238.227	239.048	239.356	241.076	241.689	242.118
Public transportation	230.0	250.549	242.929	244.164	251.600	264.681	270.002	268.487	261.318	252.323	243.385	237.638	234.394	231.529	230.735
Medical care	351.1	364.065	363.000	363.184	363.396	363.616	363.963	364.477	365.036	365.746	366.613	367.133	369.830	372.405	373.189
Medical care commodities	290.0	296.045	297.308	296.951	294.896	295.194	294.777	295.003	295.461	295.791	297.317	298.361	299.998	302.184	302.908
Medical care services	369.3	384.943	382.872	383.292	384.505	384.685	385.361	385.990	386.579	387.440	387.992	388.267	391.365	394.047	394.837
Professional services	300.8	310.968	308.726	309.227	310.917	311.317	311.926	312.396	312.527	312.914	313.328	313.886	315.603	316.992	317.460
Hospital and related services	498.9	533.953	528.968	530.144	531.022	531.606	533.558	535.501	537.728	540.853	543.183	543.585	551.305	558.373	560.995
Recreation[2]	111.4	113.254	112.731	112.874	112.987	112.991	113.277	113.786	114.032	114.169	114.078	113.674	113.822	114.461	114.625
Video and audio[1,2]	102.9	102.632	103.548	103.477	102.988	102.306	102.203	102.546	102.706	102.193	101.831	101.629	101.347	101.704	102.000
Education and communication[2]	119.6	123.631	121.832	122.073	122.348	122.828	123.445	124.653	125.505	125.686	125.758	125.921	126.151	126.190	126.187
Education[2]	171.4	181.277	177.407	177.754	177.994	178.385	179.229	183.184	186.148	186.669	186.733	186.916	187.175	187.256	187.298
Educational books and supplies	420.4	450.187	439.906	442.160	442.770	443.309	444.382	458.989	462.787	463.825	462.694	464.544	468.432	469.996	472.185
Tuition, other school fees, and child care	494.1	522.098	511.013	511.887	512.579	513.743	516.264	527.230	536.082	537.606	537.906	538.309	538.765	538.878	538.813
Communication[1,2]	83.4	84.185	83.502	83.670	83.929	84.394	84.840	84.701	84.524	84.535	84.601	84.737	84.928	84.945	84.922
Information and information processing[1,2]	80.7	81.352	80.752	80.921	81.080	81.513	81.965	81.815	81.635	81.652	81.723	81.886	82.030	82.052	82.022
Telephone services[1,2]	98.2	100.451	99.031	99.494	99.879	100.677	101.339	101.301	101.311	101.407	101.538	101.688	101.880	101.895	101.991
Information and information processing other than telephone services[1,4]	10.6	10.061	10.246	10.170	10.118	10.071	10.087	10.012	9.901	9.874	9.867	9.906	9.919	9.926	9.872
Personal computers and peripheral equipment[1,2]	108.4	94.944	100.359	98.853	97.028	95.663	94.711	92.921	90.797	89.945	88.984	88.529	88.522	87.696	86.213
Other goods and services	333.3	345.381	341.827	343.410	344.709	345.885	346.810	346.990	348.166	349.276	349.040	349.220	350.259	351.223	361.156
Tobacco and smoking products	554.2	588.682	574.890	576.359	581.185	589.904	596.782	597.361	597.581	599.744	599.820	602.644	607.403	611.549	679.078
Personal care[1]	195.6	201.279	199.982	201.028	201.523	201.537	201.545	201.623	202.486	203.107	202.921	202.774	203.080	203.391	204.117
Personal care products[1]	158.3	159.290	158.440	159.398	158.790	158.868	158.989	159.252	159.643	159.826	161.000	161.397	162.588	162.508	162.696
Personal care services[1]	216.6	223.669	222.752	222.799	223.649	223.520	223.719	224.151	224.614	225.564	226.197	226.281	225.734	225.895	227.982

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]

Series	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Miscellaneous personal services	325.0	338.921	335.427	337.685	339.824	340.547	340.077	341.053	343.431	343.131	340.174	339.698	340.608	341.188	341.570
Commodity and service group:															
Commodities	167.5	174.764	173.884	175.838	178.341	180.534	181.087	179.148	179.117	175.257	167.673	163.582	164.360	165.891	166.645
Food and beverages	203.3	214.225	209.692	211.365	212.251	213.383	215.326	216.419	217.672	218.705	218.752	218.839	219.729	219.333	218.794
Commodities less food and beverages	147.5	153.034	153.682	155.690	158.778	161.337	161.301	158.179	157.621	151.874	141.397	135.720	136.427	138.702	139.962
Nondurables less food and beverages	182.5	196.192	196.185	200.926	207.875	213.489	213.363	207.284	206.919	195.127	173.346	161.681	162.938	167.560	170.200
Apparel	119.0	118.907	120.881	122.113	120.752	117.019	114.357	116.376	121.168	122.243	121.262	117.078	114.764	118.825	122.545
Non durables less food, beverages, and apparel	226.2	248.809	247.546	254.599	266.943	278.584	280.062	268.740	265.100	244.935	209.569	192.948	196.490	201.554	203.557
Durables	112.5	110.877	112.059	111.671	111.362	111.232	111.275	110.779	110.077	109.677	109.191	108.811	109.025	109.221	109.264
Services	246.8	255.498	252.817	253.426	254.509	256.668	258.422	258.638	258.059	257.559	256.967	256.731	257.780	258.328	258.597
Rent of shelter [3]	250.8	257.152	256.470	256.463	256.532	257.585	258.637	258.547	258.255	258.368	257.961	257.567	258.830	259.440	260.197
Transportation services	233.7	244.074	239.556	240.150	242.343	245.759	247.869	248.806	248.047	247.762	247.030	246.287	247.006	248.114	247.912
Other services	285.6	295.780	292.218	293.016	293.959	294.668	295.677	297.923	299.598	299.923	299.996	300.067	300.614	301.471	302.024
Special indexes:															
All items less food	208.1	215.528	214.236	215.462	217.411	219.757	220.758	219.552	218.991	216.250	211.421	208.855	209.777	211.076	211.775
All items less shelter	196.6	205.453	203.217	205.040	207.566	210.242	211.468	210.264	209.936	206.776	201.075	198.127	198.936	200.184	200.626
All items less medical care	200.1	207.777	205.992	207.317	209.170	211.408	212.576	211.653	211.321	209.021	204.721	202.442	203.281	204.265	204.766
Commodities less food	149.7	155.310	155.881	157.870	160.880	163.385	163.364	160.341	159.825	154.250	144.055	138.536	139.258	141.491	142.728
Nondurables less food	184.0	197.297	197.167	201.693	208.233	213.538	213.447	207.769	207.483	196.442	175.979	165.032	166.282	170.665	173.167
Nondurables less food and apparel	223.4	244.443	243.109	249.571	260.703	271.235	272.612	262.470	259.278	241.183	209.344	194.403	197.704	202.323	204.159
Nondurables	193.5	205.901	203.767	207.096	211.240	214.783	215.628	212.882	213.274	207.435	195.773	189.557	190.649	192.943	194.105
Services less rent of shelter [3]	260.8	273.000	267.567	269.007	271.467	275.200	277.982	278.606	277.615	276.297	275.425	275.370	276.227	276.739	276.407
Services less medical care services	236.8	244.987	242.310	242.921	243.982	246.219	248.007	248.198	247.563	246.997	246.351	246.090	247.013	247.439	247.675
Energy	207.7	236.666	230.505	240.194	257.106	275.621	280.833	266.283	258.020	231.561	189.938	171.158	174.622	178.741	177.454
All items less energy	208.9	214.751	213.420	213.851	214.101	214.600	215.335	215.873	216.397	216.695	216.417	215.930	216.586	217.325	218.033
All items less food and energy	210.7	215.572	214.866	215.059	215.180	215.553	216.045	216.476	216.862	217.023	216.690	216.100	216.719	217.685	218.639
Commodities less food and energy	140.1	140.246	141.056	141.156	140.677	139.925	139.535	139.785	140.528	140.659	140.236	139.228	139.111	140.270	141.662
Energy commodities	241.0	284.352	283.362	298.757	326.414	351.886	354.423	328.240	318.918	272.921	193.395	155.745	162.395	172.428	172.787
Services less energy	253.1	261.017	259.249	259.503	260.049	261.216	262.323	262.867	262.980	263.156	262.901	262.636	263.759	264.547	265.147
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	202.8	211.053	209.147	210.698	212.788	215.223	216.304	215.247	214.935	212.182	207.296	204.813	205.700	206.708	207.218
All items (1967 = 100)	604.0	628.661	622.985	627.606	633.830	641.082	644.303	641.155	640.226	632.025	617.472	610.075	612.719	615.719	617.239
Food and beverages	202.5	213.546	208.927	210.559	211.438	212.700	214.662	215.850	217.098	218.141	218.178	218.269	219.123	218.645	218.119
Food	202.1	213.376	208.571	210.252	211.200	212.514	214.577	215.812	217.090	218.120	218.114	218.155	218.998	218.449	217.855
Food at home	200.3	213.017	207.196	209.657	210.624	212.079	214.679	216.214	217.594	218.600	217.956	217.498	218.485	217.111	215.922
Cereals and bakery products	222.4	245.472	236.764	240.663	244.648	246.493	250.972	250.842	251.448	253.561	253.498	253.759	255.055	254.775	254.395
Meats, poultry, fish, and eggs	195.2	204.255	199.484	200.285	200.501	202.424	204.557	207.211	209.515	210.314	209.297	208.639	208.161	207.656	206.094
Dairy and related products [1]	194.5	209.773	205.660	207.135	207.088	208.510	213.582	214.139	212.841	211.808	212.184	209.922	208.530	203.023	198.048
Fruits and vegetables	260.5	276.759	266.030	270.169	274.136	276.641	278.885	282.171	284.612	283.549	281.279	278.835	279.906	275.884	271.727
Nonalcoholic beverages and beverage materials	152.8	159.324	157.488	158.799	157.285	157.309	158.527	159.024	160.850	163.265	162.472	162.280	164.514	163.821	165.437
Other foods at home	172.6	183.637	177.713	181.215	182.241	183.342	185.174	186.458	187.467	188.806	188.685	189.527	191.782	191.620	191.594
Sugar and sweets	175.3	185.494	181.033	183.725	184.127	184.378	186.054	186.860	188.914	189.574	190.501	192.120	195.867	195.395	196.015
Fats and oils	173.6	197.512	183.706	191.560	194.228	197.155	201.821	203.721	207.069	208.973	206.870	207.439	207.400	206.185	205.693
Other foods	188.4	198.303	192.832	196.106	197.081	198.153	199.722	201.119	201.632	203.138	203.126	203.937	206.490	206.547	206.468
Other miscellaneous foods [1,2]	115.4	120.348	117.754	118.751	119.248	118.879	121.015	121.443	121.589	123.026	123.837	124.144	124.477	122.994	122.837
Food away from home [1]	206.4	215.613	212.193	212.794	213.723	214.851	216.177	217.002	218.147	219.219	220.107	220.847	221.497	222.101	222.336
Other food away from home [1,2]	143.5	149.731	147.188	147.335	148.517	149.306	150.232	150.301	151.321	152.910	153.464	153.646	153.397	154.520	154.054
Alcoholic beverages	207.1	214.579	212.748	213.633	213.486	213.976	214.440	214.931	215.728	216.953	217.626	218.445	219.458	220.029	220.500
Housing	204.8	211.839	209.388	210.161	211.191	213.441	215.026	214.743	213.954	213.156	212.591	212.452	213.078	213.192	213.213
Shelter	233.0	239.128	237.965	238.261	238.353	239.198	239.845	240.038	240.163	240.517	240.740	240.752	241.651	242.051	242.605
Rent of primary residence	233.8	242.196	239.932	240.507	240.818	241.623	242.276	243.010	243.741	244.624	245.425	246.026	246.696	246.991	247.285
Lodging away from home [2]	142.3	143.164	148.110	145.936	144.979	148.378	152.248	148.368	142.591	140.763	133.747	129.982	134.235	136.255	138.008
Owners' equivalent rent of primary residence [3]	223.2	228.758	227.488	227.893	228.007	228.536	228.824	229.219	229.670	230.028	230.743	230.926	231.503	231.746	232.235
Tenants' and household insurance [1,2]	117.4	119.136	117.999	118.683	118.615	119.293	119.006	118.894	120.279	120.258	120.589	120.360	120.715	120.960	121.099
Fuels and utilities	198.9	217.883	206.861	210.912	217.388	228.843	236.381	233.373	226.709	219.325	214.700	213.861	213.882	212.353	209.400
Fuels	179.0	197.537	186.315	190.657	197.554	209.843	217.640	213.807	206.544	198.191	193.000	192.050	191.852	190.110	186.809
Fuel oil and other fuels	251.1	331.784	329.271	339.009	358.947	381.903	388.208	363.535	345.907	317.012	283.747	260.185	251.976	246.781	236.237
Gas (piped) and electricity	184.4	200.265	188.143	192.434	199.045	211.398	219.612	216.557	209.442	201.651	197.507	197.545	197.703	196.040	192.922
Household furnishings and operations	122.5	123.635	123.184	123.108	123.287	123.434	123.798	123.944	124.500	124.719	124.466	124.314	124.454	124.865	125.337
Apparel	118.5	118.735	120.809	121.855	120.407	116.706	113.978	116.214	120.990	121.957	121.149	117.006	114.969	118.766	122.162
Men's and boys' apparel	112.2	113.490	115.808	117.136	116.621	112.395	109.969	110.513	112.973	115.495	114.651	111.232	111.879	116.332	118.735
Women's and girls' apparel	110.2	107.489	110.712	110.971	108.594	104.062	99.772	104.584	112.304	111.880	110.612	105.413	100.751	105.538	110.380
Infants' and toddlers' apparel [1]	116.3	116.266	118.990	119.200	117.213	114.057	111.502	111.593	115.764	118.496	118.611	115.003	114.775	116.001	117.944
Footwear	122.1	124.102	124.343	126.150	125.335	123.381	122.380	122.026	124.873	126.352	126.689	124.152	122.753	124.494	126.858
Transportation	184.3	195.692	195.710	199.556	206.757	213.633	214.533	207.796	204.785	192.198	170.870	160.914	163.215	165.976	165.978
Private transportation	181.5	192.492	192.740	196.641	203.781	210.423	211.201	204.348	201.476	188.871	167.301	157.272	159.719	162.645	162.659
New and used motor vehicles [2]	93.3	92.146	93.455	93.158	92.850	92.714	92.686	92.287	91.305	90.530	89.783	89.482	89.774	89.728	89.418

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]

Series	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
New vehicles	137.4	135.338	136.910	136.456	135.933	135.728	135.556	134.540	133.504	133.351	133.380	133.317	134.490	135.248	135.744
Used cars and trucks[1]	136.6	134.731	138.070	137.616	137.145	136.790	136.639	136.186	133.669	130.444	127.540	126.526	125.485	123.443	121.669
Motor fuel	239.9	280.817	279.975	295.618	323.495	348.762	351.124	325.116	316.717	269.639	187.770	149.650	157.265	168.028	169.060
Gasoline (all types)	238.9	278.728	277.842	293.349	321.291	346.459	348.888	322.930	315.324	267.580	184.855	146.644	155.204	166.831	168.574
Motor vehicle parts and equipment	121.4	128.776	126.330	126.032	126.742	127.750	128.997	130.228	131.072	132.088	133.125	133.295	133.645	134.264	134.485
Motor vehicle maintenance and repair	225.5	236.353	232.344	232.983	234.221	235.550	237.324	238.583	239.571	240.688	241.509	241.855	243.594	244.219	244.650
Public transportation	228.5	247.865	240.729	241.966	249.310	261.779	266.259	264.755	258.142	249.168	240.496	235.199	232.422	229.404	229.034
Medical care	350.9	364.208	363.069	363.356	363.462	363.628	363.942	364.652	365.250	366.000	366.800	367.301	370.001	372.630	373.541
Medical care commodities	282.6	287.970	289.254	288.796	286.825	287.033	286.562	286.880	287.397	287.725	289.046	290.080	291.710	293.917	294.728
Medical care services	370.1	386.317	384.149	384.753	385.769	385.911	386.560	387.420	388.036	388.947	389.493	389.744	392.831	395.563	396.489
Professional services	303.2	313.446	311.259	311.757	313.294	313.618	314.235	314.893	314.977	315.458	315.825	316.435	318.110	319.663	320.231
Hospital and related services	493.7	530.193	524.534	526.495	527.230	527.948	529.798	532.065	534.394	537.382	539.864	540.101	547.655	554.390	557.167
Recreation[2]	108.6	110.143	109.742	109.775	109.876	109.905	110.198	110.698	110.904	110.947	110.826	110.487	110.630	111.257	111.436
Video and audio[1,2]	102.6	102.654	103.525	103.414	102.958	102.306	102.267	102.643	102.819	102.267	101.974	101.810	101.488	101.857	102.153
Education and communication[2]	116.3	119.827	118.155	118.462	118.737	119.264	119.852	120.809	121.439	121.569	121.636	121.819	122.025	122.092	122.087
Education[2]	169.3	178.892	175.101	175.545	175.791	176.148	176.879	180.819	183.613	184.091	184.115	184.352	184.642	184.765	184.824
Educational books and supplies	423.7	452.880	442.639	444.594	445.394	445.740	446.741	461.104	465.570	466.885	465.576	467.179	471.061	473.012	474.880
Tuition, other school fees, and child care	477.6	504.163	493.546	494.711	495.384	496.449	498.598	509.241	517.389	518.726	518.938	519.500	519.987	520.159	520.146
Communication[1,2]	85.8	86.807	86.016	86.244	86.496	87.017	87.490	87.369	87.224	87.226	87.300	87.444	87.599	87.640	87.615
Information and information processing[1,2]	83.9	84.828	84.091	84.320	84.511	85.007	85.484	85.355	85.208	85.214	85.292	85.454	85.581	85.624	85.595
Telephone services[1,2]	98.4	100.502	99.090	99.566	99.939	100.723	101.375	101.339	101.350	101.436	101.564	101.720	101.876	101.890	101.977
Information and information processing other than telephone services[1,4]	11.1	10.567	10.745	10.671	10.621	10.585	10.600	10.525	10.414	10.375	10.367	10.406	10.418	10.442	10.378
Personal computers and peripheral equipment[1,2]	108.2	94.863	100.265	98.820	97.010	95.766	94.691	92.931	90.722	89.690	88.631	88.176	88.178	87.622	86.004
Other goods and services	344.0	357.906	353.351	354.887	356.523	358.419	359.961	360.102	361.125	362.354	362.550	362.986	364.333	365.522	380.208
Tobacco and smoking products	555.5	591.100	576.910	578.296	583.296	592.248	599.180	599.823	600.293	602.533	602.881	605.662	610.503	615.012	682.115
Personal care[1]	193.6	199.170	197.803	198.859	199.367	199.404	199.495	199.501	200.284	200.930	201.036	200.918	201.209	201.426	202.099
Personal care products[1]	158.3	159.410	158.730	159.585	158.993	159.052	159.237	159.345	159.730	159.914	160.994	161.295	162.683	162.543	162.516
Personal care services[1]	216.8	223.978	223.043	223.088	223.922	223.838	223.994	224.464	224.910	225.800	226.433	226.578	225.951	226.088	228.201
Miscellaneous personal services	326.1	340.533	336.476	338.851	341.212	341.921	341.763	342.974	345.175	344.622	342.853	342.530	343.022	343.443	344.021
Commodity and service group:															
Commodities	169.6	177.618	176.727	178.900	181.837	184.495	185.105	182.846	182.647	177.906	168.926	164.233	165.151	166.673	167.514
Food and beverages	202.5	213.546	208.927	210.559	211.438	212.700	214.662	215.850	217.098	218.141	218.178	218.269	219.123	218.645	218.119
Commodities less food and beverages	150.9	157.481	158.156	160.488	164.188	167.344	167.376	163.761	162.971	155.982	143.544	137.015	137.932	140.235	141.615
Nondurables less food and beverages	189.5	205.279	205.166	210.558	218.794	225.585	225.595	218.454	217.828	203.762	178.209	164.879	166.694	171.698	174.838
Apparel	118.5	118.735	120.809	121.855	120.407	116.706	113.978	116.214	120.990	121.957	121.149	117.006	114.969	118.766	122.162
Nondurables less food, beverages, and apparel	237.9	263.756	262.252	270.496	285.024	298.593	300.341	287.124	283.056	259.204	217.500	198.108	202.400	208.255	211.287
Durables	112.6	111.217	112.549	112.171	111.845	111.769	111.820	111.357	110.451	109.782	109.038	108.576	108.689	108.592	108.413
Services	241.7	250.272	247.197	248.045	249.175	251.365	252.991	253.304	252.861	252.369	252.144	252.176	253.033	253.456	253.591
Rent of shelter[3]	224.6	230.555	229.443	229.719	229.810	230.620	231.255	231.445	231.541	231.885	232.096	232.112	232.981	233.365	233.903
Transporatation services	233.4	242.563	238.496	239.044	240.728	243.395	245.005	246.041	245.722	246.003	246.126	245.881	246.931	248.029	247.862
Other services	275.2	284.319	281.017	281.829	282.720	283.449	284.449	286.389	287.792	287.898	288.082	288.227	288.627	289.432	290.043
Special indexes:															
All items less food	202.7	210.452	209.055	210.583	212.870	215.498	216.407	214.950	214.361	210.949	205.214	202.292	203.186	204.465	205.167
All items less shelter	193.9	203.102	200.904	202.931	205.774	208.817	210.069	208.544	208.068	204.149	197.342	193.918	194.811	196.052	196.551
All items less medical care	196.6	204.626	202.713	204.290	206.423	208.906	210.002	208.900	208.563	205.726	200.707	198.153	198.978	199.928	200.421
Commodities less food	152.9	159.538	160.152	162.455	166.070	169.169	169.213	165.689	164.937	158.132	145.985	139.620	140.543	142.809	144.172
Nondurables less food	190.7	206.047	205.843	211.005	218.809	225.276	225.309	218.562	218.010	204.734	180.533	167.933	169.708	174.484	177.487
Nondurables less food and apparel	234.2	258.423	256.899	264.488	277.717	290.127	291.760	279.753	276.112	254.473	216.516	198.909	202.906	208.291	211.094
Nondurables	196.8	210.333	208.101	211.757	216.582	220.813	221.740	218.473	218.725	211.680	198.009	190.910	192.284	194.740	196.174
Services less rent of shelter[3]	230.9	241.567	236.483	237.922	240.181	243.780	246.411	246.834	245.787	244.331	243.599	243.646	244.376	244.791	244.413
Services less medical care services	232.2	240.275	237.201	238.048	239.167	241.422	243.071	243.354	242.868	242.316	242.058	242.079	242.819	243.128	243.223
Energy	208.1	237.414	231.533	241.518	258.903	277.597	282.579	267.624	259.864	232.106	188.375	168.726	172.463	177.033	175.947
All items less energy	203.0	208.719	207.296	207.812	208.021	208.458	209.062	209.718	210.325	210.649	210.541	210.168	210.707	211.279	211.989
All items less food and energy	203.6	208.147	207.406	207.687	207.747	208.007	208.317	208.857	209.329	209.511	209.383	208.925	209.404	210.203	211.178
Commodities less food and energy	140.6	141.084	141.973	142.040	141.558	140.878	140.492	140.802	141.428	141.375	140.793	139.731	139.614	140.554	142.077
Energy commodities	241.3	284.270	283.359	298.852	326.565	351.873	354.402	328.310	319.507	272.894	192.494	154.744	161.781	171.978	172.563
Services less energy	247.9	255.598	253.589	254.031	254.517	255.513	256.365	257.072	257.411	257.774	258.008	258.039	258.976	259.643	260.158

[1] Not seasonally adjusted.

[2] Indexes on a December 1997 = 100 base.

[3] Indexes on a December 1982 = 100 base.

[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]

	Pricing schedule[1]	All Urban Consumers						Urban Wage Earners					
		2008			2009			2008			2009		
		Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
U.S. city average	M	216.573	212.425	210.228	211.143	212.193	212.709	212.182	207.296	204.813	205.700	206.708	207.218
Region and area size[2]													
Northeast urban	M	230.837	227.236	225.091	225.436	226.754	227.309	227.762	223.741	221.446	221.704	222.945	223.626
Size A—More than 1,500,000	M	233.165	229.625	227.681	227.852	229.262	229.749	228.437	224.621	222.628	222.707	224.084	224.597
Size B/C—50,000 to 1,500,000[3]	M	136.730	134.445	132.830	133.308	133.967	134.411	137.489	134.757	132.938	133.345	133.908	134.558
Midwest urban[4]	M	206.019	201.737	199.582	200.815	201.453	202.021	201.236	196.346	193.987	195.245	195.813	196.453
Size A—More than 1,500,000	M	207.049	202.922	200.465	202.001	202.639	203.240	201.323	196.770	194.120	195.621	196.147	196.855
Size B/C—50,000 to 1,500,000[3]	M	131.946	129.018	128.018	128.636	129.057	129.334	131.699	128.186	127.005	127.768	128.167	128.468
Size D—Nonmetropolitan (less than 50,000)	M	202.086	197.883	195.383	195.843	196.421	197.267	200.017	195.114	192.391	192.907	193.527	194.393
South urban	M	210.108	205.559	203.501	204.288	205.343	206.001	207.312	201.821	199.399	200.067	201.150	201.737
Size A—More than 1,500,000	M	212.617	208.644	206.414	207.035	207.929	208.529	210.663	205.753	203.121	203.519	204.501	205.066
Size B/C—50,000 to 1,500,000[3]	M	133.285	130.324	129.099	129.615	130.380	130.873	132.017	128.504	127.055	127.529	128.276	128.686
Size D—Nonmetropolitan (less than 50,000)	M	213.103	206.659	204.428	205.766	206.671	206.927	213.696	205.777	203.054	204.316	205.337	205.744
West urban	M	221.034	217.113	214.685	215.923	217.095	217.357	215.499	210.870	208.088	209.367	210.492	210.661
Size A—More than 1,500,000	M	224.967	220.925	218.698	219.806	220.955	221.124	217.714	213.143	210.637	211.857	212.890	212.965
Size B/C—50,000 to 1,500,000[3]	M	133.795	131.440	129.725	130.682	131.636	131.775	133.694	130.684	128.641	129.639	130.649	130.674
Size classes:													
A[5]	M	198.148	194.628	192.646	193.412	194.354	194.750	196.590	192.508	190.272	191.023	191.927	192.327
B/C[3]	M	133.587	130.857	129.519	130.135	130.855	131.230	133.026	129.723	128.157	128.783	129.488	129.833
D	M	209.755	204.856	202.359	203.409	203.999	204.672	208.028	202.041	199.228	200.057	200.681	201.485
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	213.363	209.053	205.959	207.616	207.367	207.462	206.772	202.022	198.434	200.222	199.944	200.218
Los Angeles–Riverside–Orange County, CA	M	226.159	222.229	219.620	220.719	221.439	221.376	218.726	214.083	211.007	212.454	213.234	213.013
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	238.403	234.498	233.012	233.402	234.663	235.067	232.778	228.727	227.223	227.503	228.653	229.064
Boston–Brockton–Nashua, MA–NH–ME–CT	1	–	232.354	–	230.806	–	232.155	–	231.854	–	230.095	–	231.884
Cleveland–Akron, OH	1	–	198.187	–	198.232	–	199.457	–	188.860	–	188.798	–	190.107
Dallas–Ft Worth, TX	1	–	200.051	–	198.623	–	200.039	–	201.479	–	199.416	–	200.770
Washington–Baltimore, DC–MD–VA–WV[7]	1	–	138.547	–	137.598	–	138.620	–	137.700	–	136.359	–	137.539
Atlanta, GA	2	206.388	–	196.961	–	199.190	–	205.236	–	195.310	–	197.528	–
Detroit–Ann Arbor–Flint, MI	2	205.238	–	197.991	–	201.913	–	200.570	–	192.808	–	196.191	–
Houston–Galveston–Brazoria, TX	2	191.140	–	185.930	–	187.972	–	190.600	–	183.088	–	185.015	–
Miami–Ft. Lauderdale, FL	2	223.699	–	218.324	–	220.589	–	222.038	–	215.867	–	217.635	–
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	225.113	–	218.186	–	220.262	–	225.069	–	217.610	–	219.356	–
San Francisco–Oakland–San Jose, CA	2	225.824	–	218.528	–	222.166	–	221.192	–	213.685	–	216.797	–
Seattle–Tacoma–Bremerton, WA	2	225.915	–	222.580	–	224.737	–	220.687	–	216.424	–	218.752	–

[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:											
All items:											
Index	159.7	163.2	168.9	173.5	175.9	179.8	184.5	191.0	197.1	202.767	211.053
Percent change	1.3	2.2	3.5	2.7	1.4	2.2	5.1	1.1	3.2	2.9	4.1

41. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2008										2009		
	2007	2008	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Jan.[p]	Feb.[p]	Mar.[p]
Finished goods	166.6	177.1	175.1	176.5	179.8	182.4	185.1	182.2	182.2	177.4	172.0	168.8	170.3	170.1	168.9
Finished consumer goods	173.5	186.3	184.2	185.8	190.3	193.8	197.2	193.2	193.0	185.5	178.2	173.8	175.7	175.4	173.9
Finished consumer foods	167.0	178.4	176.0	175.5	177.6	180.0	181.0	181.3	181.5	180.7	179.8	178.5	177.6	174.9	174.0
Finished consumer goods excluding foods	175.6	189.0	187.1	189.6	195.0	199.0	203.4	197.5	197.2	187.0	177.0	171.4	174.2	174.7	173.1
Nondurable goods less food	191.7	210.5	208.2	211.7	220.0	226.4	233.1	223.9	223.4	205.4	190.6	182.3	186.1	186.9	184.6
Durable goods	138.3	141.1	139.9	140.5	140.3	139.7	139.6	140.2	140.3	144.8	144.2	143.9	144.4	144.4	144.2
Capital equipment	149.5	153.7	151.8	152.4	152.7	152.7	153.3	153.9	154.3	157.0	156.9	156.7	157.5	157.4	157.0
Intermediate materials, supplies, and components	170.7	188.6	184.5	187.3	192.8	197.2	203.1	199.4	198.6	189.0	179.2	172.7	171.6	169.8	168.1
Materials and components for manufacturing	162.4	177.6	173.1	175.5	179.1	182.4	187.4	188.7	186.7	180.3	171.1	164.6	162.9	161.2	160.2
Materials for food manufacturing	161.4	180.6	180.0	180.3	182.7	185.4	187.6	187.5	185.2	179.4	175.5	171.9	167.3	164.1	163.6
Materials for nondurable manufacturing	184.0	215.5	206.0	209.5	215.9	222.8	234.8	238.6	234.7	222.4	200.6	188.1	188.3	186.7	184.8
Materials for durable manufacturing	189.8	203.4	200.3	205.6	211.9	215.4	219.2	218.9	214.5	202.2	190.0	177.7	171.6	167.1	166.0
Components for manufacturing	136.3	140.3	137.9	138.6	139.4	140.1	141.3	141.9	142.4	142.5	142.3	142.0	141.7	141.6	141.2
Materials and components for construction	192.5	205.4	197.3	200.2	203.3	206.5	209.8	212.9	214.0	212.2	210.2	207.6	206.2	204.9	204.2
Processed fuels and lubricants	173.9	206.4	206.1	211.8	227.3	238.4	250.1	225.2	224.5	193.9	168.7	154.1	154.3	150.1	145.0
Containers	180.3	191.9	185.9	187.0	187.6	189.2	191.9	195.0	198.4	199.1	199.0	198.1	198.0	199.3	198.4
Supplies	161.7	174.1	170.0	171.3	173.1	174.6	178.3	178.9	179.0	177.0	175.3	174.0	173.2	172.5	172.0
Crude materials for further processing	207.1	251.7	262.1	274.6	293.1	301.2	313.3	274.6	254.2	212.0	183.3	171.7	166.9	160.3	159.9
Foodstuffs and feedstuffs	146.7	163.5	169.2	168.1	173.2	178.1	178.9	170.6	167.6	147.9	144.2	135.9	136.7	133.1	130.5
Crude nonfood materials	246.3	313.5	327.7	352.4	382.4	393.0	414.9	350.0	314.2	253.9	203.2	189.5	179.8	170.9	172.7
Special groupings:															
Finished goods, excluding foods	166.2	176.5	174.6	176.4	180.1	182.8	185.9	182.2	182.1	176.3	169.6	165.8	167.9	168.2	167.0
Finished energy goods	156.3	178.6	177.5	182.4	194.8	204.6	214.0	198.6	197.0	167.8	144.1	130.6	135.9	136.4	132.4
Finished goods less energy	162.8	169.8	167.6	168.0	168.8	169.4	170.2	170.8	171.2	173.1	172.7	172.3	172.6	172.3	171.9
Finished consumer goods less energy	168.7	176.9	174.7	174.9	175.9	176.8	177.7	178.3	178.7	180.2	179.7	179.2	179.3	178.7	178.5
Finished goods less food and energy	161.7	167.2	165.1	165.7	166.1	166.0	166.7	167.4	167.9	170.8	170.6	170.5	171.3	171.6	171.4
Finished consumer goods less food and energy	170.0	176.3	174.1	174.8	175.2	175.2	175.9	176.6	177.2	180.2	180.0	180.0	180.7	181.2	181.4
Consumer nondurable goods less food and energy	197.0	206.9	203.6	204.3	205.4	206.0	207.6	208.5	209.7	210.7	210.9	211.2	212.1	213.3	213.8
Intermediate materials less foods and feeds	171.5	189.0	184.7	187.7	193.3	197.8	203.6	199.7	199.1	189.5	179.4	172.8	172.0	170.1	168.4
Intermediate foods and feeds	154.4	182.2	180.3	180.5	184.5	186.6	195.5	194.3	190.0	179.9	174.7	170.2	166.9	164.7	164.0
Intermediate energy goods	174.6	208.3	208.6	213.4	228.7	240.3	253.5	231.3	227.5	197.4	167.3	150.6	153.2	148.7	142.6
Intermediate goods less energy	167.6	181.2	176.0	178.4	181.4	183.9	187.9	188.9	188.8	184.5	179.8	176.0	174.0	172.8	172.3
Intermediate materials less foods and energy	168.4	181.2	175.8	178.3	181.2	183.8	187.5	188.7	188.8	184.8	180.2	176.4	174.6	173.6	173.0
Crude energy materials	232.8	308.5	325.4	346.1	386.1	400.4	426.5	339.1	303.7	244.4	194.9	178.4	165.0	151.0	153.8
Crude materials less energy	182.6	205.7	211.7	218.5	223.9	228.2	231.7	222.3	211.7	182.0	167.6	159.9	160.9	158.6	155.7
Crude nonfood materials less energy	282.6	325.4	332.1	366.7	372.4	373.8	386.1	374.2	337.5	276.7	224.8	220.7	221.7	225.3	221.7

p = preliminary.

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

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2008										2009		
		Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Jan.[p]	Feb.[p]	Mar.[p]
	Total mining industries (December 1984=100)	287.2	301.6	329.0	341.4	363.8	299.2	273.4	223.3	184.9	171.5	164.1	155.0	157.2
211	Oil and gas extraction (December 1985=100)	371.6	390.8	436.2	456.0	490.4	383.6	341.2	259.4	199.5	177.9	165.7	150.3	152.9
212	Mining, except oil and gas	174.8	186.1	184.7	185.8	191.8	190.4	188.9	184.1	174.7	175.2	175.4	179.9	181.6
213	Mining support activities	169.8	170.1	172.2	173.1	175.9	177.1	177.6	179.3	179.9	177.1	175.9	167.9	168.2
	Total manufacturing industries (December 1984=100)	173.4	175.3	179.4	182.0	185.6	182.6	182.9	176.8	169.4	164.2	164.7	164.2	163.0
311	Food manufacturing (December 1984=100)	169.8	171.2	174.0	176.1	180.3	180.5	179.2	176.4	173.4	172.2	170.0	168.7	167.7
312	Beverage and tobacco manufacturing	112.7	112.9	114.2	114.1	115.0	114.8	115.2	116.1	116.0	115.8	117.8	119.4	120.3
313	Textile mills	110.4	110.6	111.4	111.7	112.6	114.2	114.9	114.9	114.7	113.4	113.9	113.0	112.7
315	Apparel manufacturing	102.0	102.2	102.2	102.1	102.3	102.5	102.7	103.0	103.2	102.8	103.2	103.8	103.8
316	Leather and allied product manufacturing (December 1984=100)	152.6	152.7	152.4	153.4	153.8	154.1	154.8	154.6	154.3	154.7	155.2	155.1	155.0
321	Wood products manufacturing	105.9	106.2	108.2	109.2	108.9	109.1	109.1	107.6	106.7	105.9	104.9	104.0	103.0
322	Paper manufacturing	119.6	120.2	120.5	120.9	121.8	124.5	126.6	127.3	127.2	127.1	126.4	126.2	125.6
323	Printing and related support activities	108.2	109.0	109.2	109.5	109.8	110.0	110.4	110.3	110.2	110.2	109.9	109.6	109.4
324	Petroleum and coal products manufacturing (December 1984=100)	337.1	347.7	384.1	406.0	429.6	382.2	382.6	300.0	221.4	169.1	180.7	177.9	166.6
325	Chemical manufacturing (December 1984=100)	218.4	221.1	224.5	228.5	234.5	238.2	240.4	239.3	234.5	230.1	225.7	227.1	226.9
326	Plastics and rubber products manufacturing (December 1984=100)	156.4	156.8	158.3	159.4	162.9	165.2	166.9	167.8	166.9	165.1	162.9	161.3	160.6
331	Primary metal manufacturing (December 1984=100)	202.4	211.5	221.1	227.8	232.7	233.5	228.9	214.9	199.9	184.7	176.4	170.5	169.1
332	Fabricated metal product manufacturing (December 1984=100)	168.3	171.1	173.0	174.7	177.2	178.8	179.6	179.6	179.3	178.4	178.1	177.5	176.6
333	Machinery manufacturing	114.6	115.1	115.8	116.4	117.9	118.3	118.8	119.4	119.9	119.5	120.7	120.6	120.5
334	Computer and electronic products manufacturing	92.7	92.7	92.8	92.8	92.8	92.7	92.7	92.7	92.6	92.7	92.9	92.7	92.3
335	Electrical equipment, appliance, and components manufacturing	127.1	127.3	127.8	128.2	129.1	129.3	129.8	129.4	127.3	126.5	126.2	126.8	126.9
336	Transportation equipment manufacturing	106.1	106.7	106.6	105.9	105.9	106.5	106.6	110.4	110.0	109.5	109.8	110.2	109.5
337	Furniture and related product manufacturing (December 1984=100)	168.3	169.5	170.2	171.3	172.3	173.5	174.3	175.1	175.3	175.2	175.9	176.3	176.9
339	Miscellaneous manufacturing	109.2	109.3	109.4	109.9	110.8	110.5	110.4	110.6	110.4	110.7	112.2	111.5	111.6
	Retail trade													
441	Motor vehicle and parts dealers	117.9	118.9	118.3	118.1	118.4	117.5	117.6	116.8	118.5	117.7	117.4	116.4	117.2
442	Furniture and home furnishings stores	120.1	119.4	120.2	119.6	120.3	122.0	121.1	121.0	120.8	121.8	121.1	121.0	120.7
443	Electronics and appliance stores	113.4	119.7	118.7	105.8	106.5	111.0	110.8	108.9	108.1	112.8	112.7	107.1	102.4
446	Health and personal care stores	125.5	127.2	127.3	127.8	133.8	133.3	134.0	134.6	136.4	136.8	135.3	137.5	137.9
447	Gasoline stations (June 2001=100)	60.6	65.7	59.3	67.6	77.2	72.7	81.7	76.8	76.3	66.6	67.1	71.0	62.4
454	Nonstore retailers	133.1	136.4	136.5	141.8	140.6	162.4	150.6	148.7	154.1	150.4	152.0	152.7	159.0
	Transportation and warehousing													
481	Air transportation (December 1992=100)	198.6	199.5	203.7	213.5	213.6	213.0	208.6	209.3	203.8	198.0	197.8	189.3	184.9
483	Water transportation	120.6	121.1	124.7	127.0	130.4	133.7	135.1	135.0	130.6	129.5	126.6	120.6	117.5
491	Postal service (June 1989=100)	175.5	175.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	180.5	181.6	181.6
	Utilities													
221	Utilities	131.1	134.5	137.0	141.7	146.8	145.7	140.8	136.0	133.4	134.4	133.1	132.6	130.2
	Health care and social assistance													
6211	Office of physicians (December 1996=100)	123.3	123.2	123.2	123.2	123.5	123.6	123.7	124.0	124.3	124.2	124.6	125.5	125.7
6215	Medical and diagnostic laboratories	107.3	107.3	106.9	106.9	106.9	106.9	107.6	107.7	107.7	107.9	108.0	108.3	108.4
6216	Home health care services (December 1996=100)	125.5	125.4	125.4	125.4	125.6	126.3	126.5	127.3	127.3	127.1	127.4	127.6	127.4
622	Hospitals (December 1992=100)	162.9	162.7	162.7	162.6	163.2	163.2	163.0	164.9	164.9	164.3	165.2	166.2	166.4
6231	Nursing care facilities	118.3	118.5	118.6	118.6	119.4	119.7	119.8	120.6	120.6	120.7	121.7	122.1	121.7
62321	Residential mental retardation facilities	117.7	118.2	118.5	118.5	118.6	118.7	118.9	119.1	119.2	118.9	119.2	119.8	120.4
	Other services industries													
511	Publishing industries, except Internet	110.4	110.9	110.7	110.4	111.0	111.1	110.2	110.9	111.1	110.7	111.9	111.9	111.4
515	Broadcasting, except Internet	105.2	106.4	105.5	104.4	103.9	105.5	107.0	112.0	111.5	109.1	107.0	108.6	109.3
517	Telecommunications	100.6	101.0	101.3	101.1	101.0	101.5	101.5	101.2	101.2	100.9	101.2	101.1	101.0
5182	Data processing and related services	100.5	100.4	100.8	100.8	100.9	101.0	101.1	101.3	101.3	100.9	100.6	100.7	100.8
523	Security, commodity contracts, and like activity	121.0	119.6	119.6	120.2	119.1	120.2	120.5	117.7	115.8	112.3	113.4	112.4	108.4
53112	Lessors or nonresidental buildings (except miniwarehouse)	109.7	109.5	110.5	110.4	110.9	112.7	111.7	111.5	111.7	111.6	113.8	108.5	110.1
5312	Offices of real estate agents and brokers	110.0	110.2	106.9	106.9	106.8	104.4	103.8	103.1	103.0	103.2	98.6	101.6	101.6
5313	Real estate support activities	106.8	107.3	108.3	108.2	109.2	109.3	108.6	109.2	108.2	108.7	108.5	110.2	110.8
5321	Automotive equipment rental and leasing (June 2001=100)	125.1	120.3	122.0	125.4	136.7	135.0	131.3	128.2	126.9	124.1	129.6	133.1	133.0
5411	Legal services (December 1996=100)	160.7	161.1	160.9	161.1	161.5	161.5	162.6	163.2	163.2	163.1	164.2	164.6	166.0
541211	Offices of certified public accountants	113.8	112.7	114.0	112.7	115.3	115.5	115.4	115.6	115.0	115.7	115.1	115.1	115.3
5413	Architectural, engineering, and related services (December 1996=100)	140.3	140.5	140.5	141.3	141.6	141.6	141.6	141.8	141.8	142.1	142.0	142.3	142.3
54181	Advertising agencies	105.3	105.7	106.3	106.3	106.3	106.3	106.3	106.3	106.3	106.3	104.9	105.2	105.3
5613	Employment services (December 1996=100)	123.0	122.9	122.7	122.8	123.0	123.4	123.1	123.6	124.1	124.2	123.3	124.1	123.2
56151	Travel agencies	98.8	98.8	98.8	98.8	98.8	98.8	101.4	101.4	101.4	101.4	101.4	101.4	102.6
56172	Janitorial services	108.9	108.9	109.0	109.1	109.0	109.3	109.4	109.4	109.4	108.8	109.8	109.7	109.5
5621	Waste collection	112.0	112.2	111.9	112.6	112.3	113.3	114.0	113.0	113.3	110.2	113.6	114.3	116.4
721	Accommodation (December 1996=100)	145.3	145.6	144.9	147.0	149.9	150.9	146.9	145.6	144.3	144.3	142.4	139.7	142.3

p = preliminary.

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	178.4
Energy	75.1	78.8	94.1	96.7	88.8	102.0	113.0	132.6	145.9	156.3	178.6
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	188.6
Foods	123.2	120.8	119.2	124.3	123.2	134.4	145.0	146.0	146.2	161.4	180.6
Energy	80.8	84.3	101.7	104.1	95.9	111.9	123.2	149.2	162.8	174.6	208.3
Other	133.5	133.1	136.6	136.4	135.8	138.5	146.5	154.6	163.8	168.4	181.2
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	251.7
Foods	103.9	98.7	100.2	106.1	99.5	113.5	127.0	122.7	119.3	146.7	163.5
Energy	68.6	78.5	122.1	122.3	102.0	147.2	174.6	234.0	226.9	232.8	308.5
Other	84.5	91.1	118.0	101.5	101.0	116.9	149.2	176.7	210.0	238.7	309.0

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

[2000 = 100]

Category	2008										2009		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
ALL COMMODITIES	123.8	124.4	124.8	126.1	128.0	125.9	124.9	122.3	118.4	115.8	116.5	116.2	115.5
Foods, feeds, and beverages	196.9	192.8	193.3	198.0	211.5	189.6	190.4	175.0	164.8	155.1	165.7	162.5	156.9
Agricultural foods, feeds, and beverages	202.6	198.2	198.9	204.0	218.9	194.7	195.6	178.3	166.9	156.6	167.9	164.6	158.6
Nonagricultural (fish, beverages) food products	148.3	146.4	145.5	146.1	147.0	145.7	145.5	147.8	148.3	143.5	147.9	145.5	143.7
Industrial supplies and materials	165.5	167.9	169.6	173.2	177.8	174.0	169.4	161.8	148.2	139.6	138.6	137.8	136.5
Agricultural industrial supplies and materials	159.3	157.9	156.9	158.0	162.8	160.9	157.4	148.5	134.2	126.1	125.6	126.6	123.5
Fuels and lubricants	249.5	259.3	275.8	297.2	312.3	275.8	267.2	239.2	193.4	166.8	165.5	159.1	150.9
Nonagricultural supplies and materials, excluding fuel and building materials	158.2	160.1	160.1	161.6	165.1	165.3	160.8	155.5	145.6	138.8	137.8	137.6	137.4
Selected building materials	114.2	114.1	113.9	113.8	114.5	115.2	115.4	116.6	115.6	115.1	115.5	115.8	114.8
Capital goods	101.2	101.5	101.6	102.0	101.9	101.9	101.8	101.7	101.6	101.5	101.9	102.2	102.2
Electric and electrical generating equipment	108.6	108.7	108.6	108.9	109.3	109.2	109.5	109.7	109.2	109.0	107.8	107.7	107.8
Nonelectrical machinery	93.7	93.9	93.9	94.2	94.0	94.1	93.9	93.6	93.5	93.3	93.4	93.8	93.5
Automotive vehicles, parts, and engines	107.1	107.5	107.5	107.4	107.7	107.8	107.9	108.2	108.1	108.0	108.4	108.1	108.3
Consumer goods, excluding automotive	108.0	108.1	108.1	108.2	108.5	109.0	109.3	109.9	109.1	109.0	109.2	109.0	108.5
Nondurables, manufactured	109.3	109.8	110.0	110.1	109.8	109.6	109.0	108.9	107.4	107.2	108.7	109.0	108.1
Durables, manufactured	105.4	105.1	105.1	105.2	106.0	107.2	108.7	109.9	109.8	109.7	109.7	109.5	109.4
Agricultural commodities	194.3	190.5	190.8	195.2	208.2	188.2	188.3	172.5	160.6	150.8	160.0	157.4	151.9
Nonagricultural commodities	118.8	119.6	120.1	121.2	122.3	121.5	120.4	118.7	115.4	113.2	113.3	113.2	112.9

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

[2000 = 100]

Category	2008										2009		
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
ALL COMMODITIES	133.5	137.3	141.2	145.5	147.5	143.0	137.8	129.6	120.0	114.5	113.1	113.0	113.6
Foods, feeds, and beverages	141.8	143.7	145.0	147.7	149.7	150.4	147.9	146.0	139.5	142.3	142.4	137.8	136.4
Agricultural foods, feeds, and beverages	157.3	159.8	162.2	165.1	167.6	167.9	165.1	162.8	154.4	159.4	159.2	153.1	150.6
Nonagricultural (fish, beverages) food products	106.8	107.2	105.9	108.4	109.1	110.9	109.1	108.0	105.8	103.8	104.4	103.2	104.5
Industrial supplies and materials	234.5	248.7	265.0	283.0	290.7	270.7	248.9	213.5	174.6	150.4	143.7	144.7	149.0
Fuels and lubricants	329.0	354.6	388.3	423.7	437.6	392.0	346.3	274.1	197.8	153.9	146.4	150.1	160.8
Petroleum and petroleum products	347.5	375.8	412.2	450.3	465.0	419.5	371.5	288.9	201.6	150.8	143.4	150.8	166.7
Paper and paper base stocks	114.1	116.2	117.1	117.3	118.9	119.7	119.9	116.4	115.1	113.2	110.3	108.5	105.9
Materials associated with nondurable supplies and materials	147.8	148.7	149.6	152.9	157.4	159.6	162.4	160.2	155.0	148.5	138.9	136.9	137.4
Selected building materials	114.1	114.3	116.2	119.2	121.3	122.1	122.7	120.4	118.8	118.1	117.1	116.4	115.9
Unfinished metals associated with durable goods	241.5	259.2	263.6	273.2	273.4	270.3	255.4	236.7	209.3	185.7	176.6	175.8	172.6
Nonmetals associated with durable goods	105.2	106.2	107.3	107.6	110.7	111.8	111.4	110.9	110.4	109.0	106.8	106.0	104.8
Capital goods	92.2	93.0	93.3	93.2	93.4	93.4	93.3	93.3	92.9	92.7	92.7	92.3	92.0
Electric and electrical generating equipment	109.3	111.5	111.7	112.0	112.7	113.0	112.9	112.3	111.8	111.4	111.1	110.2	109.8
Nonelectrical machinery	87.5	88.0	88.4	88.2	88.4	88.3	88.2	88.1	87.7	87.5	87.5	87.1	86.8
Automotive vehicles, parts, and engines	107.4	107.8	107.8	107.9	108.1	108.3	108.1	108.3	107.9	107.8	108.0	108.2	108.0
Consumer goods, excluding automotive	104.0	104.6	104.8	104.9	105.1	105.2	105.1	105.1	104.6	104.4	104.4	104.5	104.0
Nondurables, manufactured	107.5	107.9	108.0	107.9	108.2	108.4	108.2	108.1	108.0	108.2	108.9	109.0	108.5
Durables, manufactured	100.4	101.1	101.3	101.5	101.7	101.7	101.8	101.8	101.1	100.7	100.2	100.0	99.7
Nonmanufactured consumer goods	104.3	105.6	105.8	106.6	106.7	106.6	106.6	105.9	103.2	103.6	102.7	104.4	101.3

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

[2000 = 100, unless indicated otherwise]

Category	2007				2008				2009
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
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)	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
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
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	143.0
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	186.1	187.9
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	124.6	126.6
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	130.5	131.4
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	141.4	142.0
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	135.4
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	141.8
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	185.0	186.9
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	123.9	125.9
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	130.7	131.8
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	143.0	143.8
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	152.0	–
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	182.4	–
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	122.1	–
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	121.3	–
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	120.0	–
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	124.7	–
Unit profits	182.6	183.4	193.4	174.4	172.4	173.1	167.4	156.4	150.8	147.8	156.7	144.0	–
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	129.9	–
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	–
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	178.3	176.8
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	189.6	195.4
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	126.9	131.6
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	106.3	110.5

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	116.8	118.0	120.2	–
Output per unit of capital services	104.7	104.9	103.5	102.3	100.0	96.0	94.8	95.6	97.5	98.6	99.1	98.1	–
Multifactor productivity	95.3	96.2	97.5	98.7	100.0	100.1	101.8	104.4	107.0	108.8	109.4	110.1	–
Output	82.8	87.2	91.5	96.2	100.0	100.5	102.0	105.2	109.7	113.8	117.4	120.1	–
Inputs:													–
Labor input	90.7	94.2	96.4	99.0	100.0	98.6	97.2	97.0	98.4	100.2	102.8	103.8	–
Capital services	79.1	83.2	88.4	94.1	100.0	104.6	107.6	110.0	112.5	115.4	118.5	122.3	–
Combined units of labor and capital input	86.9	90.6	93.9	97.5	100.0	100.3	100.2	100.7	102.5	104.6	107.4	109.2	–
Capital per hour of all persons	85.9	87.4	91.1	95.0	100.0	107.0	112.9	116.3	117.4	118.4	119.1	122.3	–
Private nonfarm business													–
Productivity:													–
Output per hour of all persons	90.5	92.0	94.5	97.3	100.0	102.7	107.1	111.0	114.2	116.4	117.6	119.7	–
Output per unit of capital services	105.5	105.3	103.9	102.5	100.0	96.0	94.7	95.4	97.3	98.3	98.7	97.9	–
Multifactor productivity	95.9	96.5	97.8	98.8	100.0	100.1	101.8	104.3	106.8	108.6	109.0	109.7	–
Output	82.8	87.2	91.5	96.3	100.0	100.5	102.1	105.2	109.6	113.7	117.4	120.1	–
Inputs:													–
Labor input	90.2	93.9	96.2	99.0	100.0	98.7	97.2	97.1	98.6	100.4	103.1	104.1	–
Capital services	78.5	82.7	88.1	93.9	100.0	104.7	107.8	110.3	112.7	115.6	118.9	122.8	–
Combined units of labor and capital input	86.4	90.3	93.6	97.4	100.0	100.5	100.2	100.8	102.6	104.7	107.6	109.4	–
Capital per hour of all persons	85.8	87.3	91.0	94.9	100.0	107.0	113.1	116.4	117.4	118.4	119.1	122.4	–
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	182.9
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	128.9
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	181.8
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	120.9
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	143.2
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	128.9
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	180.8
Compensation per hour	–	–	–	102.0	134.7	137.8	147.8	158.2	161.5	164.5	171.2	177.4	184.5
Real compensation per hour	–	–	–	99.6	112.0	111.5	117.7	123.2	122.5	120.7	121.6	122.5	122.7
Unit labor costs	–	–	–	99.5	96.9	97.6	97.9	98.7	98.5	95.7	98.6	99.0	102.1
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

[1997=100]

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 metals	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 components	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 tire stores	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 stores	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 stores	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 stores	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
	Transportation and warehousing												
481	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

[1997=100]

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
	Finance and insurance												
52211	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
	Real estate and rental and leasing												
532111	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
	Professional and technical services												
541213	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
	Administrative and waste services												
56131	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
	Health care and social assistance												
6215	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
	Arts, entertainment, and recreation												
71311	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
	Accommodation and food services												
72	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
	Other services												
8111	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

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	-

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 **http://www.bls.gov/fls/flscomparelf.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/fls/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

[Numbers in thousands]

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/fls/flsjec.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. of	–	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

See notes at end of table.

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	–	–	–	–	–	–	–	–	–
Special trades contractors:													
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 workdays	177.5	172.5	172.0	165.8	–	–	–	–	–	–	–	–	–
Furniture and fixtures:													
Total cases	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2	11.0
Lost workday cases	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9	5.7
Lost workdays	–	–	–	128.4	–	–	–	–	–	–	–	–	–
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	–	–	–	–	–	–	–	–	–
Primary metal industries:													
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
Fabricated metal products:													
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	–	–	–	–	–	–	–	–	–
Instruments and related products:													
Total cases	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5	4.0
Lost workday cases	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2	2.0
Lost workdays	55.4	57.8	64.4	65.3	–	–	–	–	–	–	–	–	–
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,[1] 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	–	–	–	–	–	–	–	–	–
Rubber and miscellaneous plastics products:													
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.

[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: N = number of injuries and illnesses or lost workdays; EH = total hours worked by all employees during the calendar year; and 200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[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.

NOTE: Dash indicates data not available.

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

Event or exposure[1]	1996-2000 (average)	2001-2005 (average)[2]	2005[3]	
			Number	Percent
All events	6,094	5,704	5,734	100
Transportation incidents	2,608	2,451	2,493	43
Highway	1,408	1,394	1,437	25
Collision between vehicles, mobile equipment	685	686	718	13
Moving in same direction	117	151	175	3
Moving in opposite directions, oncoming	247	254	265	5
Moving in intersection	151	137	134	2
Vehicle struck stationary object or equipment on side of road	264	310	345	6
Noncollision	372	335	318	6
Jack-knifed or overturned--no collision	298	274	273	5
Nonhighway (farm, industrial premises)	378	335	340	6
Noncollision accident	321	277	281	5
Overturned	212	175	182	3
Worker struck by vehicle, mobile equipment	376	369	391	7
Worker struck by vehicle, mobile equipment in roadway	129	136	140	2
Worker struck by vehicle, mobile equipment in parking lot or non-road area	171	166	176	3
Water vehicle	105	82	88	2
Aircraft	263	206	149	3
Assaults and violent acts	1,015	850	792	14
Homicides	766	602	567	10
Shooting	617	465	441	8
Suicide, self-inflicted injury	216	207	180	3
Contact with objects and equipment	1,005	952	1,005	18
Struck by object	567	560	607	11
Struck by falling object	364	345	385	7
Struck by rolling, sliding objects on floor or ground level	77	89	94	2
Caught in or compressed by equipment or objects	293	256	278	5
Caught in running equipment or machinery	157	128	121	2
Caught in or crushed in collapsing materials	128	118	109	2
Falls	714	763	770	13
Fall to lower level	636	669	664	12
Fall from ladder	106	125	129	2
Fall from roof	153	154	160	3
Fall to lower level, n.e.c.	117	123	117	2
Exposure to harmful substances or environments	535	498	501	9
Contact with electric current	290	265	251	4
Contact with overhead power lines	132	118	112	2
Exposure to caustic, noxious, or allergenic substances	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 Illness Classification Manual.
[2] Excludes fatalities from the Sept. 11, 2001, terrorist attacks.
[3] The BLS news release of August 10, 2006, reported a total of 5,702 fatal work injuries for calendar year 2005. Since then, an additional 32 job-related fatalities were identified, bringing the total job-related fatality count for 2005 to 5,734.

NOTE: Totals for all years are revised and final. Totals for major categories may include subcategories not shown separately. Dashes indicate no data reported or data that do not meet publication criteria. N.e.c. means "not elsewhere classified."

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State, New York City, District of Columbia, and Federal agencies, Census of Fatal Occupational Injuries.