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How wages are determined is one of the classic questions of labor economics. While much has been learned about the impact of workers' occupations, industries, and personal characteristics, Julia I. Lane, Laurie A. Salmon, and James R. Spletzer use microdata from the BLS Occupational Employment Statistics program to investigate the less well-measured differentials associated with specific establishments. They find that such differentials—those common to all individuals in an establishment after controlling for occupation and individual characteristics—can and do have a significant effect on wages.

Lonnie Golden and Tesfayi Gebreselassie also look at a less-studied aspect of labor economics—"over-employment mismatches" in which employees work more hours than they would desire if they could choose hours and income without constraints. While acknowledging that underemployment mismatches may be more common, Golden and Gebreselassie find that at least 7 percent of the employed would prefer to trade some income for fewer hours.

Jesse X. Fan, Barbara B. Brown, Lori Kowaleski-Jones, Ken R. Smith, and Cathleen D. Zick use cluster analysis to group Consumer Expenditure Survey respondents into eight food-budget clusters ranging from "balanced" to "meat-eater" to nonalcoholic "beverage-dominated." They then tabulate the basic demographic characteristics of these clusters.

Essentials spending

A 1.5-percent drop in spending on

food at home in 2005 was offset by an 8.2-percent increase in spending on food away from home, resulting in a 2.6-percent increase in total food expenditures. The drop in food at home expenditures in 2005 was driven by a significant decrease (13.1 percent) in spending on meats, poultry, fish and eggs. Expenditures for two components of food at home increased in 2005: Dairy products were up 2.0 percent and other food at home increased by a significant 7.7 percent.

Consumer expenditures on apparel and services (such as laundry and dry cleaning) were \$1,886 in 2005, not much different than they had been in the previous year. A decline in spending on footwear partially offset increases in other parts of the category.

A 9.0-percent increase in housing expenditures was the largest in several years. Increases in spending for all components of housing contributed to the overall growth, but only the changes in shelter expenditures (10.1 percent) and spending for utilities, fuels, and public services (8.8 percent) were statistically significant. Find out more in "Consumer Expenditures in 2005," BLS Report 998.

Work experience

In 2005, the proportion of the civilian noninstitutional population 16 years old and over that worked at some point during the year was 67.7 percent, essentially unchanged from 2004. Among those with work experience during 2005, 77.4 percent were employed year round (either full or part time), up by 0.4 percentage point from 2004.

Continuing a long-term growth trend, full-year employment among women edged up to 74.0 percent in 2005. The percentage of men employed year round also was up over the year, increasing to 80.5 percent from 80.0 percent in 2004.

About 4 out of 5 of persons who were employed at some time during 2005 usually worked full time, about the same ratio as in 2004. Among both men and women, the proportion who worked full time was little changed in 2005 (87.0 and 72.7 percent, respectively). See more in "Work Experience of the Population in 2005," USDL news release 07-0199.

State unemployment rates

In 2006, Hawaii again reported the lowest unemployment rate among the States, 2.4 percent. Utah had the next lowest rate, 2.9 percent, followed by Nebraska and Virginia at 3.0 percent each. Twelve additional States registered annual average unemployment rates below 4.0 percent.

The States with the highest unemployment rates in 2006 were Michigan at 6.9 percent, Mississippi at 6.8 percent, Alaska at 6.7 percent, and South Carolina at 6.5 percent. The District of Columbia reported a rate of 6.0 percent.

Altogether, 20 States had jobless rates that were significantly below the U.S. rate of 4.6 percent, while 12 states and the District of Columbia recorded rates that were appreciably above it. The rates for 18 States were not significantly different from the overall U.S. rate. To learn more, see "Regional and State Unemployment, 2006 Annual Averages," news release USDL 07-0305.

Establishment wage differentials

Microdata from the BLS Occupational Employment Statistics program are providing researchers a fresh approach to use in studying how wages are influenced by the establishment in which an individual works

Julia I. Lane
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Economists have long known that individual wages depend on a combination of employee and employer characteristics, as well as the interaction of the two. Although understanding establishment wage differentials is important for labor economics and theories of the firm, little is known about the magnitude of these wage differentials. Primarily this stems from the lack of microdata linking individuals to the establishments where they work, but also it reflects the technical difficulties associated with separating out employee and employer effects. This article provides new findings using microdata from the Occupational Employment Statistics program at the Bureau of Labor Statistics that permit both of these issues to be addressed. The data used for the research contain information from more than half a million establishments, in all sectors of the economy, with wages reported for over 34 million individuals in more than 800 occupations. This article contributes to the growing body of literature analyzing the impact of firms' compensation policies, and specifically, that which explores the topic of employer effects on wages.

The main contributions made by this research are the empirical estimates of the ways in which wages are influenced by the establishment at which the individual works. The decomposition of wages into employee and employer effects uses Ordinary Least Squares (OLS) regressions to partition the sum of squares of wages into worker and establishment components. The results show that employer effects contribute substan-

tially to earnings differences—the results from the basic model show that controlling for detailed occupation, establishment dummies account for more than one-fifth of individual wage variation. The results also show that these large employer effects can be only partially explained by observable characteristics, such as the location, size, age, and industry of the establishment.

In order to examine the breadth of the establishment wage differentials across occupations, correlations of occupational wages within establishments were calculated. The results are striking—establishments that pay well for one occupation also pay well for others. Even after controlling for observable establishment characteristics, positive wage correlations within establishments for occupations that are closely related were found, as well as for occupations that one would not expect to be closely related in the production process. This empirical finding may offer interesting implications for theories that attempt to explain the source of establishment wage differentials.

Background and literature review

Empirical estimates of establishment wage differentials. Establishment wage differentials are defined as the wage premium which controls for occupation and individual characteristics, and is common to all individuals in an establishment. While economists have known about these differentials ever since studies of employer wage policies were undertaken in the 1940s and 1950s, it is only

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recently, with the advent of large electronically linked employer-employee micro-databases, that systematic statistical analyses of establishment wage differentials have been conducted. The empirical strategy used by almost all of these recent studies has been to define the differentials as the percentage of individual wage variation accounted for by adding establishment indicators to a regression that already includes controls for occupation and worker characteristics.

In 1991, Erica Groshen wrote the seminal article in the modern literature.¹ Using data for six manufacturing industries from the Bureau of Labor Statistics Industry Wage Surveys, she decomposed earnings variation into occupational and establishment differentials as well as the interaction between the two. She found that establishments contribute substantially to earnings differences—when controlling for occupation, establishment wage differentials account for a sizeable amount of individual wage variation, ranging from a low of 12 percent in the cotton and man-made textiles industry to a high of 58 percent in the industrial chemicals industry.

Groshen's methodology and basic findings have been replicated with other data in recent studies. Using data from 241 establishments that responded to the Bureau of Labor Statistics White Collar Pay Survey, and controlling for individual worker characteristics, Stephen Bronars and Melissa Famulari found that 18 percent of individual wage variation is due to establishment wage differentials.² Using data on 50,000 managerial positions in 39 companies, and controlling for job characteristics and job requirements, K. C. O'Shaughnessy, David Levine, and Peter Cappelli found that 8 to 9 percent of individual wage variation is due to firm (or establishment) wage differentials.³ Finally, in a study of the Brazilian and Chilean labor markets, Alejandra Mizala and Pilar Romaguera report that 7 to 9 percent of Brazilian wage variation and 6 to 18 percent of Chilean wage variation can be attributed to firm wage differentials.⁴

These studies cited above use cross-sectional data with multiple individuals per establishment (or firm) and report estimates of differentials controlling for observed differences across individuals. It is natural to wonder whether these estimated differentials might be measuring unobserved differences in average worker skill across establishments, which would result from a sorting of individuals into establishments based on characteristics unobserved by the data analyst. Evaluating this hypothesis requires panel data with multiple observations per individual and multiple individuals per establishment. John Abowd and Francis Kramarz show that firm wage differentials in

France account for 25 percent of wage variation conditional on observed worker characteristics and account for 19 percent of wage variation conditional on both observed and unobserved worker heterogeneity.⁵ These results demonstrate that using longitudinal microdata to account for unobserved differences across individuals diminishes but does not remove the estimated employer effect on wages.

Theoretical explanations for establishment wage differentials. Erica Groshen's classic 1991 reference effectively documented the theoretical explanations for establishment wage differentials.⁶ She proposed and evaluated five explanations as the reasons why individual wages vary among employers. These explanations for establishment wage differentials can also be found in the somewhat older and more firmly established industry wage differentials literature.⁷

The first explanation is that of *labor quality*, in which employers systematically sort workers by ability as predicted by team production models. Groshen offers two key reasons explaining why the sorting model is not the sole source of establishment wage differentials. First, differentials are estimated conditional on controls for occupation, and Groshen argues that detailed occupational information can serve as a proxy quite effectively for standard human capital variables. Similarly, industry wage differentials are estimated conditional on human capital controls, and these differentials still exist after controlling for unobserved individual ability in a longitudinal analysis. Second, it is difficult to reconcile the sorting explanation with the finding that establishment and industry wage differentials apply to all occupations.

A second explanation offered for the existence of establishment wage differentials is that of *compensating differentials*. Compensating differentials are defined as a wage premium paid to workers compensating them for undesirable working conditions. This explanation is problematic because the risk of injury is occupation specific, and does not necessarily apply to all workers in the establishment. Furthermore, the industry wage differentials literature has empirically examined and rejected the hypothesis of compensating differentials as an explanation for the wage differentials.

A third explanation suggested for the existence of establishment wage differentials is that *costly information may generate random variation* in wages across employers. For example, employers may profit from individuals who find it costly to search for alternative wage offers, or employers who hire infrequently may not have adjusted their pay structure since their last hiring cycle. Groshen rejects

this explanation based on evidence that employer wage differentials are persistent over time.

A fourth explanation proposed for the existence of establishment wage differentials is *efficiency wages*. Efficiency wages refer to employers paying their workers more than the market-clearing wage in order to increase worker productivity. Efficiency wage theories, particularly those that emphasize the humanistic qualities of morale, loyalty, and teamwork, offer one explanation as to why workers in all occupations receive the establishment wage premium. Unfortunately, little, if any, direct empirical evidence has been found to exist that fully supports a relationship of this nature between efficiency wages and establishment wage differentials.

A fifth explanation is a model in which wage variation across employers results from *workers bargaining over rents, or employers sharing profits with employees* for other reasons. These models can generate the result that the establishment wage premium covers all occupations. The bargaining models are difficult to evaluate, however, especially their applicability outside the union sector. Groshen finds some support for rent-sharing models, citing research from the empirical literature which tends to show a positive relationship between an individual's wage and the employer's or the industry's profits.

The literature on employer-size wage differentials also offers and evaluates similar explanations regarding the reasons why the individuals' wages are associated with the establishment where they work.⁸ Briefly, the evidence from this literature suggests that theories based on compensating differentials, union avoidance, monitoring, and rent sharing accruing from product market power contribute little to explaining the employer-size wage differential. Sorting is a more likely possibility: Charles Brown and James Medoff find that labor-quality variables reduce the simple size coefficients by roughly one-half, and controlling for unobserved labor quality in a longitudinal fixed-effects regression reduces the size coefficients by an additional 5 to 45 percent.⁹ Even so, there remains a significant size effect after controlling for both observed and unobserved labor quality. Kenneth Troske uses linked employer-employee microdata that allows him to evaluate explanations which cannot be analyzed using most databases.¹⁰ He finds that more skilled workers tend to work together, as predicted by team production models, and this grouping reduces the employer-size wage premium by approximately 20 percent. However, Troske concludes that a large and significant employer-size wage premium still exists and remains unexplained.

A recent and comprehensive analysis of employer ef-

fects on wages is provided by John Abowd and Francis Kramarz.¹¹ Their study decomposes estimates of a simply estimated employer differential into components that are due to unobserved individual heterogeneity and unobserved firm heterogeneity. Using data for both France and the United States, Abowd and Kramarz find that 45 to 50 percent of the "raw" industry wage differential is due to unobserved firm heterogeneity, and 71 to 76 percent of the "raw" firm size wage differential is due to unobserved firm heterogeneity. While the sources of the unobserved firm heterogeneity remain unknown, these empirical estimates document that employer effects on wages do indeed exist.

The wage decomposition methodology

This article's empirical analysis is based on the methodology used by Erica Groshen.¹² It has a measure of log wages W_{iej} for individual "i" in establishment "e" in occupation "j." By decomposing the variation in wages into components attributable to occupational differentials, establishment differentials, and differences across individuals, and following Groshen, the following four regressions are estimated:

(Occ)

$$W_{iej} = \mu + OCC_j\alpha + \varepsilon_{iej},$$

(Est)

$$W_{iej} = \mu + EST_e\beta + \varepsilon_{iej},$$

(Main)

$$W_{iej} = \mu + OCC_j\alpha + EST_e\beta + \varepsilon_{iej},$$

(Cell)

$$W_{iej} = \mu + OCC_j\alpha + EST_e\beta + (OCC_j*EST_e)\gamma + \varepsilon_{iej}.$$

In these regressions, OCC_j is a vector of dummy variables indicating the occupation, EST_e is a vector of dummy variables indicating the establishment, and (OCC_j*EST_e) is a vector of dummy variables indicating an occupational-establishment job cell.

This wage decomposition partitions the sum of squares of wages into its various components. As Groshen mentions, this statistical technique avoids imposing structure on unbalanced data. The OES microdata are unbalanced, with a different number of workers across occupations and a different number of occupations across establishments. The R-squareds from each of the four regressions are the key to the decomposition (not reported are the regression coefficients α , β , or γ). Notational definitions for these R-squareds are R^2_{Occ} , R^2_{Est} , R^2_{Main} , and R^2_{Cell} .

As seen from the first three regressions above, log wages are regressed on vectors of occupation and establishment indicators separately, and then on both sets of indicators together (the main-effects model). The marginal contribution of establishment indicators to the main-effects model, relative to the regression with occupation indicators only, measures the portion of wage variation associated unambiguously with the establishment indicators. This is calculated as $(R^2_{\text{Main}} - R^2_{\text{Occ}})$. Similarly, the marginal contribution of occupation indicators is calculated as $(R^2_{\text{Main}} - R^2_{\text{Est}})$ and measures the portion of wage variation associated unambiguously with the occupation indicators.

The explanatory power of occupation and establishment together in the main-effects model does not necessarily equal the sum of the marginal contributions to the main-effects model from the establishment indicators and from the occupation indicators. This difference, which is measured as $(R^2_{\text{Est}} + R^2_{\text{Occ}} - R^2_{\text{Main}})$, is referred to as the “joint” explanatory power of occupation and establishment. This joint contribution is nonzero if there is any sorting of occupations across establishments. Positive sorting occurs if high-wage occupations are concentrated in high-wage establishments ($R^2_{\text{Est}} + R^2_{\text{Occ}} > R^2_{\text{Main}}$), whereas negative sorting occurs if high-wage occupations are concentrated in low-wage establishments ($R^2_{\text{Est}} + R^2_{\text{Occ}} < R^2_{\text{Main}}$). Research taken from the existing literature has shown positive sorting does occur between occupational wage differentials and establishment wage differentials.¹³

In the fourth regression above, the job-cell interactions measure the wage premium paid to a particular occupation in a particular establishment above or below the wage premium predicted by the occupational and the establishment differentials. The relative contribution of the job cells in our wage decomposition is measured as $(R^2_{\text{Cell}} - R^2_{\text{Main}})$. The explanatory power of job cells captures what Erica Groshen and David Levine refer to as the “internal (wage) structure effect.”¹⁴ In a wage regression, the job cells can reflect many factors. For example, the initial phases of an establishment’s production process may resemble the average in the industry requiring workers of average ability, but its finishing process may require workers of higher-than-average ability. Another example may be that the wage profile in the establishment is tilted, either because of on-the-job training given to entry-level workers, or as a result of deferring wages in order to offer workers incentives not to shirk in their duties. The job-cell effects could also reflect differences in occupational tenure across establishments.

The final contribution to wages is the individual contribution. This is measured as $(1 - R^2_{\text{Cell}})$ and is the portion

of the total sum of squares of wages that cannot be explained by occupation and establishment indicators. This individual contribution is undoubtedly due to unobserved wage effects that result from gender, education, tenure, or other individual attributes that are not captured by the interactions of the occupation and establishment indicators.

In summary, four regressions of log wages on various combinations of occupation and establishment dummy variables are estimated, with the focus on the R-squareds from these four regressions. Simple comparisons of these R-squareds provide information on occupational and establishment wage differentials, the degree of occupational sorting across establishments, the importance of employer-specific wage structures, and the importance of unobserved individual heterogeneity (controlling for occupation and establishment).

The data

As stated in the beginning of this article, microdata from the Occupational Employment Statistics (OES) program at the Bureau of Labor Statistics (BLS) were used. The OES is an annual mail survey measuring occupational employment and wage rates by geographic area and by industry. Approximately 400,000 establishments are surveyed each year. The OES survey covers all full-time and part-time wage and salary workers in nonfarm industries. The survey does not cover the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers. In 1996, the OES program began collecting wage-rate data along with occupational-employment data in every State. The survey is designed as a three-year sample, with one-third of both the certainty and noncertainty strata sampled each year.

The 1996 and 1997 microdata were used in this analysis. The sample had 573,586 establishments with no imputations of wage or employment data.¹⁵ It included occupation and wage information for all of the 34,453,430 individuals employed in these establishments, along with information on the location, industry, size, and age of each establishment.

The OES survey asks establishments to fill out the elements of a matrix, in which occupations are listed on the rows and various wage ranges are listed in the columns. For each occupation, respondents are asked to report the number of employees paid within specific wage intervals. An example of the OES survey form, with many of the occupations omitted for presentation purposes, is given in the appendix. Separate OES survey forms are designed for

each industry group and list the occupations that are typical in the industry. Survey forms contain between 50 and 225 OES occupations, depending on the industry classification and size class of the sampled establishments. If an occupation is not listed on a survey form, the respondent is asked to include the information on a supplemental page. To reduce paperwork and respondent burden, no survey form contains every OES occupation.

The occupational data in the 1996 and 1997 OES surveys are based on the 1980 Standard Occupational Classification (SOC) System. Occupations are classified based upon work performed, skills, education, training, and credentials. There are 824 detailed occupations in this OES microdata. In some of the analysis, these 824 detailed (5-digit) occupational codes were aggregated into 7 major (1-digit) occupations: Management, Professional, Sales, Clerical, Services, Agricultural, and Production.

The wage information provided by establishments in the OES survey is recorded in intervals for either hourly or annual rates of pay. (See appendix.) The actual values used for these intervals are the mean wage of all workers within the interval, as computed from the National Compensation Survey for that year.¹⁶ All of the wages used in this analysis were measured, in real terms, as the natural logarithm of hourly rates of pay.¹⁷

The obvious strengths of the OES microdata for economic analysis are the sample size and the level of occupational detail. Specifically, there are more than half a million establishments in our sample, with wages reported for over 34 million individuals in more than 800 occupations. As such, the OES data can be viewed as a type of matched employer-employee microdata. The second strength of the OES is the employer-reported occupational data. Although the dataset contains no information regarding the worker's demographic characteristics (such as age, race, or gender) or the worker's labor-market information (such as tenure, experience, or training), it should be noted that the detailed occupational information should be a proxy for a worker's skills. This latter point will be considered in the discussion of the empirical estimates.

Empirical wage decompositions

Basic results. The results of our wage decomposition are shown in table 1. In the first column, estimates using the seven 1-digit occupation measures are reported. In the second column, estimates using the 824 5-digit occupation measures are reported. The first four rows report the R-squareds from the regressions described earlier. These regressions are estimated from the sample of more than

Table 1. Wage variance decomposition

Item	(1)	(2)
R ² : W _{iej} = Occ dummies	0.2870	0.5466
R ² : W _{iej} = Est dummies	.4955	.4955
R ² : W _{iej} = Occ + Est	.6468	.7552
R ² : W _{iej} = Occ * Est	.7252	.8798
Occupation	.1513	.2597
Joint occupation and establishment	.1357	.2869
Establishment	.3598	.2086
Job cell	.0784	.1246
Individual	.2748	.1202
One-digit occupation	Yes	—
Five-digit occupation	—	Yes
NOTE: 34,453,430 individuals. Wages are measured in natural logarithms: Mean=2.5133, Std.Dev.=0.5446. There are 7 1-digit occupations, 824 5-digit occupations, and 573,586 establishments.		

34 million individuals.¹⁸ The next five rows report the various contributions of occupation and establishment to wage variation.

The R-squareds in the fourth row of table 1 demonstrate that knowing an individual's occupation and workplace provides substantial information towards explaining individual wage variation. More than 72 percent of wage variation is explained by knowing the individual's 1-digit occupation and establishment, and close to 88 percent of wage variation is explained by knowing the individual's 5-digit occupation and establishment. This implies that approximately 12 percent of wage variation is left to unobserved individual heterogeneity (although it is acknowledged that this is probably an underestimate because of the use of interval data).

The importance of the information contained in the detailed occupational categories becomes clear from an analysis of the first row in table 1. In the first column, the seven 1-digit occupation indicators explain more than 28 percent of wage variation. In the second column, the 824 5-digit occupation indicators explain more than 54 percent of wage variation. This empirically confirms the belief that the OES occupational data provide meaningful information about the work performed in the job, as well as the skills, education, training, and credentials of the persons performing the work. The R-squareds in the second row illustrate that establishment indicators alone explain approximately half of individual wage variation.

In the lower half of table 1, the decomposition of individual wage variation into its component parts is reported.

By looking at the second column, which is based on regressions of log wages on detailed-occupation dummies and establishment dummies, it may be seen that 26 percent of wage variation is associated unambiguously with occupation, and 21 percent of wage variation is associated unambiguously with information on the individual's establishment. An important part to understand is the sorting among occupations and establishments—this joint contribution accounts for 29 percent of wage variation. The final portion of the explained wage variation is the job-cell contribution, which accounts for slightly more than 12 percent of wage variation. The residual 12 percent of wage variation in the OES data is due to unobserved variation across individuals within a job cell.

It is worthwhile to compare the results of this study's wage decomposition with the results reported by Erica Groshen.¹⁹ If a computation is run on the simple average across the six industries reported by Groshen, her results fall in between the results reported in columns 1 and 2 of table 1. For example, Groshen's estimates imply that occupation indicators account for a mean of 20 percent of wage variation, and establishment indicators account for a mean of 32 percent of wage variation. This article's estimates of the occupation effect range from 15 to 26 percent, and the estimates of the establishment effect range from 21 to 36 percent. Estimates of the joint-sorting effect (14 to 29 percent), the job-cell effect (8 to 12 percent), and the individual effect (12 to 27 percent) are also comparable to the means of the estimates reported by Groshen (17 percent, 10 percent, and 22 percent, respectively).

The estimates in table 1 provide interesting insight into the labor market and the wage-setting practices of businesses. The occupation and establishment information in the OES data explain most of the wage variation across individuals. Not surprisingly, detailed information on the individual's occupation explains a sizable amount of wage variation. Building on a small but growing literature, substantial establishment wage differentials are found.

Sensitivity analysis. The R-squared of 0.8798 in table 1 is unusually high if it is compared with most earnings regressions based on worker surveys. This article is not the first study to find such a high R-squared when employers are included: Erica Groshen finds that "occupation and

establishment identity alone can explain over 90 percent of wage variation among blue-collar workers."²⁰ It is notable that this high R-squared is achieved despite the fact that education and other individual determinants of wages are not available, confirming that occupation serves as a strong proxy for these factors. This is also supported by the finding that the residual individual component falls from 0.27 to 0.12 when moving from 1-digit to 5-digit occupation controls.

However, it is possible that, despite the fact that the OES survey contains some of the most detailed and accurate occupational data available in any dataset, the R-squared may be inflated for technical reasons—the wage intervals in which the data are reported may be "too wide" relative to the wage variation within establishments. Clearly, as the occupational classifications become more detailed, or as the wage intervals become wider, the average number of wage intervals reported per job cell will decrease and the R-squareds will increase. In the longer working paper version of this article, we have examined the possibility that this may be a source of bias by undertaking an extensive sensitivity analysis. Specifically, in that version, an econometric framework was presented that simulates how the interval method of collecting individual wage data affects the estimates from our wage decomposition. It was found that collecting individual wage data as intervals in an establishment survey does not distort the conclusions drawn from our wage decomposition. Indeed, the sensitivity analysis in the longer working paper supports the notion that an important source of earnings variation

Table 2. The effect of observable establishment characteristics on empirical wage decompositions

Item	(1)	(2)	(3)	(4)	(5)	(6)
R ² : W _{iej} = X	0.0833	0.0243	0.0727	0.1294	0.2955	0.3469
R ² : W _{iej} = Occ + X	.5884	.5499	.5684	.5658	.6104	.6515
Establishment effect	.2086	.2086	.2086	.2086	.2086	.2086
Explained	.0418	.0033	.0218	.0192	.0638	.1049
Unexplained	.1668	.2053	.1868	.1894	.1448	.1037
County controls	Yes	—	—	—	—	Yes
Age controls	—	Yes	—	—	—	Yes
Size controls	—	—	Yes	—	—	Yes
Major industry controls	—	—	—	Yes	—	Yes
4-digit industry controls	—	—	—	—	Yes	Yes

NOTE: 34,453,430 individuals. Wages are measured in natural logarithms: Mean=2.5133, Std.Dev.=0.5446.

There are 7 1-digit occupations, 824 5-digit occupations, and 573,586 establishments. There are 3,194 counties, 5 age categories, 9 size categories, 10 major industries, and 937 4-digit industries.

comes from between, rather than within, establishment variation.²¹

A closer examination of establishment wage differentials. In column 2 of table 1, 20.9 percent of wage variation is found to be attributable to differences across establishments. This provides strong evidence for establishment wage differentials. These estimated differentials, however, might simply reflect cost-of-living differences across establishments in different geographical areas, or might be acting as a proxy for other characteristics, such as size or industry. The importance of these effects is explored by modifying the decomposition to include establishment-level explanatory variables, such as age, size, industry, and county in the right-hand side of the wage regression.

The wage decomposition is now based on five regressions, for which the additional regression is:

$$\begin{aligned} &(\text{Occ}, X) \\ W_{iej} &= \mu + \text{OCC}_j \alpha + X_e \delta + \varepsilon_{iej}. \end{aligned}$$

The components of X_e are dummy variables for industry, county, age, and size. The R-squared from this fifth regression is notationally defined as $R^2_{\text{Occ}, X}$. Because these explanatory variables are linear combinations of the establishment dummies, the establishment contribution of the wage decomposition can be decomposed into two pieces: the explained and the unexplained contribution. The explained component of the establishment effect is defined as $(R^2_{\text{Occ}, X} - R^2_{\text{Occ}})$, and the unexplained component of the establishment effect as $(R^2_{\text{Main}} - R^2_{\text{Occ}, X})$. These two components sum to the total establishment effect in table 1, which is calculated as $(R^2_{\text{Main}} - R^2_{\text{Occ}})$.

The wage decompositions controlling for the effects of observable establishment characteristics are presented in table 2. In column 1, the wage decomposition controlling for any county effects, including cost-of-living differences that are common within counties, are presented. These county controls account for one-fifth of the estimated establishment wage differentials (0.0418/0.2086), and thus local area differences explain some of the reasons why wages vary across establishments. Similarly, in columns 2 through 5 of table 2, the conclusion is reached that age, size, and industry can each explain only a small portion of the reasons why wages vary across establishments. When all observable effects are controlled for together in column 6 of table 2, half of the estimated establishment wage differentials are accounted for. It may be concluded that establishment wage differentials can be only partially explained by observable establishment characteristics, and thus, establishment wage differentials are an important

explanation for the reasons why wages vary across individuals.

Further empirical results. Many of the explanations put forward for the existence of employer effects on wages vary in importance for different industries. For example, capital-labor complementarity should be more important in the goods-producing industries than in the service-providing industries, unionization rates vary dramatically across industries, and skill sorting should be more important in industries that produce heterogeneous output. The results presented in table 3 show noticeable differences across major industries. Establishment wage differentials are most important in construction, mining, manufacturing, and transportation and public utilities (TCPU); they are least important in public administration; finance, insurance and real estate (FIRE); agriculture; and services. Establishment wage differentials explain 37 percent of wage variation in construction, yet only 16 percent of wage variation in the services industry. A number of reasons for these industry differences are possible: the traditional goods-producing industries are more unionized than the other sectors (with the exception of public administration), and these industries may well have greater variation in capital usage.

Interestingly, the construction and services industries are also quite different with regard to the contribution of occupational sorting: this component of the wage decomposition contributes little to variation in earnings in construction, but is quite important in services. This suggests that establishments in the construction industry bundle their workers in very similar ways, while establishments in the services industry bundle their workers very differently.

It is equally rewarding to analyze differences by establishment size. As seen in table 4, the importance of establishment wage differentials drops markedly and monotonically with the size of the establishment. Establishment wage differentials explain 30 percent of wage variation for establishments with two to nine employees, yet explain 16.5 percent of wage variation for the largest establishments. Also, it may be seen that the percentage of the establishment effect which can be explained by observed characteristics rises with the size of the establishment. The finding that small establishments exhibit more variation, both total and unexplained, in their contribution to wages is consistent with the notion that small establishments are more idiosyncratic than large establishments with regard to their personnel and paysetting practices.²²

Table 3. Wage variance decomposition, by major industry

Item	Agriculture	Mining	Construction	Manufacturing	TCPU
R ² : $W_{iej} = X$	0.2819	0.4187	0.2511	0.3542	0.3114
R ² : $W_{iej} = \text{Occ}$	.5960	.4858	.3332	.5112	.4496
R ² : $W_{iej} = \text{Occ} + X$	.6596	.7042	.5325	.6765	.5826
R ² : $W_{iej} = \text{Est}$	.4340	.5284	.4556	.5144	.4844
R ² : $W_{iej} = \text{Occ} + \text{Est}$	.7666	.7829	.7017	.7855	.7171
R ² : $W_{iej} = \text{Occ} * \text{Est}$	.8921	.9114	.8595	.9110	.8565
Occupation	.3326	.2545	.2461	.2711	.2327
Joint occupation and establishment	.2634	.2313	.0871	.2401	.2169
Establishment	.1706	.2971	.3685	.2743	.2675
Explained	.0636	.2184	.1993	.1653	.1330
Unexplained	.1070	.0787	.1692	.1090	.1345
Job cell	.1255	.1285	.1578	.1255	.1394
Individual	.1079	.0886	.1405	.0890	.1435
Number of individuals	268,958	180,110	1,358,346	6,020,917	1,895,225
Number of establishments	10,995	3,744	47,434	73,390	31,136
Number of 5-digit occupations	229	287	391	643	502
Item	Wholesale	Retail	FIRE	Services	Public administration
R ² : $W_{iej} = X$	0.1612	0.1912	0.2032	0.2937	0.2207
R ² : $W_{iej} = \text{Occ}$	.4778	.4575	.5319	.6075	.4282
R ² : $W_{iej} = \text{Occ} + X$	.5547	.5516	.6111	.6769	.5615
R ² : $W_{iej} = \text{Est}$	.3880	.3784	.3465	.4360	.2909
R ² : $W_{iej} = \text{Occ} + \text{Est}$	.7063	.6932	.7028	.7630	.6111
R ² : $W_{iej} = \text{Occ} * \text{Est}$	.8789	.8466	.8376	.8802	.7626
Occupation	.3183	.3148	.3563	.3270	.3202
Joint occupation and establishment	.1595	.1427	.1756	.2805	.1080
Establishment	.2285	.2357	.1709	.1555	.1829
Explained	.0769	.0941	.0792	.0694	.1333
Unexplained	.1516	.1416	.0917	.0861	.0496
Job cell	.1726	.1534	.1348	.1172	.1515
Individual	.1211	.1534	.1624	.1198	.2374
Number of individuals	1,568,727	4,367,477	1,553,429	10,914,875	6,325,366
Number of establishments	53,433	134,886	36,408	167,371	14,789
Number of 5-digit occupations	559	534	409	759	669

NOTE: 34,453,430 individuals. Wages are measured in natural logarithms: Mean=2.5133, Std.Dev.=0.5446. There are 7 1-digit occupations, 824 5-digit occupations, and 573,586 establishments.

There are 3,194 counties, 5 age categories, 9 size categories, 10 major industries, and 937 4-digit industries. Explanatory variables "X" are county, age, size, and 4-digit industry.

Occupational wages within establishments

The empirical evidence from the wage decompositions highlights the importance of the establishment itself for understanding the variation of individual wages. Even after controlling for observable characteristics that vary across establishments, substantial evidence of establishment wage differentials was found. By definition, these establishment wage differentials measure the wage premium paid to all workers in the establishment, regardless of occupation. This study now turns toward examining the correlations of occupational wages within establishments. The analysis here is motivated by the team-production model, well described by Michael Kremer.²³ Simply put, in this model, workers of similar skill will be grouped

together in firms—highly skilled supervisors will work with highly skilled production workers. This reflects the complex nature of a multi-stage production process that requires the coordinated and successful completion of distinct tasks. In many production processes, it is not possible for several low-skilled workers to substitute for one high-skilled worker. Empirically, this should result in a positive correlation of occupational wages within establishments.

The analysis in this section is similar to previous work of William Dickens and Lawrence Katz, as well as previous work of Stephen Bronars and Melissa Famulari.²⁴ The objective of the correlation analysis is to examine the breadth of the establishment wage differentials across occupations, with the goal being an enhanced understanding of their effects. For example, in a manufacturing plant, it is

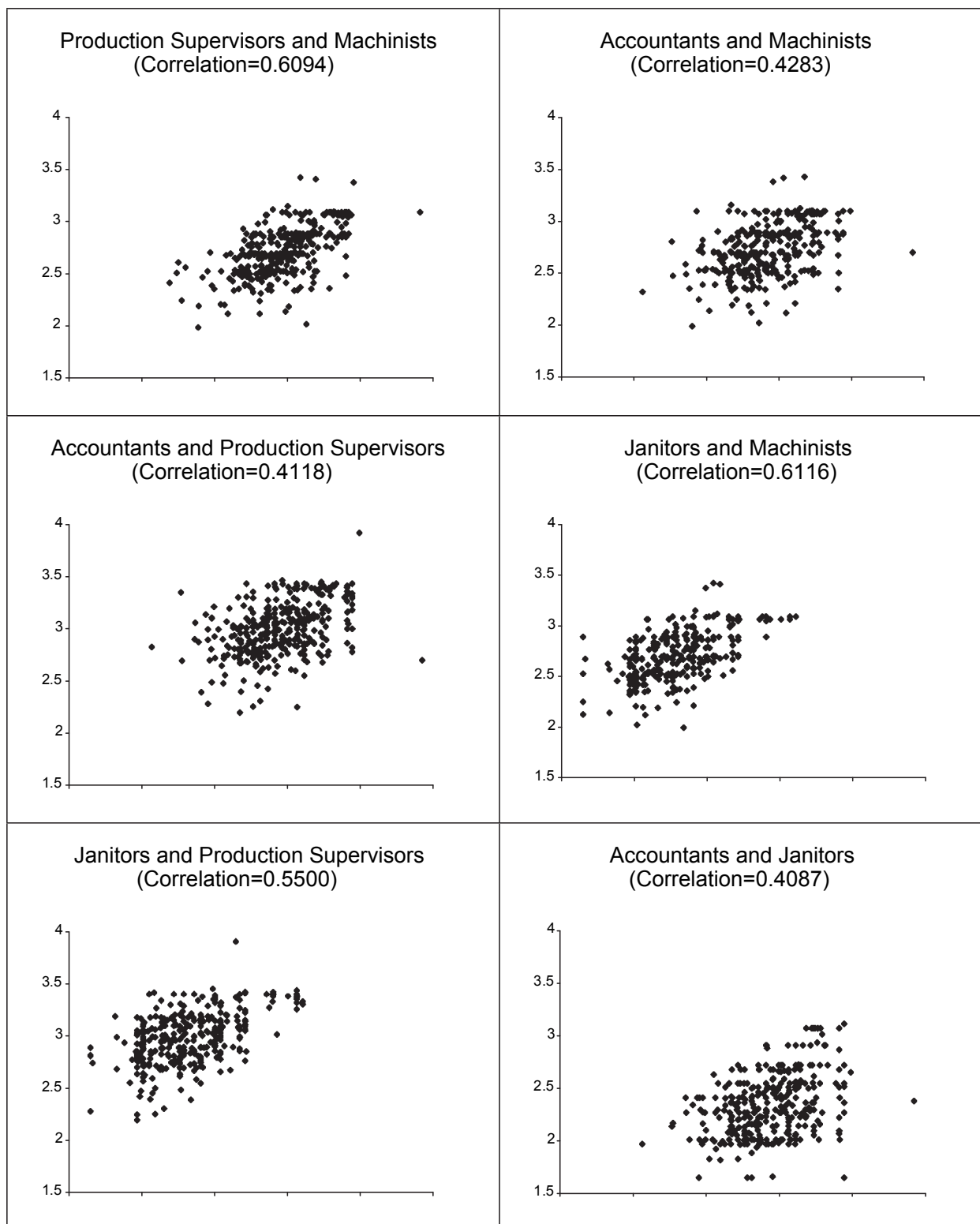
Table 4. Wage variance decomposition, by establishment size

Item	Size =1	Size 2–9	Size 10–15	Size 16–25	Size 26–50	Size 51–100	Size 101–250	Size 251–500	Size >500
R ² : $W_{iej} = X$	0.6535	0.2756	0.2844	0.3032	0.3191	0.3335	0.3373	0.3630	0.3042
R ² : $W_{iej} = \text{Occ}$	.4735	.4692	.5082	.5366	.5575	.5666	.5670	.5826	.5438
R ² : $W_{iej} = \text{Occ} + X$	.8125	.5595	.5946	.6213	.6361	.6505	.6586	.6888	.6590
R ² : $W_{iej} = \text{Est}$	1.000	.5392	.4991	.4940	.4994	.5022	.4958	.4932	.3858
R ² : $W_{iej} = \text{Occ} + \text{Est}$	1.000	.7684	.7589	.7626	.7646	.7655	.7632	.7714	.7088
R ² : $W_{iej} = \text{Occ} * \text{Est}$	1.000	.9270	.9136	.9079	.9008	.8960	.8875	.8843	.8288
Occupation	.0000	.2292	.2598	.2686	.2652	.2633	.2674	.2782	.3230
Joint occupation and establishment	.4735	.2400	.2484	.2680	.2923	.3033	.2996	.3044	.2208
Establishment	.5265	.2992	.2507	.2260	.2071	.1989	.1962	.1888	.1650
Explained	.3390	.0903	.0864	.0847	.0786	.0839	.0916	.1062	.1152
Unexplained	.1875	.2089	.1643	.1413	.1285	.1150	.1046	.0826	.0498
Job cell	.0000	.1586	.1547	.1453	.1362	.1305	.1243	.1129	.1200
Individual	.0000	.0730	.0864	.0921	.0992	.1040	.1125	.1157	.1712
Number of individuals	3,149	1,098,076	1,292,496	1,806,070	3,073,260	3,890,886	5,477,999	3,880,169	13,931,325
Number of establishments	3,149	177,200	106,272	90,111	86,388	55,087	36,111	11,280	7,988
Number of 5-digit occupations	377	791	802	806	815	819	821	812	816

NOTE: 34,453,430 individuals. Wages are measured in natural logarithms: Mean=2.5133, Std.Dev.=0.5446. There are 7 1-digit occupations, 824 5-digit occupations, and 573,586 establishments.

There are 3,194 counties, 5 age categories, 9 size categories, 10 major industries, and 937 4-digit industries. Explanatory variables "X" are county, age, size, and 4-digit industry.

Figure 1. Mean occupational wages, manufacturing industry



NOTE: Wages are measured in natural logarithms. Sample is 338 establishments in the manufacturing industry with at least two employees in each of the following 5-digit occupations: machinists, production supervisors, accountants, and janitors.

expected that the wages of machinists and production supervisors would be positively correlated, as they work side by side on the assembly line. It is less likely, however, that wages of the accountants or the janitors in this manufacturing plant would be positively correlated with the wages of the machinists and the production supervisors.

An examination of the data reveals that while the correlations across closely related occupations are quite high, supporting a team-production hypothesis, correlations are also surprisingly high across unrelated occupations. In figure 1, continuing with the example from the previous paragraph, the average wages of one occupation against the average wages of another occupation in the same establishment are graphed.²⁵ Not surprisingly, it was found that the wages of machinists and the wages of production supervisors are closely correlated (the correlation is 0.61). Also found were that the wages of accountants are positively correlated with the wages of machinists and production supervisors (the correlations are 0.43 and 0.41), and the wages of janitors are positively correlated with the wages of machinists and production supervisors (the correlations are 0.61 and 0.55). Perhaps most surprisingly, the wages of accountants are highly correlated with the wages of janitors in the same establishment (the correlation is 0.41).

Consistent with the earlier analysis of establishment wage differentials outlined in this article, the enormous heterogeneity in wages across the manufacturing establishments that is evident in figure 1 deserves mention. For example, the establishment mean $\ln(\text{wage})$ of accountants in this sample ranges from 2.1 to 3.9 (with a mean of 2.94 and a standard deviation of 0.26). This heterogeneity is consistent with the findings of John Haltiwanger, Julia Lane, and James Spletzer, who outline a model wherein an unobserved business “type” generates heterogeneity in establishment productivity and wages.²⁶ Furthermore, the findings in figure 1 of skill complementarity across occupations within the establishment fit quite nicely with Haltiwanger, Lane, and Spletzer’s model of complementarity between the “type” of business and the skill composition of its workforce.

The relationship of occupational mean wages within establishments is investigated more formally in table 5. For the seven major occupations, the correlation matrix of occupational mean wages within establishments is presented. Two correlations for each occupational pair are shown. The top correlation is unadjusted for observable establishment characteristics, whereas the bottom correlation is based on individual wage data with county, age, size, and major industry means removed.

Table 5. Correlation of mean 1-digit occupational wages within establishments

Item	Management	Professional	Sales	Clerical	Services	Agricultural	Production
Management	1 1 (N=378,960)	0.5054 .3964 (N=190,508)	0.5696 .3668 (N=177,866)	0.4503 .3346 (N=309,002)	0.3510 .2041 (N=123,393)	0.3668 .1798 (N=29,415)	0.3790 .1935 (N=234,127)
Professional	—	1 1 (N=242,710)	.4515 .2249 (N=95,201)	.4788 .3604 (N=212,116)	.4237 .2900 (N=91,243)	.3625 .1293 (N=20,786)	.4671 .2315 (N=126,181)
Sales	—	—	1 1 (N=263,965)	.5004 .2072 (N=179,827)	.3822 .0912 (N=67,313)	.3869 .2273 (N=12,940)	.5020 .2469 (N=145,992)
Clerical	—	—	—	1 1 (N=410,387)	.5138 .4387 (N=128,401)	.4904 .3054 (N=32,757)	.4878 .3033 (N=255,165)
Services	—	—	—	—	1 1 (N=173,193)	.5827 .3351 (N=17,470)	.4602 .2591 (N=88,471)
Agricultural	—	—	—	—	—	1 1 (N=41,203)	.5780 .3447 (N=25,329)
Production	—	—	—	—	—	—	1 1 (N=316,958)

NOTE: 573,586 establishments. Wages are measured in natural logarithms. Upper correlation: no controls for establishment charac-

teristics. Lower correlation: controls for county, age, size, and major industry.

Looking at the data unadjusted for establishment characteristics, the average of the 21 off-diagonal correlations is 0.4614. This is very similar to the estimate of Stephen Bronars and Melissa Famulari, who report a correlation of mean occupational wages between professionals and nonprofessionals of 0.499.²⁷ All these correlations in table 5 are positive and statistically greater than zero at conventional levels of significance. This says that establishments that pay well for one occupation also pay well for all other occupations. One particularly interesting pattern is that all correlations below 0.4 are in the upper-right corner of the table—it would seem that the least skill matching within establishments occurs between traditional white-collar occupations (managers, professionals, and sales) and blue-collar occupations (services, agricultural, and production). The correlations in table 5 are consistent with theories which predict that workers are sorted into establishments based on skill.

As was seen with the wage-decomposition analysis, it is possible that these correlations are biased upward by not controlling for observable characteristics of the establishment. After removing the effects of county, age, size, and industry, it is clear that the correlations fall. The average off-diagonal correlation fell dramatically from 0.4614 to 0.2700. The correlations remain quite large, however, and all the correlations remain statistically greater than zero. This leads to the conclusion that the unadjusted occupational mean correlations within establishments do measure cost-of-living differences, industry effects, or size effects to a large extent, but also they are measuring establishment-specific pay practices that are otherwise unobservable to the data analyst.

Discussion

Using a simple regression-based wage decomposition effectively documents the magnitude of occupation and establishment wage differentials, the sorting of high-wage occupations into high-wage establishments, and the extent of employer-specific wage structures—the wage premium paid to particular occupations in particular establishments above or below the wage premium predicted by the occupational and the establishment differentials. The key finding in this article is that an establishment can and does exert a significant effect on the wages of the individuals who work therein. It may be seen that controlling for detailed occupation, 21 percent of wage variation can be explained merely by knowing the individual's particular establishment. Accounting for observable characteristics of the employer reduces these establishment wage differ-

entials by half. Taking the empirical analysis one step further, it was shown that the establishment's wage premium is correlated across major occupation groups within the establishment. These empirical estimates complement and enhance previous work on the topic of employer effects on wages.

One of the dominant themes running through the literature of employer effects on wages is that establishments systematically sort workers by skill. The existing literature has found that this sorting explains much but not all of the observed employer effects on wages. The findings documented in this article are certainly consistent with such a conclusion. In the wage decomposition described earlier, merely knowing the worker's establishment explains 50 percent of the observed wage variation across individuals. Controlling for the seven 1-digit occupation indicators lowers this wage variation explained by establishments to 36 percent, and controlling for 5-digit occupation indicators lowers this further to 21 percent. Because the detailed occupational information serves as a proxy for the worker's skills, it was also found that controlling for skill explains much, but certainly not all, of the estimated establishment wage differentials in the raw data.

Another of the themes running through the literature is that establishment wage differentials are merely a proxy, at least in part, for unobserved characteristics of the establishment that are correlated with wages. The results found are consistent with this hypothesis. To the extent that differences across establishments in working conditions, costs of living, rent sharing, and capital-labor ratios can be proxied for by observable establishment characteristics, such as county, age, size, and industry, it was found that controlling for these characteristics lowers the estimated establishment wage differentials from 21 percent of wage variation to 10 percent.

The question remaining is how to explain the estimated establishment wage differentials. Any explanation proposed must simultaneously account for the finding that the establishment wage differentials are common to workers in all occupations in the establishment.

One possible explanation is that the observed differentials simply reflect differences in unobserved labor quality across establishments, and that more detailed information on individual ability and human capital would serve to eliminate the differentials. To the extent that this explanation is true, differentials support the sorting theory; to the extent that it is not, differentials support variations in establishment pay practices. Testing this hypothesis is beyond the capabilities of this dataset, for it does not have information on worker characteristics, such as education,

age, tenure, or training. In addition, there are several reasons to doubt that this hypothesis is the sole explanation of the estimated differentials. First, the work of Erica Groshen and David Levine suggests (but does not prove) that occupation adequately controls for standard measures of human capital.²⁸ Moreover, in the work by K. C. O'Shaughnessy, David Levine, and Peter Cappelli, it was found that measures of skill and job characteristics do not explain much of the difference in wages across employers (although these measures of skill do explain quite a bit of wage variation across individuals).²⁹ The findings of John Abowd and his colleagues, who have access to longitudinal linked employer-employee microdata and are thus able to control for unobserved skill using person-specific dummy variables, suggest that unmeasured heterogeneity across individuals explains some but not all of the estimated employer effects on wages.³⁰ Finally, it is difficult to theorize how unobserved ability and human capital could be important contributors to wage differentials across all occupations in the establishment—such as janitors and accountants.

Another possibility is that the observed differentials reflect differences in technology or capital across establishments. Recent work using establishment microdata has illustrated the striking amount of heterogeneity across establishments within narrowly defined aggregates.³¹ While this study used establishment characteristics such as age,

size, and industry to serve as a proxy for such differences, it would be useful to incorporate establishment-level information on inputs to (and outputs from) the production process into the analysis. However interesting and worthwhile this line of research would be, it may prove unlikely that capital intensity or technology per se would produce establishment wage differentials that are common to all occupations—again, the example of janitors and accountants comes to mind.

ANY EXPLANATION FOR THE EXISTENCE OF ESTABLISHMENT wage differentials will, in all likelihood, rest on a combination of theories. Empirical work from recent analysis of matched employer-employee data shows that higher-skilled workers not only work together in the same establishment, but also tend to work with higher-quality capital and technology.³² Modeling these basic human-capital results, augmented with a theory of why human resource pay policies might differ across establishments, should show how the gains from skill sorting and capital-labor complementarities can be extended to workers in all occupations in the establishment. Thoughts such as these run throughout the existing body of literature that examines the reasons why the wages of individuals are, to an extent not entirely understood, affected at a variety of levels by their employer. Additional theoretical and empirical research will have much more information to offer. □

Notes

¹ Erica L. Groshen, "Sources of Intra-Industry Wage Dispersion: How Much Do Employers Matter?" *The Quarterly Journal of Economics*, August 1991, pp. 869–884.

² Stephen G. Bronars and Melissa Famulari, "Wage, Tenure, and Wage Growth Variation Within and Across Establishments," *Journal of Labor Economics*, April 1997, pp. 285–317.

³ K. C. O'Shaughnessy, David I. Levine, and Peter Cappelli, "Changes in Managerial Pay Structures, 1986–1992, and Rising Returns to Skill," National Bureau of Economic Research (NBER) Working Paper No. 7730 (Cambridge, MA, NBER, 2000).

⁴ Alejandra Mizala and Pilar Romaguera, "Wage Differentials and Occupational Wage Premia: Firm-Level Evidence for Brazil and Chile," *Review of Income and Wealth*, June 1998, pp. 239–257.

⁵ John M. Abowd and Francis Kramarz, "Inter-Industry and Firm-size Wage Differentials in France and the United States," unpublished paper (Ithaca, NY, Cornell University, 1999.)

⁶ Erica L. Groshen, "Five Reasons Why Wages Vary Among Employers," *Industrial Relations*, Fall 1991, pp. 350–381.

⁷ Key references that have influenced the industry wage differentials literature are William T. Dickens and Lawrence F. Katz, "Inter-Industry Wage Differences and Theories of Wage Determination," NBER

Working Paper No. 2271 (Cambridge, MA, NBER, 1987); Lawrence F. Katz and Lawrence H. Summers, "Industry Rents: Evidence and Implications," *Brookings Papers on Economic Activity* (Washington, DC, The Brookings Institution, 1989), pp. 209–275; and Alan B. Krueger and Lawrence H. Summers, "Efficiency Wages and the Inter-Industry Wage Structure," *Econometrica*, March 1988, pp. 259–294.

⁸ One survey of the employer-size wage differentials literature is Walter Y. Oi and Todd L. Idson, "Firm Size and Wages," in *Handbook of Labor Economics*, edited by Orley Ashenfelter and David Card (Amsterdam, North-Holland Press, 1999), pp. 2165–2214.

⁹ Charles Brown and James Medoff, "The Employer Size-Wage Effect," *Journal of Political Economy*, October 1989, pp. 1027–1059.

¹⁰ Kenneth R. Troske, "Evidence on the Employer Size-Wage Premium from Worker-Establishment Matched Data," *The Review of Economics and Statistics*, February 1999, pp. 15–26.

¹¹ Abowd and Kramarz, "Inter-Industry and Firm-size Wage Differentials," unpublished paper (Cornell University, 1999.)

¹² Groshen, "Sources of Intra-Industry Wage Dispersion" *Quarterly Journal of Economics*, August 1991, pp. 869–884.

¹³ See Groshen, "Sources of Intra-Industry Wage Dispersion" *Quarterly Journal of Economics*, August 1991, pp. 869–884; and Erica L.

Groshen and David I. Levine, "The Rise and Decline (?) of U.S. Internal Labor Markets," Working Paper No. 9819, Federal Reserve Bank of New York (New York, 1998).

¹⁴ Groshen and Levine, "The Rise and Decline (?) of U.S. Internal Labor Markets," Working Paper No. 9819, Federal Reserve Bank of New York (1998).

¹⁵ The response rate for the OES survey is 78 percent (thus we have survey responses from roughly 624,000 of the 800,000 sampled establishments). The remaining sample reduction is to exclude the establishments that report employment or wage data for some but not all occupations.

¹⁶ The interval mean for the bottom interval may vary for States with a minimum wage above the Federal minimum. The interval mean for the top interval is set in nominal terms at \$60.01. This upper wage interval contains 0.7 percent of the individuals in our sample (244,727 / 34,453,430). It has been found that the results from the wage decomposition are not sensitive to the point estimate used for this upper interval: the establishment effects reported in table 1 are 20.86 percent using the point estimate of \$60.01, and would be 20.78 percent using a point estimate of \$70.01 and 20.69 percent using a point estimate of \$80.01.

¹⁷ Given that the wage data can be reported as either annual or hourly, there is a concern that the establishment wage differentials could reflect hours differences across establishments. The example of banking comes to mind: a bank with "bankers' hours" may have tellers working six hours per day, whereas a full-service bank may have tellers working eight hours per day. Our estimated establishment wage differentials could be affected if earnings for occupations with hours variation across establishments are reported on an annual basis. This potential bias should be mitigated, however, by the fact that the OES survey respondents are instructed to classify part-time workers according to an hourly rate.

¹⁸ The R-squareds from a regression using 34 million individuals are identical to the R-squareds from a regression using 7,778,248 "cells" weighted by employment, where a "cell" is a wage interval within an establishment-occupation job cell.

¹⁹ Groshen, "Sources of Intra-Industry Wage Dispersion," *Quarterly Journal of Economics*, August 1991, pp. 869–884. The authors recognize that it may be conceptually difficult to compare this study's results (which are computed from a national sample) with Groshen's results (which are computed from six industries). One purpose of this simple comparison is to demonstrate that the results from this study's estimation, and in particular the high R-squareds, are similar to results from other data which use the same methodology.

²⁰ This quote is from Groshen, "Sources of Intra-Industry Wage Dispersion," *Quarterly Journal of Economics*, August 1991, p. 869.

²¹ The longer working paper version of this article is Julia I. Lane, Laurie A. Salmon, and James R. Spletzer, "Establishment Wage Dif-

ferentials," BLS Working Paper No. 403 (Washington, DC, U.S. Department of Labor, Bureau of Labor Statistics, March 2007).

²² This conclusion mirrors the findings of John C. Haltiwanger, Julia I. Lane, and James R. Spletzer, "Wages, Productivity, and the Dynamic Interaction of Businesses and Workers," *Labour Economics*, June 2007, pp. 575–602, which show that new businesses exhibit greater earnings heterogeneity than do mature businesses.

²³ Michael Kremer, "The O-Ring Theory of Economic Development," *The Quarterly Journal of Economics*, August 1993, pp. 551–575.

²⁴ Dickens and Katz, "Inter-Industry Wage Differences and Theories of Wage Determination," NBER Working Paper No. 2271 (1987); and Bronars and Famulari, "Wage, Tenure, and Wage Growth Variation," *Journal of Labor Economics*, April 1997, pp. 285–317.

²⁵ There are 47,633 manufacturing establishments with at least 1 worker in any of the four occupations. We have selected the 338 manufacturing establishments with at least 2 workers in each of the four occupations.

²⁶ Haltiwanger, Lane, and Spletzer, "Wages, Productivity, and Dynamic Interaction," *Labour Economics*, June 2007, pp. 575–602.

²⁷ Bronars and Famulari, "Wage, Tenure, and Wage Growth Variation," *Journal of Labor Economics*, April 1997, pp. 285–317.

²⁸ Groshen, "Sources of Intra-Industry Wage Dispersion," *Quarterly Journal of Economics*, August 1991, pp. 869–884; and David I. Levine, "Can Wage Increases Pay for Themselves? Tests with a Production Function," *Economic Journal*, September 1992, pp. 1102–1115.

²⁹ O'Shaughnessy, Levine, and Cappelli, "Changes in Managerial Pay Structures, 1986–1992, and Rising Returns to Skill," NBER Working Paper No. 7730 (2000).

³⁰ See Abowd and Kramarz, "Inter-Industry and Firm-size Wage Differentials," unpublished paper (Cornell University, 1999); John M. Abowd, Francis Kramarz, and David Margolis, "High Wage Workers and High Wage Firms," *Econometrica*, March 1999, pp. 251–334; and John M. Abowd, Hampton Finer, and Francis Kramarz, "Individual and Firm Heterogeneity in Compensation: An Analysis of Matched Longitudinal Employer-Employee Data for the State of Washington," in *The Creation and Analysis of Employer-Employee Matched Data*, edited by John C. Haltiwanger, Julia I. Lane, James R. Spletzer, Jules J. M. Theeuwes, and Kenneth R. Troske (Amsterdam, North-Holland Press, 1999), pp. 3–24.

³¹ See, for example, Haltiwanger, Lane, and Spletzer, "Wages, Productivity, and Dynamic Interaction," *Labour Economics*, June 2007, pp. 575–602.

³² See Mark Doms, Timothy Dunne, and Kenneth R. Troske, "Workers, Wages, and Technology," *The Quarterly Journal of Economics*, February 1997, pp. 253–290; and Haltiwanger, Lane, and Spletzer, "Wages, Productivity, and Dynamic Interaction," *Labour Economics*, June 2007, pp. 575–602.

Appendix: Example of OES Survey Form

OCCUPATIONAL TITLE AND DESCRIPTION OF DUTIES	NUMBER OF EMPLOYEES IN SELECTED WAGE RANGES (Report Part-time Workers According to an Hourly Rate)												
	A	B	C	D	E	F	G	H	I	J	K	L	T
	Hourly (part-time or full-time) under \$7.50	\$7.50–9.49	\$9.50–11.99	\$12.00–15.24	\$15.25–19.24	\$19.25–24.49	\$24.50–30.99	\$31.00–39.24	\$39.25–49.74	\$49.75–63.24	\$63.25–79.99	\$80.00 and over	Total Employment
Annual (full-time only)	under \$15,600	\$15,600–19,759	\$19,760–24,959	\$24,960–31,719	\$31,720–40,039	\$40,040–50,959	\$50,960–64,479	\$64,480–81,639	\$81,640–103,479	\$103,480–131,559	\$131,560–166,399	\$166,400 and over	
Architects, Except Landscape and Naval - Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property. 17-1011	A	B	C	D	E	F	G	H	I	J	K	L	T
Landscape Architects - Plan and design land areas for such projects as parks and other recreational facilities, airports, highways, hospitals, schools, land subdivisions, and commercial, industrial, and residential sites. 17-1012	A	B	C	D	E	F	G	H	I	J	K	L	T
Cartographers and Photogrammetrists - Collect, analyze, and interpret geographic information provided by geodetic surveys, aerial photographs, and satellite data. Research, study, and prepare maps and other spatial data in digital or graphic form. May work with Geographic Information Systems (GIS). 17-1021	A	B	C	D	E	F	G	H	I	J	K	L	T
Surveyors - Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface. 17-1022	A	B	C	D	E	F	G	H	I	J	K	L	T
Aerospace Engineers - Perform a variety of engineering work in designing, constructing, and testing aircraft, missiles, and spacecraft. 17-2011	A	B	C	D	E	F	G	H	I	J	K	L	T
Agricultural Engineers - Apply knowledge of engineering technology and biological science to agricultural problems concerned with power and machinery, electrification, structures, soil and water conservation, and processing of agricultural products. 17-2021	A	B	C	D	E	F	G	H	I	J	K	L	T
Biomedical Engineers - Apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems and products, such as artificial organs and medical information systems. 17-2031	A	B	C	D	E	F	G	H	I	J	K	L	T
Chemical Engineers - Design chemical plant equipment and devise processes for manufacturing chemicals and products by applying principles and technology of chemistry, physics, and engineering. 17-2041	A	B	C	D	E	F	G	H	I	J	K	L	T

Overemployment mismatches: the preference for fewer work hours

The preference of workers for having either more or fewer hours of work has remained virtually unchanged since 1985; rates of overemployment differ considerably by job type, workweek length, income level, gender, and stage of workers' life cycle

Lonnie Golden and
Tesfayi Gebreselassie

While workers' preferences regarding work hours by their nature are not directly observable, restrictions on individuals' choice of hours of work in a given job are widely acknowledged as a central feature of the labor market and, in many conventional economic studies, of labor supply. For the purpose of this article, overemployment occurs when a worker's desired hours of labor supply is exceeded by hours of labor demanded at their current pay rate. This article identifies empirically the demographic and job factors associated with being "overemployed," and the extent one may be willing to reduce hours of work at one's current (or suitable alternative) job for less income. Unlike previous studies of hours constraints, the focus here is less on underemployment—the desire for more hours and income—even though underemployment is more common and may be more adverse to worker welfare.¹ However, overemployment has considerable spillover (hidden) social costs. Facilitating a reduction in overemployment with appropriately targeted policy may potentially reduce the extent of underemployment, at least in sectors and workplaces where they co-exist.²

The research for this article relies on analysis of the May 2001 Supplement to the Current Population Survey (CPS). This Supplement queried workers directly (for the first time since a previous CPS in 1985) about their hypothetical choice between more income with more hours, fewer hours for less income, or same hours and income. The empirical findings can be contrasted to

previous estimates of the "rate of overemployment" in the United States using the previous CPS or different instruments capturing the presence of "constrained hours." (See exhibit 1.) They also can be used to contrast the volume or rate of overemployment in comparable countries.³ This article first sets the stage by considering the theoretical labor market and macroeconomic forces determining the overall rate and distribution of overemployment. Then, it discusses measurement issues pertaining to estimating the level of overemployment. Gauging the extent of overemployment has proven to be highly sensitive to survey question wording and range of options presented to respondents. The article then considers whether hours mismatches are widely shared or are more prevalent for certain types of workers. The empirical analyses test the null hypothesis that overemployment is distributed randomly among individuals against the alternative hypothesis that it is attributable entirely to workers' stage in their life cycle vis-à-vis the nature of jobs. There may be microeconomic, macroeconomic, and institutional reasons to expect that overemployment might be disproportionately associated with certain personal characteristics of workers, reflecting life cycle preferences such as being a parent. In addition, to the extent overemployment is also associated with certain occupations and industries, union coverage, longer usual workweeks, or inflexible daily work schedules, employer or workplace constraints may hold sway. There are few previous studies applying the type of disaggregated data needed

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to explore in depth the divergence of overemployment by workers' specific characteristics and the degree to which it is associated with either a greater or a lesser incidence of underemployment among a given type of worker. The conclusion section explores theoretical reasons why the overall rate has been stable since 1985 and will likely remain so, and derives implications for surveys and research.

Measuring overemployment

The overemployed are workers who state a preference to reduce hours of paid work even if to do this lessens their income. The most germane questions in surveys are those querying the employed if they are willing (but unable) to reduce hours at their current (or comparable) job in exchange for less current or future earnings or pay. Estimates of the rate of overemployment in the United States vary considerably, depending on the type of sample, instrument, wording, and context of the question from which it can be derived. Exhibit 1 summarizes available, recent estimates of the rate of overemployment from studies considering technical aspects of the survey attempting to measure hours preferences and the existence (or size) of a discrepancy with actual hours.

The CPS Supplement yields the lower bound while other surveys yield estimates of overemployment as high as 50 percent in the United States. Generally, in any survey that also presents an alternative option of obtaining higher income, the proportions of respondents indicating a preference for fewer hours are typically lower.⁴ On one hand, if workers are presented exclusively with various hours and pay reduction options, the proportions indicating overemployment are higher. This leads some analysts to be skeptical whether workers' stated preferences would become revealed preferences. On the other hand, overemployment may be underestimated if the query provokes implicit assumptions among respondents about the current income foregone, amount and dimensions of hours reduced, and type of gains realized with time off. First, respondent openness to hours reduction is greatest when surveys do not explicitly state any direct tradeoff of lower income.⁵ Second, rates will vary inversely with the extent to which respondents inherently believe they are unable in practice to change their own hours toward their truly preferred hours. Workers may perceive that hours reduction is either not permissible (for example, mandatory overtime), infeasible (under established organizational and job norms and rigidities), or penalized (no quality part-time or shorter standard workweek options). Furthermore, surveys find workers' inclination to forgo current income

is considerably less than the willingness to forgo future income or raises.⁶ Estimates of the proportion overemployed also tend to be greater if individuals are asked to specify how many hours they would have preferred to have worked in a given week, rather than just indicating fewer (or more) hours. Thus, survey questions regarding hours preferences are challenging not only because they are trickier to measure than actual working hours, but because it is often left unclear whether and how workers would get their "preferred" number of hours and whether they implicitly assume they would experience either more than proportional reduction in compensation, such as access to employee benefit coverage or premium pay.⁷ Moreover, any preference for fewer hours might be suppressed if a worker anticipates being underemployed or unemployed in the future.⁸ Finally, because survey questions do not address the intensity of work, respondents may be interpreting the "work less" question as implying not only less pay but also a consequently greater work pace or effort. Thus, it is likely that estimates of overemployment drawn from CPS-type survey questions may be biased downward, on balance.

Underlying sources of overemployment

The conventional microeconomic model of the labor market suggests labor suppliers sort themselves or are matched into jobs that reflect their preferred work time in the long run. In the interim, they would receive a compensating wage differential.⁹ If there were a persistent mismatch between desired and actual hours, even though it may be equilibrium, this is both individually and socially suboptimal. Hours mismatches are created when labor demand-side incentives lead employers to require longer hours than employees prefer in the context of human capital investment (the cost of training and screening or adverse selection), principal-agent, or efficiency wage models.¹⁰ The labor market does not tend to offer "diverse durations" of shift lengths and instead may under-provide short-hour jobs.¹¹ An overemployment mismatch may exist and persist so long as: (a) employers perceive the costs of adjusting hours downward toward each employee's preference to exceed the benefits; (b) employers underestimate or discount the longer term indirect labor costs (for example, absences, tardiness, turnover, reduced labor productivity) they may incur with worker overemployment; (c) employees lack recourse or bargaining power to impose adverse cost consequences on employers who do not match preferences.¹²

The overall rate of overemployment also has macroeco-

Exhibit 1. Recent estimates of rate of overemployment, sources and measurement

Source	Date	Sample	Overemployment	Survey question wording
CareerBuilder.com, Survey of Working Moms, 2006	February-March, 2006.	N = 600 full-time women with children under age 18 living at home	52 percent of working mothers; 10 percent willing to take a pay cut of 10 percent or more	Are you... "willing to take a pay cut to spend more time with your children?"
Friedman and Casner-Lotto, 2003, Work in America	2002	Time is of the Essence Survey, n = 815 (614 = union members)	27 percent-union; 39 percent-nonunion	"Which would you probably select at this point in your life? Your current work schedule, or 90 percent of a Full-time schedule with 90 percent pay and benefits, 80 percent with 80 percent of pay and benefits 70 percent, 60 percent, etc."
Friedman and Casner-Lotto, 2003, Work in America	...	...	Very likely or somewhat likely: 33 percent-union 36 percent-nonunion	"If you had more high quality... part-time options available to you right now, how likely do you think you would be to use them and reduce your schedule?"
Hart and Associates, 2003.	2002	Imagining the Future of Work n = 1,106 adults	15 percent would now definitely or probably; 42 percent would in future definitely or probably.	"Would You... Work Fewer Hours Per Week / Less Pay, would now or would in future."
www.NewDream.Org	2003	Center for the New American Dream	52 percent	"Would you be willing to trade one day off a week for an equivalent pay reduction?"
Fligstein and Sharone, 2002	2001–02	California Workforce Survey, n = 911	8 percent	"If you could, would you work ...same hours for same pay...fewer hours for less pay?"
Heldrich Center	1999	Work Trends Survey	30 percent (28 percent in 1998)	"Would you like to work more hours than you currently work, same number of hours, or fewer hours than you currently work?"
J. Hahnel, 1998, Is Time Really Money? Dollars and Sense, (Jan./Feb.), 43	1998		17 percent (20 percent cut) 50 percent (10 percent cut)	"Would...accept a 10 percent cut in their pay... a 20 percent pay cut, to get a 4-day workweek."
Smith, 2000; Hout and Hanley, 2003; Bell and Freeman, 2001	1997 2005	International Social Survey Program (ISSP), Work Orientations Module	1997: 10 percent (18 percent wives; 8 percent husbands) 2005: 6 percent	"If you had only one of these three choices, which of the following would you...prefer to work...fewer hours and earn less money?"
Families and Work Institute, 1998	1997	n = 3,500	28 percent	"Would...give up a day's pay for one fewer day of work per week."
Schor, 1995	1994	...	51 percent-10 percent cut, 19 percent-20 percent cut, 37 percent-prefer time off	"(Would you) take the option of a four day week, for a 10 percent pay cut? 20 percent pay cut?" "(Do you) prefer a raise or more time off?"
Clarkberg and Moen, 2001	2001	National Study of Families and Households 1993/4 and 1987/8; n = 9,108	36 percent of husbands in dual-career couples; 39 percent of husbands in "neo-traditional" couples	(If employed and married) "Would you prefer to work less than your present work schedule?"
Feather and Shaw, 2000	1992	National Survey of Recreation, n = 860	25 percent of hourly wage workers; 50 percent of workers on a fixed schedule (not free to choose how long to work)	"Would you be willing to work fewer hours in order to have more free time?"

conomic sources, such as cyclical factors. When orders or customers are surging, the demand for hours per worker may rise faster than hours desired induced by rising wages (particularly when income effects dominate substitution effects on labor supply). Also, overemployment may be structural. This may result from skill upgrading or skill shortages and the rising quasi-fixed cost of health insurance contributions, or institutional factors such as deunionization and more noncompliance with Fair Labor Standards Act (FLSA) overtime hours and pay regulations. All of these factors would tend to increase average hours demanded.¹³ Finally, frictional overemployment stems from the bundling of hours with pay in most employment contracts and from incomplete information regarding available jobs, hours, and scheduling arrangements and employee preferences.¹⁴

Hypotheses: overemployment distribution

An employee becomes overemployed when their employer's demand for hours per worker lengthens beyond the supply of hours employers can induce (with working conditions or pay) from employees. Alternatively, it occurs when workers cannot realize a new preference for reduced hours of paid market work because constraints in the workplace, such as minimum hours required to retain or perform a job preclude a commensurate downward adjustment of hours. Various theories of the labor market suggest that overemployment, all else constant, may be more prevalent among certain types of workers (as with unemployment and underemployment). Thus, overemployment (underemployment) is expected to be positively (negatively) associated with:

- Personal characteristics that are associated with relatively shorter preferred time in paid work activity, during certain life cycle stages.¹⁵ This includes times when competing demands on time are greatest, especially in dual earner households, when household production, caregiving, or health needs are at a peak,¹⁶ and personal characteristics associated with access to relatively higher relative wage rates, such as for whites and the higher educated, rather than disadvantaged minorities such as African-Americans and the lesser educated;
- Long average weekly hours, as this is associated with a desire to work less, particularly among full-time dual working spouses where at least one partner wishes to reduce hours;¹⁷
- High relative earnings per hour, where income effects may be stronger;¹⁸

- Occupations for which there are no legally required overtime pay premia for increasing hours, such as “exempt” jobs that tend to be paid by salary rather than hourly;
- Occupations and industries with workplaces or jobs that offer incentives that induce longer hours with the promise of future compensation rewards or enhance job security and/or penalize expressing preferences for shorter hours;¹⁹
- Occupations with structural economic constraints, such as high minimum hours requirements or little autonomy for workers to exert control over their own hours;²⁰
- Industries where there is some productivity per worker gained while the additional wage cost is negligible, such as jobs compensated with salary rather than hourly wages;²¹
- Little bargaining leverage among workers to obtain arrangements for adjusting hours downward as needed when their preferences shift, such as younger or nonunion workers, and a paucity of alternative job opportunities;²²
- Jobs with more flexible working options, such as flexitime scheduling and work at home, to the extent these may help alleviate chronic daily time conflicts associated with long workweeks, or lead workers to reciprocate with greater effort in the form of extra hours.²³

Descriptive statistics

The descriptive statistics of the key variables used in the May 2001 CPS Supplement sample of more than 57,000 individuals appear in the appendix. (See page 37.) The key question asks: “If [you/name] had a choice [at your main job] would you/he/she prefer to: work fewer hours but earn less money. Work more hours but earn more money. Work the same number of hours and earn the same money?” Because proxy answers for this question were not allowed, just under 43,000 observations were collected. The distribution of hours mismatches by personal and work characteristics appear in tables 1 through 5.²⁴

Table 1 shows that estimates of the overemployment rate using the CPS Supplement question on the willingness to trade income for reduced hours in 2001 was about 7 percent of all employed (7.4 percent among full-time workers), virtually the same as the 7.6 percent rate observed when last measured in 1985.²⁵ While a far greater proportion is either satisfied with their level of hours or seeks more hours to gain income, the share that is over-

employed is not trivial. Indeed, it implies a growth over time in structural or frictional overemployment, as there was presumably less cyclical overemployment in the midst of the 2001 recession year. The overemployment rates and overemployment ratios (overemployment over underemployment rate) are relatively higher among women and whites than among men and African-Americans. There is a clear pattern by age, with overemployment low among young workers but rising with age. There appears to be more interest in reduced hours in 2001 among the 55–64 age group, than had been in 1985, and somewhat more interest among 65 and older men as well. However, the overall rates by gender exhibited no discernable change over time.

Table 2 shows how the overemployment varies by level of work hours. The pattern by hours level is similar in both 2001 and 1985. Overemployment climbs steadily as hours lengthen, with the exception that overemployment and the overemployment ratio dip somewhat among those working exactly 40 hours, in both 2001 and 1985. A shift seems to have taken place over time where overemployment has become somewhat less disparate by hours. It has become less concentrated among those with very long hours, but is slightly more apparent among those with fewer than 30 hours. Thus, the small decline in overall overemployment rate observed since 1985 has occurred almost entirely because of a decline in overemployment among those working exactly 40 or more than 48 hours per week.

Table 3 shows the general distribution of overemployment and underemployment by job sector. Private non-profit sector jobs exhibit higher rates of overemployment. The sample collapsed responses into 49 detailed industry and 43 detailed occupational classifications. Overemployment ratios are higher for managerial, professional, technical and sales jobs. Since 1985, there has been a slight increase among managerial and technical jobs, and a noticeable drop in overemployment among production and service type occupations.

Table 4 illustrates the largely positive association between a preference for reduced hours and a worker's weekly earnings level. The preference appears to intensify as income climbs from low to high. Among women, this preference rises, for the most part, linearly in all but two of the ten income groups. Also, among men, higher income is associated with elevated overemployment, however, in contrast, men in the highest income group have slightly lower overemployment, compared with men in the second highest income group, and the rate of overemployment for men in the \$300–\$399 per week group is lower than the level of income just below that. Correspondingly,

however, underemployment decreases in a linear fashion (with the exception of men with short weekly hours and/or very low wage rates) as income level grows. Thus, the overemployment (to underemployment) ratio has a clear linear relationship to income among women and virtually linear among men.

Table 5 shows that overemployment is particularly high in certain occupational classifications. In health diagnosing, the overemployment ratio exceeds one. Overemployment actually surpasses the rate of underemployment. With an overemployment ratio just under one in health assessment and law professions, overemployment appears to be almost on par with underemployment. The intensity of desire to trade income for fewer hours is significantly correlated with the amount of work hours in an occupation (but not industry).

Table 6 shows that certain industries feature higher overemployment rates, although the rates are less disparate by industry than by occupation, as measured by the standard deviation among the 49 industries and 43 occupations. Rates are highest in services such as hospitals and other health, utilities and sanitary, professional services, insurance and real estate, and a few manufacturing industries—paper, professional equipment and toys-sporting goods.

The mismatch ratio is defined here as the sum of overemployment plus underemployment, divided by the share of workers that prefers the “same hours” they currently have. That is, the ratio of those who are dissatisfied to those who are satisfied with their number of work hours. Data in tables 1–6 suggest that mismatches are more concentrated in relatively lower skilled blue-collar jobs and in industries such as retail trade, private household, and personal and entertainment services. In addition, mismatches shrink as age progresses and this ratio is a bit lower among men than among women.

Empirical model and estimation results

The microdata permit empirical testing of the explanatory power and significance of many of the personal and job status characteristics often hypothesized to affect the likelihood a given individual in the sample may express a preference for “fewer hours and less income.” Whether an individual reports being willing to reduce hours and income depends on three independent sets of factors observable in the CPS and Supplement:

- 1) Personal characteristics such as age, gender, race, marital status, parental status, and human capital such as education level.

Table 1. Hours preference by workers' demographic characteristics, 2001 and Shank 1986

Characteristic	CPS, 2001			Number of cases	Mismatch ratio ¹	Over-employment ratio ²	Shank (1986)		
	Same hours	Fewer hours	More hours				Same hours	Fewer hours	More hours
Total	65.8	6.94	27.25	42,956	0.52	0.25	64.9	7.6	27.5
Usually full time	67.0	7.43	25.6	25,098	.49	.29	...	...	...
Male	64.7	5.4	30.0	21,897	.55	.18	63.5	5.9	3.6
Age:									
16-19	42.5	3.1	54.4	1,131	1.36	.06	39.7	2.6	57.8
20-24	54.3	2.6	43.2	2,282	.84	.06	48.5	3.9	47.7
25-34	60.5	4.5	35.1	5,218	.65	.13	60.4	6.0	33.6
35-44	67.4	5.6	27.0	5,980	.48	.21	66.8	6.7	26.5
45-54	70.2	6.6	23.2	4,673	.42	.28	72 .6	6.7	20.6
55-64	74.6	7.8	17.5	2,089	.34	.45	79 .5	6.8	13.7
65 and older	79.6	8.0	12.4	524	.26	.64	81 .9	7.4	10.7
Female	67.0	8.6	24.3	21,059	.49	.36	65 .7	8.8	25.5
Age:									
16-19	51.3	4.2	44.5	1,143	.95	.09	42 .8	3.4	53.8
20-24	59.5	4.3	36.3	2,221	.68	.12	57 .4	6.1	36.6
25-34	64.8	9.1	26.1	4,697	.54	.35	65 .5	9.7	24.8
35-44	68.1	9.6	22.3	5,661	.47	.43	65 .6	1.7	23.6
45-54	71.3	9.9	18.9	4,773	.40	.52	71 .2	9.4	19.4
55-64	72.8	9.9	17.3	2,064	.37	.57	77 .3	7.5	15.2
65 and older	81.6	6.3	12.1	500	.23	.52	81 .3	6.9	11 .8
Male--usually full time	67.7	5.6	26.8	14,050	.48	.21	...	...	...
Female--usually full time	69.6	10.1	20.3	11,048	.44	.50	...	...	...
White	67.0	7.4	25.6	36,598			65 .5	7.7	26.8
Male	65.7	5.7	28.6	19,345	.52	.20	64 .5	6.2	29 .3
Female	68.5	9.2	22.3	17,253	.46	.41	66 .5	9.4	24 .2
Black	59.1	4.4	36.5	4,131	...	...	56 .6	4.4	39 .0
Male	58.1	3.1	38.8	1,839	.72	.08	54 .0	3.8	42 .2
Female	60.0	5.5	34.6	2,292	.67	.16	58 .8	4.9	36 .3

¹ The numerator of the mismatch ratio is the sum of overemployment plus underemployment, and the denominator is the proportion that prefers the "same hours" they currently have.

² The overemployment ratio is the overemployment rate divided by the underemployment rate.

SOURCE: May 2001 CPS Supplement on Work Schedules and Work at Home.

2) Work hours status, such as working either standard or long workweeks, part-time job, on a daytime or non-traditional shift, and flexibility of its daily timing.

3) Job characteristics, such as the occupation and industry of employment, hourly paid, or union membership status, and private or public sector employment.

This likelihood of an individual (*i*) responding affirmatively to the option of reducing both hours and income,

that is, being overemployed (or underemployed), is determined by a worker's personal (β) as well as job characteristics, including work hours (δ), and the respective vectors of estimated coefficients, *X* and *Y*:

$$OVER_i = \alpha + X_i\beta + Y_i\delta + \varepsilon$$

$$UNDER_i = \alpha + X_i\beta + Y_i\delta + \varepsilon$$

Table 2. Hours preferences by number of hours worked, 2001 and Shank (1986)

Actual hours worked weekly	CPS, 2001			Number of cases	Mismatch ratio ¹	Overemployment ratio ²	Shank (1986)		
	Same hours	Fewer hours	More hours				Same hours	Fewer hours	More hours
Total	67.0	7.4	25.6	30,327	...	...	...	...	...
1 to 14	62.1	5.1	32.9	680	0.61	0.15	50.9	4.6	44.5
15 to 29	60.3	6.0	33.7	2,404	.66	.18	57.3	5.6	37.1
30 to 34	58.9	8.1	33.1	1,989	.70	.24	58.6	8.0	33.4
35 to 39	64.0	7.7	28.3	2,179	.56	.27	65.0	8.1	26.9
40	69.8	5.6	24.5	12,961	.43	.23	70.5	7.1	22.5
41 to 48	66.6	8.1	25.3	4,015	.50	.32	65.3	8.1	26.6
49 to 59	69.7	9.6	20.6	3,745	.43	.47	66.5	10.8	22.7
60 and more	66.1	13.3	20.7	2,354	.51	.64	63.9	16.3	19.8

¹ The numerator of the mismatch ratio is the sum of overemployment plus underemployment, and the denominator is the proportion that prefers the "same hours" they currently have

² The overemployment ratio is the overemployment rate divided by the underemployment rate.

NOTE: As with Shank (1986), only those aged 25 to 54 are included here.

SOURCE: May 2001 CPS Supplement on Work Schedules and Work at Home.

The model is estimated using multinomial logit analysis, given the three potential responses. The dependent variable is bi-variate, taking on a value of one if the employed worker reports having a preference for fewer hours and less income or more hours for more income. The coefficients are derivatives of the probit estimates, representing the marginal probabilities that an individual possessing a given characteristic prefers fewer hours with less income. The estimation shows precisely which personal and job characteristics are more likely to be associated with the condition of "overemployment," with the effects of all other variables held constant. The sequential estimation by sets of variables will highlight the role of various job attributes that might otherwise be attributed (solely) to personal characteristics.

Demographic and worker personal characteristics. Results in the appendix show that as workers become older, their likelihood of harboring a preference for fewer hours heightens, but the effect is nonlinear, diminishing over the life cycle. Moreover, the effects of age are smaller when controlling for workers' work hours and occupational characteristics. Female workers appear to be much more likely to report being overemployed than their male counterparts. The order of magnitude is about a 4-percent greater likelihood. Note this is not reduced at all when taking into account work hours and other job characteristics.

Conversely, African-American workers are significantly less likely than others to be overemployed. This probably reflects their significantly greater likelihood of being underemployed.²⁶ Because wage rates for African-American workers, on average, are lower than for other workers, apparently such workers are more willing to work additional hours for added income.

Marital status is also a factor. Being married is associated with more overemployment, on the order of about 2 percent, relative to the reference group of single workers, even when controlling for all job characteristics. Being divorced, separated, or widowed, however, is not. Indeed, such workers are more likely to be underemployed. Having children in the household (relative to having either no children or fully grown children) is important, but with nuances. When the youngest child in the household is younger than 3 years, this raises the likelihood of feeling overemployed by an additional 2 percent. Having children ages 3 through 5 (pre-school age) has a statistically significant but weaker effect, about half the magnitude of the youngest children. Interestingly, when the youngest child present in the household reaches age 14, this reverses the effect of having children on the likelihood of overemployment. Thus, it is apparent that when the youngest child is an infant or toddler, there is a relatively greater demand for time than for money (some of the lower underemployment probability for parent workers can be attributed

Table 3. Hours preferences by job type, 2001 and Shank (1986)

Job type	CPS, 2001			Number of cases	Mismatch ratio ¹	Overemployment ratio ²	Shank (1986) ³		
	Same hours	Fewer hours	More hours				Same hours	Fewer hours	More hours
Major occupations									
Executive, administrative and managerial	72.8	10.4	16.9	6,234	0.37	0.61	72.3	9.7	18.0
Professional speciality	73.0	9.5	17.4	7,076	.37	.54			
Technicians and related support	69.9	8.2	22.0	1,564	.43	.37	66.1	8.3	25.6
Sales	63.1	6.8	30.1	4,671	.58	.23	...	...	...
Administrative support, including clerical	67.5	7.7	24.9	6,317	.48	.31	...	...	...
Private household	54.6	4.7	40.7	197	.83	.12	56.6	4.5	38.9
Protective services	65.4	4.2	30.4	875	.53	.14	...	...	...
Services, except protective and household	56.1	4.2	39.7	4,846	.78	.11	...	...	...
Precision production, craft and repair	64.3	4.3	31.4	4,509	.56	.14	63.5	6.4	3.1
Machine operators, assemblers and inspectors	60.8	3.9	35.4	2,368	.64	.11	59.4	5.6	35.0
Transportation and material moving	64.5	5.3	30.2	1,877	.55	.18	...	...	...
Handlers, equipment cleaners, helpers, laborers	54.8	3.7	41.5	1,712	.82	.09	...	...	...
Farming, forestry and fishing	54.0	4.5	41.5	710	.85	.11	49.4	5.0	45.6
Major industries									
Total	65.8	6.9	27.3	42,956	...	...	...	...	...
Agriculture	54.4	5.3	40.4	657	.84	.13	49.4	7.3	43.3
Mining	75.6	4.1	20.3	196	.32	.20	66.3	8.0	25.6
Construction	62.0	4.4	33.6	2,480	.61	.13	58.6	5.3	36.1
Manufacturing--durables	66.8	6.4	26.8	4,152	.50	.24	66.7	7.5	25.8
Manufacturing--nondurables	67.5	6.5	25.9	2,562	.48	.25	...	...	...
Transportation	67.3	7.0	25.7	2,045	.49	.27	68.7	7.8	7.8
Communication	69.2	7.8	23.0	781	.45	.34	...	...	...
Utilities and sanitary services	69.9	10.6	19.5	518	.43	.55	...	...	...
Wholesale trade	66.3	7.9	25.9	1,666	.51	.30	66.3	7.4	26.3
Retail trade	58.8	5.5	35.7	7,075	.70	.15	56.3	6.4	37.3
Finance, insurance and retail estate	69.5	8.2	22.3	2,751	.44	.37	68.6	8.0	23.5
Private household	55.5	5.0	39.5	226	.80	.13	65.6	7.8	26.5
Business, auto and repair services	63.7	6.7	29.6	2,751	.57	.23	...	...	...
Personal services	59.7	6.6	33.6	912	.67	.20	...	...	...
Entertainment and recreation	59.6	5.1	35.4	834	.68	.14	...	...	...
Hospitals	71.5	10.6	17.9	1,848	.40	.59	...	...	...
Medical services, except hospitals	68.2	8.7	23.2	2,165	.47	.37	...	...	...
Education services	68.9	7.8	23.3	4,148	.45	.33	...	...	...
Social services	64.8	6.7	28.6	1,066	.54	.23	...	...	...
Other professional services	71.8	9.5	18.7	1,860	.39	.51	...	...	...
Forestry and fisheries	62.0	16.2	21.8	25	.61	.74	...	...	...

See footnotes at end of table.

Table 3. Continued—Hours preferences by job type, 2001 and Shank (1986)

Job type	CPS, 2001			Number of cases	Mismatch ratio ¹	Overemployment ratio ²	Shank (1986) ³		
	Same hours	Fewer hours	More hours				Same hours	Fewer hours	More hours
Federal Government	71.6	6.7	21.7	1,196	.40	.31			
State government	70.9	6.6	22.5	2,096	.41	.29	...	...	...
Local government	69.8	6.9	23.3	3,699	.43	.29	...	...	...
Private, for profit	64.4	6.8	28.8	33,379	.55	.24	...	...	...
Private, nonprofit	71.4	9.0	19.6	2,586	.40	.46	...	...	...

¹ The numerator of the mismatch ratio is the sum of overemployment plus underemployment, and the denominator is the proportion that prefers the "same hours" they currently have.

² The overemployment ratio is the overemployment rate divided by the underemployment rate.

³ Shank collapsed occupations and industries into fewer categories, and the proportions here are combinations with the blank spaces directly below it.

SOURCE: May 2001 CPS Supplement on Work Schedules and Work at Home

to their number of work hours). However, when their youngest child reaches high school age, parents shift their preference, to the point where they actually prefer more income relative to time, all else constant.

Finally, the desire to reduce work hours is strongly connected to education level. Those with college or advanced degrees are much more likely to indicate overemployment and those without any college are far less likely. The effect of higher education, however, appears to have more to do with such workers' occupations rather than their education level per se. Those aged 16 to 24 who are enrolled in school are actually more likely to be overemployed when holding constant their work hours, shift, and sector. Women, the married, and parents of very young children exhibit significantly less likelihood of being underemployed, while the divorced-widowed-separated, school-enrolled, the higher educated, and workers with children of school-age, have a lesser likelihood. (A supplemental table displaying the symmetry found with underemployment hours mismatches is available. See endnote 26.)

Work hours, work shift, and work flexibility characteristics. The explanatory power of the model (See pseudo- R^2 in appendix table, page 37.) is improved measurably when workers' duration and timing of weekly hours is added to the model. A clear pattern is evident as a worker's average workweek lengthens. Full-time workers have a progressively higher likelihood of being overemployed corresponding to the length of their usual weekly hours, relative to those working 35 to 39 hours (the reference group). Working from 41 to 49 hours raises the prob-

ability of overemployment by a statistically significant 2 percent. Working 50 hours or more raises it still further, on the order of about 5 percent, even when including controls for occupation and industry type. Having variable weekly hours, where a worker is unable to specify their usual workweek length, exhibits no effect either way on the likelihood of overemployment. Interestingly, however, full-time workers with variable hours are somewhat less likely to be underemployed, while part-time workers with variable workweeks are considerably more likely to be underemployed. The effects of hours duration on underemployment are symmetrical, but even stronger. Perhaps surprisingly, workers reporting usual hours of exactly 40 hours per week (accounting for about half the work force) are significantly less likely to be underemployed and no less likely to be overemployed, and this cannot be attributed to their occupations or industries of employment. This runs counter to expectations that the FLSA overtime pay requirement restrains employer demand for work hours in ways that constrain workers who might wish more labor supply to earn the premium pay. In fact, there is no indication whatsoever of a desire for more hours among those working 41 or more hours. Not surprising, however, is that part-time workers are considerably more likely to be underemployed as well as less likely to be overemployed. The findings suggest there is a widespread preference to work somewhere between 35 and 40 hours.

Compared to those working an evening shift (the reference group), those on a regular daytime shift (the vast majority) have a slightly increased likelihood of being overemployed. This appears to be due in large measure

Table 4. Hours preferences by earnings levels, 2001 and Shank (1986)

Weekly earnings	CPS, 2001			Number of cases	Mismatch ratio ¹	Overemployment ratio ²	Shank (1986)		
	Same hours	Fewer hours	More hours				Same hours	Fewer hours	More hours
Male	67.1	5.6	27.4	3,877	...	...	65.5	6.5	28.0
Less than \$150	63.0	4.6	32.4	51	0.59	0.14	39.3	3.9	56.7
150–199	43.1	.0	56.9	37	1.32	.00	43.9	3.4	52.7
200–249	36.0	2.8	61.2	70	1.78	.05	55.6	4.2	40.2
250–299	44.9	2.7	52.5	127	1.23	.05	60.8	2.9	36.3
300–399	52.2	4.8	43.0	297	.92	.11	62.6	7.0	30.5
400–499	60.1	2.7	37.2	410	.66	.07	66.6	6.5	26.9
500–599	63.9	4.8	31.3	448	.56	.15	71.9	7.9	20.3
600–749	69.8	5.0	25.3	564	.43	.20	73.0	7.8	19.1
750–899	68.5	7.8	23.7	501	.46	.33	76.6	8.9	14.5
900 and more	76.2	6.8	16.9	1,372	.31	.40	...	...	...
Female	68.5	10.0	21.6	3,773	.46	.46	67.2	10.9	21.9
Less than \$150	62.4	2.2	35.4	126	.60	.06	55.6	5.0	39.4
150–199	66.3	2.5	31.1	94	.51	.08	66.6	7.4	26.9
200–249	56.0	4.5	39.6	122	.79	.11	66.6	12.2	21.2
250–299	63.4	4.1	32.6	165	.58	.12	66.2	14.1	19.7
300–399	68.8	5.0	26.2	350	.45	.19	72.6	11.9	15.5
400–499	68.5	7.8	23.8	382	.46	.33	75.7	12.4	11.9
500–599	73.8	9.1	17.2	336	.36	.53	72.0	15.2	12.8
600–749	70.4	13.8	15.8	330	.42	.88	73.2	13.9	12.9
750–899	76.0	12.7	11.4	266	.32	1.11	63.6	22.0	14.6
900 and more	67.6	20.9	11.4	413	.48	1.83	...	...	...

¹ The numerator of the mismatch ratio is the sum of overemployment plus underemployment, and the denominator is the proportion that prefers the “same hours” they currently have.

² The overemployment ratio is the overemployment rate divided by the underemployment rate.

NOTE: Earnings are reported only by the CPS Outgoing Rotation Group. Also, Shank's (1986) top income category was \$750 and more.

SOURCE: May 2001 CPS Supplement on Work Schedules and Work at Home.

to the type of occupation, however. Those on an irregular (“other”) shift have a reduced probability of being underemployed, but are no different from evening shift workers regarding overemployment. Perhaps surprisingly, the incidence of overemployment is associated positively, rather than negatively, with having a flexible work schedule (having an ability to alter either the daily starting or ending times of the work day). Similar is the effect of having location flexibility (the opportunity to work from home), although when controlling for industry of employment, working at home does somewhat reduce the likelihood of underemployment. However, working at home is associated with greater risk of overemployment. The findings suggest that the timing of work, even when at the discretion of the employee, does not alleviate overemployment and indeed, even seems to exacerbate it. Thus, neither daily

work scheduling flexibility nor work at home appear to be solutions to overemployment. This dual face of flexibility lends support to the notion that the interference of work hours with efforts to balance work-life-family is wholly independent of flexibility of work schedule.²⁷

Job characteristics: occupations and industries. The major occupational classifications that exhibit relatively greater overemployment are managerial and professional jobs, even when controlling for their generally higher education requirements and longer hours.²⁸ In general, the higher the pay (skill or preparation) level of the job, the greater is the tendency toward overemployment and lesser toward underemployment. Blue-collar production, service, and transportation occupation employees are all more likely to be underemployed and less likely to be overemployed.

Table 5. Overemployment by detailed occupational classification, 2001

Occupation	Overemployment rate, rank	Over-employment ratio ¹	Mean usual hours in main job	Number of cases
Total	...	0.25	36.3	42,956
Correlation coefficient, overemployment rate with hours	0.53	...	...	...
Standard deviation among occupations	3.43	...	...	...
Health diagnosing	20.1	1.87	43.6	229
Lawyers and judges	14.3	.88	44.3	222
Natural scientists	12.4	.71	40.9	180
Health assessment and treatment	11.8	.89	34.8	1,164
Other executive, administrative, and managerial	11.0	.68	41.6	4,166
Engineers	9.5	.56	40.7	728
Management related occupations	9.5	.51	39.3	1,715
Supervisors, administrative support	9.4	.40	40.4	264
Health technologists and technicians	9.2	.43	35.4	630
Mathematical and computer scientists	9.1	.53	40.5	659
Computer equipment operators	8.9	.64	37.7	122
Supervisors and proprietors, sales	8.9	.44	41.6	1,241
Secretaries, stenographers, and typists	8.9	.52	35.6	1,052
Sales representatives, finance and business services	8.8	.35	38.7	764
Technicians, excluding health, engineer and science	8.3	.49	36.9	451
Teachers, college and university	8.2	.50	33.1	382
Financial records processing	8.0	.36	34.9	694
Other professional specialty occupations	7.9	.42	36.2	1,529
Teachers, except college and university	7.9	.39	36.1	1,981
Other administrative support, including clerical	7.2	.27	34.9	3,981
Sales representatives, commodities, excluding retail	7.2	.36	39.5	490
Engineering and science technicians	6.6	.24	37.6	447
Officials and administrative, public administrative	6.4	.43	39.2	349
Mail and message distributing	6.4	.20	36.1	320
Other precision production, craft, and repair	5.8	.19	40.4	1,336
Personal service	5.8	.16	27.6	773
Motor vehicle operators	5.6	.19	36.6	1,383
Sales workers, retail and personal service	4.8	.12	28.3	2,137
Private household service	4.7	.12	23.7	200
Cleaning and building service	4.7	.13	32.5	1,055
Mechanics and repairers	4.6	.16	39.4	1,583
Health service	4.6	.13	33.0	961
Farm workers and related occupations	4.5	.11	34.0	680
Other transportation and material moving	4.4	.13	38.3	474
Protective service	4.2	.14	38.3	867
Freight, stock and materials handlers	4.2	.10	30.0	698
Fabricators, assemblers, inspectors, samplers	3.9	.11	39.1	833
Machine operators and tenders, excluding precision	3.8	.11	37.3	1,412
Other handlers, equipment cleaners, helpers, laborers	3.7	.09	35.5	733

See footnotes at end of table.

Table 5. Continued—Overemployment by detailed occupational classification, 2001

Occupation	Over-employment rate	Over-employment ratio ¹	Mean usual hours in main job	Number of cases
Food service	3.2	.07	27.1	2,181
Construction trades	2.8	.08	38.3	1,605
Construction laborers	2.5	.05	34.9	285

¹ The overemployment ratio is the overemployment rate divided by the underemployment rate.

NOTES: Sales related occupations (n=23) are included in "Sales workers, retail and personal service." Farm operators and managers (n=25) are included in "Management related occupations." Forestry

and fishing occupations (n=34) are included in "Farm workers and related occupations."

SOURCE: May 2001 CPS Supplement on Work Schedules and Work at Home.

When controlling for occupation types, the effect of all the other variables remains the same in terms of their size and significance.

Some industries stand out for a markedly greater likelihood of overemployment. Utilities and sanitary services and hospitals have a higher likelihood of overemployment. So does the transportation industry, although this appears attributable to the occupational mix of that industry. The industry findings are not surprising, given the greater incidence of mandatory overtime work in the telecommunications, public utilities, and hospital sectors.²⁹ Thus, it appears that certain jobs and sectors have more stringent minimum hours constraints than others, and/or that workers in these jobs and sectors have stronger preferences for shorter hours than for the existing length of hours.

Gender patterns and differences. Given the strong gender difference uncovered, it would be worthwhile to separate the sample into women and men. Among women, aging through the life cycle heightens the preference for fewer hours. (See endnote 26.) However, this appears entirely due to the number (and shift) of their work hours. Somewhat in contrast, men exhibit a positive association of age with overemployment, but this is partly because of their work hours. The effects of children present in the household are generally stronger for women. Women with children up through age 5 have a greatly heightened likelihood of overemployment. Quite symmetrically, they have a much reduced likelihood of being underemployed, as well. Moreover, when controlling for women's (shorter or longer) hours of work, the preference for fewer hours exists among mothers whose youngest child is age 13 or younger. In strong contrast, men with school-aged children become less likely to be overemployed, regardless of their work hours. When the youngest child is very young,

however, men do harbor less interest in seeking more hours. Nevertheless, once the youngest child reaches age 3, men are less likely to be overemployed, and when their youngest child reaches school age, become more likely to be underemployed. At first glance, women also appear to be less likely to be overemployed and more likely to be underemployed when their youngest child reaches high-school age. However, the reduced overemployment among mothers of teens may be attributable largely to their number of work hours and their greater underemployment is entirely attributable to their level of education.

The influence of work hours on expressed hours preferences is most salient. Women with fewer than 35 work hours exhibit less likelihood of being overemployed and women working more than 41 and more than 50 hours experience a statistically significant 4 percent to 6 percent higher likelihood, respectively, of being overemployed. Moreover, if women part-timers' hours vary, this slightly reduced their likelihood of preferring fewer hours, although this also exacerbates the likelihood of being underemployed. This is in contrast to men working part-time hours, where having variable hours slightly increases their risk of overemployment as well as underemployment. Men have greater likelihood of overemployment when they work 50 or more hours a week (as is true for women), although the magnitude is slightly lower than that for women. Their overemployment risk is not statistically significantly elevated when working 41 to 49 hours. Working 40 or more hours quite strongly reduces the likelihood of men being underemployed. That this includes workers who work exactly 40 hours counters the expectation that such workers would prefer more hours to earn the premium pay, but are denied the opportunity because of its deterrent effect on employers.

Work shift time has little bearing on either the likeli-

Table 6. Overemployment by detailed industry, 2001

Industry	Overemployment rate	Overemployment ratio ¹	Number of cases
Total	6.94	0.25	42,956
Correlation of overemployment with work hours	.02	...	...
Standard deviation among industries	2.06	...	...
Utilities and sanitary services	10.6	.55	518
Hospitals	10.6	.59	1,848
Other professional services	9.5	.51	1,860
Manufacturing-paper and allied products	9.4	.43	216
Manufacturing-professional and photo equipment, watches	9.1	.45	254
Insurance and real estate	9.0	.38	1,372
Health services, excluding hospitals	8.7	.37	2,165
Other public administration	8.0	.46	797
Manufacturing-printing, publishing and allied industries	7.9	.31	581
Wholesale trade	7.9	.30	1,666
Communications	7.8	.34	781
Educational services	7.8	.33	4,148
Manufacturing-chemicals and allied products	7.6	.35	436
Manufacturing-machinery, excluding electrical	7.6	.31	860
Manufacturing-miscellaneous and n.e.c. manufacturing industries	7.6	.31	286
Banking and other finance	7.4	.36	1,379
Manufacturing-electrical machinery, equipment supplies	7.3	.29	707
Manufacturing-textile mill products	7.3	.23	165
Transportation	7.0	.27	2,045
Business services	6.8	.23	2,206
Administration of human resource programs	6.8	.37	306
Social services	6.7	.23	1,066
Personal service, excluding private households	6.6	.20	912
Manufacturing-motor vehicles and equipment	6.5	.24	405
Automobile and repair services	6.3	.22	545
Goods producing-agricultural services	6.3	.13	365
Other retail trade	6.2	.19	4,820
Manufacturing-rubber and miscellaneous plastic products	5.9	.24	296
Manufacturing-other transportation equipment	5.9	.23	192
Manufacturing-aircraft and parts	5.8	.30	145
Manufacturing-lumber and wood products, excluding furniture	5.4	.18	192
Manufacturing-primary metals	5.3	.17	273
Manufacturing-food and kindred products	5.2	.20	560
Entertainment and recreation services	5.1	.14	834
Private household services	5.0	.13	226
Goods producing other agricultural	4.9	.16	317
Manufacturing-furniture and fixtures	4.8	.15	206
National security and internal affairs	4.5	.27	238
Manufacturing-appeal and other finished textile products	4.4	.10	197
See footnotes at end of table.			

Table 6. Continued—Overemployment by detailed industry, 2001

Industry	Overemployment rate	Overemployment ratio ¹	Number of cases
Construction	4.4	.13	2,480
Justice, public order and safety	4.2	.18	900
Mining	4.1	.20	196
Eating and drinking places	4.0	.09	2,255
Manufacturing-fabricated metals	3.9	.12	490
Manufacturing-stone, clay, concrete, glass products	3.2	.11	195

¹ The overemployment ratio is the overemployment rate divided by the underemployment rate.

NOTES: Manufacturing-petroleum and coal products (n=57) had no overemployed. Manufacturing-fabricated metals includes manufacturing-not specified metals Industries (n=4). Miscellaneous manufacturing includes three other industries with small sample size

—manufacturing-leather products and tobacco (n=26 for each) and manufacturing-toys, amusement and sporting goods (n=50), which had a high rate of 12.6 percent. Forestry and fishing, with an overemployment rate of 16.2 percent, is included in agricultural production—other. n.e.c. = not elsewhere classified.

SOURCE: May 2001 CPS Supplement on Work Schedules and Work at Home.

hood of overemployment or underemployment, although working on an irregular (“other”) shift somewhat reduces men’s likelihood of underemployment. Similarly, the surprisingly positive effect of working on a flexible daily work schedule on overemployment is about triple the size for women as for men. This bodes ill, particularly for women seeking to use flexible scheduling arrangements to reduce the pressures associated with overemployment. There is no impact either way, however, of flexible daily scheduling on the likelihood of underemployment for either gender.

For both men and women, local government employment is associated with reduced likelihood of overemployment, as is State government employment for women and slightly so for men. Being employed in a private nonprofit facility has no effect on overemployment, but does reduce somewhat the likelihood of seeking more hours, particularly among men. The effects of industry on employment differ in a few instances by gender. The probability of overemployment is highest in utilities and hospitals for both, but unlike for men, it is higher for women in wholesale trade. Unlike women, men in the transportation industry have a higher likelihood of overemployment. Men (but not women) employed in construction seek more, rather than fewer, hours. By occupation, women in managerial jobs are somewhat more prone to overemployment and also less likely to face underemployment. Both women and men in managerial and professional (and men in technical) jobs are considerably less likely to prefer more hours, while those in protective services are more likely.

Both men and women in most blue-collar type production and service (and women in clerical) jobs seek more hours and income. In sum, the sector and type of employment impacts on preferences of both genders, sometimes similarly, other times in ways peculiar to one gender.

Hourly versus salary pay and union membership status. Work hours mismatches for union members show no apparent differences with nonunion workers.³⁰ However, employees paid by the hour, relative to those on salary, are somewhat less likely to be overemployed and far more likely to be underemployed, as expected. Among men, perhaps surprisingly, overemployment is greater for hourly paid men once taking into account their number of work hours. Nevertheless, men are far more likely to express a preference for more hours and income if they are paid on an hourly basis.

When controlling for hourly salaried pay status, the industries with the greater risk of overemployment for women are utilities and wholesale trade and the lowest risk is in communications, while women in educational services tend to be the most underemployed. Among men, the overemployment risk is raised only in the hospitals sector. Even given their salary status, women managers have greater overemployment, but not so among men. Among men, given pay status, being a professional reduces the risk of both overemployment and underemployment, whereas being in protective services jobs raises both. In sum, men paid hourly are generally more likely

to experience hours mismatches than are others, except those employed in professions.

Implications of the results

Overemployment and underemployment are created when workers face binding constraints from the employer side of the labor market that produce a gap between workers' actual and preferred hours. The preference to trade income for fewer work hours occurs among a relatively lower yet nontrivial proportion of the overall employed, at least 7 percent. However, it is measurably higher among certain job types, sectors, and stages of workers' life cycle. It is more prevalent for the employed who are women, married, and mothers of very young children. This supports the hypothesis that constraints are more binding at certain points along workers' life cycle. It is also disproportionately concentrated among those who have both higher earnings and education and those enrolled in school. The explanatory power of the model is roughly doubled when work factors are added to the standard demographic characteristics of workers. Thus, work factors account for at least as much as demographic factors. Overemployment is higher for workers with longer than standard workweeks and salary pay status. Interestingly, there does not appear to be an unfulfilled desire for additional (overtime) work hours for those working the standard 40 weekly hours. Indeed, the generally preferred workweek lies between 35 and 40 hours. Workers with flexible daily work scheduling and work at home are actually more likely to express a preference for fewer hours. Overemployment is also relatively higher for those who work in health, utilities, transportation, and in some manufacturing industries, and in managerial-administrative-supervisory positions, the health, law and science-related professions, and some technical and sales occupations. It is lower in blue-collar production and service jobs and in local government employment. The relatively low incidence of overemployment in many occupations and industries suggests that hours constraints need not be considered an inevitable feature of all labor markets and workplaces.

The rate, and to a large extent, the distribution of overemployment and underemployment has remained remarkably similar in the United States to that last observed in 1985. This stability occurred despite the dramatic changes in workplace technology, the labor force, job structure, and work flexibility. This supports the continued importance of labor demand-side hours constraints in the labor market, but begs for further explanation. In 1986, Susan Shank had interpreted the positive association between earnings and

a preference for fewer hours as support for the backward-bending labor supply hypothesis, where income effects are stronger or prevail at high earnings levels. In this light, however, growth in workers' wage rates since 1985 would suggest that a larger share of the work force would now prefer to supply fewer hours.³¹ It has not, and actually has weakened among men. (See table 4.) This suggests that while the quantity of labor supply desired at each given wage rate might well have declined, the entire labor supply curve may be shifting outward, offsetting any potential income effects. A wedge between actual and desired hours would not widen if either (a) average hours supplied per worker have become shorter or (b) preferred hours per worker have increased. Regarding the former, actual average hours in the private sector (which includes part-time employees) are an hour shorter in 2001 than they were in the second quarter of 1985 (33.9 versus 34.9 hours per week). In 1985, however, 20 percent reported working longer than 40 hours per week whereas 29 percent did so in 2001.³² Thus, the slight decrease in the average masks the rising proportions of workers employed for longer than "standard" hours and also at shorter hours at the other end of the spectrum.³³ In addition, hours demanded per worker were likely shorter than usual in 2001 for cyclical reasons. In the second quarter of 2001 (including the May survey date), the economy was in the midst of a recession, while in 1985 was in rapid expansion. This all implies that preferences for income and time may be adaptive rather than stable over time. Thus, the wedge has not widened apparently because workers' preferred hours of labor supply on average may be longer now than it might have been in 1985.³⁴

Unfortunately, such dynamics cannot be observed directly with just two snapshots. However, it could be with more frequent and precise measurement of overemployment, for example, if the CPS Supplement work hours choice question were included following each March CPS Supplement regarding households' income. Future research could then endeavor to establish the extent to which underemployment is more of a substitute (over the cycle) or complement (for structural reasons). It might also further investigate the extent of any age cohort effect of hours of work, to determine whether overemployment rates track generations through their life cycle. Finally, the longitudinal feature of the CPS could be analyzed to determine what becomes of an overemployed worker's hours in future months or years, to discern whether they change their hours or their jobs, or neither, testing the notion of adaptive work hours preferences.

IN A HYPOTHETICAL LABOR MARKET WITH PERFECT matching of employer-demanded and employee-desired

hours of work, regulations to deter long hours would simply constrain more workers and inhibit firm performance. However, the findings herein suggest that overemployment exists and persists, especially in certain pockets, even among those workers who are presumed to have relatively more bargaining leverage vis-à-vis their employers to control working time, such as older and higher educated, skilled, and paid employees.³⁵ Employment beyond one's usual hours has been found elsewhere to be associated with risks and symptoms of overwork, via greater fatigue and stress levels.³⁶ To the extent that overwork has spillover costs not only on individuals themselves, but family relationships and social capital formation, there is a case for targeted intervention to curb overemployment.³⁷ There is

much support among the majority of the public for some sort of legal restrictions on hours of work in certain industries and occupations, particularly when public health and safety is concerned.³⁸ The findings suggest that improving net individual and social welfare may involve aimed restraint of hours in particular industries and occupations with the highest overemployment ratios, such as hospitals and utilities industries and managerial-supervisory and professional jobs, and to facilitate time transfers from the overemployed to underemployed.³⁹ This also includes targeting efforts toward workers who are at the most vulnerable points of their life cycle when nonmarket worktime appears to become most valuable, such as workers with very young pre-school dependent children.⁴⁰ □

Notes

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¹ René Böheim and Mark P. Taylor, "Actual and Preferred Working Hours," *British Journal of Industrial Relations*, 2004, vol. 42, no. 1, pp. 149-66. L. F. Dunn, "Loss Aversion and Adaptation in the Labor Market: Empirical Indifference Functions and Labor Supply," *Review of Economics and Statistics*, August 1996, pp. 441-50; Peter Feather and Douglass Shaw, "The Demand for Leisure Time in the Presence of Constrained Work Hours," *Economic Inquiry*, 2000, vol. 38, no. 4, pp. 651-62; Kevin Lang and Shulamit Kahn, "Hours Constraints: Theory, Evidence and Policy Implications," in G. Wong and G. Picot, eds., *Working Time in a Comparative Perspective, Volume 1* (Kalamazoo, MI, Upjohn Institute for Employment Research, 2001). R. Drago, Y.-P. Tseng, and M. Wooden, "Usual and preferred working hours in couple households," *Journal of Family Studies*, vol. 11, pp. 46-61. The self-reporting of hours constraints has been validated by the finding that workers who preferred fewer hours and changed their job actually did lower their hours by 2 per week, while those job changers who preferred more hours raised hours by more than 3 hours per week (Joseph Altonji and Christina Paxson, "Labor Supply Preferences, Hours Constraints and Hours-Wage Trade-Offs," *Journal of Labor Economics*, vol. 6, no. 2, April 1988, pp. 254-76).

² Better matching between preferred and actual hours status is associated with in-role and extra-role performance of employees. Overemployment may lead to work behaviors antithetical to productivity, including greater absenteeism, tardiness, use of sick-time, or on-the-job leisure (Jackie Krasas Rogers, "There's No Substitute: The Politics of Time Transfer in the Teaching Profession," *Work and Occupations*, February 2001, pp. 64-92; Brooks Holtom, Simon Tidd, and Thomas Lee, "The Relationship Between Work Status Congruence and Work-Related Attitudes and Behaviors," *Journal of Applied Psychology*, October 2002, pp. 903-23; I. J. H. Van Emmerikand and Karin Sanders, "Mismatch in Working Hours and Effective Commitment," *Journal of Managerial Psychology*, 2005, vol. 20, no. 8, pp. 712-26).

³ Joachim Merz, "Time and Economic Well-Being—A Panel Analysis of Desired versus Actual Working Hours," *The Review of Income*

and Wealth, vol. 48, no. 3, September 2002, pp. 317-46; Kea Tjidsens, "Employees' and Employers' Preferences for Working Time Reduction and Working," *Acta Sociologica*, 46, 2003, pp. 69-82; Michael Hout and Caroline Hanley, "Working Hours and Inequality, 1968-2001 (University of California Berkeley Survey Research Center, March 2003). (Harold Bielinski, Gerhard Bosch, and Alexandra Wagner, *Europeans Work Time Preferences*, European Foundation for the Improvement of Living and Working Conditions, Dublin, 2002; Alfonso Sousa-Poza and Fred Henneberger, "An Empirical Analysis of Working Hours Constraints in Twenty-One Countries," *Review of Social Economy*, 2002, vol. 60, no. 2, pp. 209-42; Lars Osberg, "Understanding Growth and Inequality Trends: The Role of Labour Supply in the U.S.A. and Germany," *Canadian Public Policy*, 2002, vol. 28; Alberto Alesina, Edward Glaeser, and Bruce Sacerdote, "Why Do Americans Work So Hard? *Public Policy Research*, 2005, vol. 12, no. 3, pp. 148-58; Colette Fagan, "Time, Money and the Gender Order: Work Orientations and Working-Time Preferences in Britain," *Gender, Work and Organization*, 2001, vol. 8, no. 3, pp. 239-66).

⁴ There are exceptions, such as Heldrich Center for Workforce Development, "Who will let the Good Times Roll? A National Survey on Jobs, the Economy," *Work Trends Survey*, 1999, vol. 1, pp. 16 (table 1), where preferring fewer hours was almost twice the proportion that preferred more hours). Roper-ASW polls consistently find somewhat stronger general preference for money over time. In 2003, 34 percent of North Americans "would prefer more time to more money" about the same rate found in 2001 and 2000.

⁵ More than 60 percent of workers' "actual" exceeded their "ideal" workweek by 5 hours in 1992 and 11 hours in 1997 (Ellen Galinsky and J. T. Bond, eds., *The National Study of the Changing Work Force*, New York, Families and Work Institute, 1998; Jerry Jacobs, and Kathleen Gerson, "Who Are the Overworked Americans?" in L. Golden and D. Figart, eds., *Working Time: International Trends, Theory, and Policy Perspectives*, New York, Routledge, 2001, pp. 89-105).

⁶ See Peter Hart and Associates, *Imagining the Future of Work* (New York, Alfred P. Sloan Foundation, 2003).

⁷ See Tjidsens, "Preferences for Working Time Reduction." Moreover, surveys tend to query only those employed, whereas many of the overemployed may be between jobs, via layoff or quit, or outside the labor force. See Bluestone and Sharpe, eds., *Toward a New Architecture*

for *Labor Market Statistics* (University of Chicago Press, 2007).

⁸ Workers employed in cyclically sensitive or downsizing industries or insecure jobs may “prefer” longer hours as a hedge against anticipated future income reduction or future layoff (Barry Bluestone and Stephen Rose, “Macroeconomics of Work Time,” *Review of Social Economy*, 1998, vol. 56, no. 4, pp. 425–41). In addition, more workers might prefer to spend “a bit less time” than “much less time” at work, and these combined are far greater proportions than indicated by the more general “work less” option (J. Schor, “Trading Income for Leisure Time, Is There Public Support for Escaping Work-and-Spend?” in V. Bhaskar and Andrew Glyn eds., *The North, the South and the Environment, Ecological Constraints and the Global Economy*, Earthscan Publications, United Nations University Press, 1995).

⁹ For example, Simon Rottenberg, “The Regulation of Work Hours and Its Externalities Defenses,” *Journal of Labor Research*, January 1995, pp. 98–109.

¹⁰ Shulamit Kahn and Kevin Lang, “The Causes of Hours Constraints: Evidence from Canada,” *Canadian Journal of Economics*, 1995, vol. 28, pp. 914–28; and François Contensou and Radu Vranceanu, *Working Time: Theory and Policy Implication* (Cheltenham UK, Edward Elgar, 2000); and Marcus Rubin and Ray Richardson, *The Microeconomics of the Shorter Working Week* (Aldershot, U.K., Ashgate, 1997).

¹¹ James Rebitzer and Lowell Taylor, “Do Labor Markets Provide Enough Short-Hour Jobs? An Analysis of Work Hours and Work Incentives,” *Economic Inquiry*, 1995, vol. 33, pp. 257–73. Compensating wage differentials for inflexible, inconvenient, or mandatory overtime hours are not found empirically (Ronald Ehrenberg and Paul Schumann, “Compensating Wage Differentials for Mandatory Overtime,” *Economic Inquiry*, 1984, vol. 22, no. 4, pp. 460–78; and Altonji and Paxson, “Labor supply preferences”).

¹² More technically, the cost to employers of a mismatch where a worker’s actual hours (h) exceed desired hours (h^*) (at their current wage and job) is:

$$\lambda (h - h^*)^\theta \quad \text{given} \quad \lambda > 0; \quad \theta > 1$$

This gap may persist so long as employers’ administrative costs associated with adjusting each employee’s h to their $h^*(\lambda)$ is sufficiently large, or, the perceived long-term costs (θ) associated with overemployment are sufficiently small or discounted (is near one). Workers may settle for overemployment if absenteeism risks discharge (R. Landers, J. Rebitzer, and L. Taylor, “Rat Race Redux: Adverse Selection in the Determination of Work Hours in Law Firms,” *American Economic Review*, 1996, vol. 86, pp. 3229–48. The lack of health insurance coverage for short-hour jobs increases worker seeking of positions with full-time hours (T. Buchmueller and R. Valletta, “The Effect of Health Insurance on Married Female Labor Supply,” *Journal of Human Resources*, winter 1999, pp. 42–70).

¹³ Dale Belman and Michael Belzer, “The Regulation of Labor Markets: Balancing the Benefits and Costs of Competition,” in Bruce Kaufman, ed., *Government Regulation of the Employment Relationship*, Industrial Relations Research Association, 1998, pp. 178–219; Dora Costa, “Hours of Work and the Fair Labor Standards Act: A Study of Retail and Wholesale Trade, 1938–1950,” *Industrial and Labor Relations Review*, July 2000, pp. 648–64; and Daniel Hamermesh and Stephen Trejo, “The Demand for Hours of Labor: Direct Evidence from California,” *Review of Economics and Statistics*, February 2000, pp. 38–47.

¹⁴ As with unemployment, because of frictions, overemployment can never reach a rate of zero. Estimates of overemployment may be biased downward, if overemployment eventually leads to worker absences, quits, and even labor force withdrawal.

¹⁵ Jeremy Reynolds, “When Too Much Is Not Enough: Overwork and Underwork in the U.S. and Abroad,” *Sociological Forum*, March 2004, pp. 89–120; and Charles Kerwin Kofi and Philip Decicca, “Hours Flexibility and Retirement,” *Economic Inquiry*, 2007, 45 no. 2, pp. 251–67.

¹⁶ More than one-third of dual career couples are working longer than their “preferred” work hour arrangements (Marin Clarkberg and Phyllis Moen, “Understanding the Time-Squeeze: Married Couples’ Preferred and Actual Work-Hour Strategies,” *American Behavioral Scientist*, 2001, vol. 44, pp. 1115–36).

¹⁷ Clarkberg and Moen, “Time-Squeeze.”

¹⁸ This presumes underemployment is negative in the real wage, particularly at low wage levels.

¹⁹ Landers, et al, “Rat Race”; Bluestone and Rose, “Work Time”; Wayne Eastman, “Working for Position: Women, Men, and Managerial Work Hours,” *Industrial Relations*, 1998, vol. 37, pp. 51–66; Bell and Freeman, “Working Hard”; Jeanne Brett and Linda Stroh, “Working 61 Plus Hours a Week: Why Do Managers Do It?” *Journal of Applied Psychology*, February 2003, pp. 67–78; Peter Kuhn and Fernando Lozano, “The Expanding Workweek? Understanding Trends in Long Work Hours Among U.S. Men, 1979–2004,” IZA Discussion Paper no. 1924, Institute for the Study of Labor, 2006; and Jeremy Reynolds, “You Can’t Always Get the Hours You Want: Mismatches between Actual and Preferred Work Hours in the United States,” *Social Forces*, 2003, vol. 81, no. 4, pp. 1171–99.

²⁰ Jeremy Reynolds, “Mismatches between Actual and Preferred Work Hours.” Some jobs provide incumbents a great deal of autonomy and flexibility, but not necessarily an ability to control the number or scheduling of work hours, including high-status occupations such as surgeons or judges. See Shelley MacDermid and Chiung Ya Tang, “Flexibility and Control: Does One Necessarily Bring the Other?” draft, Families and Work Research Conference, Brigham Young University, Mar. 20–22, 2006.

²¹ Because 2001 was a recession year, jobs with cyclical hours, such as construction and durables manufacturing, will likely exhibit relatively low overemployment and high underemployment. See Ronald Hetrick, “Analyzing the upward surge in overtime hours,” *Monthly Labor Review*, February 2000, pp. 30–33.

²² Unions tend to restrain average work hours (John Earle and John Pencavel, “Hours of Work and Trade Unionism,” *Journal of Labor Economics*, January 1990, pp. S15–S174; and Stephen Trejo, “Overtime Pay, Overtime Hours, and Labor Unions,” *Journal of Labor Economics* 1993, vol. 11, pp. 253–78). Unionized workers are considerably less likely to prefer more time over more money, but slightly more likely to prefer that their overtime work be compensated in the form of pay rather than future time off (Will Friedman and Jill Casner-Lotto, *Time is of the Essence: New Scheduling Options for Unionized Employees*, New York, Work in America Institute, 2003).

²³ Bringing work home is much more common among salaried, nonproduction, and supervisory type employees, which considerably increases their relative average daily and weekly hours of work (Lucy Eldridge and Sabrina Pabilonia, “Are Those Who Bring Work Home Really Working Longer Hours?” BLS Working Paper no. 406, May 2007). For evidence on the association of the duration of hours and flexible work schedules, see Lonnie Golden, “The Flexibility Gap: Employee Access to Flexibility in Work Schedules,” in I. U. Zeytinoglu, ed., *Flexibility in Workplaces: Effects on Workers, Work Environment and the Unions* (Geneva, IIRA/ILO, 2005, pp. 1–19). For the effects of nontraditional shift time working on hours preferences and outcomes, see Harriet Presser and Janet Gornick, “The female share of weekend employment: a study of 16 countries,” *Monthly Labor Review*, August

2005, pp. 41–53; and John Schmitt and Dean Baker, *Bad Times: The Impact of Changes in Work Schedules on Productivity Growth* (Washington DC, Center for Economic Policy Research, November 2004).

²⁴ The 1985 CPS Supplement asked: “If you had a choice would you prefer to work: The same number of hours and earn the same money? Fewer hours at the same rate of pay and earn less money? More hours at the same rate of pay and earn more money?” Because the CPS questions were revised in 1994, most relevant being the questions pertaining to the number of work hours, some of the differences between the findings in 1985 and 2001 may reflect these changes (see Anne Polivka and Jennifer Rothgeb, “Overhaul of the Current Population Survey: redesigning the questionnaire,” *Monthly Labor Review*, September 1993, pp. 10–28).

²⁵ The CPS often uses proxy answers for residents who are not home at the time of the interview, but for a “subjective preference” regarding the fewer hours versus more money question, only self-reports are used (as in S. Shank, “Preferred hours of work and corresponding earnings,” *Monthly Labor Review*, November 1986, pp. 40–44). Thus, more than 19 percent of the sample is “unreported” for this question. Also note that the proportion of workers who usually work part time, but in the CPS survey week worked 35 hours or more was at least 4 percent of the usual part-time work force.

²⁶ Appendix tables showing the results of these estimates are available on request to the co-author, Lonnie Golden. E-mail: Lmg@psu.edu.

²⁷ See Virginia Major, K. Klein, and M. Ehrhart, “Work Time, Work Interference with Family and Psychological Distress,” *Journal of Applied Psychology*, 2002, vol. 87, pp. 427–36.

²⁸ At the major occupation level, both managerial and professional categories are statistically significant when the highly correlated variable, work-at-home, is omitted. The reference occupation is sales jobs. In unreported regression results using detailed occupational classifications, the specific professional jobs most likely to exhibit a preference for reduced hours are, in order of magnitude, engineers, health diagnosing occupations, natural scientists, math/computer scientists, health assessment and treatment, lawyers/judges, and management-related occupations. Two technician jobs, health and those other than health, science or engineering, other administrative support and to a slight extent, computer equipment operators, are also positive. Overemployment is relatively higher among private sector (but not public sector) managers and administrators.

²⁹ See Lonnie Golden and Barbara Wiens-Tuers, “To Your Happiness? Overtime Work, Worker Happiness and Satisfaction,” *Journal of Socio-Economics*, April 2006, pp. 382–97. In unreported results from observations at the detailed industry level (relative to the construction industry), two manufacturing industries are associated with significantly greater overemployment: paper and toys/sporting goods. On the other hand, being employed in social services, construction, agriculture, private household, justice/public order, and stone/glass manufacturing significantly reduces overemployment.

³⁰ Hourly pay and union membership status are asked only of the CPS outgoing rotation group (ORG), about a quarter of the overall supplement sample. A table showing the results are available on request to the co-author, Lonnie Golden. E-mail: Lmg5@psu.edu.

³¹ See Robert Drago, D. Black and Mark Wooden, “The Existence and Persistence of Long Work Hours,” IZA Discussion Paper 1720, August 2005. This focus on labor supply curve “shifters” is warranted by evidence that real wages are often found to have little empirical impact on the quantity of labor supply (Mark Bryan, “Free to Choose? Differences in the Hours Determination of Constrained and Unconstrained Workers,” *Oxford Economic Papers*, 2007, vol. 59, no. 2, pp. 226–52).

³² Moreover, the incidence of having paid vacation has decreased over the last two decades, to 77 percent of workers among all establishments (Bureau of Labor Statistics, *National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2005*, Summary 05–01, August). Workers might not respond affirmatively to options of a reduced workweek if their preference for shorter work time is annual hours, in the form of more vacation days or weeks.

³³ For further evidence of this polarization or time divide, see Jacobs and Gerson, “Overworked Americans”; Drago, Black, and Wooden, “Long Work Hours.”

³⁴ A fuller theoretical behavioral consideration of overemployment might help illuminate why the aggregate rate of overemployment might stay constant across time periods (see Morris Altman and Lonnie Golden, “Alternative Approaches to Analyzing Hours of Work Determination and Standards,” in M. Oppenheimer and N. Mercurio, eds., *Alternative Approaches in Law & Economics*, Armonk, NY, M.E. Sharpe, 2004, pp. 286–307). Indeed, any preference for hours reduction is more in the future than current period (Hart and Associates, “Imagining the Future of Work”). The constancy also may reflect a greater aversion to income loss than the benefit expected from an equivalent income gain (Dunn, “Loss Aversion and Adaptation in the Labor Market”). A combination of labor market, workplace, and consumption arena pressures may lead workers to adjust upward their preferred work hours. One factor is that a reduction in hours to reach one’s desired workweek may entail a more than proportional drop in compensation, particularly by going to part-time status, which involves not only lower wage rates but less likelihood of benefit coverage and lower earnings trajectory (Dale Belman and Lonnie Golden, “Nonstandard and Contingent Jobs: Dispersion and Contrast by Industry, Occupation and Job Type,” in F. Carre, M. Ferber, L. Golden, and S. Herzberg, eds., *Nonstandard Work: The Nature and Challenge of Changing Employment Arrangements*, Cornell University Press, 2000, pp. 167–212; and Marianne Ferber and Jane Waldfogel, “Long-term consequences of nontraditional employment,” *Monthly Labor Review*, May 1998, pp. 3–12). Among managerial employees, workplace norms and relative positional concerns may alter initial preferences, perhaps toward hours norms or co-workers (Schor, “Trading income”; and Eastman, “Working for Position”). A greater dispersion of pay grades within an occupation motivates workers to exceed the hours of their co-workers as a positive signaling tactic (Bell and Freeman, “Working Hard”). Reinforcing this may be income targeting behavior, when higher income leads individuals to perpetually seek fulfillment of new, unsatisfied material wants rather than more time (Morris Altman, “Preferences and Labor Supply: Casting Some Light into the Black Box of Income-Leisure Choice,” *Journal of Socio-Economics*, 2001, vol. 30, pp. 199–219). Also, a spell of overemployment creates time scarcity and more earnings, shifting household preferences from self-produced to market-produced goods and services and from time-using toward time-saving goods and services, which requires even further work to purchase (Kurt Rothschild, “A Note on Some of the Economic and Welfare Aspects of Working Time Regulations,” *Australian Economic Papers*, 1982, vol. 21, pp. 214–18). Finally, more individuals may seek more work hours in order to sustain their relative position in consumption levels or emulate the most wealthy (Samuel Bowles and Y. Park, “Emulation, inequality, and work hours: Was Thorsten Veblen right?” *The Economic Journal*, November 2005, pp. F397–F412).

³⁵ Peter Berg, Eileen Appelbaum, Tom Bailey, and Arne Kalleberg, “Contesting Time: Control over Working Time in Seven Industrialized Countries,” *Industrial and Labor Relations Review*, 2004, vol. 57, no. 3, pp. 531–49. However, many workers may not avail themselves of existing options (David Maume, “The Overworked American or The Time Bind? Assessing Competing Explanations for Time Spent in Paid La-

bor," *The American Behavioral Scientist*, March 2001, pp. 1137–57).

³⁶ Such risks are intensified if additional work is not strictly voluntary (E. Galinsky, J. T. Bond, S. Kim, L. Backon, E. Brownfield, and K. Sakai, *Overwork in America: When the Way We Work Becomes Too Much*, New York, Families and Work Institute, 2005; and Golden and Wiens-Tuers, "Overtime").

³⁷ R. Barnett, K. Gareis, and R. Brennan, "Fit as a Mediator of the Relationship Between Work Hours and Burnout," *Journal of Occupational Health Psychology*, 1999, vol. 4, pp. 307–17; Rudy Fenwick and Mark Tausig, "Scheduling Stress: Family and Health Outcomes of Shift Work and Schedule Control," *American Behavioral Scientist*, 2001, vol. 44, no. 7, pp. 1179–98; and M. Van Der Hulst, "Long Work Hours and Health," *Scandinavian Journal of Work Environment Health*, 2003, vol. 29, no. 3, pp. 171–88. Anne Spurgeon, *Working Time: Its Impact on Safety and Health*, Seoul, Korea, International Labor Organization and Korean Occupational Safety and Health Research Institute, 2003; and Allard Dembe, J. Erickson, R. Delbos, S. Banks, "The Impact of Overtime and Long Work Hours on Occupational Injuries and Illnesses: New Evidence from the United States," *Occupational Environment Medicine* 2005, vol. 62, pp. 588–97. Foregone nonmarket time also tends to create negative spillovers to family, marriage quality, children's well-being, social capital (Moen and Clarkberg, "Time-Squeeze"; Major, et al., "Work Interference"; and E. J. Hill, N. T. Mead, L. R. Dean, D. M. Hafen, R. Gadd, A. A. Palmer, and M. S. Ferris, "Researching the 60-Hour Dual-Earner Workweek: An Alternative to the 'Opt-Out Revolution,'" *American Behavioral Scientist*, May 2006, pp. 1184–1203). The most direct estimates are that 26 percent report recently "feeling overworked" and more than half of workers feeling so sometime in the past 3 months (Galinsky, et al., "Overwork").

³⁸ In particular for pilot, police officer, and truck driver occupations (National Sleep Foundation, *2002 Sleep in America Poll*). Long-haul truck drivers' average weekly hours are among the longest (Daniel Hecker, "How hours of work affect occupational earnings," *Monthly Labor Review*, October 1998, pp. 8–18; and Dale Belman and Kristen Monaco, "The Effects of Deregulation, De-Unionization, Technology and Human Capital on the Work and Work Lives of Truck Drivers," *Industrial and Labor Relations Review*, 2001, no. 2A, pp. 502–24.

³⁹ See Rogers, "There's No Substitute." In other post-industrial countries, the extent of legal limitations on the duration of working hours reflects a combination of not only working time preferences among men and women, but also the cultural, economic, and institutional context (Haya Stier and Noah Lewin-Epstein, "Time to Work: A Comparative Analysis of Preferences For Working Hours," *Work and Occupations*, August 2003, pp. 302–26). The only institutional restraints on hours of work in the United States are the Fair Labor Standard Act's (FLSA) overtime regulations enforced by the U.S. Department of Labor, requiring premium pay for hours worked in excess of 40 in a given week for workers not exempt by their duties. For example, drivers covered by U.S. Department of Transportation Hours of Service regulations (limiting driving hours to no more than 11 hours per 24-hour period and 60 hours per week) and youth labor.

⁴⁰ The U.K.'s 2002 Right to Request Flexible Working law, following similar Dutch and German Acts in 2000 facilitates requests from working parents for reduced hours arrangements with their employer (Ariane Hegewisch, *Employers and European Flexible Working Rights: When the Floodgates Were Opened*, University of California Hastings School of the Law, Issue Brief, Work Life Law, fall 2005).

Table A-1. Multinomial logistic regression estimates for all workers 16 years and older, by preference of work hours

Prefer fewer hours	Model 1		Model 2		Model 3 (with occupation)		Model 4 (with industry)	
	Coef.	z	Coef.	z	Coef.	z	Coef.	z
Age	0.003	5.000	0.002	2.670	0.002	2.630	0.002	2.320
Age squared	-.00003	-3.800	-.00001	-1.230	-.00001	-1.180	-.00001	-.900
Female	.033	14.660	.043	18.730	.041	16.350	.040	15.650
African American	-.026	-6.070	-.020	-4.920	-.019	-4.730	-.020	-4.790
Married	.024	6.250	.022	6.020	.021	5.800	.021	5.690
Divorced/separated/widowed	-.003	-.670	-.006	-1.280	-.006	-1.330	-.006	-1.430
Child, 0–2 years	.019	3.360	.019	3.530	.019	3.550	.019	3.530
Child, 3–5 years	.010	1.970	.012	2.320	.012	2.340	.012	2.360
Child, 6–13 years	-.004	-1.120	-.001	-.420	-.001	-.390	-.001	-.430
Child, 14–17 years	-.011	-3.060	-.009	-2.420	-.008	-2.340	-.008	-2.380
Enrolled in school (16–24 year-olds only)	.007	.900	.028	3.690	.029	3.870	.030	3.970
Less than high school	-.037	-6.500	-.030	-5.490	-.023	-3.960	-.021	-3.720
High school	-.010	-3.240	-.007	-2.360	-.004	-1.160	-.003	-.950
College degree (BA, BSc,...)	.018	5.710	.010	3.080	.006	1.800	.006	1.950
Post graduate (MA, PhD, MD,...)	.021	5.410	.008	2.010	.003	.620	.004	.830
Work at home			.016	5.450	.014	4.780	.016	5.250
Work hours, 20 a week			-.041	-6.040	-.040	-5.800	-.039	-5.770
21–34			-.012	-1.920	-.011	-1.740	-.011	-1.830
40			-.003	-.550	-.003	-.540	-.003	-.670
41–49			.020	3.420	.019	3.350	.018	3.200
50 and more			.038	7.210	.037	6.960	.036	6.830
Day shift			.013	2.350	.009	1.610	.010	1.840
Night shift			.011	1.260	.010	1.190	.009	1.030
Other shift			.009	1.360	.008	1.130	.008	1.100
Flexible schedule			.010	4.070	.009	3.560	.008	3.510
Federal Government			-.008	-1.160	-.011	-1.700	-.012	-1.480
State government			-.014	-2.690	-.017	-3.110	-.013	-1.880
Local government			-.016	-3.860	-.018	-4.250	-.014	-2.470
Private nonprofit			.002	.570	-.000	-.080	-.002	-.510
Major occupations								
Executive, administrative and managerial					.005	1.330	.006	1.470
Professional speciality					.006	1.480	.005	1.260
Technicians and related support					.006	.950	.003	.430
Private household					-.008	-1.740	-.007	-1.420
Protective services					-.023	-1.180	-.032	-.690
Services, except protective and household					-.010	-.960	-.008	-.760
Precision production, craft and repair					-.017	-3.290	-.018	-3.430
Machine operators, assemblers and inspectors					.014	-2.680	-.013	-2.370
Transportation and material moving					-.024	-3.530	-.023	-3.280
Handlers, equipment, cleaners, helpers, laborers					-.002	-.270	-.005	-.650
Farming, forestry and fishing					-.008	-1.040	-.008	-.990
Administrative support, including clerical					-.006	-.540	-.010	-.680
Pseudo R-squared	.049	...	.062	...	.066	...	.068	...

NOTE: Results for industry, prefer more hours, gender split, and log-likelihoods are all available by request. Reference occupation is sales.
n=42,956.

Household food expenditure patterns: a cluster analysis

Using data from the Consumer Expenditure Survey, researchers are studying household food expenditure patterns and are learning about the many ways people differ in what and where they eat

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The 2001 report titled “The Surgeon General’s Call to Action to Prevent and Decrease Overweight and Obesity” identified overweight and obesity as major public health problems, costing U.S. society as much as \$117 billion a year and posing as great a threat of death as poverty, smoking, or problem drinking.¹ As a first step in screening for overweight and obesity, “Body Mass Index” (BMI) is calculated using a person’s weight and height, and this number is viewed as being a reliable indicator of body fat for most people.²

The percentage of the U.S. population defined as obese (a BMI greater than 30) or overweight (a BMI greater than 25) has been rising in the past decade. Data from the 1999–2002 National Health and Nutrition Examination Survey (NHANES) show that 65 percent of U.S. adults ages 20–74 were overweight or obese. This is a substantial increase from the 56 percent estimated from the 1988–1994 NHANES and the 47 percent estimated from the 1976–1980 NHANES.³

The statistics presented for children are equally grim. The percentage of children defined as overweight (a BMI-for-age at or above the 95th percentile of the CDC Growth Charts) has also been increasing. Among children and teens ages 6–19, 16 percent (more than 9 million) are overweight according to the 1999–2000 NHANES data, triple the percentage reported in 1980.⁴

While numerous suggestions have been offered as possible solutions to the problem, an energy balance approach to the causes of overweight and obesity recognizes the equi-

librium of food consumption and energy expenditure as being of key importance in maintaining a healthy body weight. This approach suggests that obesity and overweight are caused by eating too much, exercising too little, or some combination of the two. This article examines the input component of this balance by investigating household food expenditure patterns. The literature linking food consumption and obesity can be classified into three categories: (1) type of food intake, (2) amount of energy intake, and (3) location of food intake (where one eats). Published research has identified associations between obesity and a high level of consumption of artificial sweeteners, meat and meat products, high-fructose corn syrup, and soda. Obesity has also been found to be correlated with a low level of consumption of milk, dairy products, bread, and other cereal-based goods.⁵ The amount of energy intake is found to be positively associated with BMI in controlled laboratory studies, although this association is found to be weak or nonexistent in population-based studies, possibly due to measurement issues.⁶ The research has consistently shown that the frequency of eating food away from home is positively associated with obesity and percent of body fat.⁷ Eating out more frequently is associated with a diet high in energy density, such as fat, and low in essential micronutrients and fiber, such as vegetables.⁸ Food away from home, especially fast-food consumption, is linked to an increased intake of energy.⁹

Research on patterns of both food expenditures or food consumption has shown an up-

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ward trend in the consumption of refined carbohydrates and fats from the mid 1980s to the late 1990s.¹⁰ Using U.S. Department of Agriculture Economic Research Services' loss-adjusted annual per capita food supply series, researchers also have found that the average daily calorie consumption in the United States in 2000 was 12 percent, or roughly 300 calories, above the 1985 level. In addition, researchers have observed a trend toward consuming more food away from home, both in terms of the frequency and number of people eating out¹¹ and in terms of the percentage of total calories consumed as food away from home.¹² These trends in type of food intake, calories consumed, and location of food intake are consistent with the observed increases in rates of obesity.

Analyses of food intake patterns can provide insight regarding the possible causes of obesity. There are several approaches that can be used to study household food intake. At one end of the spectrum, studying specific foods in detail to best determine the types of foods people are eating is an option. Such an approach, however, is likely to yield hundreds, if not thousands of food categories, with the overall picture lost amid such detailed analyses. At the other end of the spectrum, it is possible to argue that total caloric intake is the sole critical issue. Some evidence has shown, however, that holding calorie intake constant, different types of food may have different impacts on weight gain, possibly due to differences in the glycemic index.¹³ For this article, a middle-ground approach was initiated, starting from detailed food categories and using cluster analysis to identify major types of household food expenditure patterns; the approach was further developed by investigating which sociodemographic factors may be associated with the probability of households having a particular food expenditure pattern.

Ultimately, it is the overall pattern of food intake, rather than the intake of one or two particular food items, that determines energy intake and thus affects BMI. In most cases, the first step of behavior change is at the point of purchase, followed by the point of consumption. Therefore, identifying expenditure patterns can increase understanding as to which sociodemographic groups are more likely to have food expenditure patterns that put them at a higher risk of obesity. In turn, such an analysis may be useful for consumers, educators, and policymakers in their efforts to fight the obesity problem.

Data

Data used for studying household food expenditure patterns are from the Diary Survey component of the Con-

sumer Expenditure Survey, an ongoing survey conducted by the U.S. Bureau of Labor Statistics (BLS) that provides a continuous flow of information related to the buying habits of American consumers.¹⁴ The Diary Survey component is completed by the sample consumer units (or households) for two consecutive 1-week periods. Data from it are useful for this article because this component contains consumer information on small, frequently purchased items such as food, beverages, food consumed away from home, gasoline, housekeeping supplies, non-prescription drugs and medical supplies, and personal care products and services. Participants are asked to maintain expense records, or diaries, of all purchases made each day for the period surveyed, and information on the consumer unit's characteristics and earnings of the household members is collected as well. The Diary Survey sample is a national probability sample of households designed to represent the total noninstitutional civilian population of the United States. For this article, the 2001 and 2002 Diary Surveys were used.¹⁵ The sample size was 10,967 households with diary data collected in either 2001 or 2002. Because income is an important variable for our research, households were eliminated that were categorized as *incomplete income reporters*; nevertheless, we find it noteworthy that even *complete* reporters do not necessarily provide a full accounting of all sources of income.¹⁶

Cluster analysis: methodology and measurement. Cluster analysis is a multivariate technique used to group households based on similarities in their budget allocation patterns through maximizing within-group similarities and between-group differences.¹⁷ The identification of clusters is empirically based instead of guided by theory. For this article, the similarity measurement used is the Euclidian distance, and the centroid method of measuring similarity is employed because this method is more robust to outliers than most other hierarchical methods.¹⁸ The outcome of this cluster analysis is several clusters of households, with each cluster displaying a distinct food expenditure pattern.

BLS aggregates subcategories of food at home into 18 standard categories: cereals, bakery products, beef, pork, other meat, poultry, seafood, eggs, milk products, other dairy products, fresh fruit, fresh vegetables, processed fruits, processed vegetables, sweets, nonalcoholic beverages, oils, and other miscellaneous foods. This standard aggregation is used in this study. For food away from home, BLS does not have a standard aggregation method; therefore, three categories were created: (1) food away from home at fast-food establishments, (2) food away

from home at full-service establishments, and (3) food away from home at work. While BLS does not consider alcoholic beverages to be food, they are included in this study because alcoholic beverages involve calorie intake and are thus related to obesity. In total, then, there are 22 food expenditure categories used in this article, including 18 food-at-home categories, 3 food-away-from-home categories, and 1 alcoholic-beverages category. Details of which foods are included in each category are provided in the appendix.

Results of the cluster analysis. Eight expenditure patterns are identified from the cluster analysis. Because the cluster analysis technique assigns more weight to large budget-share items, the variances of large budget-share categories, such as fast food away from home and full-service food away from home are better explained than small budget-share categories, such as eggs and oils. This characteristic is not a severe drawback for analyzing a household's budget allocations, however, because large budget-share items figure more prominently in the household decisionmaking process.

The budget share means are presented for the entire sample and for each of the eight clusters. These means are averages of the budget shares for our sample households. The mean budget shares for each cluster indicate that every cluster represented a distinct budget pattern. The clusters are named according to their dominant budget share or shares as follows: (1) balanced, (2) full-service-dominated, (3) fast-food-dominated, (4) meat-eater, (5) miscellaneous-food-dominated, (6) alcohol-dominated, (7) beverages-dominated, and (8) food-at-work-dominated. (See table 1.)

Demographic profiles for the entire sample and for each cluster are presented. A household representative is designated for each consumer unit. For single-person households, the household representative is the reference person; for married-couple households, the household representative is the spouse who is employed. If both spouses are, or neither spouse is, employed, then the spouse with the highest education level is designated as the household representative. The demographic variables include the household representative's sociodemographic characteristics (age, race or ethnicity, education, and employment status), the household's characteristics (family composition, number of earners, and income-to-needs ratio), and characteristics of the community in which the household resides (region and Primary Sampling Unit (PSU) size). The household's income-to-needs ratio is defined as the household's after-tax income divided by the

poverty threshold for the given household size in 2002.¹⁹ Therefore, if a household has an income-to-needs ratio of 1.0, then its income is exactly equal to the poverty threshold for the household's size. (See table 2.)

Cluster 1: Balanced. Of the sample households, 29.1 percent belong to the balanced cluster. Compared with households in other clusters, these households allocate more of their food budget to 7 out of the 22 categories. The seven categories are cereal, bakery goods, seafood, dairy products other than milk, fresh fruits, processed fruits, and sweets. Households in this cluster also allocate more of their budget to all other food-at-home categories than the sample average. Higher-than-average proportions of older households, married-couple households, and households living in the urban Northeast belong to the cluster, as do much-lower-than-average proportions of households headed by single men. The percentage of full-time employment and the average income-to-needs ratio are both slightly lower than the sample averages. The percentage of household members older than 64 years in this cluster is the highest among all clusters, suggesting that members of these households may have more time to prepare meals at home. (See table 2.)

Cluster 2: Full-service-dominated. Of the sample households, 20.3 percent belong to the full-service food-away-from-home cluster. On average, households having this expenditure pattern allocate 42.2 percent of their total food budget to full-service food away from home, much higher than the sample mean of 13.0 percent. Understandably, households in the cluster spend less than the sample average on all other food categories. However, whatever amount they do spend on food at home is fairly balanced across food categories. Higher-than-average proportions of white households, college-educated households, and households living in PSU's that number more than 4 million people belong to the cluster. Households in this group are economically better off than households in other groups, as evidenced by the group's relatively high mean income-to-needs ratio. (See table 2.)

Cluster 3: Fast-food-dominated. Of the sample households, 18.4 percent belong to the fast-food-dominated cluster. Households in this cluster spend, on average, half of their food budget on fast food. However, their budget share for full-service food away from home is approximately half of the sample average. Higher-than-average proportions of younger households and households headed by single men belong to the cluster. Also, the cluster

Table 1. Eight clusters of food expenditure patterns

[Percent of food budget]

Food category	Entire sample	Balanced	Full service	Fast food	Meateater	Miscellaneous foods	Alcohol	Beverage	Work
Cereal	3.14	4.46	1.96	2.06	4.44	3.48	1.73	3.51	1.67
Bakery products	6.09	8.94	3.9	4.17	6.04	7.05	3.87	8.62	3.37
Beef	4.42	3.74	2.68	2.53	15.4	3.41	3	2.98	1.64
Pork	3.3	3.85	1.78	1.88	8.93	2.38	2.16	3.17	1.58
Other meats	1.99	2.74	1.12	1.29	3.01	2.35	1.22	2.66	0.87
Poultry	2.84	3.57	1.59	1.56	6.92	2.36	1.65	2.72	1.16
Seafood	1.98	3.12	1.27	0.9	3.03	1.65	1.32	1.53	1.16
Eggs	0.79	0.97	0.46	0.55	1.46	0.74	0.5	1.26	0.35
Milk products	3.16	4.12	1.92	2.49	4.24	3.27	1.97	5.36	1.84
Other dairy	3.88	5.66	2.47	2.41	3.88	5.3	2.95	4.3	1.79
Fresh fruits	3.43	5.39	2.48	2.01	3.91	3.26	1.76	3.34	1.75
Fresh vegetables	3.41	5.04	2.26	1.73	5.2	3.21	2.41	3.28	1.52
Processed fruits	2.36	3.49	1.63	1.59	2.56	2.78	1.38	2.13	1.28
Processed vegetables	1.64	2.31	0.98	0.93	2.42	1.99	1.2	1.84	0.46
Sweets	2.31	3.37	1.48	1.71	1.98	3.01	1.23	3.18	1.42
Nonalcoholic beverages	5.3	5.38	3.26	4.28	4.87	5.52	4.43	25.63	2.88
Oils	1.68	2.38	1	0.99	2.42	2.01	0.98	2.28	0.58
Miscellaneous foods	9.06	10.11	5.38	5.74	6.08	26.97	6.06	9.58	3.59
Fast food	18.28	10.68	13.43	49.98	7.83	11.31	12.81	8.29	10.81
Full-service food	13	6.32	42.2	6.45	2.17	4.42	9.01	2.14	4.67
Food at work	2.37	1.83	1.4	1.73	0.98	1.32	1.4	0.84	53.35
Alcoholic beverages	5.56	2.56	5.37	3.03	2.25	2.23	36.97	1.35	2.24
Sample size	10,967	3,192	2,231	2,017	1,181	1,030	786	360	170
Proportion		0.29	0.2	0.18	0.11	0.09	0.07	0.03	0.02

NOTE: The numbers in the table are budget shares. For example, the first number, 3.14, means that, for the whole sample, 3.14 percent of the food budget is spent on cereal. Numbers were computed by the authors from the Diary Survey component of the 2001 and 2002 Consumer Expenditure Survey.

has the highest percentage of full-time employment, 64.3 percent, compared with the sample average of 53.3 percent. In addition, the average number of earners, 1.51, is the highest, compared with the sample average of 1.37. The income-to-needs ratio for this cluster is slightly lower than the sample average, indicating less economic well-being. (See table 2.)

Cluster 4: Meat-eater. Of the sample households, 10.8 percent belong to the meat-eater cluster. This cluster of households allocates a substantial portion of its food budget to beef (15.4 percent, compared with the sample average of 4.4 percent), pork (8.9 percent, compared with the sample average of 3.3 percent), other meats (3.0 percent compared with the sample average of 2.0 percent), and poultry (6.9 percent, compared with the sample average of 2.8 percent). Households in the cluster also allocate more of their budget to eggs, milk products, fresh and frozen vegetables, and oils, compared with the sample average. Higher-than-sample-average proportions of older households, black households, Hispanic households, and households living in the urban South belong to this cluster. The group has the lowest income-to-needs ratio and the lowest percentage of full-time employment, 43.9 percent, compared with the sample average of 53.3 percent. (See table 2.)

Cluster 5: Miscellaneous-food-dominated. Miscellaneous foods include soup, frozen food, potato chips and other snacks, nuts, seasonings and condiments, other prepared food, and vitamin supplements. (See appendix.) Of the sample of households, 9.4 percent belong to this cluster. On average, these households allocate 27.0 percent of their budget to miscellaneous foods, much higher than the sample average of 9.1 percent. While they allocate close to the sample mean to the majority of the other food categories, they spend less on all three food-away-from-home items: full service, fast food, and food at work. They also spend less on alcohol. It appears that this household group substitutes store-bought prepared foods (such as frozen meals) for food away from home. Higher-than-average proportions of younger households, white households, households headed by single women, households living in the urban Midwest, and households living in less populated areas belong to this cluster. (See table 2.)

Cluster 6: Alcohol-dominated. Of all the households in the sample, 7.2 percent belong to this cluster. On average, the cluster spends approximately 37.0 percent of its household food budget on alcoholic beverages, compared

with the overall sample mean of 5.6 percent. The budget shares for these households on other food categories are all less than the sample means. Higher proportions of younger households, white households, college-educated households, households headed by single men, urban households, and households living in medium-sized areas (0.33–1.19 million) belong to this cluster. Households in the cluster have a high income-to-needs ratio, 4.04, second only to the full-service cluster. (See table 2.)

Cluster 7: Beverage-dominated. Of all households in the sample, 3.3 percent belong to this cluster. Households in the cluster allocate 25.6 percent of their food budget to nonalcoholic beverages, which include carbonated drinks, coffee, tea, and fruit-flavored drinks. These households also spend the highest cluster average for milk products. By contrast, they allocate much less than average on food-away-from-home categories. Higher proportions of older households, households with a high school education or less, households headed by single women, rural households, and households living in small areas belong to this cluster. These households also have the second-lowest income-to-needs ratio (second only to the meat-eaters cluster). (See table 2.)

Cluster 8: Food-at-work-dominated. This is the smallest cluster in the sample, with only 1.6 percent of households. Households in the cluster allocate more than half of their food budgets, 53.4 percent, to food at work. The allocations of their food budget to all other food categories are typically less than the sample averages. The cluster consists of higher-than-average proportions of those under 25 years; those between 45 and 54 years; blacks and another group not listed, including those who answered “don’t know”; those living in the urban Northeast and the Midwest; and those living in medium-sized areas (0.33–1.19 million). Households in this cluster have the second highest proportion of full-time employment (second only to the full-service cluster), and a slightly higher income-to-needs ratio than the overall sample mean. (See table 2.)

Findings. Overall, two food-at-home clusters have been identified: the balanced cluster and the meat-eater cluster. The balanced cluster seems to have a food expenditure pattern that is consistent with nutritional recommendations, which advise eating a variety of foods and avoiding foods that have a relatively high fat content, such as meat. The meat-eater cluster, in contrast, may place too high an emphasis on meat intake and thus fat intake. The other six clusters are clearly dominated by one type of food.

Table 2. Demographic profiles by cluster

Variables	Entire sample	Balanced	Full service	Fast food	Meat-eater	Miscellaneous foods	Alcohol	Beverage	Work
Age (percent):									
Less than 25 years	8.5	4.6	6.3	15.3	6.1	10.0	13.7	5.5	17.6
25–34 years	18.8	15.9	17.2	24.6	16.8	22.5	21.1	13.0	15.6
35–44 years	22.7	24.1	20.4	26.0	20.9	19.7	21.8	23.4	23.6
45–54 years	19.5	19.6	21.0	17.4	19.9	18.3	19.8	20.8	23.4
55–64 years	12.2	13.4	14.1	8.0	14.7	10.3	10.3	17.2	7.6
65 years and older	18.3	22.4	21.0	8.7	21.6	19.3	13.2	20.1	12.2
Race/Ethnicity (percent):									
White	74.3	74.2	83.9	69.9	54.8	79.9	82.8	76.6	62.2
Black	11.9	11.2	5.6	15.1	23.2	9.3	8.0	11.1	22.8
Hispanic	9.8	10.0	6.2	10.9	17.7	8.3	6.6	8.8	9.3
Other	4.1	4.6	4.2	4.2	4.3	2.6	2.6	3.4	5.7
Education (percent):									
Less than high school	14.6	15.6	7.2	13.5	29.2	15.1	10.0	22.6	7.5
High school graduate	58.0	57.0	53.2	63.0	57.1	58.3	58.6	64.0	66.3
College or more	27.4	27.5	39.6	23.5	13.7	26.6	31.4	13.5	26.2
Full-time employment (percent)	53.3	46.8	56.6	64.3	43.9	50.2	61.8	46.7	63.2
Gender/family type (percent):									
Married couple	51.2	57.6	55.9	45.0	52.2	48.0	37.9	43.5	35.2
Headed by single woman	29.5	30.9	22.9	30.2	35.4	33.0	22.9	37.8	30.3
Headed by single man	19.3	11.4	21.2	24.8	12.4	19.0	39.2	18.7	34.5
Other nonfamilies	13.5	12.4	11.2	15.8	16.7	12.3	15.9	14.6	6.3
Family composition:									
Number of people less than 2 years	.1	.1	.0	.1	.1	.1	.0	.0	.0
Number of people 2–5 years	.2	.2	.1	.2	.2	.2	.1	.1	.1
Number of people 6–12 years	.3	.4	.2	.3	.3	.3	.1	.2	.2
Number of people 13–17 years	.2	.2	.1	.2	.3	.2	.1	.2	.4
Number of people 18–64 years	1.5	1.6	1.5	1.6	1.6	1.5	1.4	1.4	1.4
Number of people 65 years and older	.3	.4	.4	.1	.4	.3	.2	.3	.2
Number of earners	1.37	1.36	1.36	1.51	1.31	1.30	1.36	1.12	1.33
Income-to-needs ratio	3.62	3.24	5.17	3.40	2.53	3.17	4.04	2.72	3.66
Region (percent):									
Urban Northeast	16.6	19.2	18.2	12.6	15.0	12.9	18.7	14.1	22.0
Urban Midwest	19.4	18.1	19.7	21.0	13.6	22.6	22.6	16.4	30.9
Urban South	30.8	28.2	31.8	33.4	37.4	29.9	27.6	23.9	27.4
Urban West	20.1	19.7	19.3	21.2	18.0	21.8	21.9	22.7	13.4
Rural	13.2	14.8	10.9	11.8	16.0	12.8	9.3	22.9	6.3

See footnote at end of table.

Table 2. Continued—Demographic profiles by cluster

Variables	Entire sample	Balanced	Full service	Fast food	Meat-eater	Miscellaneous foods	Alcohol	Beverage	Work
PSU size (percent)									
More than 4 million	24.4	25.5	29.2	22.2	22.5	18.0	23.4	22.6	24.1
1.2–4 million	21.2	19.4	21.9	21.4	20.5	24.0	24.8	18.1	20.2
0.33–1.19 million	17.3	17.3	16.3	18.1	19.4	16.1	18.2	11.1	25.1
125–329.1 thousand	11.9	12.1	10.4	11.9	10.2	16.4	11.9	13.8	8.7
Fewer than 125 thousand	25.2	25.7	22.1	26.3	27.3	25.5	21.7	34.4	21.9
Sample size	10,967	3,192	2,231	2,017	1,181	1,030	786	360	170
Proportion (percent)	100.0	29.1	20.3	18.4	10.8	9.4	7.2	3.3	1.6

NOTE: Numbers were computed by the authors from the Diary Survey component of the 2001 and 2002 Consumer Expenditure Survey.

Three of the six are food-away-from-home-dominated: full service, fast food, and food at work. In the miscellaneous-food-dominated cluster, households use a significant amount of store-bought prepared food (such as frozen meals). The last two are beverage groups, with one focusing on alcoholic beverages, and the other spending a considerable portion of its food budget on nonalcoholic beverages. If these two beverage groups are eliminated, and the cluster analysis is rerun with the first six groups, households in these clusters generally move toward the balanced cluster.

Past research suggests that the frequency of eating food away from home, especially fast-food consumption, is positively associated with obesity and body fat.²⁰ In addition, consuming higher levels of artificial sweetener, meat and meat products, high-fructose corn syrup, and soda are all associated with obesity.²¹ As such, membership in the full-service, fast-food, meat-eater, miscellaneous, and beverage clusters is likely to be positively associated with a high BMI, whereas membership in the balanced cluster is likely to be negatively associated with a high BMI. The relationships between BMI and the alcohol and food-at-work clusters are less clear.

Multivariate analysis

The next step in the study involved investigating the determinants of the identified food expenditure patterns. Neoclassical demand theory suggests that households attempt to maximize their consumption choices subject to preferences and resource constraints. Sociodemographic factors affect a household's preferences for food expenditure choices. Prices, income, and time constraints all affect a household's decision as to how best to spend its food

dollars. Mathematically, food demand (D) is a function of food prices (P), income (M), time constraint (t), and preferences (PR):

$$D = f(P, M, t, \text{PR}). \quad (1)$$

A standard set of preference shifters are used in this study. These variables include (1) the household representative's sociodemographic characteristics, (2) the household's characteristics, and (3) characteristics of the community in which the household resides. The household representative's measured sociodemographic characteristics include age (less than 25, 25–34, 35–44, 45–54, 55–64, 65 and older); education (less than high school, high school, some college, college or postgraduate); race or ethnicity (non-Hispanic whites; non-Hispanic blacks; Hispanics; and another group not listed, including “don't know”); and full-time employment status. Household characteristics include family type (married couple, headed by single woman, headed by single man, and other families); family composition (number of family members younger than age 2, and those aged 2–5, 6–12, 13–17, 18–64, and 65 and older); and number of wage earners in the family. Community characteristics include region (urban Northeast, urban Midwest, urban South, urban West, rural) and population size of the metropolitan area (PSU) (greater than 4 million, from 1.2 to 4 million, from 0.33 to 1.19 million, from 125 to 329.9 thousand, and fewer than 125 thousand).

The Diary Survey component of the Consumer Expenditure Survey does not gather price information; therefore, variation in prices cannot be directly measured. In spite of that, the location variables just presented may capture price differences across different regions. Income effects are captured by including the household's income-to-needs ratio, which measures income adjusted for

household size. Time constraints are approximated by the employment status of the household representative and the number of wage earners in the family.

Although the neoclassical consumer demand model guides the multivariate analysis presented, no rigorous attempt is made to model the household's decisions regarding food-purchase choices. Rather, an attempt is made to determine socioeconomic factors that are associated with particular household food expenditure patterns. In that sense, the multivariate analysis is exploratory in nature. As such, no explicit hypotheses are formed. However, it is expected that households in which the household representative works full time and households with more earners are more likely to be in the food-away-from-home clusters, especially the fast-food-dominated cluster, because the purchase of food away from home reduces food preparation time. It is also expected that households with higher income-to-needs ratios are more likely to be in the full-service food-away-from-home cluster because full-service restaurants are typically income elastic goods. Because of traditional gender roles, households headed by single men may be less likely than other types of households to be in clusters that require significant amounts of at-home food preparation, such as the balanced and the meat-eater clusters.

Because cluster membership is a categorical variable, an unordered multinomial logit analysis is used. Following Maddala (1983), the multinomial logit model is specified as

$$\log\left(\frac{P_i}{P_m}\right) = \beta_i'x, \quad i = 1, 2, \dots, m-1, \quad (2)$$

where P_i is the probability that a certain observation falls into the i th cluster, x is the set of preference and constraints variables, and β is the corresponding set of regression coefficients. Note that the x vector includes P , M , t , and PR . A total of $(m-1)$ binary logit equations are fit simultaneously, and the sum of the m predicated probabilities is restricted to 1. The dependent variables of the multinomial logit analysis are the log-odds ratios of being in cluster i versus in cluster m . A household's probability of inclusion in cluster i is computed with the formula

$$P_j = \frac{e^{\beta_j'x}}{1 + \sum_{j=1}^{m-1} e^{\beta_j'x}} \quad j = 1, 2, \dots, m-1, \quad (3)$$

and the household's probability of inclusion in cluster m is calculated with

$$P_m = \frac{1}{1 + \sum_{j=1}^{m-1} e^{\beta_j'x}}. \quad (4)$$

The household's marginal probability of inclusion in cluster i for variable x_i is computed as

$$\frac{\partial P_j}{\partial x_i} = \beta_{ji} P_j - P_m P_j \sum_{j=1}^{m-1} \beta_{ji} e^{\beta_j'x} \quad j = 1, 2, \dots, m-1. \quad (5)$$

The household's marginal probability of inclusion in cluster m for variable x_i is

$$\frac{\partial P_m}{\partial x_i} = - \sum_{j=1}^{m-1} \frac{\partial P_j}{\partial x_i} \quad (6)$$

Results of the multivariate analysis

Table 3 shows the results of the multinomial logit analysis. For ease of interpretation, the marginal effects for each observation in the sample are computed, along with the means of these marginal effects. The McFadden pseudo- R^2 of the model is 0.18. Other than the dummy variable indicating a PSU size smaller than 125,000, all independent variables are at least jointly statistically significant at the 95-percent confidence level.

Age. The probability of being in the full-service-dominated cluster increases with age, while the probability of being in the fast-food-dominated cluster and the food-at-work cluster decreases with age, all else being equal. In addition, those who are age 34 years and younger are more likely to be in the miscellaneous-food-dominated group or the alcohol-dominated group, compared with those who are age 65 and older. The effect of age is the largest for the fast-food cluster, with those younger than age 25 being 24.6 percent more likely to be in this cluster, compared with those who are age 65 and older. There are two explanations for this age trend: the first is a life-cycle explanation, in that for life-cycle-stage reasons, younger households are more likely than older households to eat in fast-food establishments. As people grow older, their tastes may change and they may move to other clusters. The second is a cohort explanation, in that there are fundamental differences in the younger households compared with the older households, which posits that the younger households may prefer fast-food consumption even as they grow older, compared with the older groups. Given

Table 3. Average marginal probability of cluster inclusion and P-value

Variables	Balanced	Full service	Fast food	Meat eater	Miscellaneous foods	Alcohol	Beverage	Work	P-value
Age (65 and older):									
Less than 25	-15.6	-3.1	23.2	-5.5	-5.1	5.0	-0.9	2.0	<.0001
25-34	-13.4	-.9	17.0	-3.7	-3.0	3.6	.5	-.2	<.0001
35-44	-10.4	-.6	13.1	-2.6	-3.5	2.6	1.7	-.2	<.0001
45-54	-6.3	-.8	5.9	-.3	-2.3	2.4	1.5	.0	.0375
55-64	-3.5	-.1	2.2	1.7	-2.6	.5	2.1	-.4	.2158
Race/ethnicity (white):									
Black	-3.7	-7.2	2.8	12.8	-3.7	-2.4	-.8	2.1	<.0001
Hispanic	-2.5	-3.5	-.4	11.9	-3.2	-1.5	-1.1	.4	<.0001
Other	2.9	-2.9	1.1	3.6	-2.6	-2.8	-.6	1.4	.0002
Education (high school):									
Less than high school	-2.5	-5.1	.8	7.0	-.3	-.7	1.3	-.5	<.0001
College or more	1.7	4.9	-3.1	-2.4	-.2	.4	-1.0	-.2	<.0001
Full-time employed	-2.6	1.2	2.7	.0	-.8	-.8	.2	.2	.0803
Gender/family type (married couple):									
Headed by single woman	-1.4	-3.8	2.3	.3	2.7	-1.3	.0	1.2	.0006
Headed by single man	-8.9	-3.0	4.0	-2.5	.8	7.2	-.8	3.3	<.0001
Other nonfamilies	2.0	-.1	-.8	1.0	-2.2	.5	.7	-1.2	.0008
Family composition:									
Number of people less than 2 years	.6	-4.6	-4.5	1.8	10.9	-2.7	-1.1	-.3	<.0001
Number of people 2-5 years	4.5	-3.6	-.5	.2	1.2	-1.3	-.1	-.4	<.0001
Number of people 6-12 years	4.7	-2.8	-.5	1.2	-.2	-1.6	-.7	-.1	<.0001
Number of people 13-17 years	3.7	-2.6	-2.5	1.4	.0	-1.5	.2	1.2	<.0001
Number of people 18-64 years	1.7	-.5	-2.4	1.9	.3	-1.7	.1	.6	.0009
Number of people 65 years and older	.7	2.6	-1.9	1.8	-1.8	-1.3	-.1	.0	.1015
Number of earners	-.7	-.9	3.3	-1.2	-.4	1.1	-.9	-.3	<.0001
Income-to-needs ratio	-.6	1.4	-.1	-.7	-.1	.2	-.2	.1	<.0001
Region (Urban Northeast):									
Urban Midwest	-4.7	-.8	4.5	-1.7	3.1	-.3	.0	.0	.0003
Urban South	-5.7	2.3	3.9	.5	1.5	-1.5	-.1	-.8	<.0001
Urban West	-3.7	-2.1	4.1	-1.1	2.8	-.3	1.1	-.7	<.0001
Rural	-1.3	-3.0	.7	3.0	.9	-1.6	2.1	-.8	.0216

Table 3. Continued—Average marginal probability of cluster inclusion and P-value

Variables	Balanced	Full service	Fast food	Meat-eater	Miscellaneous foods	Alcohol	Beverage	Work	P-Value
PSU size (more than 4 million)									
1.2–4 million	–2.1	–3.0	–.3	.9	3.4	1.4	–.4	.1	.0018
0.33–1.19 million	–.1	–4.9	1.6	1.6	.7	.8	–1.1	1.3	<.0001
125–329.1 thousand	.5	–4.5	–.4	–.3	4.5	.5	–.1	–.2	.0026
Fewer than 125 thousand	–2.3	–2.1	1.8	–.4	2.1	.1	.1	.6	.1486

NOTE: For dummy variables, the category listed by the variable title is the reference group. For example, the number –15.6 in row 3, column 2, should be interpreted as follows: Compared with those households with a reference person 65 and older, those with a

reference person less than 25 are 15.6 percent less likely to be in the balanced cluster. Numbers were computed by the authors using the Diary Survey component of the 2001 and 2002 Consumer Expenditure Survey.

the research evidence suggesting that high levels of fast-food consumption are linked to overweight and obesity, the cohort explanation paints a rather bleak forecast of future obesity trends. Further study is needed to decompose these two effects.

Race/ethnicity. All else being equal, compared with non-Hispanic whites, minority groups are more likely, on average, to be in the meat-eater cluster, with black households 13.3 percent more likely and Hispanic households 12.7 percent more likely, on average, holding other things equal. Blacks and Hispanics are less likely to be in the full-service, miscellaneous, and alcohol clusters, compared with whites. In addition, black households are more likely to be in the fast-food and food-at-work clusters, compared with white households. These ethnic differences raise concern for black and Hispanic Americans because large amounts of fast-food consumption and meat consumption both have been linked to high BMI.²² Research presented in the literature has shown that black and Hispanic Americans have higher BMI levels than do non-Hispanic white Americans.²³ Although this might be attributable to ethnic- and race-specific genetic effects, food preferences among these groups also might be an explanation.

Education. Households headed by a college-educated person are less likely to be in the fast-food, meat-eater, and beverage clusters, compared with those headed by an individual with only a high school diploma or one who has less formal education, all else being equal. By contrast, households headed by a person with less than a high school education are 7.4 percent more likely to be in the meat-eater cluster and 1.2 percent more likely to be in

the beverage cluster, compared with households headed by a high school graduate. This would seem to imply that a college education may have an effect on how people decide on a type of diet that is commonly identified as “healthful.”

Gender/family type. Households headed by single persons are less likely to be in the balanced cluster compared with married-couple households, and the difference is larger for households headed by single men compared with those headed by single women (13.3 percent less, as opposed to 4.8 percent less), holding other factors constant. Households headed by single men are more likely to be in the alcohol cluster (13.2 percent more likely), the fast-food cluster (3.3 percent more likely), and the food-at-work cluster (2.6 percent more likely). The difference between households headed by single women and married-couple households is smaller. Households headed by single women are more likely to be in the beverage cluster (1.3 percent more likely) and the food-at-work cluster (1.0 percent more likely) and less likely to be in the meat-eater cluster (1.8 percent less likely), compared with married-couple households. One explanation for this gender and family composition difference is that, generally, women have more food-preparation skills than do men. As such, households with an adult female present are more likely to have more balanced food expenditure patterns.

Location. Households residing in the urban Northeast and in rural areas are more likely to be in the balanced cluster, compared with households residing in the urban Midwest, the South, and the West, all else being equal. In turn, households in the urban West, the South, and the

Midwest are more likely to be in the fast-food (3.7 percent to 4.5 percent more likely) and miscellaneous-food clusters (1.4 percent to 3.0 percent more likely). For urban areas, population size is positively related to membership in the full-service cluster, probably an indication of both access issues and location-specific lifestyle differences.

Work hours and income/needs ratio. Households in which the average adult market-work hours number more than 35 hours per week are more likely to be in the full-service and fast-food clusters (1.1 percent and 4.6 percent more likely, respectively), compared with otherwise similar households working less than 35 hours per week per adult, all else being equal. This is consistent with the notion that consumption of food away from home, especially fast food, is positively correlated with adult market-work hours. Similarly, the higher the income-to-needs ratio, the more likely the household belongs to one of these two clusters, but this income effect is larger for the full-service cluster than for the fast-food cluster. A higher income-to-needs ratio is also positively associated with the probability of being in the alcohol and food-at-work clusters, but negatively associated with the probability of being in the meat-eater cluster.

Thus, age, ethnicity, education, gender/family type, location, and population size all affect household food expenditure patterns. If we subscribe to the idea that a more balanced diet is good for one's health, then it is younger, black or Hispanic, less educated households headed by a single person that appear less likely to have a healthy, balanced food expenditure pattern. In addition, households with higher average adult market-work hours and households with higher needs-adjusted incomes are less likely to have a balanced pattern. Households living in the urban Midwest, the South, the West, in rural areas, and households living in either very large metropolitan areas or in very small areas also are less likely to have balanced food expenditure patterns.

Conclusions and implications

Energy intake changes start with changing point-of-purchase decisions. This article has identified eight constellations of food expenditures that are either more or less likely to be associated with healthy eating habits. While the nutrition literature does not arrive at complete agreement as to which eating patterns are the most healthful, it is generally agreed that a balanced, diversified pattern of food consumption is beneficial to energy balance. The findings presented in this article show that only 29 percent

of all households in this nationally representative survey fall into the balanced-purchasing cluster that is likely to be the most healthful. In sharp contrast, 40 percent of the households in this survey typically spend between 40 to 50 percent of their food budgets on meals eaten away from home (including those eaten at work). The generally poorer nutritional content and higher caloric content of these types of meals increases the likelihood that such eating habits might be contributing to the growing energy balance problem in the population of the United States.

To help offer a solution, educational efforts might focus on teaching people about the nutritional benefits that could be gained from eating more home-prepared meals and focus as well on strategies for keeping energy intake in balance when eating out (for example, two people splitting a meal that is purchased away from home). It is likely that many households do not even realize that by eating out, they are increasing both their caloric intake (for example, through higher portion sizes) and their intake of fat, while reducing their intake of essential micronutrients and fiber, such as vegetables.²⁴ Providing additional educational resources, as they relate to the nutritional implications of eating food away from home, may be a good first step towards helping people make positive changes in their energy intake.

Higher work hours and higher needs-adjusted incomes are associated with an increased likelihood of being in one of the food-away-from-home groups. These associations are particularly important given the upward trends in women's labor force participation rates and real median household income throughout the past 20 years.²⁵ With less time available to prepare meals and more real disposable income, households appear to be choosing to spend more of their food dollars on high-calorie meals consumed away from home. Although education programs targeted at focused groups (for example, nutrition and cooking programs targeted at both male and female high school students) might have some impact, the trend toward spending a sizable share of the household food budget on meals eaten away from home is likely to continue. With fully 40 percent of the households falling into one of the food-away-from-home clusters, it is imperative that researchers attempt to ascertain the food-away-from-home expenditures to arrive at a better understanding of the factors that may be influencing purchase choices among this sizable, and likely growing, part of the population.

Younger households are much more likely to be in the fast-food-dominated cluster, and less likely to be in the balanced cluster. Given the cross-sectional nature of this analysis, it cannot be ascertained whether this is a life-

cycle effect or a cohort effect. In either case, but especially in the case of a cohort effect, educational efforts regarding healthy eating choices should be focused on younger age groups. In addition, households headed by single men are much less likely to be in the balanced cluster and much more likely to be in the alcohol cluster, compared with married households. Because of traditional gender roles, men are more likely to lack the skills necessary to prepare nutritious meals at home. Given that the percentage of households headed by single men has been increasing in the United States, it is important that cooking and nutrition education reach this segment of the male population.²⁶ Indeed, this might be an argument for making nutrition and cooking classes a requirement for high school students, both male and female, so that all high school graduates can be equipped with a basic knowledge of nutrition and of which foods contribute to healthy eating.

In addition, the data indicate that blacks and Hispanics are much more likely to have a meat-eater pattern, compared with whites. The literature also shows that blacks and Hispanics are more likely to be overweight.²⁷ Although there might be race/ethnic-specific genetic effects, it is possible that their food preferences have some effect as well. Although race- or ethnic-specific genetic effects are difficult to modify, members of black and Hispanic communities might benefit from education about decreasing meat consumption and increasing consumption of whole

grains, vegetables, and so forth. Further research is needed to ascertain if ethnicity interacts with other covariates to explain differences in these groups' eating patterns.

Household food expenditures, of course, do not correlate precisely with food intake. Although food expenditures and food consumption are likely to be highly correlated, not all food purchased will be consumed, and different individuals in a household may consume very different amounts of certain foods purchased by the household. Nevertheless, the identification of household food expenditure patterns provides useful information in understanding the food intake choices of households.

IN SUM, BASED ON THE FINDINGS presented in this article, it is suggested that educational efforts targeting young people in general, males of all age groups, and minorities might be beneficial. These efforts could focus on teaching cooking skills, increasing understanding of the nutritional impact of eating food away from home (particularly its role in obesity), and increasing awareness of the impact of meat consumption on obesity. Because these groups make up approximately 40 percent of the sample studied in this article, further research is needed to "unpack" food-away-from-home expenditures to gain a better understanding of the factors that influence food-purchasing choices among this sizable, and likely growing, segment of the U.S. population. □

NOTES

¹ *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity* (Washington, DC, U.S. Department of Health and Human Services, 2001); on the Internet at www.surgeongeneral.gov/topics/obesity/calltoaction/CalltoAction.pdf (visited Apr. 28, 2007).

² BMI—Body Mass Index (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007); on the Internet at www.cdc.gov/nccdphp/dnpa/BMI/index.htm (visited Apr. 28, 2007).

³ K. M. Flegal, M. D. Carroll, et al., "Prevalence and Trends in Obesity Among U.S. Adults, 1999–2000," *Journal of the American Medical Association*, Oct. 9, 2002, pp. 1723–27; A. A. Hedley, C. L. Ogden, et al., "Prevalence of Overweight and Obesity Among U.S. Children, Adolescents, and Adults, 1999–2002," *Journal of the American Medical Association*, June 16, 2004, pp. 2847–50; and *Prevalence of Overweight and Obesity Among Adults: United States, 1999–2002* (U.S. Department of Health and Human Services, National Center for Health Statistics, 2005), on the Internet at www.cdc.gov/nchs/products/pubs/pubd/hestats/obese/obse99.htm (visited Apr. 29, 2007).

⁴ C. L. Ogden, K. M. Flegal, et al., "Prevalence and Trends in Overweight Among U.S. Children and Adolescents, 1999–2000," *Journal of the American Medical Association*, Oct. 9, 2002, 1728–32; Hedley, Ogden, et al., "Prevalence of Overweight and Obesity"; *Prevalence of*

Overweight and Obesity Among Children and Adolescents: United States, 1999–2002 (U.S. Department of Health and Human Services, National Center for Health Statistics, 2005), on the Internet at www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm (visited Apr. 29, 2007).

⁵ S. Stellman and L. Garfinkel, "Patterns of Artificial Sweetener Use and Weight Change in an American Cancer Society Prospective Study," *Appetite*, November 1988 (Suppl. 1), pp. 85–91; H. Hesecker, S. Hartmann, et al., "An Epidemiologic Study of Food Consumption Habits in Germany," *Metabolism*, February 1995 (Suppl. 2), pp. 10–13; G. A. Bray, S. J. Nielsen, et al., "Consumption of High-Fructose Corn Syrup in Beverages May Play a Role in the Epidemic of Obesity," *American Journal of Clinical Nutrition*, April 2004, pp. 537–43.

⁶ J. M. Weber, R. C. Klesges, et al., "Dietary Restraint and Obesity: Their Effects on Dietary Intake," *Journal of Behavioral Medicine*, April 1988, 185–99; Hesecker, et al., "An Epidemiologic Study of Food."

⁷ M. A. McCrory, P. J. Fuss, et al., "Overeating in America: Association between Restaurant Food Consumption and Body Fatness in Healthy Adult Men and Women Ages 19 to 80," *Obesity Research*, November 1999, pp. 564–71; S. A. Bowman and B. T. Vinyard, "Fast Food Consumption of U.S. Adults: Impact on Energy and Nutrient Intakes and Overweight Status," *Journal of the American College of Nutrition*,

April 2004, 163–68; M. A. Pereira, A. I. Kartashov, et al., “Fast-food Habits, Weight Gain, and Insulin Resistance (the CARDIA study): 15-year Prospective Analysis,” *Lancet*, January 2005, pp. 36–42.

⁸ McCrory, et al., “Overeating in America”; Bowman and Vinyard, “Fast Food Consumption”; J. A. Satia, J. A. Galanko, et al., “Eating at Fast-food Restaurants is Associated with Dietary Intake, Demographic, Psychosocial and Behavioural Factors among African Americans in North Carolina,” *Public Health Nutrition*, December 2004, pp. 1089–96; Pereira, et al., “Fast-food Habits.”

⁹ McCrory, et al., “Overeating in America”; C. Burns, M. Jackson, et al., “Foods Prepared Outside the Home: Association with Selected Nutrients and Body Mass Index in Adult Australians,” *Public Health Nutrition*, June 2002, pp. 441–48; Bowman and Vinyard, “Fast Food Consumption”; Pereira, et al., “Fast-food Habits.”

¹⁰ J. Putnam, J. Allshouse, et al., “U.S. per Capita Food Supply Trends: More Calories, Refined Carbohydrates, and Fats,” *Food Review*, December 2002, pp. 2–15.

¹¹ A. K. Kant and B. I. Graubard, “Eating Out in America, 1987–2000: Trends and Nutritional Correlates,” *Preventive Medicine*, February 2004, pp. 243–49.

¹² J. F. Guthrie, B. H. Lin, et al., “Role of Food Prepared Away from Home in the American Diet, 1977–78 versus 1994–96: Changes and Consequences,” *Journal of Nutrition Education and Behavior*, May–June 2002, pp. 140–50.

¹³ R. C. Atkins. *Dr. Atkins’ New Diet Revolution*, new and rev. ed. (New York, HarperCollins, 2002); D. S. Ludwig and R. H. Eckel, “The Glycemic Index at 20 y,” *American Journal of Clinical Nutrition*, July 2002, pp. 264–65; A. Agatston, *The South Beach Diet: The Delicious, Doctor-Designed, Foolproof Plan for Fast and Healthy Weight Loss* (New York, Random House, 2003). For a further discussion of this topic, see “Obesity epidemic increases dramatically in the United States: CDC director calls for national prevention effort” (U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 1999), on the Internet at www.cdc.gov/od/oc/media/press-rel/r991026.htm (visited May 17, 2007).

¹⁴ Consumer Expenditure Survey, 2001, 2002: Diary Survey [Computer files]. (Bureau of Labor Statistics, 2001, 2002).

¹⁵ *Ibid.*

¹⁶ For an excellent discussion of this issue, see T. I. Garner and L. A. Blanciforti, “Household Income Reporting: An Analysis of U.S. Consumer Expenditure Data,” *Journal of Official Statistics*, March 1994, pp. 69–91.

¹⁷ R. Johnson and D. Wichern, *Applied Multivariate Statistical Analysis*, 4th ed. (New York, Prentice Hall, 1998).

¹⁸ *Ibid.*

¹⁹ *Computations for the 2002 Annual Update of the HHS Poverty Guidelines for the 48 Contiguous States and the District of Columbia* (U.S. Department of Health and Human Services, 2002), on the Internet at aspe.hhs.gov/poverty/02computations.htm (visited Apr. 29, 2007).

²⁰ McCrory, et al., “Overeating in America”; Bowman and Vinyard, “Fast Food Consumption”; Pereira, et al., “Fast-food Habits.”

²¹ Stellanman and Garfinkel, “Patterns of Artificial Sweetener Use”; Heseker, et al., “An Epidemiologic Study”; Bray, et al., “Consumption of High-Fructose Corn Syrup.”

²² Stellanman and Garfinkel, “Patterns of Artificial Sweetener Use”; Heseker, et al., “An Epidemiologic Study”; McCrory, Fuss, et al., “Overeating in America”; Bowman and Vinyard, “Fast Food Consumption”; Bray, et al., “Consumption of High-Fructose Corn Syrup”; Satia, et al., “Eating at Fast-food Restaurants.”

²³ *AOA Fact Sheets: Obesity in Minority Population* (Washington, DC, American Obesity Association, 2006).

²⁴ McCrory, et al., “Overeating in America”; Bowman and Vinyard, “Fast Food Consumption”; Satia, et al., “Eating at Fast-food Restaurants.”

²⁵ Statistical Abstract of the United States: 2006 (Washington, DC, U.S. Department of Commerce, Bureau of Census, 2006), table 55; on the Internet at www.census.gov/prod/2005pubs/06statab/pop.pdf (visited Apr. 29, 2007).

²⁶ *Ibid.*

²⁷ *AOA Fact Sheets: Obesity in Minority Population.*

APPENDIX: Food expenditure categories

Food category	Description
Cereal	(1) flour, (2) prepared flour mixes, (3) cereal, (4) rice, (5) pasta, cornmeal, and other cereal products
Bakery products	(1) white bread, (2) bread other than white, (3) fresh biscuits, rolls, muffins, (4) cakes and cupcakes, fresh and other, excluding frozen; (5) cookies, excluding refrigerated dough, (6) crackers, excluding crumbs, (7) bread and cracker products, (8) doughnuts, sweet rolls, coffeecakes, fresh and other, excluding frozen, (9) frozen refrigerated and canned bakery products, such as biscuits, rolls, muffins, cakes, cupcakes, doughnuts, pies, tarts, turnovers, and miscellaneous products, including dough and batter, (10) pies, tarts, turnovers, fresh and other, excluding frozen
Beef	(1) ground beef, excluding canned, (2) chuck roast, excluding canned, (3) round roast, excluding canned, (4) other beef roast, excluding canned, (5) round steak, excluding canned, (6) sirloin steak, excluding canned, (7) other steak, excluding canned, (8) other beef, excluding canned
Pork	(1) bacon, (2) pork chops, (3) ham, excluding canned, (4) other pork, excluding canned, (5) pork sausage, excluding canned, (6) canned ham
Other meats	(1) frankfurters, excluding canned, (2) bologna, liverwurst, salami, excluding canned, (3) other lunchmeat, (4) lamb and organ meats, excluding canned, (5) mutton, goat, game
Poultry	(1) fresh and frozen whole chicken, (2) fresh or frozen chicken parts, (3) other poultry
Seafood	(1) canned fish, seafood and shellfish, (2) fresh fish and shellfish, (3) frozen fish and shellfish
Eggs	(1) eggs
Milk products	(1) fresh milk all types, (2) cream
Other dairy	(1) butter, (2) cheese, (3) ice cream and related products, including frozen yogurt, (4) other dairy products, including powdered milk, and fresh, canned and nonfrozen yogurt
Fresh fruits	(1) apples, (2) bananas, (3) oranges, (4) other fresh fruits, (5) citrus fruits, excluding oranges
Fresh vegetables	(1) potatoes, (2) lettuce, (3) tomatoes, (4) other fresh vegetables
Processed fruits	(1) frozen orange juice, (2) frozen fruits, (3) frozen fruit juices, (4) fresh fruit juices, (5) canned/bottled fruit juices, (6) canned fruits, (7) dried fruits
Processed vegetables	(1) frozen vegetables, (2) canned beans, (3) canned corn, (4) miscellaneous canned vegetables, not collected in a separate UCC, (5) other processed dried vegetables, such as squash, not collected in a separate UCC, (6) dried peas, (7) dried beans, (8) dried carrots, onions, leafy greens, and cabbage, (9) frozen vegetable juices, (10) fresh/canned vegetable juices
Sweets	(1) candy and chewing gum, (2) sugar, (3) artificial sweeteners, (4) jams, jellies, preserves, and other sweets
Nonalcoholic beverages	(1) cola drinks, (2) other carbonated drinks, (3) coffee, roasted, (4) coffee, instant or freeze dried, (5) noncarbonated fruit flavored drinks, including lemonade—nonfrozen, (6) tea, (7) other noncarbonated beverages and ice, excluding coffee and tea, (8) nonalcoholic beer
Oils	(1) margarine, (2) fats and oils, (3) salad dressings, (4) nondairy cream substitutes, (5) peanut butter
Miscellaneous foods	(1) soup, (2) frozen meals, (3) frozen prepared food other than meals, (4) potato chips and other snacks, (5) nuts, (6) salt, other seasonings and spices, (7) olives, pickles, relishes, (8) sauces and gravies, (9) other condiments, (10) prepared salads, (11) prepared desserts, (12) baby food, (13) miscellaneous prepared foods including items such as canned meats not included in previous categories, fresh and canned ethnic foods, fresh and canned pizza, (14) vitamin supplements
Fast food (*)	(1) lunch at fast food, (2) lunch at vending machine, (3) dinner at fast food, (4) dinner at vending machine, (5) snacks at fast food, (6) snacks at vending machine, (7) breakfast at fast food, (8) breakfast at vending machine, (9) catered affair at fast food, (10) catered affair at vending machine, (11) board at fast food, (12) board at vending machine
Full-service food (*)	(1) lunch at full service, (2) dinner at full service, (3) snacks at full service, (4) breakfast at full service, (5) catered affair at full service, (6) board at full service
Food at work (*)	(1) lunch at employer, (2) lunch at board, (3) lunch at catered affairs, (4) dinner at employer, (5) dinner at board, (6) dinner at catered affairs, (7) snacks at employer, (8) snacks at board, (9) snacks at catered affairs, (10) breakfast at employer, (11) breakfast at board, (12) breakfast at catered affairs, (13) board at employer, (14) board, (15) board at catered affairs, (16) catered affairs at employer, (17) catered affairs at board, (18) catered affairs
Alcoholic beverages (*)	(1) beer and ale at home, (2) whiskey at home, (3) wine at home, (4) other alcoholic beverages at home, (5) beer at fast food, (6) beer at full service, (7) beer at vending machine, (8) beer at employer, (9) beer at board, (10) beer at catered affairs, (11) wine at fast food, (12) wine at full service, (13) wine at vending machine, (14) wine at employer, (15) wine at board, (16) wine at catered affairs, (17) alcoholic beverage excluding beer/wine fast food, (18) alcoholic beverage excluding beer/wine full service, (19) alcoholic beverage excluding beer/wine vending machine, (20) alcoholic beverage excluding beer/wine at employer, (21) alcoholic beverage excluding beer/wine at board, (22) alcoholic beverage excluding beer/wine catered affairs
Note: An asterisk (*) indicates a category developed by the authors for this study. All others are standard categories of BLS.	

Neighborhood-level unemployment trends

Although the unemployment rate in U.S. metropolitan areas has trended downward over the last several decades, urban unemployment has grown more geographically concentrated. In other words, the Nation's metropolitan areas have become divided into neighborhoods of relatively high unemployment and those of relatively low unemployment. In the Federal Reserve Bank of St. Louis *Review*, Christopher H. Wheeler seeks to explain the trend by analyzing unemployment at the neighborhood (block group) level using data from the Census of Population for 1980, 1990, and 2000. Wheeler considers three possible explanations for the trend: 1) urban decentralization (changes in urban population density and suburban sprawl), 2) industrial shifts and declining unionization, and 3) increased geographic segregation by levels of income and educational attainment. He finds little support for the first two explanations, but considerable evidence for the third.

Specifically, Wheeler's results show little relation between increased concentrations of unemployment and changes in population density, union coverage, or industrial composition. At the same time, the results show "a strong positive association between unemployment concentration and measures of segregation according to income and (college) education across neighborhoods." Wheeler concludes that increased concentrations of urban unemployment are closely related to an increase in residential sorting among households by level of income and educational attainment.

Wheeler attempts to measure "the degree to which unemployment is spatially concentrated" in two ways.

First, he computes the differences between three different percentiles (90th, 50th, and 10th) of the distribution of unemployment rates at the neighborhood level; higher differentials mean greater disparity. Second, he computes an "index of dissimilarity," which measures the extent to which unemployed persons are unequally distributed in a city's neighborhoods. The index basically calculates the portion of the unemployed that would have to move for unemployment to be distributed equally in a given area. Both measures increased over the period from 1980 to 2000.

To test his hypothesis, Wheeler constructs a statistical model to measure the extent to which increased unemployment concentration is associated with changes in population density, industrial composition, union membership, and level of income and education. The model also controls for demographic characteristics such as race, age, gender, and immigration status. Areas with large populations of young people (less than 24 years) or older persons (more than 65 years), for example, tend to have relatively high concentrations of unemployment. Areas with large numbers of foreign-born workers, by contrast, tend to have lower concentrations of unemployment. Wheeler also demonstrates that very little association exists between unemployment concentration and suburban sprawl, declining unionization, or industrial shifts. At the same time, his tests reveal a strong correlation between changes in the amount of residential segregation by income and education level and geographic concentrations of unemployment.

Wheeler notes that his findings are especially interesting, given that the literature argues that a person's

labor market outcomes are closely related to his or her place of residence. He suggests that increased concentrations of unemployment might help explain other trends in the U.S. economy, such as rising income and earnings inequality and increasing unemployment duration.

Big firm-small firm redux

In the Federal Reserve Bank of Kansas City *Economic Review*, Kelly Edmiston compares the roles of small and large firms in local economic development. He cautions against "smokestack chasing," luring large companies with tax abatements and other subsidies, on two grounds. First, the net creation of jobs can often be much smaller than the direct employment in the new facility. Negative spillovers including labor supply constraints, upward wage pressure, and congestion, may outweigh the positive externalities of supplier employment, more consumer spending, and knowledge transfers. Second, local public services can be constrained if fiscal incentives are offered to the new firm and, as a result, non-subsidized firms may be discouraged or even driven out.

Edmiston is not a one-dimensional small business advocate, however. He also shows that large firms often offer better jobs, as measured by wages, benefits, and stability. While he admits that small firms are important innovators in today's economy, he also concludes, "There is no clear evidence that small businesses are more effective innovators." In the end, Edmiston restates the new wisdom for economic developers: "... an attractive and supportive environment that might enable any business, whether large or small, to flourish." □

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>

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Notes on Current Labor Statistics

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

General notes

The following notes apply to several tables in this section:

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

Seasonally adjusted data appear in tables 1–14, 17–21, 48, and 52. Seasonally adjusted labor force data in tables 1 and 4–9 were revised in the February 2005 issue of the *Review*. Seasonally adjusted establishment survey data shown in tables 1, 12–14, and 17 were revised in the March 2005 *Review*. A brief explanation of the seasonal adjustment methodology appears in “Notes on the data.”

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

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

rate expressed in 1982 dollars is \$2 ($\$3/150 \times 100 = \2). The \$2 (or any other resulting values) are described as “real,” “constant,” or “1982” dollars.

Sources of information

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

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

www.bls.gov/cps/

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

www.bls.gov/ces/

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

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

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

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

www.bls.gov/lpc/

For additional information on international comparisons data, see *Interna-*

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

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

job openings, and multiplying that quotient by 100.

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

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

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

Notes on the data

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

enrolled until May 2003. The data collected up until those points are from less than a full sample. Therefore, estimates from earlier months should be used with caution, as fewer sampled units were reporting data at that time.

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

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

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

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

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

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

Compensation and Wage Data

(Tables 1–3; 30–37)

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

Employment Cost Index

Description of the series

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

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

Sample establishments are classified by industry categories based on the 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 aggregations, such as management, professional, and related occupations.

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

Definitions

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

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

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

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

Notes on the data

The ECI data in these tables reflect the conversion to the 2002 North American Industry Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior to 2006 are for informational

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

The ECI for changes in wages and salaries in the private nonfarm economy was 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 <http://www.bls.gov/ncs/ect/home.htm> or by telephone at (202) 691-6199.

National Compensation Survey Benefit Measures

Description of the series

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

Definitions

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

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

Employees in contributory plans are considered as **participating** in an insurance or retirement plan if they have paid required

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

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

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

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

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

Notes on the data

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

Work stoppages

(Table 37)

Description of the series

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

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

Definitions

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

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

Number of days idle: The aggregate number of workdays lost by workers involved in the stoppages.

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

Notes on the data

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

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

Price Data

(Tables 2; 38-46)

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

Consumer Price Indexes

Description of the series

The **Consumer Price Index** (CPI) is a measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The CPI is calculated monthly for two population groups, one consisting only of urban households whose primary source of income is derived from the employment of wage earners and clerical workers, and the other consisting of all urban households. The wage earner index (CPI-W) is a continuation of the historic index that was introduced well over a half-century ago for use in wage negotiations. As new uses were developed for the CPI in recent years, the need for a broader and more representative index became apparent. The all-urban consumer index (CPI-U), introduced in 1978, is representative of the 1993-95 buying habits of about 87 percent of the noninstitutional population of the United States at that time, compared with 32 percent represented in the CPI-W. In addition to wage earners and clerical workers,

the CPI-U covers professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees, and others not in the labor force.

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

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

Notes on the data

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

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

Producer Price Indexes

Description of the series

Producer Price Indexes (PPI) measure average changes in prices received by domestic producers of commodities in all stages of processing. The sample used for calculating these indexes currently contains about 3,200 commodities and about 80,000 quotations per month, selected to represent the movement of prices of all commodities produced in the manufacturing; agriculture, forestry, and fishing; mining; and gas and electricity and public utilities sectors. The stage-of-processing structure of PPI organizes products by

class of buyer and degree of fabrication (that is, finished goods, intermediate goods, and crude materials). The traditional commodity structure of PPI organizes products by similarity of end use or material composition. The industry and product structure of PPI organizes data in accordance with the 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, allowances, and rebates applicable to the reported prices, so that the price used in the calculation of the indexes is the actual price for which the product was bought or sold.

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

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

Notes on the data

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

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

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

Productivity Data

(Tables 2; 47-50)

Business and major sectors

Description of the series

The productivity measures relate real output to real input. As such, they encompass a family of measures which include single-factor input measures, such as output per hour, output per unit of labor input, or output per unit of capital input, as well as measures of multifactor productivity (output per unit of combined labor and capital inputs). The Bureau indexes show the change in output relative to changes in the various inputs. The measures cover the business, nonfarm business, manufacturing, and nonfinancial corporate sectors.

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

Definitions

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

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

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

Unit nonlabor costs contain all the com-

ponents 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 additional 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 BLS Web site 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

The foreign country data are adjusted as closely as possible to U.S. concepts, with the exception of lower age limits and the treatment of layoffs. These adjustments include, but are not limited to: including older persons in the labor force by imposing no upper age limit, adding unemployed students to the un-employed, excluding the military and family workers working fewer than 15 hours from the employed, and excluding persons engaged in passive job search from the unemployed.

Data for the United States relate to the population 16 years of age and older. The U.S. concept of the working age population has no upper age limit. The adjusted to U.S. concepts statistics have been adapted, insofar as possible, to the age at which compulsory schooling ends in each country, and the Swedish statistics have been adjusted to include persons older than the Swedish upper age limit of 64 years. The adjusted statistics presented here relate to the population 16 years of age and older in France, Sweden, and the United Kingdom; 15 years of age and older in Australia, Japan, Germany, Italy, and the Netherlands. An exception to this rule is that the Canadian statistics are adjusted to cover the population 16 years of age and older, whereas the age at which compulsory schooling ends remains at 15 years. In the labor force participation rates and employment-population ratios, the denominator is the civilian noninstitutionalized working age population, except for Japan and Germany, which include the institutionalized working age population.

In the United States, the unemployed include persons who are not employed and who were actively seeking work during the reference period, as well as persons on layoff. In the United States, as in Australia and Japan, passive job seekers are not in the labor force; job search must be active, such as placing or answering advertisements, contacting employers directly, or registering with an employment agency (simply reading ads is not enough to qualify as active search). Canada and the European countries classify passive jobseekers as unemployed. An adjustment is made to exclude them in Canada, but not in the European countries where the phenomenon is less prevalent. In some countries, persons on layoff are classified as employed due to their strong job attachment. No adjustment is made for

the countries that classify those on layoff as employed. Persons without work and waiting to start a new job are counted as unemployed under U.S. concepts if they were actively seeking work during the reference period; if they were not actively seeking work, they are not counted in the labor force. Persons without work and waiting to start a new job are counted among the unemployed for all other countries, whether or not they were actively seeking work.

For more qualifications and historical annual data, see *Comparative Civilian Labor Force Statistics, Ten Countries*, on the Internet at <http://www.bls.gov/fls/flscomparelf.htm>

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, Korea, 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 all employed persons (wage and salary earners plus self-employed persons and unpaid family workers) with the exception of Belgium and Taiwan, where only employees (wage and salary earners), are counted.

Definitions

Output, for most economies, is real value added in manufacturing taken from national accounts. However, output for Japan prior to 1970 and for the Netherlands prior to 1960 is from an index of industrial production. Manufacturing value added for the United Kingdom is essentially identical to its indexes of industrial production.

Real output for manufacturing in the United States is the chain-weighted index of real gross product originating (deflated value added), produced by the Bureau of Economic Analysis of the U.S. Department of Com-

merce. Most of the other economies now also use chain-weighted as opposed to fixed-year weights that are periodically updated.

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). For the United States and Canada, it is defined according to the North American Industry Classification System (NAICS 97).

To preserve the comparability of the U.S. measures with those for 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, and Sweden, compensation is increased to account for other significant taxes on payroll or employment. For the United Kingdom, compensation is reduced between 1967 and 1991 to account for employment-related subsidies. Self-employed workers are included in the all-employed persons measures by assuming that their compensation is equal to the average for wage and salary employees.

Unit labor costs are the costs of labor input required to produce one unit of output. They are computed as compensation in normal 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

In general, the measures relate to to-

tal manufacturing as defined by the International Standard Industrial Classification. However, the measures for France include parts of mining as well.

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 these series, go to <http://www.bls.gov/news.release/prod4.toc.htm> or contact the Division of Foreign Labor Statistics: (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: <http://www.bls.gov/iif/>

Census of Fatal Occupational Injuries

The Census of Fatal Occupational Injuries compiles a complete roster of fatal job-related injuries, including detailed data about the fatally injured workers and the fatal events.

The program collects and cross checks fatality information from multiple sources, including death certificates, State and Federal workers' compensation reports, Occupational Safety and Health Administration and Mine Safety and Health Administration records, medical examiner and autopsy reports, media accounts, State motor vehicle fatality records, and follow-up questionnaires to employers.

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

Definition

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

Notes on the data

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

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

1. Labor market indicators

Selected indicators	2005	2006	2004	2005				2006			
			IV	I	II	III	IV	I	II	III	IV
Employment data											
Employment status of the civilian noninstitutional population (household survey): ¹											
Labor force participation rate.....	66.0	66.2	66.0	65.8	66.1	66.2	66.1	66.0	66.1	66.2	66.3
Employment-population ratio.....	62.7	63.1	62.4	62.4	62.7	62.9	62.8	62.9	63.1	63.1	63.3
Unemployment rate.....	5.1	4.6	5.4	5.3	5.1	5.0	5.0	4.7	4.7	4.7	4.5
Men.....	5.1	4.6	5.6	5.4	5.0	5.0	4.9	4.7	4.7	4.6	4.5
16 to 24 years.....	12.4	11.2	12.8	13.2	12.5	12.0	11.7	11.2	11.2	11.4	11.1
25 years and older.....	3.8	3.5	4.3	4.1	3.8	3.8	3.7	3.6	3.6	3.5	3.3
Women.....	5.1	4.6	5.2	5.1	5.2	5.0	5.0	4.7	4.6	4.7	4.4
16 to 24 years.....	10.1	9.7	10.7	10.3	10.5	9.8	9.9	9.6	9.2	10.2	9.8
25 years and older.....	4.2	3.7	4.2	4.2	4.2	4.2	4.2	3.9	3.8	3.8	3.5
Employment, nonfarm (payroll data), in thousands: ¹											
Total nonfarm.....	133,703	136,171	132,229	132,656	133,371	134,107	134,652	135,393	135,913	136,442	136,944
Total private.....	111,899	114,181	110,532	110,917	111,590	112,258	112,796	113,520	113,970	114,412	114,840
Goods-producing.....	22,190	22,569	22,012	22,027	22,152	22,218	22,370	22,534	22,603	22,625	22,540
Manufacturing.....	14,226	14,197	14,310	14,270	14,241	14,202	14,201	14,214	14,227	14,218	14,145
Service-providing.....	111,513	113,602	110,217	110,629	111,218	111,889	112,282	112,859	113,310	113,817	114,404
Average hours:											
Total private.....	33.8	33.9	33.8	33.7	33.7	33.7	33.8	33.8	33.9	33.8	33.9
Manufacturing.....	40.7	41.1	40.6	40.6	40.5	40.6	40.9	41.0	41.2	41.3	41.1
Overtime.....	4.6	4.4	4.5	4.5	4.4	4.5	4.6	4.5	4.5	4.4	4.2
Employment Cost Index ^{1, 2, 3}											
Total compensation:											
Civilian nonfarm ⁴	3.1	3.3	.5	1.0	.6	.8	.6	.7	.9	1.1	.6
Private nonfarm.....	2.9	3.2	.5	1.0	.7	.6	.5	.8	.9	.8	.7
Goods-producing ⁵	3.2	2.5	.4	1.1	1.0	.8	.2	.3	1.0	.7	.5
Service-providing ⁵	2.8	3.4	.5	1.0	.6	.6	.5	1.0	.8	.9	.7
State and local government.....	4.1	4.1	.7	.8	.3	2.0	.9	.5	.4	2.3	.9
Workers by bargaining status (private nonfarm):											
Union.....	2.8	3.0	.6	.6	.9	.8	.4	.5	1.3	.6	.6
Nonunion.....	2.9	3.2	.5	1.1	.6	.6	.5	.9	.8	.9	.6

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	2005	2006	2004	2005				2006			
			IV	I	II	III	IV	I	II	III	IV
Compensation data ^{1, 2, 3}											
Employment Cost Index—compensation:											
Civilian nonfarm.....	3.1	3.3	0.5	1.0	0.6	0.8	0.6	0.7	0.9	1.1	0.6
Private nonfarm.....	2.9	3.2	.5	1.0	.7	.6	.5	.8	.9	.8	.7
Employment Cost Index—wages and salaries:											
Civilian nonfarm.....	2.6	3.2	.3	.6	.6	.7	.6	.7	.8	1.1	.6
Private nonfarm.....	2.5	3.2	.3	.7	.6	.6	.5	.7	1.0	.8	.7
Price data ¹											
Consumer Price Index (All Urban Consumers): All Items.....	3.4	3.2	.2	1.6	.6	2.2	−1.0	1.5	1.6	.0	−5
Producer Price Index:											
Finished goods.....	4.8	3.0	1.3	2.0	.4	3.0	−1	.3	1.7	−9	.1
Finished consumer goods.....	5.7	3.4	1.1	2.5	.6	4.0	−4	.2	2.1	−1.3	−2
Capital equipment.....	2.3	1.5	1.7	.4	.0	.2	.6	.8	.2	.0	1.4
Intermediate materials, supplies, and components.....	8.0	6.5	1.1	2.4	.9	4.2	1.0	1.0	3.0	−4	−8
Crude materials.....	14.6	1.8	7.3	2.8	−2.0	19.9	.2	−11.1	1.8	1.2	6.5
Productivity data ⁴											
Output per hour of all persons:											
Business sector.....	2.3	2.2	2.5	2.4	1.6	2.7	2.4	2.7	2.7	1.5	2.0
Nonfarm business sector.....	2.3	2.1	1.9	2.3	1.6	2.7	2.5	2.7	2.4	1.3	2.1
Nonfinancial corporations ⁵	2.5	−	2.4	2.7	3.0	2.1	2.2	4.0	2.1	3.2	−

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—				
	2005	2006				2005	2006			
	IV	I	II	III	IV	IV	I	II	III	IV
Average hourly compensation: ¹										
All persons, business sector.....	3.1	13.6	-1.4	3.4	4.2	4.0	6.4	5.8	4.5	4.8
All persons, nonfarm business sector.....	2.9	13.7	-1.2	3.1	4.8	4.1	6.4	5.6	4.5	4.9
Employment Cost Index—compensation: ²										
Civilian nonfarm ³	.6	.7	.9	1.1	.6	3.1	2.8	3.0	3.3	3.3
Private nonfarm.....	.5	.8	.9	.8	.7	2.9	2.6	2.8	3.0	3.2
Union.....	.4	.5	1.3	.6	.6	2.8	2.7	3.0	2.8	3.0
Nonunion.....	.5	.9	.8	.9	.6	2.9	2.6	2.8	3.1	3.2
State and local government.....	.9	.5	.4	2.3	.9	4.1	3.7	3.8	4.1	4.1
Employment Cost Index—wages and salaries: ²										
Civilian nonfarm ³	.6	.7	.8	1.1	.6	2.6	2.7	2.8	3.2	3.2
Private nonfarm.....	.5	.7	1.0	.8	.7	2.5	2.4	2.8	3.0	3.2
Union.....	.5	.3	.9	.5	.6	2.5	2.5	2.5	2.2	2.3
Nonunion.....	.5	.8	1.0	.9	.6	2.5	2.5	2.9	3.2	3.3
State and local government.....	.9	.3	.5	2.0	.7	3.1	2.8	3.1	3.7	3.5

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
TOTAL																
Civilian noninstitutional																
population ¹	226,082	228,815	227,763	227,975	228,199	228,428	228,671	228,912	229,167	229,420	229,675	229,905	230,108	230,650	230,834	
Civilian labor force.....	149,320	151,428	150,477	150,689	150,862	151,051	151,370	151,558	151,734	151,818	152,052	152,449	152,775	152,974	152,784	
Participation rate.....	66.0	66.2	66.1	66.1	66.1	66.1	66.2	66.2	66.2	66.2	66.2	66.3	66.4	66.3	66.2	
Employed.....	141,730	144,427	143,319	143,680	143,763	144,045	144,386	144,330	144,618	144,906	145,337	145,623	145,926	145,957	145,919	
Employment-pop- ulation ratio ²	62.7	63.1	62.9	63.0	63.0	63.1	63.1	63.1	63.1	63.2	63.3	63.3	63.4	63.3	63.2	
Unemployed.....	7,591	7,001	7,158	7,009	7,098	7,006	6,984	7,228	7,116	6,912	6,715	6,826	6,849	7,017	6,865	
Unemployment rate.....	5.1	4.6	4.8	4.7	4.7	4.6	4.6	4.8	4.7	4.6	4.4	4.5	4.5	4.6	4.5	
Not in the labor force.....	76,762	77,387	77,287	77,285	77,338	77,378	77,301	77,354	77,433	77,602	77,623	77,456	77,333	77,676	78,050	
Men, 20 years and over																
Civilian noninstitutional																
population ¹	100,835	102,145	101,657	101,754	101,857	101,963	102,075	102,187	102,308	102,428	102,549	102,656	102,751	102,956	103,046	
Civilian labor force.....	76,443	77,562	77,115	77,310	77,390	77,457	77,319	77,339	77,616	77,823	77,936	78,123	78,334	78,384	78,375	
Participation rate.....	75.8	75.9	75.9	76.0	76.0	76.0	75.7	75.7	75.9	76.0	76.0	76.1	76.2	76.1	76.1	
Employed.....	73,050	74,431	73,880	74,180	74,163	74,208	74,233	74,105	74,421	74,868	74,924	75,088	75,235	75,158	75,138	
Employment-pop- ulation ratio ²	72.4	72.9	72.7	72.9	72.8	72.8	72.7	72.5	72.7	73.1	73.1	73.1	73.2	73.0	72.9	
Unemployed.....	3,392	3,131	3,235	3,130	3,228	3,249	3,087	3,234	3,195	2,954	3,012	3,036	3,100	3,226	3,237	
Unemployment rate.....	4.4	4.0	4.2	4.0	4.2	4.2	4.0	4.2	4.1	3.8	3.9	3.9	4.0	4.1	4.1	
Not in the labor force.....	24,392	24,584	24,542	24,444	24,467	24,506	24,756	24,848	24,692	24,606	24,613	24,533	24,417	24,572	24,671	
Women, 20 years and over																
Civilian noninstitutional																
population ¹	108,850	109,992	109,562	109,646	109,736	109,829	109,927	110,026	110,134	110,241	110,349	110,445	110,528	110,803	110,880	
Civilian labor force.....	65,714	66,585	66,098	66,089	66,249	66,356	66,644	66,872	66,856	66,754	66,851	67,024	67,132	67,361	67,267	
Participation rate.....	60.4	60.5	60.3	60.3	60.4	60.4	60.6	60.8	60.7	60.6	60.6	60.7	60.7	60.8	60.7	
Employed.....	62,702	63,834	63,286	63,349	63,432	63,622	63,901	64,029	64,118	63,978	64,252	64,333	64,491	64,654	64,703	
Employment-pop- ulation ratio ²	57.6	58.0	57.8	57.8	57.8	57.9	58.1	58.2	58.2	58.0	58.2	58.2	58.3	58.4	58.4	
Unemployed.....	3,013	2,751	2,811	2,739	2,818	2,735	2,743	2,843	2,738	2,776	2,599	2,691	2,641	2,707	2,564	
Unemployment rate.....	4.6	4.1	4.3	4.1	4.3	4.1	4.1	4.3	4.1	4.2	3.9	4.0	3.9	4.0	3.8	
Not in the labor force.....	43,136	43,407	43,464	43,557	43,487	43,472	43,284	43,154	43,277	43,487	43,498	43,420	43,396	43,442	43,612	
Both sexes, 16 to 19 years																
Civilian noninstitutional																
population ¹	16,398	16,678	16,545	16,575	16,606	16,637	16,668	16,700	16,725	16,751	16,776	16,804	16,829	16,891	16,908	
Civilian labor force.....	7,164	7,281	7,264	7,290	7,222	7,237	7,407	7,347	7,262	7,242	7,264	7,301	7,309	7,228	7,142	
Participation rate.....	43.7	43.7	43.9	44.0	43.5	43.5	44.4	44.0	43.4	43.2	43.3	43.5	43.4	42.8	42.2	
Employed.....	5,978	6,162	6,153	6,150	6,169	6,215	6,253	6,197	6,079	6,060	6,161	6,202	6,200	6,145	6,078	
Employment-pop- ulation ratio ²	36.5	36.9	37.2	37.1	37.1	37.4	37.5	37.1	36.3	36.2	36.7	36.9	36.8	36.4	35.9	
Unemployed.....	1,186	1,119	1,111	1,140	1,053	1,022	1,154	1,151	1,183	1,182	1,104	1,099	1,108	1,083	1,064	
Unemployment rate.....	16.6	15.4	15.3	15.6	14.6	14.1	15.6	15.7	16.3	16.3	15.2	15.1	15.2	15.0	14.9	
Not in the labor force.....	9,234	9,397	9,281	9,285	9,384	9,399	9,261	9,352	9,464	9,509	9,512	9,502	9,520	9,662	9,766	
White³																
Civilian noninstitutional																
population ¹	184,446	186,264	185,570	185,704	185,849	186,002	186,166	186,329	186,500	186,669	186,840	186,988	187,115	187,471	187,582	
Civilian labor force.....	122,299	123,834	123,036	123,131	123,394	123,508	123,782	123,983	124,149	124,062	124,364	124,536	124,783	124,908	124,676	
Participation rate.....	66.3	66.5	66.3	66.3	66.4	66.4	66.5	66.5	66.6	66.5	66.6	66.6	66.7	66.6	66.5	
Employed.....	116,949	118,833	117,961	118,228	118,397	118,482	118,760	118,885	119,023	119,164	119,511	119,636	119,813	119,767	119,669	
Employment-pop- ulation ratio ²	63.4	63.8	63.6	63.7	63.7	63.7	63.8	63.8	63.8	63.8	64.0	64.0	64.0	63.9	63.8	
Unemployed.....	5,350	5,002	5,075	4,903	4,997	5,026	5,021	5,098	5,127	4,898	4,853	4,900	4,970	5,141	5,007	
Unemployment rate.....	4.4	4.0	4.1	4.0	4.0	4.1	4.1	4.1	4.1	3.9	3.9	3.9	4.0	4.1	4.0	
Not in the labor force.....	62,148	62,429	62,533	62,573	62,454	62,493	62,384	62,346	62,350	62,607	62,476	62,452	62,333	62,562	62,905	
Black or African American³																
Civilian noninstitutional																
population ¹	26,517	27,007	26,826	26,865	26,905	26,943	26,982	27,021	27,065	27,109	27,153	27,193	27,231	27,276	27,310	
Civilian labor force.....	17,013	17,314	17,271	17,337	17,318	17,309	17,248	17,369	17,361	17,225	17,378	17,444	17,512	17,639	17,549	
Participation rate.....	64.2	64.1	64.4	64.5	64.4	64.2	63.9	64.3	64.1	63.5	64.0	64.2	64.3	64.7	64.3	
Employed.....	15,313	15,765	15,656	15,721	15,699	15,770	15,704	15,731	15,839	15,659	15,902	15,950	16,045	16,226	16,154	
Employment-pop- ulation ratio ²	57.7	58.4	58.4	58.5	58.3	58.5	58.2	58.2	58.5	57.8	58.6	58.7	58.9	59.5	59.2	
Unemployed.....	1,700	1,549	1,615	1,616	1,619	1,539	1,544	1,638	1,522	1,565	1,476	1,494	1,466	1,412	1,395	
Unemployment rate.....	10.0	8.9	9.3	9.3	9.3	8.9	9.0	9.4	8.8	9.1	8.5	8.6	8.4	8.0	7.9	
Not in the labor force.....	9,504	9,693	9,556	9,529	9,588	9,634	9,734	9,652	9,705	9,884	9,774	9,749	9,719	9,637	9,761	

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]

(Numbers in thousands)

Employment status	Annual average		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Hispanic or Latino ethnicity																
Civilian noninstitutional population ¹	29,133	30,103	29,707	29,793	29,880	29,966	30,053	30,140	30,232	30,324	30,416	30,508	30,596	30,877	30,965	
Civilian labor force.....	19,824	20,694	20,466	20,445	20,566	20,559	20,723	20,667	20,652	20,738	20,825	20,994	21,176	21,439	21,318	
Participation rate.....	68.0	68.7	68.9	68.6	68.8	68.6	69.0	68.6	68.3	68.4	68.5	68.8	69.2	69.4	68.8	
Employed.....	18,632	19,613	19,341	19,376	19,466	19,531	19,630	19,580	19,551	19,611	19,860	19,953	20,131	20,221	20,204	
Employment-population ratio ²	64.0	65.2	65.1	65.0	65.1	65.2	65.3	65.0	64.7	64.7	65.3	65.4	65.8	65.5	65.2	
Unemployed.....	1,191	1,081	1,125	1,069	1,100	1,029	1,093	1,087	1,101	1,127	965	1,042	1,045	1,218	1,115	
Unemployment rate.....	6.0	5.2	5.5	5.2	5.3	5.0	5.3	5.3	5.3	5.4	4.6	5.0	4.9	5.7	5.2	
Not in the labor force.....	9,310	9,409	9,241	9,347	9,314	9,406	9,330	9,473	9,581	9,586	9,591	9,513	9,419	9,438	9,647	

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Characteristic																
Employed, 16 years and older..	141,730	144,427	143,319	143,680	143,763	144,045	144,386	144,330	144,618	144,906	145,337	145,623	145,926	145,957	145,919	
Men.....	75,973	77,502	76,922	77,259	77,234	77,315	77,361	77,176	77,482	77,920	77,985	78,148	78,311	78,237	78,172	
Women.....	65,757	66,925	66,397	66,421	66,530	66,730	67,026	67,154	67,136	66,986	67,352	67,475	67,615	67,720	67,747	
Married men, spouse present.....	45,483	45,700	45,683	45,791	45,809	45,781	45,714	45,564	45,514	45,645	45,548	45,802	45,864	46,066	46,231	
Married women, spouse present.....	34,773	35,272	35,070	35,110	35,298	35,192	35,355	35,309	35,304	35,421	35,277	35,363	35,383	35,536	35,728	
Persons at work part time ¹																
All industries:																
Part time for economic reasons.....	4,350	4,162	4,167	4,009	3,964	4,152	4,272	4,250	4,157	4,099	4,305	4,183	4,232	4,246	4,212	
Slack work or business conditions.....	2,684	2,658	2,662	2,502	2,467	2,715	2,729	2,668	2,683	2,630	2,770	2,711	2,706	2,753	2,729	
Could only find part-time work.....	1,341	1,189	1,218	1,188	1,179	1,161	1,190	1,190	1,163	1,151	1,203	1,168	1,234	1,185	1,208	
Part time for noneconomic reasons.....	19,491	19,591	19,547	19,394	19,494	19,696	19,653	19,513	19,625	19,631	19,467	19,780	19,885	19,761	19,907	
Nonagricultural industries:																
Part time for economic reasons.....	4,271	4,071	4,074	3,902	3,891	4,053	4,165	4,139	4,083	3,981	4,233	4,091	4,159	4,155	4,088	
Slack work or business conditions.....	2,636	2,596	2,590	2,404	2,436	2,631	2,662	2,594	2,638	2,563	2,717	2,661	2,653	2,686	2,662	
Could only find part-time work.....	1,330	1,178	1,209	1,180	1,170	1,154	1,185	1,187	1,155	1,142	1,196	1,140	1,221	1,165	1,187	
Part time for noneconomic reasons.....	19,134	19,237	19,183	19,074	19,142	19,285	19,272	19,179	19,235	19,289	19,170	19,423	19,512	19,410	19,521	

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Characteristic																
Total, 16 years and older.....	5.1	4.6	4.8	4.7	4.7	4.6	4.6	4.8	4.7	4.6	4.4	4.5	4.5	4.6	4.5	
Both sexes, 16 to 19 years.....	16.6	15.4	15.3	15.6	14.6	14.1	15.6	15.7	16.3	16.3	15.2	15.1	15.2	15.0	14.9	
Men, 20 years and older.....	4.4	4.0	4.2	4.0	4.2	4.2	4.0	4.2	4.1	3.8	3.9	3.9	4.0	4.1	4.1	
Women, 20 years and older.....	4.6	4.1	4.3	4.1	4.3	4.1	4.1	4.3	4.1	4.2	3.9	4.0	3.9	4.0	3.8	
White, total ¹	4.4	4.0	4.1	4.0	4.0	4.1	4.1	4.1	4.1	3.9	3.9	3.9	4.0	4.1	4.0	
Both sexes, 16 to 19 years.....	14.2	13.2	12.7	12.8	12.4	12.8	13.5	13.0	14.2	13.8	13.4	13.1	13.4	13.2	13.1	
Men, 16 to 19 years.....	16.1	14.6	14.6	14.1	14.3	15.0	14.9	14.3	15.1	14.8	14.4	14.2	15.1	14.2	14.3	
Women, 16 to 19 years.....	12.3	11.7	10.8	11.5	10.4	10.5	12.1	11.7	13.2	12.7	12.4	11.9	11.6	12.2	11.7	
Men, 20 years and older.....	3.8	3.5	3.6	3.5	3.6	3.6	3.5	3.6	3.6	3.3	3.4	3.4	3.6	3.7	3.7	
Women, 20 years and older.....	3.9	3.6	3.8	3.6	3.7	3.6	3.6	3.7	3.6	3.6	3.5	3.5	3.4	3.6	3.4	
Black or African American, total ¹	10.0	8.9	9.3	9.3	9.3	8.9	9.0	9.4	8.8	9.1	8.5	8.6	8.4	8.0	7.9	
Both sexes, 16 to 19 years.....	33.3	29.1	30.4	33.1	29.3	25.2	28.1	31.6	28.9	31.6	26.3	27.6	26.2	29.1	29.0	
Men, 16 to 19 years.....	36.3	32.7	31.6	32.6	32.2	30.0	32.7	35.9	32.2	38.8	34.0	32.7	27.7	34.4	35.7	
Women, 16 to 19 years.....	30.3	25.9	29.4	33.6	26.5	20.3	23.8	27.6	26.0	26.2	19.7	23.0	25.1	24.6	22.6	
Men, 20 years and older.....	9.2	8.3	8.6	8.5	8.9	9.0	8.5	8.8	8.3	8.2	8.2	7.8	7.3	7.5	7.4	
Women, 20 years and older.....	8.5	7.5	7.7	7.6	7.7	7.2	7.5	7.8	7.2	7.7	6.9	7.4	7.6	6.5	6.4	
Hispanic or Latino ethnicity.....	6.0	5.2	5.5	5.2	5.3	5.0	5.3	5.3	5.3	5.4	4.6	5.0	4.9	5.7	5.2	
Married men, spouse present.....	2.8	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.3	2.3	2.3	2.5	2.5	2.7	
Married women, spouse present.....	3.3	2.9	2.9	2.6	2.9	3.0	2.9	3.2	2.9	2.9	2.8	2.7	2.7	2.8	2.7	
Full-time workers.....	5.0	4.5	4.7	4.5	4.6	4.5	4.5	4.7	4.6	4.5	4.3	4.4	4.4	4.5	4.4	
Part-time workers.....	5.4	5.1	5.2	5.1	5.1	5.2	5.2	5.4	5.1	5.1	5.1	5.0	4.8	5.0	4.9	
Educational attainment ²																
Less than a high school diploma.....	7.6	6.8	7.1	7.0	7.1	6.9	7.0	7.1	6.9	6.5	5.8	6.5	6.6	6.8	7.1	
High school graduates, no college ³	4.7	4.3	4.4	4.2	4.4	4.4	4.0	4.4	4.6	4.2	4.1	4.3	4.3	4.2	4.3	
Some college or associate degree.....	3.9	3.6	3.7	3.8	3.8	3.7	3.5	3.6	3.6	3.6	3.4	3.3	3.4	3.7	3.6	
Bachelor's degree and higher ⁴	2.3	2.0	2.2	2.2	2.2	2.1	2.1	2.1	1.8	2.0	1.9	1.9	1.9	2.1	1.9	

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.

3 Includes high school diploma or equivalent.

4 Includes persons with bachelor's, master's, professional, and doctoral degrees.

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

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Less than 5 weeks.....	2,667	2,614	2,604	2,671	2,632	2,517	2,676	2,686	2,615	2,582	2,588	2,517	2,707	2,642	2,600	
5 to 14 weeks.....	2,304	2,121	2,100	2,002	2,123	2,234	2,061	2,171	2,198	2,077	2,064	2,135	2,037	2,283	2,192	
15 weeks and over.....	2,619	2,266	2,498	2,323	2,365	2,307	2,129	2,343	2,345	2,264	2,062	2,152	2,081	2,118	2,135	
15 to 26 weeks.....	1,130	1,031	1,136	1,029	1,036	984	1,010	1,028	1,036	1,010	974	1,006	991	986	905	
27 weeks and over.....	1,490	1,235	1,361	1,295	1,329	1,323	1,120	1,315	1,309	1,254	1,088	1,145	1,090	1,133	1,230	
Mean duration, in weeks.....	18.4	16.8	17.8	17.0	16.9	17.1	16.1	17.3	17.3	17.2	16.4	16.3	15.9	16.2	16.4	
Median duration, in weeks.....	8.9	8.3	8.9	8.5	8.5	8.5	7.6	8.2	8.4	8.1	8.0	8.2	7.3	8.1	8.1	

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Job losers ¹	3,667	3,321	3,379	3,414	3,476	3,463	3,373	3,351	3,289	3,195	3,088	3,179	3,236	3,440	3,453	
On temporary layoff.....	933	921	889	920	912	955	976	924	892	872	958	965	958	1,021	1,022	
Not on temporary layoff.....	2,734	2,400	2,491	2,493	2,564	2,508	2,396	2,427	2,398	2,323	2,130	2,214	2,278	2,420	2,430	
Job leavers.....	872	827	852	811	845	876	817	854	851	804	783	793	807	797	816	
Reentrants.....	2,386	2,237	2,280	2,161	2,183	2,128	2,150	2,361	2,276	2,292	2,249	2,279	2,199	2,230	2,042	
New entrants.....	666	616	685	626	585	519	643	630	646	635	593	591	601	619	580	
Percent of unemployed																
Job losers ¹	48.3	47.4	47.0	48.7	49.0	49.6	48.3	46.6	46.6	46.1	46.0	46.5	47.3	48.6	50.1	
On temporary layoff.....	12.3	13.2	12.4	13.1	12.9	13.7	14.0	12.8	12.6	12.6	14.3	14.1	14.0	14.4	14.8	
Not on temporary layoff.....	36.0	34.3	34.6	35.6	36.2	35.9	34.3	33.7	34.0	33.5	31.7	32.4	33.3	34.1	35.3	
Job leavers.....	11.5	11.8	11.8	11.6	11.9	12.5	11.7	11.9	12.1	11.6	11.7	11.6	11.8	11.2	11.8	
Reentrants.....	31.4	32.0	31.7	30.8	30.8	30.5	30.8	32.8	32.2	33.1	33.5	33.3	32.1	31.5	29.6	
New entrants.....	8.8	8.8	9.5	8.9	8.3	7.4	9.2	8.8	9.1	9.2	8.8	8.6	8.8	8.7	8.4	
Percent of civilian labor force																
Job losers ¹	2.5	2.2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.1	2.0	2.1	2.1	2.2	2.3	
Job leavers.....	.6	.5	.6	.5	.6	.6	.5	.6	.6	.5	.5	.5	.5	.5	.5	
Reentrants.....	1.6	1.5	1.5	1.4	1.4	1.4	1.4	1.6	1.5	1.5	1.5	1.5	1.4	1.5	1.3	
New entrants.....	.4	.4	.5	.4	.4	.3	.4	.4	.4	.4	.4	.4	.4	.4	.4	

¹ Includes persons who completed temporary jobs.

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

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

[Civilian workers]

Sex and age	Annual average		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Total, 16 years and older.....	5.1	4.6	4.8	4.7	4.7	4.6	4.6	4.8	4.7	4.6	4.4	4.5	4.5	4.6	4.5	
16 to 24 years.....	11.3	10.5	10.7	10.2	10.3	10.0	10.4	10.9	10.8	10.7	10.6	10.5	10.3	10.3	9.8	
16 to 19 years.....	16.6	15.4	15.3	15.6	14.6	14.1	15.6	15.7	16.3	16.3	15.2	15.1	15.2	15.0	14.9	
16 to 17 years.....	19.1	17.2	17.7	18.4	15.7	15.2	17.2	17.0	19.4	18.0	17.6	17.3	16.9	16.9	16.6	
18 to 19 years.....	14.9	14.1	13.8	13.7	14.3	13.6	14.4	14.7	14.5	15.1	13.3	13.4	13.7	13.7	13.7	
20 to 24 years.....	8.8	8.2	8.4	7.6	8.2	8.1	7.9	8.6	8.2	8.0	8.4	8.4	7.9	8.1	7.4	
25 years and older.....	4.0	3.6	3.8	3.7	3.7	3.7	3.6	3.7	3.6	3.5	3.3	3.4	3.5	3.6	3.6	
25 to 54 years.....	4.1	3.8	4.0	3.9	3.9	3.9	3.7	3.8	3.8	3.7	3.4	3.5	3.6	3.7	3.7	
55 years and older.....	3.4	3.0	2.9	2.7	3.0	3.0	3.0	3.2	2.9	2.9	3.0	2.9	3.0	3.3	3.1	
Men, 16 years and older.....	5.1	4.6	4.8	4.6	4.7	4.8	4.6	4.8	4.7	4.4	4.4	4.5	4.5	4.7	4.7	
16 to 24 years.....	12.4	11.2	11.5	11.0	11.1	11.4	11.0	11.4	11.5	11.3	11.3	11.1	10.9	10.9	10.8	
16 to 19 years.....	18.6	16.9	17.0	16.8	16.3	16.3	17.1	17.1	17.1	17.7	16.7	16.7	16.7	16.2	16.6	
16 to 17 years.....	22.0	18.6	20.9	20.0	17.9	17.7	18.0	17.2	18.6	19.4	19.8	19.1	19.0	17.0	19.3	
18 to 19 years.....	16.5	15.7	14.7	14.5	16.3	15.8	16.7	17.5	16.5	16.8	14.0	14.4	14.8	15.4	15.0	
20 to 24 years.....	9.6	8.7	9.0	8.4	8.8	9.1	8.2	8.8	8.9	8.3	8.9	8.6	8.3	8.4	8.2	
25 years and older.....	3.8	3.5	3.7	3.6	3.6	3.6	3.5	3.6	3.5	3.3	3.2	3.3	3.5	3.6	3.7	
25 to 54 years.....	3.9	3.6	3.9	3.8	3.7	3.8	3.6	3.7	3.7	3.4	3.3	3.4	3.5	3.7	3.8	
55 years and older.....	3.3	3.0	2.8	2.6	3.1	3.1	3.1	3.2	3.0	2.6	3.0	3.0	3.2	3.4	3.1	
Women, 16 years and older.....	5.1	4.6	4.7	4.7	4.7	4.5	4.6	4.8	4.7	4.7	4.4	4.5	4.4	4.5	4.3	
16 to 24 years.....	10.1	9.7	9.7	9.4	9.3	8.6	9.8	10.4	10.1	10.1	9.9	9.9	9.6	9.7	8.6	
16 to 19 years.....	14.5	13.8	13.5	14.4	12.8	11.8	14.0	14.2	15.4	14.8	13.6	13.4	13.6	13.7	13.1	
16 to 17 years.....	16.5	15.9	14.7	16.7	13.6	12.6	16.4	16.8	20.1	16.7	15.6	15.7	14.9	16.8	13.8	
18 to 19 years.....	13.1	12.4	12.8	12.9	12.1	11.2	12.0	11.7	12.3	13.3	12.5	12.4	12.6	11.8	12.4	
20 to 24 years.....	7.9	7.6	7.7	6.7	7.6	6.9	7.6	8.4	7.4	7.6	7.9	8.1	7.5	7.7	6.4	
25 years and older.....	4.2	3.7	3.8	3.8	3.9	3.7	3.7	3.8	3.7	3.8	3.4	3.6	3.5	3.6	3.5	
25 to 54 years.....	4.4	3.9	4.1	4.0	4.1	4.0	3.9	4.0	4.0	4.0	3.5	3.7	3.8	3.7	3.6	
55 years and older ¹	3.4	2.9	3.1	2.5	2.6	2.6	3.0	3.5	3.2	3.3	2.9	2.9	2.4	3.3	3.0	

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	Jan. 2006	Dec. 2006 ^P	Jan. 2007 ^P	State	Jan. 2006	Dec. 2006 ^P	Jan. 2007 ^P
Alabama.....	3.6	3.7	3.3	Missouri.....	4.7	4.8	4.6
Alaska.....	7.0	6.7	6.4	Montana.....	3.5	2.9	2.7
Arizona.....	4.4	4.1	4.2	Nebraska.....	3.1	2.8	3.0
Arkansas.....	5.0	5.4	5.1	Nevada.....	4.1	4.3	4.5
California.....	5.1	4.8	4.8	New Hampshire.....	3.4	3.5	3.7
Colorado.....	4.7	4.0	4.1	New Jersey.....	4.8	4.3	4.2
Connecticut.....	4.5	4.1	4.4	New Mexico.....	4.7	3.8	3.8
Delaware.....	3.8	3.3	3.4	New York.....	4.8	4.1	4.3
District of Columbia.....	5.9	6.2	6.1	North Carolina.....	4.7	4.9	4.6
Florida.....	3.4	3.3	3.3	North Dakota.....	3.2	3.2	3.2
Georgia.....	4.9	4.6	4.5	Ohio.....	5.5	5.6	5.3
Hawaii.....	2.4	2.0	2.2	Oklahoma.....	3.9	4.0	3.8
Idaho.....	3.7	3.2	3.0	Oregon.....	5.5	5.4	5.2
Illinois.....	5.2	4.1	4.6	Pennsylvania.....	4.7	4.7	4.7
Indiana.....	5.0	4.8	5.1	Rhode Island.....	5.2	5.1	4.7
Iowa.....	4.0	3.5	3.4	South Carolina.....	6.6	6.5	6.4
Kansas.....	4.5	4.5	4.1	South Dakota.....	3.3	3.2	3.3
Kentucky.....	6.0	5.4	5.6	Tennessee.....	5.2	4.9	4.8
Louisiana.....	4.6	4.2	3.7	Texas.....	5.2	4.7	4.5
Maine.....	4.5	4.6	4.4	Utah.....	3.4	2.5	2.6
Maryland.....	3.8	3.9	3.8	Vermont.....	3.6	3.8	4.0
Massachusetts.....	4.8	5.2	5.3	Virginia.....	3.0	2.9	2.8
Michigan.....	6.8	7.2	6.9	Washington.....	4.9	5.0	5.1
Minnesota.....	4.2	4.2	4.4	West Virginia.....	4.6	5.0	4.0
Mississippi.....	7.6	6.9	6.2	Wisconsin.....	4.7	4.9	4.9
				Wyoming.....	3.0	3.0	2.6

^P = preliminary**11. Employment of workers on nonfarm payrolls by State, seasonally adjusted**

State	Jan. 2006	Dec. 2006 ^P	Jan. 2007 ^P	State	Jan. 2006	Dec. 2006 ^P	Jan. 2007 ^P
Alabama.....	2,171,179	2,225,914	2,249,278	Missouri.....	3,011,561	3,050,063	3,058,071
Alaska.....	345,393	348,787	348,340	Montana.....	489,270	495,386	495,875
Arizona.....	2,924,891	3,022,651	3,022,179	Nebraska.....	971,729	975,370	980,242
Arkansas.....	1,363,540	1,368,842	1,369,805	Nevada.....	1,263,125	1,323,753	1,329,654
California.....	17,824,475	18,011,807	18,084,615	New Hampshire.....	733,229	740,414	743,245
Colorado.....	2,610,727	2,681,520	2,666,665	New Jersey.....	4,498,383	4,531,940	4,528,634
Connecticut.....	1,833,651	1,855,137	1,859,571	New Mexico.....	927,502	938,992	937,238
Delaware.....	437,551	442,310	444,922	New York.....	9,480,791	9,506,524	9,518,611
District of Columbia.....	315,315	317,762	320,158	North Carolina.....	4,402,674	4,514,514	4,510,816
Florida.....	8,861,503	9,100,691	9,135,507	North Dakota.....	355,584	359,943	362,766
Georgia.....	4,693,456	4,789,727	4,826,130	Ohio.....	5,906,671	5,958,307	5,976,621
Hawaii.....	638,405	647,789	648,057	Oklahoma.....	1,709,432	1,727,121	1,727,673
Idaho.....	740,144	755,388	751,235	Oregon.....	1,882,566	1,907,206	1,921,703
Illinois.....	6,545,141	6,681,625	6,704,925	Pennsylvania.....	6,281,531	6,336,049	6,351,604
Indiana.....	3,256,396	3,285,142	3,300,835	Rhode Island.....	574,061	578,683	580,530
Iowa.....	1,654,859	1,667,624	1,664,502	South Carolina.....	2,106,342	2,147,164	2,159,316
Kansas.....	1,461,991	1,469,718	1,478,476	South Dakota.....	427,966	433,807	435,419
Kentucky.....	2,023,708	2,049,418	2,066,150	Tennessee.....	2,960,484	3,003,834	3,031,519
Louisiana.....	1,983,881	2,003,647	1,996,573	Texas.....	11,405,019	11,568,433	11,578,973
Maine.....	706,831	716,677	719,617	Utah.....	1,288,448	1,332,501	1,330,465
Maryland.....	2,977,746	3,032,933	3,039,554	Vermont.....	359,085	363,591	363,014
Massachusetts.....	3,386,727	3,421,443	3,427,370	Virginia.....	3,958,772	4,030,566	4,046,503
Michigan.....	5,081,343	5,085,147	5,083,684	Washington.....	3,304,861	3,344,183	3,344,962
Minnesota.....	2,940,829	2,958,524	2,969,797	West Virginia.....	798,425	811,341	809,537
Mississippi.....	1,305,956	1,318,481	1,317,864	Wisconsin.....	3,049,957	3,077,661	3,086,915
				Wyoming.....	280,332	287,081	286,016

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		Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	2007	
	2005	2006												Jan. ^P	Feb. ^P
TOTAL NONFARM.....	133,703	136,174	135,410	135,659	135,803	135,906	136,030	136,252	136,438	136,636	136,745	136,941	137,167	137,329	137,419
TOTAL PRIVATE.....	111,899	114,184	113,535	113,753	113,881	113,968	114,062	114,262	114,415	114,560	114,645	114,835	115,053	115,189	115,245
GOODS-PRODUCING.....	22,190	22,570	22,541	22,573	22,604	22,593	22,613	22,622	22,629	22,625	22,573	22,525	22,520	22,554	22,465
Natural resources and															
mining.....	628	684	661	669	678	680	684	690	692	694	700	699	705	706	711
Logging.....	65.2	65.3	65.3	66.4	67.0	66.9	66.1	65.8	65.1	64.1	63.9	64.0	64.6	64.8	65.2
Mining.....	562.2	618.6	595.6	602.2	611.3	613.0	618.3	623.9	626.8	630.1	635.9	635.1	640.0	641.1	645.4
Oil and gas extraction.....	125.7	135.9	130.4	131.6	133.2	133.9	135.6	136.7	138.3	138.5	140.4	141.4	143.2	145.1	145.9
Mining, except oil and gas ¹	212.8	221.1	218.2	219.8	220.4	220.7	221.6	222.9	221.5	222.7	223.5	221.8	222.4	222.2	222.9
Coal mining.....	73.9	78.8	77.6	78.7	79.1	78.7	78.7	78.9	79.0	79.1	79.7	79.4	79.9	80.0	79.7
Support activities for mining.....	223.7	261.7	247.0	250.8	257.7	258.4	261.1	264.3	267.0	268.9	272.0	271.9	274.4	273.8	276.6
Construction.....	7,336	7,689	7,668	7,692	7,699	7,698	7,691	7,703	7,719	7,725	7,707	7,683	7,684	7,718	7,641
Construction of buildings.....	1,711.9	1,806.0	1,795.4	1,806.5	1,815.6	1,812.8	1,806.8	1,815.8	1,813.8	1,818.8	1,814.5	1,801.8	1,799.7	1,801.4	1,791.7
Heavy and civil engineering.....	951.2	983.1	983.3	983.8	981.7	980.4	975.6	976.9	978.4	985.7	989.7	993.9	993.5	1,003.8	993.2
Specialty trade contractors.....	4,673.1	4,899.6	4,889.5	4,901.9	4,901.9	4,904.6	4,908.7	4,910.1	4,926.6	4,920.4	4,902.6	4,887.2	4,890.5	4,912.5	4,856.1
Manufacturing.....	14,226	14,197	14,212	14,212	14,227	14,215	14,238	14,229	14,218	14,206	14,166	14,143	14,131	14,130	14,113
Production workers.....	10,060	10,168	10,164	10,170	10,187	10,186	10,210	10,210	10,209	10,185	10,139	10,117	10,126	10,121	10,114
Durable goods.....	8,955	9,001	8,986	8,999	9,020	9,016	9,034	9,023	9,021	9,017	8,996	8,972	8,972	8,952	8,943
Production workers.....	6,219	6,369	6,342	6,358	6,377	6,385	6,403	6,403	6,406	6,392	6,365	6,346	6,349	6,325	6,326
Wood products.....	559.2	560.2	571.4	571.6	568.5	568.8	564.6	564.1	559.5	555.6	548.3	542.9	540.4	539.4	532.6
Nonmetallic mineral products.....	505.3	507.9	512.3	514.2	513.1	509.0	507.6	508.3	507.4	503.6	504.7	503.3	504.0	504.1	501.9
Primary metals.....	466.0	462.1	463.3	464.2	463.5	464.6	465.7	465.2	464.0	460.2	459.5	455.8	454.6	454.9	454.4
Fabricated metal products.....	1,522.0	1,553.9	1,541.2	1,544.6	1,548.5	1,550.4	1,552.6	1,560.8	1,562.5	1,565.4	1,562.4	1,564.1	1,564.9	1,566.2	1,566.1
Machinery.....	1,163.3	1,191.4	1,173.5	1,176.9	1,180.3	1,183.6	1,188.6	1,197.5	1,201.2	1,203.3	1,208.8	1,209.9	1,210.1	1,213.3	1,215.4
Computer and electronic															
products ¹	1,316.4	1,316.4	1,309.0	1,310.6	1,315.8	1,316.4	1,322.7	1,318.0	1,320.0	1,318.9	1,316.6	1,320.4	1,319.9	1,319.4	1,317.5
Computer and peripheral															
equipment.....	205.1	198.8	197.3	198.4	198.7	198.6	199.0	198.6	198.8	198.3	198.9	198.7	199.8	196.4	197.8
Communications equipment.....	146.8	144.4	144.1	145.1	145.1	145.9	145.8	143.5	143.4	143.2	141.7	144.1	143.8	143.7	143.7
Semiconductors and															
electronic components.....	452.0	462.8	455.8	457.2	460.6	461.9	464.8	466.3	466.8	467.1	466.5	468.0	466.2	470.5	468.8
Electronic instruments.....	435.6	437.5	437.7	436.5	438.3	437.8	440.3	437.0	438.3	438.4	437.6	437.7	438.3	437.5	436.8
Electrical equipment and															
appliances.....	433.5	435.5	432.0	433.2	434.2	435.8	438.0	437.1	438.8	438.3	438.1	436.4	437.4	437.3	436.4
Transportation equipment.....	1,771.2	1,765.0	1,768.2	1,768.5	1,780.2	1,774.1	1,782.6	1,764.8	1,761.2	1,764.4	1,752.8	1,739.8	1,741.0	1,722.3	1,724.4
Furniture and related															
products.....	565.4	556.3	564.4	564.4	565.1	563.3	562.4	558.4	554.8	553.3	550.0	542.4	541.1	536.6	535.8
Miscellaneous manufacturing.....	652.2	651.6	651.1	651.0	650.3	650.1	648.7	649.0	651.6	653.5	654.6	657.1	658.2	658.2	658.9
Nondurable goods.....	5,272	5,197	5,226	5,213	5,207	5,199	5,204	5,206	5,197	5,189	5,170	5,171	5,159	5,178	5,170
Production workers.....	3,841	3,799	3,822	3,812	3,810	3,801	3,807	3,807	3,803	3,793	3,774	3,771	3,777	3,796	3,788
Food manufacturing.....	1,477.6	1,484.3	1,478.7	1,479.0	1,480.5	1,482.2	1,487.4	1,487.3	1,486.6	1,491.8	1,487.8	1,491.6	1,485.1	1,493.9	1,492.8
Beverages and tobacco															
products.....	191.9	194.7	194.2	194.5	194.7	193.7	194.1	194.2	195.5	195.6	196.4	195.4	195.5	197.0	197.8
Textile mills.....	217.6	195.6	205.5	202.9	200.8	199.2	196.4	194.7	192.4	188.0	187.5	186.3	185.0	182.3	179.1
Textile product mills.....	169.7	161.1	166.0	162.7	160.5	160.2	160.3	160.9	160.6	159.9	159.2	158.1	157.7	158.6	157.9
Apparel.....	257.2	238.4	245.2	243.3	243.2	240.2	239.5	240.9	235.6	234.8	233.2	231.4	230.4	227.7	225.2
Leather and allied products.....	39.6	37.4	38.5	37.7	37.8	37.7	37.5	37.2	37.0	37.1	37.2	36.5	36.5	36.5	36.4
Paper and paper products.....	484.2	469.3	477.0	474.4	472.1	471.8	470.1	469.9	466.5	464.6	463.4	463.9	462.6	462.4	460.5
Printing and related support															
activities.....	646.3	635.9	638.3	638.4	636.9	635.4	635.0	633.5	634.4	632.5	633.2	637.2	636.7	634.7	634.6
Petroleum and coal products.....	112.1	114.3	111.2	111.6	112.5	113.1	114.1	115.7	115.9	116.4	116.9	116.6	117.1	117.4	117.4
Chemicals.....	872.1	868.7	865.5	865.2	864.9	864.8	867.4	869.6	872.9	871.1	871.9	871.2	871.0	872.1	872.5
Plastics and rubber products.....	803.4	796.9	805.8	803.2	802.6	800.6	802.2	801.6	799.7	796.8	783.2	782.7	781.7	795.8	795.7
SERVICE-PROVIDING.....	111,513	113,605	112,869	113,086	113,199	113,313	113,417	113,630	113,809	114,011	114,172	114,416	114,647	114,775	114,954
PRIVATE SERVICE-PROVIDING.....	89,709	91,615	90,994	91,180	91,277	91,375	91,449	91,640	91,786	91,935	92,072	92,310	92,533	92,635	92,780
Trade, transportation, and utilities.....	25,959	26,231	26,187	26,225	26,207	26,194	26,197	26,226	26,227	26,241	26,258	26,320	26,345	26,378	26,393
Wholesale trade.....	5,764.4	5,897.6	5,853.1	5,869.1	5,879.6	5,889.5	5,893.6	5,901.5	5,908.8	5,919.2	5,919.6	5,934.7	5,955.0	5,949.0	5,960.0
Durable goods.....	2,999.2	3,076.5	3,051.7	3,061.5	3,067.0	3,070.2	3,073.3	3,078.1	3,084.0	3,093.8	3,093.6	3,097.7	3,104.3	3,102.5	3,112.0
Nondurable goods.....	2,022.4	2,040.1	2,031.1	2,032.6	2,034.4	2,038.8	2,038.9	2,042.0	2,042.0	2,041.3	2,040.8	2,048.5	2,050.0	2,050.5	2,049.7
Electronic markets and															
agents and brokers.....	742.8	781.0	770.3	775.0	778.2	780.5	781.4	781.4	782.8	784.1	785.2	788.5	795.7	796.0	798.3
Retail trade.....	15,279.6	15,319.3	15,353.9	15,377.6	15,336.6	15,302.8	15,295.9	15,306.4	15,298.2	15,289.8	15,297.8	15,327.9	15,323.7	15,357.5	15,364.6
Motor vehicles and parts															
dealers ¹	1,918.6	1,907.9	1,912.4	1,909.6	1,910.7	1,908.4	1,908.3	1,906.4	1,906.2	1,906.2	1,906.4	1,904.2	1,908.5	1,906.8	1,910.3
Automobile dealers.....	1,261.4	1,246.7	1,250.2	1,245.7	1,248.0	1,246.6	1,247.9	1,248.4	1,246.2	1,245.4	1,245.0	1,244.0	1,244.8	1,244.1	1,244.9
Furniture and home															
furnishings stores.....	576.1	588.5	586.5	585.3	589.7	589.4	589.5	589.9	589.2	587.9	589.9	586.5	591.4	588.1	587.6
Electronics and appliance															
stores.....	535.8	538.4	543.9	544.3	542.9	541.9	541.7	540.2	537.4	535.8	534.0	531.6	531.4	535.3	538.2

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^P	Feb. ^P	
Building material and garden supply stores.....	1,276.1	1,322.6	1,320.5	1,324.9	1,325.8	1,328.4	1,326.5	1,329.1	1,324.9	1,327.2	1,329.2	1,321.0	1,314.1	1,318.0	1,323.4	
Food and beverage stores.....	2,817.8	2,827.9	2,818.6	2,822.6	2,825.7	2,820.1	2,819.4	2,825.2	2,831.2	2,832.1	2,833.8	2,842.4	2,843.7	2,844.0	2,849.9	
Health and personal care stores.....	953.7	955.5	951.8	955.8	952.6	955.6	954.0	954.8	955.8	956.2	954.8	962.6	959.7	964.1	964.8	
Gasoline stations.....	871.1	861.0	868.8	865.5	865.7	856.9	862.9	862.1	857.8	858.1	854.8	854.6	854.8	853.7	852.9	
Clothing and clothing accessories stores.....	1,414.6	1,439.0	1,431.8	1,426.9	1,421.2	1,414.3	1,426.2	1,436.0	1,438.6	1,437.4	1,443.1	1,467.3	1,460.1	1,446.9	1,445.1	
Sporting goods, hobby, book, and music stores.....	647.0	646.6	651.7	649.7	646.8	644.9	644.5	641.4	644.0	638.0	638.3	647.4	648.9	655.8	654.9	
General merchandise stores ¹	2,934.3	2,912.8	2,947.5	2,973.5	2,937.5	2,926.3	2,909.0	2,907.2	2,900.5	2,894.9	2,893.8	2,882.9	2,885.4	2,923.9	2,917.3	
Department stores.....	1,595.1	1,550.9	1,573.2	1,580.1	1,566.8	1,558.3	1,550.5	1,548.0	1,542.1	1,536.2	1,535.6	1,533.2	1,537.7	1,568.7	1,565.3	
Miscellaneous store retailers.....	899.9	884.9	889.8	891.0	889.7	886.6	883.0	882.8	880.7	880.6	880.9	881.9	881.4	880.3	880.2	
Nonstore retailers.....	434.6	434.4	430.6	428.5	428.3	430.0	430.9	431.3	431.9	435.4	438.8	445.5	444.3	440.6	440.0	
Transportation and warehousing.....	4,360.9	4,465.8	4,430.4	4,430.2	4,441.6	4,453.1	4,459.2	4,470.6	4,472.6	4,484.4	4,493.8	4,509.6	4,517.0	4,522.6	4,519.6	
Air transportation.....	500.8	486.5	487.6	486.4	487.3	485.4	485.2	485.9	486.7	488.1	488.1	484.5	488.3	490.8	485.5	
Rail transportation.....	227.8	225.3	225.9	225.6	225.8	225.8	225.7	225.5	225.1	224.7	224.8	223.9	226.4	227.9	228.9	
Water transportation.....	60.6	64.1	62.5	62.4	62.9	62.6	62.8	63.7	64.3	65.5	65.6	66.8	67.8	67.1	68.1	
Truck transportation.....	1,397.6	1,437.2	1,421.0	1,424.4	1,431.9	1,431.6	1,435.6	1,442.2	1,442.8	1,446.8	1,448.7	1,448.9	1,453.6	1,457.9	1,454.7	
Transit and ground passenger transportation.....	389.2	394.3	398.3	396.7	392.6	397.1	394.6	394.6	392.6	394.2	392.3	393.2	390.2	391.6	393.3	
Pipeline transportation.....	37.8	39.0	38.2	38.5	38.6	38.8	38.9	39.2	39.4	38.8	39.6	39.8	39.7	40.3	40.6	
Scenic and sightseeing transportation.....	28.8	27.0	27.2	27.3	27.3	27.4	26.9	26.7	26.9	26.6	26.6	28.3	27.8	27.8	28.0	
Support activities for transportation.....	552.2	570.7	569.8	566.9	568.5	571.1	573.0	569.9	569.9	571.0	572.9	577.9	575.9	575.9	579.4	
Couriers and messengers.....	571.4	585.3	576.5	575.6	577.3	579.9	580.9	583.6	583.7	586.4	590.5	597.2	596.4	593.0	590.6	
Warehousing and storage.....	594.7	636.4	623.4	626.4	629.4	633.4	635.6	639.3	641.2	642.3	644.7	649.1	650.9	650.3	650.5	
Utilities.....	554.0	548.5	549.6	547.7	548.9	548.8	547.9	547.9	547.7	547.8	546.9	548.2	549.2	549.0	549.0	
Information.....	3,061	3,055	3,058	3,058	3,056	3,048	3,048	3,043	3,051	3,052	3,054	3,057	3,073	3,071	3,084	
Publishing industries, except Internet.....	904.1	903.8	904.7	904.5	905.8	903.9	902.4	902.9	902.6	900.2	902.1	905.0	906.1	907.0	907.8	
Motion picture and sound recording industries.....	377.5	377.5	385.6	385.5	380.3	372.0	375.5	372.0	376.8	374.7	374.6	371.9	378.3	378.2	385.2	
Broadcasting, except Internet..	327.7	331.3	328.5	328.9	330.7	331.0	331.4	331.6	332.2	332.3	332.1	333.8	335.6	335.3	337.4	
Internet publishing and broadcasting.....	31.5	34.5	33.7	33.6	33.9	34.2	33.9	33.3	34.5	35.0	35.8	36.3	37.0	36.9	37.9	
Telecommunications.....	992.0	972.9	973.7	971.5	972.2	972.7	968.5	969.3	971.0	974.2	975.0	973.5	978.0	975.6	976.2	
ISPs, search portals, and data processing.....	377.5	383.2	381.1	383.1	382.1	382.8	385.3	382.1	383.4	383.9	382.2	384.9	386.1	386.1	387.3	
Other information services.....	50.6	51.4	51.0	50.9	51.1	51.6	51.3	51.5	50.9	51.3	51.8	51.6	52.1	51.9	51.9	
Financial activities.....	8,153	8,363	8,298	8,314	8,340	8,352	8,348	8,368	8,379	8,408	8,415	8,422	8,438	8,440	8,446	
Finance and insurance.....	6,022.8	6,183.5	6,132.3	6,150.9	6,166.6	6,174.7	6,165.4	6,187.2	6,195.8	6,219.6	6,227.1	6,228.9	6,239.8	6,238.9	6,244.4	
Monetary authorities—central bank.....	20.8	21.5	21.0	21.1	21.2	21.3	21.5	21.6	21.6	21.7	21.8	21.7	21.8	21.7	22.0	
Credit intermediation and related activities ¹	2,869.0	2,936.8	2,914.8	2,922.7	2,932.3	2,934.8	2,928.9	2,936.1	2,937.2	2,952.8	2,956.2	2,957.4	2,959.7	2,961.5	2,962.8	
Depository credit intermediation ¹	1,769.2	1,803.2	1,787.4	1,792.3	1,797.8	1,800.8	1,799.7	1,803.3	1,805.1	1,812.4	1,818.3	1,819.6	1,824.6	1,824.3	1,823.1	
Commercial banking.....	1,296.0	1,319.3	1,305.8	1,310.8	1,313.7	1,316.2	1,317.1	1,319.4	1,320.8	1,328.1	1,334.5	1,333.0	1,336.9	1,336.9	1,334.7	
Securities, commodity contracts, investments.....	786.1	816.3	803.8	807.0	810.5	813.5	812.8	817.4	820.8	825.4	830.4	829.2	829.2	831.0	831.4	
Insurance carriers and related activities.....	2,259.3	2,315.9	2,302.0	2,308.9	2,310.9	2,312.7	2,309.1	2,318.1	2,321.7	2,324.8	2,324.0	2,326.0	2,333.9	2,329.6	2,333.2	
Funds, trusts, and other financial vehicles.....	87.7	93.1	90.7	91.2	91.7	92.4	93.1	94.0	94.5	94.9	94.7	94.6	95.2	95.1	95.0	
Real estate and rental and leasing.....	2,129.6	2,179.6	2,165.5	2,163.4	2,173.5	2,177.3	2,182.2	2,181.1	2,183.6	2,188.2	2,187.5	2,192.9	2,198.0	2,201.5	2,202.0	
Real estate.....	1,456.9	1,503.3	1,495.0	1,492.7	1,500.9	1,501.3	1,503.8	1,503.8	1,504.8	1,506.4	1,505.0	1,512.4	1,516.4	1,518.5	1,518.4	
Rental and leasing services.....	645.8	647.4	642.8	642.8	644.5	648.1	649.9	648.0	649.4	652.2	652.9	650.0	650.9	651.9	652.4	
Lessors of nonfinancial intangible assets.....	26.9	28.9	27.7	27.9	28.1	27.9	28.5	29.3	29.4	29.6	29.6	30.5	30.7	31.1	31.2	
Professional and business services.....	16,954	17,552	17,387	17,431	17,458	17,499	17,539	17,592	17,617	17,636	17,662	17,726	17,792	17,804	17,840	
Professional and technical services ¹	7,053.4	7,371.7	7,266.5	7,297.0	7,319.0	7,337.6	7,359.6	7,398.0	7,407.6	7,420.1	7,438.5	7,469.6	7,499.8	7,515.6	7,544.3	
Legal services.....	1,168.0	1,173.4	1,172.3	1,174.5	1,175.2	1,171.8	1,170.0	1,171.0	1,171.5	1,172.6	1,173.5	1,175.9	1,179.0	1,176.2	1,178.8	
Accounting and bookkeeping services.....	849.3	889.3	874.6	876.8	879.8	881.0	885.5	884.8	881.9	893.1	893.7	914.5	925.1	922.1	927.8	
Architectural and engineering services.....	1,310.9	1,385.6	1,360.1	1,369.1	1,373.7	1,380.6	1,384.3	1,392.9	1,398.0	1,399.3	1,400.6	1,407.2	1,411.4	1,419.2	1,422.7	

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^P	Feb. ^P	
Computer systems design and related services.....	1,195.2	1,278.2	1,247.9	1,254.0	1,262.1	1,274.1	1,278.3	1,288.0	1,294.4	1,298.4	1,300.8	1,296.2	1,303.3	1,305.2	1,311.1	
Management and technical consulting services.....	853.0	920.9	898.1	905.7	908.4	911.3	912.2	918.6	922.4	926.4	944.2	949.3	953.8	958.1	967.1	
Management of companies and enterprises.....	1,758.9	1,809.4	1,794.7	1,796.4	1,797.6	1,802.1	1,805.4	1,811.1	1,816.2	1,822.3	1,826.8	1,823.0	1,826.0	1,830.8	1,836.7	
Administrative and waste services.....	8,141.5	8,370.7	8,325.8	8,337.8	8,341.0	8,359.2	8,373.9	8,382.4	8,393.2	8,393.9	8,396.2	8,433.8	8,466.4	8,457.3	8,458.9	
Administrative and support services ¹	7,803.8	8,023.5	7,981.1	7,991.1	7,994.2	8,012.1	8,026.1	8,033.8	8,046.9	8,047.4	8,047.5	8,083.8	8,117.0	8,106.1	8,107.4	
Employment services ¹	3,578.2	3,656.6	3,659.4	3,658.2	3,658.0	3,662.3	3,663.2	3,663.5	3,667.2	3,653.3	3,641.2	3,665.5	3,674.2	3,667.1	3,651.6	
Temporary help services.....	2,549.4	2,631.3	2,633.7	2,634.6	2,632.2	2,646.3	2,636.3	2,633.4	2,632.1	2,623.5	2,621.1	2,631.3	2,641.6	2,641.8	2,629.2	
Business support services.....	766.4	790.7	778.2	782.0	783.2	786.1	788.2	789.7	791.3	797.2	801.0	802.2	806.9	803.6	803.3	
Services to buildings and dwellings.....	1,737.5	1,797.1	1,784.9	1,790.6	1,792.3	1,795.9	1,800.4	1,803.1	1,803.5	1,803.0	1,807.9	1,811.2	1,817.7	1,812.1	1,823.8	
Waste management and remediation services.....	337.6	347.2	344.7	346.7	346.8	347.1	347.8	348.6	346.3	346.5	348.7	350.0	349.4	351.2	351.5	
Educational and health services.....	17,372	17,838	17,666	17,709	17,743	17,776	17,794	17,828	17,894	17,946	17,976	18,018	18,063	18,102	18,138	
Educational services.....	2,835.8	2,918.4	2,883.7	2,892.4	2,902.6	2,906.9	2,902.4	2,911.0	2,936.0	2,949.4	2,944.2	2,951.4	2,948.6	2,959.5	2,955.9	
Health care and social assistance.....	14,536.3	14,919.9	14,782.5	14,816.7	14,839.9	14,869.5	14,891.5	14,917.2	14,958.3	14,996.4	15,031.5	15,066.1	15,113.9	15,142.6	15,181.7	
Ambulatory health care services ¹	5,113.5	5,283.1	5,225.8	5,243.0	5,251.0	5,262.2	5,267.6	5,281.5	5,299.4	5,321.0	5,332.6	5,344.6	5,369.2	5,375.3	5,395.6	
Offices of physicians.....	2,093.5	2,153.6	2,126.5	2,131.5	2,138.0	2,145.2	2,150.1	2,155.2	2,159.0	2,172.5	2,174.1	2,179.4	2,185.5	2,187.4	2,196.7	
Outpatient care centers.....	473.2	489.4	486.4	487.4	487.6	487.6	488.7	488.1	490.0	492.1	494.1	492.4	493.6	494.1	496.8	
Home health care services.....	821.0	867.1	852.7	857.6	858.5	862.5	862.1	867.6	872.8	877.7	880.7	883.5	890.9	896.4	901.1	
Hospitals.....	4,345.4	4,427.1	4,388.9	4,397.6	4,404.3	4,413.0	4,421.7	4,429.2	4,440.8	4,451.7	4,458.2	4,461.7	4,469.5	4,478.3	4,484.4	
Nursing and residential care facilities ¹	2,855.0	2,900.9	2,877.9	2,877.5	2,884.7	2,890.0	2,896.4	2,909.6	2,905.8	2,906.9	2,915.9	2,927.8	2,940.5	2,947.6	2,957.5	
Nursing care facilities.....	1,577.4	1,584.2	1,577.8	1,576.4	1,579.6	1,583.9	1,583.0	1,589.7	1,583.8	1,584.7	1,587.5	1,591.8	1,596.4	1,600.1	1,605.7	
Social assistance ¹	2,222.3	2,308.9	2,289.9	2,298.6	2,299.9	2,304.3	2,305.8	2,296.9	2,312.3	2,316.8	2,324.8	2,332.0	2,334.7	2,341.4	2,344.2	
Child day care services.....	789.7	806.7	810.2	811.5	813.6	812.0	807.0	795.0	804.3	802.0	802.8	805.1	803.6	804.3	802.7	
Leisure and hospitality.....	12,816	13,143	12,981	13,022	13,049	13,074	13,092	13,156	13,188	13,209	13,257	13,324	13,373	13,396	13,425	
Arts, entertainment, and recreation.....	1,892.3	1,927.0	1,907.6	1,908.3	1,918.1	1,921.6	1,923.7	1,933.4	1,933.9	1,923.7	1,939.9	1,947.4	1,957.2	1,960.4	1,963.3	
Performing arts and spectator sports.....	376.3	398.8	386.8	388.3	395.3	400.3	400.1	403.6	402.7	401.4	405.0	405.7	406.4	408.0	406.0	
Museums, historical sites, zoos, and parks.....	120.7	123.9	121.3	121.3	122.8	124.2	123.7	124.0	124.7	125.6	125.7	126.4	127.1	127.7	127.5	
Amusements, gambling, and recreation.....	1,395.3	1,404.3	1,399.5	1,398.7	1,400.0	1,397.1	1,399.9	1,405.8	1,406.5	1,396.7	1,409.2	1,415.3	1,423.7	1,424.7	1,429.8	
Accommodations and food services.....	10,923.0	11,216.2	11,073.7	11,113.4	11,131.0	11,151.9	11,168.7	11,222.8	11,253.6	11,284.8	11,316.9	11,376.8	11,415.9	11,435.8	11,461.3	
Accommodations.....	1,818.6	1,833.4	1,824.2	1,827.1	1,821.5	1,821.0	1,816.4	1,830.2	1,834.0	1,847.0	1,845.3	1,854.4	1,863.2	1,858.1	1,860.3	
Food services and drinking places.....	9,104.4	9,382.8	9,249.5	9,286.3	9,309.5	9,330.9	9,352.3	9,392.6	9,419.6	9,437.8	9,471.6	9,522.4	9,552.7	9,577.7	9,601.0	
Other services.....	5,395	5,432	5,417	5,421	5,424	5,432	5,431	5,427	5,430	5,443	5,450	5,443	5,449	5,444	5,454	
Repair and maintenance.....	1,236.0	1,248.5	1,240.5	1,243.9	1,247.1	1,252.0	1,251.0	1,244.4	1,250.5	1,253.9	1,253.4	1,250.8	1,251.6	1,246.3	1,248.9	
Personal and laundry services.....	1,276.6	1,284.2	1,285.3	1,282.2	1,282.4	1,281.1	1,280.6	1,282.9	1,279.3	1,285.6	1,286.8	1,286.4	1,287.4	1,285.8	1,290.3	
Membership associations and organizations.....	2,882.2	2,899.3	2,890.8	2,894.6	2,894.3	2,899.1	2,899.3	2,899.2	2,899.7	2,903.1	2,909.3	2,905.4	2,909.7	2,912.3	2,915.2	
Government.....	21,804	21,990	21,875	21,906	21,922	21,938	21,968	21,990	22,023	22,076	22,100	22,106	22,114	22,140	22,174	
Federal.....	2,732	2,728	2,731	2,731	2,731	2,729	2,733	2,739	2,730	2,729	2,725	2,719	2,713	2,718	2,718	
Federal, except U.S. Postal Service.....	1,957.3	1,958.3	1,959.2	1,959.0	1,960.2	1,958.8	1,961.0	1,962.4	1,960.4	1,959.0	1,954.7	1,949.5	1,948.6	1,951.1	1,951.8	
U.S. Postal Service.....	774.2	770.1	772.0	771.9	770.5	770.4	771.6	777.0	769.6	770.2	770.2	769.0	764.5	767.1	766.5	
State.....	5,032	5,080	5,053	5,060	5,064	5,073	5,075	5,078	5,088	5,113	5,109	5,107	5,111	5,117	5,133	
Education.....	2,259.9	2,294.9	2,275.3	2,281.2	2,284.5	2,291.0	2,292.6	2,292.9	2,298.8	2,321.1	2,314.3	2,313.1	2,311.8	2,311.4	2,324.0	
Other State government.....	2,771.6	2,785.2	2,777.8	2,778.7	2,779.2	2,782.1	2,782.3	2,785.3	2,789.5	2,791.5	2,794.3	2,793.5	2,798.9	2,805.7	2,809.4	
Local.....	14,041	14,182	14,091	14,115	14,127	14,136	14,160	14,173	14,205	14,234	14,266	14,280	14,290	14,305	14,323	
Education.....	7,856.1	7,938.5	7,881.8	7,896.1	7,905.0	7,905.5	7,915.4	7,926.5	7,951.6	7,970.7	7,995.1	8,003.7	8,015.6	8,018.7	8,025.1	
Other local government.....	6,184.6	6,243.0	6,209.2	6,218.9	6,222.2	6,230.6	6,245.0	6,246.8	6,252.9	6,263.0	6,270.9	6,276.3	6,274.1	6,286.4	6,298.0	

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 workers¹ on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2006												2007
	2005	2006	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p	Jan. ^p
TOTAL PRIVATE	33.8	33.9	33.8	33.8	33.8	33.9	33.8	33.9	33.9	33.8	33.8	33.9	33.8	33.9	33.8
GOODS-PRODUCING	40.1	40.5	40.4	40.4	40.4	40.6	40.3	40.6	40.7	40.6	40.3	40.6	40.4	40.7	40.2
Natural resources and mining.....	45.6	45.6	46.0	45.4	45.2	45.5	44.9	46.0	45.9	45.3	45.1	45.7	46.1	45.6	45.0
Construction.....	38.6	39.0	38.9	38.9	38.8	39.1	38.5	39.0	38.9	39.0	38.4	39.2	39.0	39.8	38.7
Manufacturing.....	40.7	41.1	40.9	41.0	41.1	41.2	41.1	41.2	41.5	41.3	41.1	41.2	41.0	41.0	40.8
Overtime hours.....	4.6	4.4	4.5	4.6	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.1	4.2	4.1
Durable goods.....	41.1	41.4	41.3	41.4	41.4	41.6	41.5	41.6	41.8	41.6	41.3	41.4	41.2	41.2	41.0
Overtime hours.....	4.6	4.4	4.5	4.6	4.6	4.6	4.5	4.5	4.5	4.4	4.3	4.3	4.1	4.2	4.1
Wood products.....	40.0	39.8	40.2	40.3	40.4	40.4	40.0	39.5	40.0	39.8	39.6	39.7	39.1	39.3	38.8
Nonmetallic mineral products.....	42.2	43.0	43.1	43.0	43.0	43.3	43.0	43.4	43.4	43.2	43.0	42.7	42.3	42.7	41.7
Primary metals.....	43.1	43.6	43.7	43.7	43.5	43.4	43.6	43.7	44.0	43.7	43.5	43.6	43.5	43.3	43.0
Fabricated metal products.....	41.0	41.4	41.2	41.3	41.5	41.7	41.3	41.5	41.6	41.7	41.3	41.6	41.2	41.0	40.9
Machinery.....	42.1	42.4	41.9	42.0	42.1	42.6	42.4	42.5	42.9	42.6	42.3	42.7	42.3	42.3	41.6
Computer and electronic products.....	40.0	40.5	40.5	40.5	40.6	40.7	40.5	40.8	40.7	40.5	40.4	40.4	40.2	40.4	40.3
Electrical equipment and appliances.....	40.6	41.0	41.2	41.3	41.2	41.3	41.1	41.1	41.4	40.9	40.7	40.8	40.7	40.4	40.8
Transportation equipment.....	42.4	42.7	42.5	42.7	42.8	43.1	43.0	43.0	43.7	42.9	42.6	42.4	42.5	42.5	42.7
Furniture and related products.....	39.2	38.8	38.2	38.6	38.5	38.6	38.8	38.7	38.8	39.1	38.8	39.2	39.0	39.0	38.9
Miscellaneous manufacturing.....	38.7	38.7	38.5	38.5	38.6	38.8	38.6	38.8	38.7	38.8	38.6	38.7	38.8	38.7	38.5
Nondurable goods.....	39.9	40.6	40.3	40.4	40.5	40.6	40.6	40.7	40.9	40.7	40.7	40.7	40.6	40.6	40.5
Overtime hours.....	4.4	4.4	4.5	4.5	4.4	4.4	4.5	4.5	4.5	4.3	4.2	4.3	4.2	4.3	4.1
Food manufacturing.....	39.0	40.1	39.6	39.7	39.9	39.8	39.9	40.0	40.2	39.9	40.3	40.4	40.5	40.4	40.2
Beverage and tobacco products.....	40.1	40.7	40.0	40.2	40.4	40.3	41.0	41.2	41.9	41.1	40.7	40.8	40.9	40.7	40.8
Textile mills.....	40.3	40.6	40.8	40.7	40.3	40.4	40.4	40.7	40.8	41.2	40.7	40.6	40.4	41.0	40.5
Textile product mills.....	39.0	40.0	40.2	40.3	39.8	40.3	40.4	40.2	40.4	40.5	39.8	39.2	39.8	39.2	39.3
Apparel.....	35.7	36.5	35.9	35.9	36.0	36.4	36.6	36.8	36.8	36.6	36.7	37.0	36.9	36.7	37.1
Leather and allied products.....	38.4	38.9	39.3	39.3	39.5	38.9	39.2	39.0	39.2	39.5	38.8	38.8	37.8	38.2	38.1
Paper and paper products.....	42.5	42.9	42.5	42.5	42.4	43.0	43.1	43.3	43.6	43.4	43.0	42.9	42.6	42.4	42.6
Printing and related support activities.....	38.4	39.2	38.9	39.0	39.0	39.2	39.2	39.3	39.1	39.1	39.2	39.4	39.1	39.5	39.2
Petroleum and coal products.....	45.5	45.0	45.1	44.9	44.9	45.2	45.3	45.4	45.5	45.4	45.0	45.1	44.8	44.7	45.4
Chemicals.....	42.3	42.5	42.6	42.8	42.7	42.7	42.3	42.6	42.9	42.7	43.0	42.5	41.9	42.0	41.7
Plastics and rubber products.....	40.0	40.6	40.5	40.5	40.7	40.7	40.6	40.8	41.1	40.9	40.5	40.7	40.6	40.6	40.8
PRIVATE SERVICE-PROVIDING	32.4	32.5	32.4	32.3	32.4	32.4	32.3	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
Trade, transportation, and utilities.....	33.4	33.4	33.3	33.3	33.3	33.5	33.3	33.4	33.4	33.4	33.4	33.4	33.5	33.4	33.5
Wholesale trade.....	37.7	38.0	37.8	37.9	37.9	38.1	37.9	38.0	38.0	38.0	37.9	38.0	38.0	38.0	38.0
Retail trade.....	30.6	30.5	30.5	30.4	30.4	30.6	30.4	30.4	30.4	30.3	30.4	30.4	30.5	30.4	30.4
Transportation and warehousing.....	37.0	36.9	36.6	36.7	36.8	36.7	36.7	36.9	36.9	37.0	36.9	36.9	36.9	36.9	37.2
Utilities.....	41.1	41.4	41.2	41.1	41.0	41.2	41.3	41.2	41.6	41.7	41.4	41.8	41.9	42.0	41.8
Information.....	36.5	36.6	36.6	36.5	36.6	36.6	36.5	36.5	36.7	36.7	36.7	36.7	36.4	36.6	36.6
Financial activities.....	35.9	35.8	35.9	35.7	35.7	35.7	35.5	35.6	35.7	35.5	35.7	35.8	35.8	36.0	35.9
Professional and business services.....	34.2	34.6	34.6	34.5	34.5	34.6	34.4	34.6	34.7	34.7	34.7	34.7	34.6	34.6	34.5
Education and health services.....	32.6	32.5	32.5	32.5	32.5	32.5	32.5	32.6	32.5	32.4	32.5	32.4	32.5	32.4	32.5
Leisure and hospitality.....	25.7	25.7	25.7	25.5	25.6	25.6	25.6	25.6	25.6	25.6	25.8	25.7	25.6	25.7	25.6
Other services.....	30.9	30.9	31.0	30.9	30.9	31.0	30.9	30.9	30.9	30.9	30.8	30.9	30.9	30.9	30.8

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 workers¹ on private nonfarm payrolls, by industry,
monthly data seasonally adjusted**

Industry	Annual average		2006												2007
	2005	2006	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p	Jan. ^p
TOTAL PRIVATE															
Current dollars.....	\$16.13	\$16.76	\$16.43	\$16.49	\$16.55	\$16.63	\$16.66	\$16.73	\$16.79	\$16.84	\$16.88	\$16.94	\$16.99	\$17.07	\$17.10
Constant (1982) dollars.....	8.18	8.24	8.18	8.21	8.21	8.20	8.17	8.18	8.17	8.17	8.25	8.34	8.36	8.36	8.36
GOODS-PRODUCING.....	17.60	18.02	17.79	17.80	17.82	17.87	17.93	18.00	18.00	18.06	18.08	18.15	18.21	18.29	18.35
Natural resources and mining.....	18.72	19.90	19.30	19.39	19.49	19.66	19.77	19.83	19.86	20.02	20.11	20.26	20.43	20.52	20.57
Construction.....	19.46	20.02	19.63	19.67	19.67	19.71	19.87	20.03	20.06	20.11	20.17	20.24	20.37	20.44	20.56
Manufacturing.....	16.56	16.80	16.69	16.69	16.71	16.75	16.77	16.78	16.78	16.83	16.83	16.88	16.89	16.95	16.99
Excluding overtime.....	15.68	15.95	15.82	15.80	15.84	15.88	15.90	15.91	15.92	15.98	15.99	16.04	16.09	16.12	16.18
Durable goods.....	17.33	17.67	17.51	17.51	17.54	17.58	17.62	17.65	17.66	17.72	17.73	17.78	17.79	17.86	17.90
Nondurable goods.....	15.27	15.32	15.31	15.30	15.30	15.34	15.30	15.28	15.26	15.30	15.29	15.33	15.35	15.41	15.45
PRIVATE SERVICE-PRIVATE SERVICE- PROVIDING.....	15.74	16.42	16.07	16.14	16.21	16.29	16.32	16.38	16.46	16.51	16.56	16.62	16.67	16.74	16.77
Trade,transportation, and utilities.....	14.92	15.40	15.13	15.19	15.22	15.30	15.31	15.39	15.48	15.49	15.52	15.55	15.54	15.58	15.59
Wholesale trade.....	18.16	18.91	18.54	18.61	18.68	18.71	18.79	18.85	18.94	19.00	19.10	19.09	19.14	19.20	19.23
Retail trade.....	12.36	12.58	12.43	12.46	12.47	12.56	12.53	12.59	12.65	12.64	12.65	12.69	12.64	12.67	12.68
Transportation and warehousing.....	16.70	17.28	16.91	16.99	17.06	17.18	17.16	17.28	17.41	17.40	17.47	17.47	17.50	17.53	17.52
Utilities.....	26.68	27.42	27.48	27.58	27.53	27.49	27.29	27.39	27.52	27.42	27.35	27.39	27.47	27.33	27.37
Information.....	22.06	23.23	22.95	22.77	22.96	23.09	23.09	23.19	23.30	23.36	23.44	23.51	23.47	23.60	23.70
Financial activities.....	17.94	18.80	18.34	18.45	18.50	18.66	18.66	18.71	18.81	18.88	19.02	19.11	19.20	19.29	19.32
Professional and business services.....	18.08	19.12	18.57	18.67	18.80	18.91	18.94	19.02	19.14	19.20	19.31	19.42	19.51	19.64	19.64
Education and health services.....	16.71	17.38	17.06	17.12	17.20	17.25	17.30	17.36	17.40	17.47	17.51	17.56	17.63	17.67	17.75
Leisure and hospitality.....	9.38	9.75	9.46	9.57	9.61	9.66	9.70	9.72	9.75	9.80	9.83	9.87	9.94	10.02	10.07
Other services.....	14.34	14.77	14.54	14.58	14.64	14.67	14.71	14.75	14.76	14.80	14.86	14.89	14.94	15.02	15.06

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 workers¹ on private nonfarm payrolls, by industry

Industry	Annual average		2006												2007
	2005	2006	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p	Jan. ^p
TOTAL PRIVATE	\$16.13	\$16.76	\$16.53	\$16.53	\$16.56	\$16.72	\$16.62	\$16.63	\$16.75	\$16.74	\$16.91	\$17.02	\$16.99	\$17.07	\$17.17
Seasonally adjusted.....	—	—	16.43	16.49	16.55	16.63	16.66	16.73	16.79	16.84	16.88	16.94	16.99	17.07	17.10
GOODS-PRODUCING	17.60	18.02	17.73	17.72	17.73	17.82	17.89	18.00	18.03	18.12	18.20	18.26	18.26	18.37	18.29
Natural resources and mining	18.72	19.90	19.44	19.38	19.57	19.78	19.75	19.74	19.79	19.90	20.01	20.26	20.45	20.61	20.65
Construction	19.46	20.02	19.49	19.56	19.53	19.61	19.78	19.98	20.12	20.23	20.35	20.45	20.42	20.52	20.44
Manufacturing	16.56	16.80	16.74	16.70	16.69	16.74	16.74	16.76	16.70	16.79	16.88	16.89	16.93	17.09	17.04
Durable goods.....	17.33	17.67	17.55	17.52	17.52	17.54	17.58	17.62	17.52	17.69	17.80	17.81	17.87	18.04	17.94
Wood products	13.16	13.40	13.15	13.14	13.14	13.24	13.32	13.46	13.43	13.46	13.53	13.61	13.67	13.64	13.62
Nonmetallic mineral products	16.61	16.59	16.50	16.54	16.60	16.71	16.59	16.56	16.57	16.72	16.51	16.59	16.51	16.73	16.72
Primary metals	18.94	19.35	19.39	19.25	19.21	19.37	19.13	19.14	19.17	19.34	19.67	19.39	19.73	19.45	19.68
Fabricated metal products	15.80	16.17	16.12	16.06	16.08	16.04	16.09	16.13	16.18	16.10	16.21	16.26	16.29	16.44	16.33
Machinery	17.03	17.20	17.07	17.01	16.99	16.95	17.03	17.03	17.13	17.14	17.26	17.45	17.56	17.78	17.63
Computer and electronic products	18.39	18.96	18.69	18.72	18.58	18.73	18.67	18.78	19.02	19.08	19.18	19.25	19.22	19.57	19.54
Electrical equipment and appliances	15.24	15.53	15.47	15.48	15.42	15.37	15.42	15.46	15.55	15.65	15.61	15.63	15.53	15.72	15.75
Transportation equipment	22.10	22.41	22.32	22.29	22.31	22.27	22.39	22.50	21.92	22.44	22.59	22.51	22.57	22.76	22.46
Furniture and related products	13.45	13.79	13.55	13.49	13.52	13.72	13.68	13.67	13.76	13.84	13.98	14.04	14.12	14.13	14.11
Miscellaneous manufacturing	14.08	14.36	14.07	14.07	14.30	14.37	14.40	14.28	14.53	14.51	14.47	14.47	14.38	14.47	14.54
Non durable goods.....	15.27	15.32	15.37	15.29	15.27	15.36	15.29	15.27	15.31	15.25	15.31	15.32	15.34	15.47	15.52
Food manufacturing	13.04	13.13	13.09	13.02	13.04	13.09	13.12	13.14	13.11	13.15	13.16	13.13	13.18	13.33	13.42
Beverages and tobacco products	18.76	18.19	18.35	18.17	18.12	18.32	18.17	17.94	18.15	17.93	18.21	18.45	18.20	18.34	17.86
Textile mills	12.38	12.55	12.50	12.38	12.40	12.42	12.41	12.55	12.54	12.64	12.59	12.82	12.74	12.63	12.89
Textile product mills	11.67	11.94	11.80	11.79	11.79	11.97	12.03	12.04	12.13	11.96	12.02	11.84	11.98	11.90	11.98
Apparel	10.24	10.61	10.63	10.60	10.62	10.62	10.59	10.64	10.69	10.58	10.61	10.60	10.53	10.64	10.86
Leather and allied products	11.50	11.44	11.24	10.99	11.11	11.26	11.46	11.72	11.58	11.65	11.44	11.64	11.58	11.70	11.88
Paper and paper products	17.99	18.01	17.89	17.77	17.81	18.01	17.90	17.95	18.27	17.93	18.15	18.10	18.05	18.23	18.15
Printing and related support activities ..	15.74	15.80	15.90	15.69	15.77	15.72	15.77	15.65	15.75	15.81	15.80	15.87	15.93	15.91	15.87
Petroleum and coal products	24.47	24.08	24.54	24.56	24.58	24.52	24.09	23.67	23.44	23.30	23.87	24.17	24.44	23.96	25.07
Chemicals	19.67	19.60	19.97	19.95	19.66	19.78	19.54	19.36	19.26	19.19	19.43	19.57	19.61	19.87	19.67
Plastics and rubber products	14.80	14.96	14.94	14.83	14.84	14.87	14.87	14.94	14.99	15.02	15.03	14.98	15.04	15.16	15.23
PRIVATE SERVICE- PROVIDING	15.74	16.42	16.22	16.21	16.24	16.43	16.27	16.26	16.41	16.35	16.56	16.68	16.65	16.73	16.88
Trade, transportation, and utilities	14.92	15.40	15.18	15.22	15.23	15.44	15.30	15.36	15.53	15.45	15.57	15.59	15.44	15.41	15.60
Wholesale trade	18.16	18.91	18.64	18.65	18.60	18.87	18.71	18.74	19.07	18.93	19.09	19.14	19.16	19.24	19.28
Retail trade	12.36	12.58	12.46	12.46	12.49	12.69	12.56	12.60	12.68	12.62	12.70	12.70	12.52	12.51	12.68
Transportation and warehousing	16.70	17.28	16.90	16.93	17.05	17.19	17.07	17.27	17.50	17.45	17.51	17.48	17.48	17.47	17.49
Utilities	26.68	27.42	27.49	27.56	27.55	27.65	27.29	27.14	27.43	27.13	27.47	27.51	27.44	27.38	27.35
Information	22.06	23.23	23.04	22.80	22.85	23.14	23.05	22.95	23.15	23.27	23.60	23.68	23.53	23.68	23.82
Financial activities	17.94	18.80	18.45	18.45	18.47	18.77	18.59	18.58	18.81	18.79	19.02	19.22	19.19	19.27	19.30
Professional and business services	18.08	19.12	18.87	18.78	18.83	19.21	18.88	18.87	19.24	18.96	19.19	19.50	19.44	19.67	19.81
Education and health services	16.71	17.38	17.08	17.12	17.21	17.29	17.26	17.32	17.42	17.45	17.53	17.55	17.62	17.68	17.79
Leisure and hospitality	9.38	9.75	9.54	9.63	9.63	9.65	9.70	9.63	9.62	9.69	9.83	9.90	10.00	10.13	10.13
Other services	14.34	14.77	14.58	14.57	14.69	14.78	14.75	14.70	14.66	14.70	14.89	14.91	14.93	15.06	15.08

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.

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

Industry	Annual average		2006												2007
	2005	2006	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p	Jan. ^p
TOTAL PRIVATE	\$544.33	\$567.87	\$558.71	\$553.76	\$556.42	\$566.81	\$560.09	\$565.42	\$572.85	\$570.83	\$573.25	\$582.08	\$574.26	\$578.67	\$573.48
Seasonally adjusted.....			555.33	557.36	559.39	563.76	563.11	567.15	569.18	569.19	570.54	574.27	574.26	578.67	577.98
GOODS-PRODUCING	705.31	729.87	710.97	708.80	712.75	711.02	722.76	736.20	730.22	741.11	742.56	746.83	739.53	753.17	729.77
Natural resources and mining	853.71	908.01	886.46	868.22	874.78	899.99	892.70	913.96	906.38	909.43	912.46	940.06	942.75	939.82	920.99
CONSTRUCTION	750.22	781.04	744.52	745.24	749.95	753.02	767.46	791.21	792.73	807.18	799.76	811.87	792.30	806.44	774.68
Manufacturing	673.37	690.83	684.67	679.69	684.29	676.30	689.69	692.19	683.03	693.43	698.83	697.56	697.52	712.65	693.53
Durable goods.....	712.95	731.81	723.06	720.07	725.33	713.88	729.57	734.75	721.82	735.90	740.48	740.90	738.03	757.68	733.75
Wood products.....	526.65	533.44	520.74	516.40	525.60	528.28	538.13	539.75	538.54	542.44	535.79	543.04	533.13	540.14	518.92
Nonmetallic mineral products....	700.78	713.34	697.95	694.68	703.84	716.86	718.35	728.64	720.80	734.01	719.84	715.03	698.37	709.35	682.18
Primary metals.....	815.78	842.94	855.10	841.23	835.64	825.16	834.07	834.50	831.98	839.36	859.58	843.47	858.26	857.75	854.11
Fabricated metal products.....	647.34	668.84	665.76	660.07	665.71	649.62	666.13	669.40	665.00	669.76	674.34	679.67	674.41	685.55	667.90
Machinery.....	716.55	728.99	716.94	712.72	716.98	705.12	723.78	723.78	729.74	725.02	733.55	745.12	744.54	768.10	733.41
Computer and electronic products.....	735.59	767.86	753.21	752.54	754.35	751.07	754.27	766.22	766.51	767.02	778.71	781.55	778.41	808.24	783.55
Electrical equipment and appliances.....	618.97	635.87	637.36	631.58	632.22	613.26	630.68	632.31	634.44	640.09	641.57	643.96	638.28	653.95	644.18
Transportation equipment.....	938.03	957.43	950.83	951.78	957.10	926.43	965.01	969.75	916.26	962.68	973.63	961.18	961.48	992.34	959.04
Furniture and related products.....	527.35	535.35	514.90	516.67	519.17	521.36	526.68	534.50	532.51	548.06	549.41	550.37	552.09	560.96	546.06
Miscellaneous manufacturing.....	545.21	556.16	541.70	544.51	554.84	547.50	557.28	558.35	555.05	562.99	559.99	561.44	560.82	568.67	558.34
Nondurable goods.....	608.95	621.78	619.41	613.13	615.38	612.86	619.25	621.49	620.06	620.68	629.24	626.59	627.41	635.82	628.56
Food manufacturing.....	508.55	526.02	517.06	507.78	512.47	507.89	522.18	525.60	524.40	527.32	538.24	535.70	543.02	547.86	536.80
Beverages and tobacco products.....	751.54	741.31	721.16	717.72	726.61	732.80	754.06	751.69	765.93	747.68	744.79	745.38	746.20	740.94	716.19
Textile mills.....	498.47	509.41	510.00	498.91	503.44	498.04	501.36	510.79	504.11	519.50	514.93	516.65	513.42	524.15	520.76
Textile product mills.....	455.52	477.56	476.72	476.32	469.24	472.82	482.40	486.42	482.77	481.99	480.80	464.13	480.40	477.19	472.01
Apparel.....	366.17	387.27	379.49	380.54	385.51	380.20	388.65	391.55	388.05	388.29	388.33	395.38	390.66	390.49	401.82
Leather and allied products.....	441.96	445.50	438.36	428.61	442.18	430.13	450.38	458.25	448.15	460.18	441.58	452.80	443.51	452.79	449.06
Paper and paper products.....	764.04	772.26	762.11	746.34	748.02	761.82	771.49	779.03	792.92	778.16	787.71	778.30	777.96	783.89	773.19
Printing and related support activities.....	604.73	618.81	618.51	611.91	616.61	609.94	613.45	610.35	609.53	615.01	627.26	630.04	627.64	634.81	620.52
Petroleum and coal products.....	1,114.51	1,084.03	1,089.58	1,075.73	1,088.89	1,113.21	1,088.87	1,079.35	1,071.21	1,046.17	1,093.25	1,099.74	1,109.58	1,054.24	1,123.14
Chemicals.....	831.76	833.59	856.71	855.86	841.45	844.61	824.59	822.80	816.62	815.58	833.55	825.85	823.62	842.49	824.17
Plastics and rubber products.....	591.58	607.82	606.56	597.65	603.99	594.80	603.72	611.05	604.10	612.82	614.73	609.69	609.12	626.11	622.91
PRIVATE SERVICE-PROVIDING	509.58	532.84	527.15	521.96	521.30	535.62	523.89	528.45	539.89	533.01	536.54	545.44	537.80	542.05	540.16
Trade, transportation, and utilities	498.43	514.61	500.94	500.74	502.59	517.24	509.49	516.10	526.47	520.67	523.15	523.82	515.70	517.78	513.24
Wholesale trade.....	685.00	718.30	706.46	701.24	699.36	722.72	707.24	712.12	732.29	719.34	723.51	734.98	728.08	731.12	723.00
Retail trade.....	377.58	383.16	375.05	372.55	375.95	388.31	381.82	385.56	393.08	387.43	388.62	386.08	379.36	384.06	377.86
Transportation and warehousing.....	618.58	637.14	615.16	611.17	620.62	629.15	624.76	638.99	654.50	650.89	649.62	652.00	648.51	648.14	641.88
Utilities.....	1,095.90	1,136.08	1,118.84	1,127.20	1,121.29	1,144.71	1,129.81	1,118.17	1,141.09	1,131.32	1,145.50	1,160.92	1,149.74	1,144.48	1,132.29
Information	805.00	850.81	847.87	827.64	827.17	851.55	832.11	837.68	861.18	856.34	868.48	878.53	856.49	864.32	862.28
Financial activities	645.10	672.40	673.43	654.98	651.99	681.35	654.37	657.73	682.80	665.17	673.31	699.61	683.16	689.87	687.08
Professional and business services	618.87	662.23	652.90	646.03	645.87	666.59	647.58	654.79	671.48	659.81	663.97	684.45	672.62	678.62	673.54
Education and health services	544.59	564.95	560.22	554.69	555.88	563.65	557.50	562.90	571.38	567.13	569.73	572.13	570.89	572.83	576.40
Leisure and hospitality	241.36	250.11	241.36	242.68	243.64	248.01	246.38	249.42	255.89	253.88	251.65	256.41	253.00	257.30	251.22
Other services	443.37	456.60	451.98	448.76	450.98	458.18	454.30	455.70	457.39	457.17	458.61	462.21	459.84	463.85	461.45

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:												
2002.....	43.5	37.2	33.6	38.8	40.8	38.5	39.2	41.7	48.0	50.2	52.2	52.9
2003.....	51.6	50.2	62.1	64.9	59.9	57.6	56.5	51.4	56.5	55.0	51.4	55.6
2004.....	52.5	61.3	52.7	60.8	54.9	58.5	59.0	60.4	53.6	53.1	62.2	60.4
2005.....	64.2	64.6	64.0	62.8	56.7	55.9	59.4	55.9	55.8	57.7	53.6	57.6
2006.....	55.2											
Over 3-month span:												
2002.....	39.6	33.8	34.9	33.8	35.3	42.3	39.2	34.4	42.6	48.6	48.7	50.2
2003.....	55.9	53.2	57.0	64.2	70.3	65.6	59.9	55.2	57.9	59.0	60.4	55.8
2004.....	51.3	55.9	56.8	61.3	57.2	59.4	62.8	63.7	59.9	53.4	57.2	62.2
2005.....	70.5	66.7	66.0	66.9	63.3	62.4	60.3	62.6	57.7	59.0	57.7	59.9
2006.....	62.9											
Over 6-month span:												
2002.....	34.7	33.1	31.1	33.3	33.5	36.5	32.7	32.4	40.8	44.8	47.7	47.5
2003.....	49.8	51.8	55.0	60.8	63.5	63.7	63.3	62.6	58.3	62.1	55.4	55.2
2004.....	54.1	57.2	57.6	56.3	56.5	58.1	65.8	63.8	61.9	59.2	62.8	60.8
2005.....	63.8	63.3	67.1	68.2	67.1	67.1	63.5	62.9	62.6	62.1	61.5	61.0
2006.....	62.6											
Over 12-month span:												
2002.....	34.5	31.5	32.9	33.5	34.2	35.1	32.7	33.1	37.1	36.7	37.2	39.2
2003.....	40.3	42.1	44.8	48.4	50.7	57.7	57.0	55.2	56.7	58.3	60.1	60.3
2004.....	60.1	61.0	59.5	58.8	58.3	60.3	60.6	62.8	60.3	58.8	59.7	61.3
2005.....	67.3	65.3	66.0	64.7	65.8	65.3	67.6	66.4	66.5	66.4	65.5	65.1
2006.....	65.8											
Manufacturing payrolls, 84 industries												
Over 1-month span:												
2002.....	34.5	17.3	17.3	10.7	22.0	17.3	17.3	31.5	26.8	38.1	42.3	42.3
2003.....	41.1	45.2	47.0	63.1	50.0	48.2	56.5	43.5	41.7	43.5	40.5	42.3
2004.....	36.9	48.2	43.5	48.2	38.7	37.5	42.3	45.8	44.0	44.6	48.2	51.8
2005.....	63.1	48.2	56.0	53.0	47.0	58.9	51.2	44.6	40.5	47.6	43.5	38.7
2006.....	44.6											
Over 3-month span:												
2002.....	15.5	11.3	13.7	9.5	8.9	11.9	15.5	15.5	17.9	29.2	30.4	33.3
2003.....	45.2	42.9	43.5	57.7	60.1	58.3	55.4	46.4	47.0	42.9	42.9	37.5
2004.....	35.1	39.9	40.5	42.3	35.1	33.9	40.5	41.7	42.3	40.5	39.9	43.5
2005.....	56.5	52.4	52.4	51.2	47.6	54.8	48.2	52.4	39.3	42.3	35.7	39.9
2006.....	48.2											
Over 6-month span:												
2002.....	11.9	11.3	7.1	8.3	9.5	10.7	7.1	9.5	12.5	16.1	25.0	24.4
2003.....	28.0	32.7	35.1	47.0	50.0	52.4	54.2	52.4	48.8	51.2	41.1	38.7
2004.....	31.5	35.1	36.3	34.5	32.1	33.3	44.0	39.3	32.1	36.9	34.5	39.3
2005.....	42.9	41.7	50.0	50.6	51.2	53.0	45.8	45.8	47.6	45.2	44.6	39.9
2006.....	41.1											
Over 12-month span:												
2002.....	10.7	6.0	6.5	6.0	8.3	7.1	7.1	8.3	10.7	10.7	9.5	10.7
2003.....	13.1	14.3	13.1	20.2	23.2	35.7	36.9	38.1	36.3	44.0	44.6	44.6
2004.....	44.6	44.6	41.7	40.5	37.5	36.3	32.1	33.9	32.7	33.3	33.3	37.5
2005.....	44.6	40.5	40.5	40.5	39.3	42.3	48.8	48.8	44.6	45.2	43.5	41.7
2006.....	42.9											

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						
	2006					2007		2006					2007	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^P	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^P
Total ²	4,188	4,177	4,157	4,200	4,401	4,222	4,149	3.0	3.0	3.0	3.0	3.1	3.0	2.9
Industry														
Total private ²	3,714	3,715	3,702	3,735	3,928	3,746	3,666	3.1	3.1	3.1	3.1	3.3	3.1	3.1
Construction.....	185	148	137	106	107	142	229	2.3	1.9	1.7	1.4	1.4	1.8	2.9
Manufacturing.....	330	317	364	328	362	337	330	2.3	2.2	2.5	2.3	2.5	2.3	2.3
Trade, transportation, and utilities.....	741	721	658	671	767	727	660	2.7	2.7	2.4	2.5	2.8	2.7	2.4
Professional and business services.....	682	755	709	705	745	707	642	3.7	4.1	3.9	3.8	4.0	3.8	3.5
Education and health services.....	683	701	749	713	734	707	670	3.7	3.8	4.0	3.8	3.9	3.8	3.6
Leisure and hospitality.....	525	544	579	625	612	552	566	3.8	4.0	4.2	4.5	4.4	4.0	4.0
Government.....	469	467	460	463	473	477	482	2.1	2.1	2.0	2.0	2.1	2.1	2.1
Region³														
Northeast.....	746	770	760	772	849	733	717	2.8	2.9	2.9	2.9	3.2	2.8	2.7
South.....	1,599	1,626	1,649	1,572	1,674	1,653	1,631	3.2	3.2	3.3	3.1	3.3	3.2	3.2
Midwest.....	851	789	769	770	810	822	783	2.6	2.4	2.4	2.4	2.5	2.5	2.4
West.....	1,009	1,017	989	1,034	1,044	1,005	1,011	3.2	3.2	3.1	3.3	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 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						
	2006					2007		2006					2007	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^P	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^P
Total ²	4,912	4,917	4,983	4,994	4,959	4,959	4,815	3.6	3.6	3.6	3.6	3.6	3.6	3.5
Industry														
Total private ²	4,434	4,482	4,616	4,665	4,662	4,607	4,509	3.9	3.9	4.0	4.1	4.1	4.0	3.9
Construction.....	369	336	345	395	341	299	298	4.8	4.4	4.5	5.1	4.4	3.9	3.9
Manufacturing.....	359	314	366	363	375	369	371	2.5	2.2	2.6	2.6	2.7	2.6	2.6
Trade, transportation, and utilities.....	1,070	965	1,008	1,012	990	1,020	1,018	4.1	3.7	3.8	3.8	3.8	3.9	3.9
Professional and business services.....	830	1,028	994	1,010	963	954	953	4.7	5.8	5.6	5.7	5.4	5.4	5.3
Education and health services.....	478	467	529	492	515	508	518	2.7	2.6	2.9	2.7	2.8	2.8	2.9
Leisure and hospitality.....	834	859	893	903	969	956	934	6.3	6.5	6.7	6.8	7.2	7.1	7.0
Government.....	407	386	363	348	371	384	379	1.8	1.7	1.6	1.6	1.7	1.7	1.7
Region³														
Northeast.....	729	720	727	713	768	833	709	2.9	2.8	2.8	2.8	3.0	3.2	2.8
South.....	1,927	2,019	1,969	1,979	1,900	1,899	1,837	3.9	4.1	4.0	4.0	3.9	3.9	3.7
Midwest.....	1,053	1,031	1,097	1,061	1,150	1,167	1,184	3.3	3.3	3.5	3.4	3.6	3.7	3.7
West.....	1,176	1,163	1,198	1,249	1,209	1,142	1,156	3.9	3.8	3.9	4.1	3.9	3.7	3.8

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						
	2006					2007		2006					2007	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^p	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^p
Total ²	4,463	4,470	4,613	4,844	4,540	4,602	4,556	3.3	3.3	3.4	3.5	3.3	3.4	3.3
Industry														
Total private ²	4,158	4,123	4,323	4,543	4,253	4,296	4,263	3.6	3.6	3.8	4.0	3.7	3.7	3.7
Construction.....	346	346	373	413	387	400	322	4.5	4.5	4.8	5.4	5.0	5.2	4.2
Manufacturing.....	368	389	359	360	372	399	422	2.6	2.7	2.5	2.5	2.6	2.8	3.0
Trade, transportation, and utilities.....	1,002	990	987	1,020	962	973	943	3.8	3.8	3.8	3.9	3.7	3.7	3.6
Professional and business services.....	728	824	921	974	851	894	862	4.1	4.7	5.2	5.5	4.8	5.0	4.8
Education and health services.....	437	396	424	430	430	423	419	2.4	2.2	2.4	2.4	2.4	2.3	2.3
Leisure and hospitality.....	804	726	791	838	835	768	835	6.1	5.5	6.0	6.3	6.2	5.7	6.2
Government.....	307	315	298	305	283	309	294	1.4	1.4	1.3	1.4	1.3	1.4	1.3
Region³														
Northeast.....	697	731	745	707	670	740	675	2.7	2.9	2.9	2.8	2.6	2.9	2.6
South.....	1,828	1,742	1,709	2,011	1,796	1,783	1,763	3.7	3.6	3.5	4.1	3.7	3.6	3.6
Midwest.....	962	970	1,072	985	1,054	1,034	1,054	3.1	3.1	3.4	3.1	3.3	3.3	3.3
West.....	1,044	1,031	1,081	1,079	1,036	1,037	1,041	3.4	3.4	3.5	3.5	3.4	3.4	3.4

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

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

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

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

NOTE: The 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						
	2006					2007		2006					2007	
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^p	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb. ^p
Total ²	2,692	2,566	2,655	2,774	2,759	2,648	2,705	2.0	1.9	1.9	2.0	2.0	1.9	2.0
Industry														
Total private ²	2,532	2,400	2,513	2,625	2,615	2,505	2,571	2.2	2.1	2.2	2.3	2.3	2.2	2.2
Construction.....	153	135	137	144	143	141	120	2.0	1.7	1.8	1.9	1.9	1.8	1.6
Manufacturing.....	201	185	196	211	222	229	212	1.4	1.3	1.4	1.5	1.6	1.6	1.5
Trade, transportation, and utilities.....	610	591	593	661	597	594	606	2.3	2.3	2.3	2.5	2.3	2.3	2.3
Professional and business services.....	424	443	475	486	497	498	486	2.4	2.5	2.7	2.7	2.8	2.8	2.7
Education and health services.....	295	263	274	278	289	271	280	1.6	1.5	1.5	1.5	1.6	1.5	1.5
Leisure and hospitality.....	553	510	542	565	602	489	579	4.2	3.9	4.1	4.2	4.5	3.7	4.3
Government.....	158	160	144	147	146	150	139	.7	.7	.7	.7	.7	.7	.6
Region³														
Northeast.....	409	383	359	409	367	355	322	1.6	1.5	1.4	1.6	1.4	1.4	1.3
South.....	1,140	1,102	1,101	1,167	1,171	1,099	1,152	2.3	2.3	2.2	2.4	2.4	2.2	2.3
Midwest.....	558	541	604	543	559	595	599	1.8	1.7	1.9	1.7	1.8	1.9	1.9
West.....	575	551	592	645	638	602	629	1.9	1.8	1.9	2.1	2.1	2.0	2.0

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 2006.

County by NAICS supersector	Establishments, third quarter 2006 (thousands)	Employment		Average weekly wage ¹	
		September 2006 (thousands)	Percent change, September 2005-06 ²	Third quarter 2006	Percent change, third quarter 2005-06 ²
United States ³	8,841.2	134,988.9	1.5	\$784	0.9
Private industry	8,562.2	113,752.0	1.7	776	.8
Natural resources and mining	124.0	1,895.7	3.3	761	3.7
Construction	882.5	7,852.5	3.2	829	1.7
Manufacturing	363.4	14,152.6	-.5	947	.1
Trade, transportation, and utilities	1,899.4	25,982.1	1.1	685	.4
Information	144.9	3,034.8	-.7	1,217	.7
Financial activities	852.0	8,175.1	1.0	1,133	1.9
Professional and business services	1,437.6	17,684.7	3.1	938	1.0
Education and health services	799.9	16,992.1	2.6	748	.4
Leisure and hospitality	711.4	13,290.1	2.0	334	.9
Other services	1,128.5	4,373.4	.8	510	1.0
Government	279.0	21,236.9	.8	832	1.7
Los Angeles, CA	392.8	4,161.2	.7	894	1.7
Private industry	389.1	3,608.2	.8	872	1.2
Natural resources and mining	.6	12.2	7.4	1,184	-1.9
Construction	14.2	160.0	2.8	896	1.8
Manufacturing	15.9	463.8	-1.7	937	3.3
Trade, transportation, and utilities	55.6	807.9	.8	750	.8
Information	9.0	206.4	-1.6	1,486	1.3
Financial activities	25.2	247.2	-.2	1,440	3.0
Professional and business services	43.4	603.5	1.4	978	-1.4
Education and health services	28.2	469.4	1.7	834	2.2
Leisure and hospitality	27.1	392.5	1.9	513	2.8
Other services	169.9	245.1	1.9	413	2.2
Government	3.7	553.0	.2	1,038	4.6
Cook, IL	135.0	2,553.4	.7	928	1.0
Private industry	133.8	2,241.8	.9	925	1.3
Natural resources and mining	.1	1.6	-.9	1,036	7.2
Construction	11.8	100.6	3.1	1,147	3.1
Manufacturing	7.2	245.6	-1.8	956	-.1
Trade, transportation, and utilities	27.5	477.6	.3	784	3.3
Information	2.5	58.6	-3.0	1,275	-2.8
Financial activities	15.5	219.5	.4	1,433	2.9
Professional and business services	27.6	441.4	2.5	1,135	-.1
Education and health services	13.2	363.4	1.8	813	1.0
Leisure and hospitality	11.3	236.1	2.0	411	2.2
Other services	13.4	93.8	-1.9	670	1.1
Government	1.2	311.5	-.8	(⁴)	(⁴)
New York, NY	116.2	2,292.3	1.9	1,421	.3
Private industry	115.9	1,852.5	2.4	1,519	.9
Natural resources and mining	.0	.1	-7.3	1,571	15.5
Construction	2.2	32.4	5.1	1,395	2.0
Manufacturing	3.0	38.9	-7.5	1,105	2.2
Trade, transportation, and utilities	21.3	241.0	1.2	1,081	1.1
Information	4.2	132.4	.5	1,825	2.9
Financial activities	17.8	369.7	3.2	2,619	.7
Professional and business services	23.2	464.3	2.9	1,637	.7
Education and health services	8.3	276.2	1.5	967	-.9
Leisure and hospitality	10.7	198.8	2.1	685	-.3
Other services	16.8	85.3	1.2	855	4.3
Government	.2	439.9	-.5	1,010	-4.6
Harris, TX	92.7	1,959.1	4.2	950	2.0
Private industry	92.3	1,708.2	4.5	960	1.6
Natural resources and mining	1.4	73.7	10.7	2,286	-6.3
Construction	6.3	142.0	7.1	917	6.3
Manufacturing	4.6	178.4	5.5	1,204	1.4
Trade, transportation, and utilities	21.2	409.4	3.4	846	1.7
Information	1.3	31.9	.7	1,169	1.0
Financial activities	10.1	117.4	.2	1,182	5.2
Professional and business services	18.0	320.2	5.1	1,074	1.4
Education and health services	9.7	204.0	3.6	812	.9
Leisure and hospitality	7.0	170.1	4.3	358	.6
Other services	10.6	56.0	1.4	551	.7
Government	.4	250.9	2.1	878	4.9
Maricopa, AZ	92.3	1,819.1	4.4	792	.5
Private industry	91.7	1,605.4	4.8	779	-.4
Natural resources and mining	.5	8.1	2.2	682	12.9
Construction	9.5	177.8	5.9	804	1.4
Manufacturing	3.4	136.9	2.3	1,082	.6
Trade, transportation, and utilities	19.7	366.7	4.1	750	-1.8
Information	1.5	31.3	-1.3	1,024	3.7
Financial activities	11.3	150.3	2.7	1,027	-.1
Professional and business services	19.9	316.8	5.8	756	-.4
Education and health services	8.9	188.6	6.2	835	-.4
Leisure and hospitality	6.4	174.0	4.2	368	-1.6
Other services	6.4	47.8	3.0	550	.5
Government	.6	213.7	1.2	897	7.3

See footnotes at end of table.

22. Continued—Quarterly Census of Employment and Wages: 10 largest counties, third quarter 2006.

County by NAICS supersector	Establishments, third quarter 2006 (thousands)	Employment		Average weekly wage ¹	
		September 2006 (thousands)	Percent change, September 2005-06 ²	Third quarter 2006	Percent change, third quarter 2005-06 ²
Orange, CA	95.9	1,517.9	1.1	\$897	-1.1
Private industry	94.5	1,378.8	1.2	893	-1.0
Natural resources and mining	.2	5.1	-16.5	636	1.4
Construction	7.1	111.0	3.7	972	1.1
Manufacturing	5.6	183.4	.5	1,083	2.4
Trade, transportation, and utilities	17.9	271.2	.2	826	.2
Information	1.4	31.1	-2.3	1,199	-3.5
Financial activities	11.5	137.0	-5.1	1,381	-5.9
Professional and business services	19.4	280.4	3.7	931	.1
Education and health services	9.9	138.9	4.8	849	.4
Leisure and hospitality	7.1	172.2	3.0	387	.0
Other services	14.4	48.5	-1.7	549	.5
Government	1.4	139.0	.3	938	-1.6
Dallas, TX	67.0	1,466.0	2.7	961	2.2
Private industry	66.5	1,306.9	3.0	969	2.1
Natural resources and mining	.6	7.4	3.4	3,640	48.6
Construction	4.3	80.4	2.4	877	2.5
Manufacturing	3.2	148.8	2.0	1,099	-3.9
Trade, transportation, and utilities	14.8	303.9	1.4	907	1.8
Information	1.7	52.7	-2.0	1,300	2.9
Financial activities	8.5	140.8	3.3	1,285	6.4
Professional and business services	14.0	263.3	4.4	1,050	2.2
Education and health services	6.4	139.2	4.1	876	-1.9
Leisure and hospitality	5.1	128.1	4.6	436	3.1
Other services	6.4	38.9	1.2	608	.7
Government	.4	159.1	.3	894	3.4
San Diego, CA	92.5	1,321.7	.9	850	-.7
Private industry	91.0	1,106.4	.9	832	-.8
Natural resources and mining	.8	11.6	-1.6	527	.6
Construction	7.3	95.0	.7	877	-1.7
Manufacturing	3.3	103.6	-.7	1,112	1.6
Trade, transportation, and utilities	14.6	220.1	.4	695	-.3
Information	1.3	37.1	-.7	1,554	-19.2
Financial activities	10.1	83.8	-.8	1,041	-3.5
Professional and business services	16.6	215.6	1.2	1,052	4.9
Education and health services	8.0	123.5	1.3	816	1.6
Leisure and hospitality	6.8	160.0	3.5	397	-.3
Other services	22.0	56.0	1.2	479	1.3
Government	1.5	215.3	1.2	944	-.1
King, WA	75.6	1,167.1	3.6	1,044	4.7
Private industry	75.2	1,015.2	4.2	1,052	4.6
Natural resources and mining	.4	3.1	-3.7	1,193	17.4
Construction	6.6	70.5	11.0	954	.1
Manufacturing	2.5	112.4	11.5	1,198	-3.5
Trade, transportation, and utilities	14.7	221.2	1.9	876	2.8
Information	1.7	74.0	5.2	2,812	19.4
Financial activities	6.8	76.0	-.4	1,247	6.5
Professional and business services	12.4	183.7	5.7	1,095	.3
Education and health services	6.3	118.2	2.3	796	.8
Leisure and hospitality	5.9	110.8	2.6	423	2.4
Other services	17.8	45.2	.0	537	2.7
Government	.5	151.9	-.4	984	4.5
Miami-Dade, FL	84.1	1,008.4	.6	792	1.5
Private industry	83.8	858.2	1.0	760	1.7
Natural resources and mining	.5	8.4	-2.6	487	4.1
Construction	5.8	53.2	13.6	795	-.9
Manufacturing	2.6	47.5	-3.2	700	-2.2
Trade, transportation, and utilities	22.9	249.0	1.7	705	-.8
Information	1.6	21.4	-5.4	1,139	3.5
Financial activities	10.1	71.3	3.4	1,085	.3
Professional and business services	16.9	138.2	-5.7	943	7.8
Education and health services	8.6	133.1	3.4	763	1.6
Leisure and hospitality	5.6	98.4	-.3	450	(⁴)
Other services	7.5	34.5	1.9	490	2.3
Government	.3	150.2	-1.4	988	1.6

¹ Average weekly wages were calculated using unrounded data.

Virgin Islands.

² Percent changes were computed from quarterly employment and pay data adjusted for noneconomic county reclassifications. See Notes on Current Labor Statistics.⁴ Data do not meet BLS or State agency disclosure standards.³ Totals for the United States do not include data for Puerto Rico or the

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 2006.

State	Establishments, third quarter 2006 (thousands)	Employment		Average weekly wage ¹	
		September 2006 (thousands)	Percent change, September 2005-06	Third quarter 2006	Percent change, third quarter 2005-06
United States ²	8,841.2	134,988.9	1.5	\$784	0.9
Alabama	117.3	1,938.9	1.6	682	1.9
Alaska	21.1	324.8	1.4	798	.1
Arizona	150.6	2,629.0	4.2	753	1.1
Arkansas	81.9	1,183.9	1.5	603	.7
California	1,270.4	15,655.0	1.5	892	.6
Colorado	176.9	2,260.1	2.2	819	1.4
Connecticut	111.9	1,680.7	1.6	957	-.9
Delaware	30.2	424.6	.5	850	3.4
District of Columbia	32.0	674.2	.7	1,307	3.6
Florida	588.1	7,941.7	1.9	713	.7
Georgia	264.5	4,039.3	2.0	752	.5
Hawaii	37.4	621.2	2.3	722	1.1
Idaho	55.3	661.2	4.1	613	1.3
Illinois	350.2	5,883.6	1.1	831	.7
Indiana	155.4	2,922.7	.3	687	-.3
Iowa	92.8	1,480.7	1.2	641	.0
Kansas	85.6	1,347.3	2.4	662	.6
Kentucky	110.7	1,795.1	.9	656	.6
Louisiana	122.5	1,835.7	3.7	683	7.1
Maine	49.4	610.2	.6	636	.8
Maryland	161.5	2,545.0	.7	858	.5
Massachusetts	208.8	3,228.1	.9	950	.3
Michigan	261.0	4,278.9	-1.8	790	.3
Minnesota	165.5	2,685.1	.0	784	-.6
Mississippi	69.1	1,134.3	2.9	585	2.1
Missouri	172.1	2,725.1	1.1	691	.0
Montana	41.4	434.4	2.3	581	3.0
Nebraska	57.8	906.9	1.1	633	.0
Nevada	72.4	1,287.6	3.7	751	.0
New Hampshire	48.9	634.9	.6	774	.3
New Jersey	279.8	3,984.7	.7	931	.3
New Mexico	52.6	826.1	4.4	654	4.0
New York	573.2	8,471.7	.8	950	1.1
North Carolina	241.5	3,982.6	1.8	700	1.6
North Dakota	24.7	342.2	2.0	589	1.4
Ohio	291.7	5,350.9	-.1	725	.3
Oklahoma	97.3	1,517.6	2.2	633	3.3
Oregon	128.6	1,729.2	2.7	719	.7
Pennsylvania	335.9	5,644.8	.8	768	.5
Rhode Island	36.0	490.8	.8	763	3.7
South Carolina	132.4	1,866.0	1.8	642	1.1
South Dakota	29.8	389.6	2.1	571	.7
Tennessee	137.1	2,761.1	1.4	698	1.2
Texas	536.7	10,019.0	3.6	786	2.5
Utah	88.1	1,188.7	4.8	660	2.0
Vermont	24.7	305.8	.6	672	1.4
Virginia	220.0	3,649.5	1.0	815	-.1
Washington	214.5	2,911.9	3.3	823	2.7
West Virginia	48.2	711.8	1.2	599	1.7
Wisconsin	161.8	2,800.8	.5	687	.1
Wyoming	24.1	274.1	4.6	706	10.0
Puerto Rico	60.6	1,020.9	-1.9	439	1.2
Virgin Islands	3.4	43.2	-2.0	692	12.5

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)					
1996	7,189,168	117,963,132	\$3,414,514,808	\$28,946	\$557
1997	7,369,473	121,044,432	3,674,031,718	30,353	584
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
UI covered					
1996	7,137,644	115,081,246	\$3,298,045,286	\$28,658	\$551
1997	7,317,363	118,233,942	3,553,933,885	30,058	578
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
Private industry covered					
1996	6,946,858	99,268,446	\$2,837,334,217	\$28,582	\$550
1997	7,121,182	102,175,161	3,071,807,287	30,064	578
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
State government covered					
1996	62,146	4,191,726	\$131,605,800	\$31,397	\$604
1997	65,352	4,214,451	137,057,432	32,521	625
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
Local government covered					
1996	128,640	11,621,074	\$329,105,269	\$28,320	\$545
1997	130,829	11,844,330	345,069,166	29,134	560
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
Federal government covered (UCFE)					
1996	51,524	2,881,887	\$116,469,523	\$40,414	\$777
1997	52,110	2,810,489	120,097,833	42,732	822
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

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 2005

Industry, establishments, and employment	Total	Size of establishments								
		Fewer than 5 workers ¹	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 or more workers
Total all industries²										
Establishments, first quarter	8,203,193	4,937,585	1,368,471	900,660	620,350	210,747	119,647	29,663	10,633	5,437
Employment, March	108,400,665	7,342,119	9,060,122	12,154,050	18,712,178	14,484,991	17,908,651	10,135,444	7,202,266	11,400,844
Natural resources and mining										
Establishments, first quarter	122,314	69,037	23,171	15,130	9,542	3,024	1,679	505	170	56
Employment, March	1,591,414	110,672	153,458	203,615	285,777	207,152	254,726	175,153	114,603	86,258
Construction										
Establishments, first quarter	831,198	541,438	136,884	81,651	49,546	13,963	6,186	1,178	279	73
Employment, March	6,801,693	788,401	897,445	1,095,463	1,480,278	946,712	911,056	393,664	185,993	102,681
Manufacturing										
Establishments, first quarter	365,703	139,265	62,539	55,531	53,217	25,598	19,498	6,468	2,432	1,155
Employment, March	14,154,939	241,424	419,954	763,046	1,655,600	1,792,309	2,996,843	2,232,678	1,644,836	2,408,249
Trade, transportation, and utilities										
Establishments, first quarter	1,857,536	986,399	378,634	243,020	154,658	53,059	32,572	6,921	1,746	527
Employment, March	25,178,580	1,648,596	2,519,528	3,253,554	4,670,426	3,660,431	4,845,270	2,356,307	1,132,759	1,091,709
Information										
Establishments, first quarter	141,249	80,206	20,516	16,131	13,347	5,569	3,553	1,153	518	256
Employment, March	3,044,649	111,997	136,803	220,670	410,443	384,425	539,896	393,212	352,742	494,461
Financial activities										
Establishments, first quarter	801,843	514,145	145,932	80,803	39,849	11,798	6,105	1,872	884	455
Employment, March	7,920,659	838,192	961,226	1,069,124	1,186,061	805,249	917,119	647,897	614,198	881,593
Professional and business services										
Establishments, first quarter	1,352,317	914,425	186,219	116,874	77,281	29,848	19,141	5,588	2,075	866
Employment, March	16,461,563	1,277,785	1,223,193	1,575,508	2,339,310	2,069,104	2,908,692	1,909,120	1,412,210	1,746,641
Education and health services										
Establishments, first quarter	758,591	356,913	171,672	109,414	69,888	25,217	17,969	3,985	1,810	1,723
Employment, March	16,369,857	659,950	1,139,990	1,470,423	2,099,073	1,757,066	2,693,346	1,355,658	1,260,059	3,934,292
Leisure and hospitality										
Establishments, first quarter	683,022	265,161	115,748	124,094	128,070	37,122	10,332	1,563	624	308
Employment, March	12,325,005	421,191	780,979	1,739,011	3,861,338	2,485,398	1,460,338	528,449	422,549	625,752
Other services										
Establishments, first quarter	1,097,218	889,756	117,854	56,303	24,642	5,518	2,603	429	95	18
Employment, March	4,284,985	1,069,170	769,066	741,466	715,321	375,264	380,117	143,056	62,317	29,208

¹ Includes establishments that reported no workers in March 2005.

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

² Includes data for unclassified establishments, not shown separately.

Table 26. Average annual wages for 2004 and 2005 for all covered workers¹ by metropolitan area

Metropolitan area ²	Average annual wages ³		
	2004	2005	Percent change, 2004-05
Metropolitan areas ⁴	\$40,917	\$42,253	3.3
Abilene, TX	27,103	27,876	2.9
Aguadilla-Isabela-San Sebastian, PR	18,579	18,717	0.7
Akron, OH	36,548	37,471	2.5
Albany, GA	30,930	31,741	2.6
Albany-Schenectady-Troy, NY	38,557	39,201	1.7
Albuquerque, NM	34,530	35,665	3.3
Alexandria, LA	29,003	30,114	3.8
Allentown-Bethlehem-Easton, PA-NJ	37,461	38,506	2.8
Altoona, PA	29,115	29,642	1.8
Amarillo, TX	30,780	31,954	3.8
Ames, IA	32,689	33,889	3.7
Anchorage, AK	40,652	41,712	2.6
Anderson, IN	31,719	31,418	-0.9
Anderson, SC	28,937	29,463	1.8
Ann Arbor, MI	44,926	45,820	2.0
Anniston-Oxford, AL	29,915	31,231	4.4
Appleton, WI	33,618	34,431	2.4
Asheville, NC	29,989	30,926	3.1
Athens-Clarke County, GA	31,702	32,512	2.6
Atlanta-Sandy Springs-Marietta, GA	43,250	44,595	3.1
Atlantic City, NJ	35,700	36,735	2.9
Auburn-Opelika, AL	28,785	29,196	1.4
Augusta-Richmond County, GA-SC	33,513	34,588	3.2
Austin-Round Rock, TX	42,144	43,500	3.2
Bakersfield, CA	33,707	34,165	1.4
Baltimore-Towson, MD	41,815	43,486	4.0
Bangor, ME	29,882	30,707	2.8
Barnstable Town, MA	34,598	35,123	1.5
Baton Rouge, LA	33,162	34,523	4.1
Battle Creek, MI	36,576	37,994	3.9
Bay City, MI	32,386	33,572	3.7
Beaumont-Port Arthur, TX	34,675	36,530	5.3
Bellingham, WA	29,957	31,128	3.9
Bend, OR	30,084	31,492	4.7
Billings, MT	30,290	31,748	4.8
Binghamton, NY	32,168	33,290	3.5
Birmingham-Hoover, AL	37,983	39,353	3.6
Bismarck, ND	30,825	31,504	2.2
Blacksburg-Christiansburg-Radford, VA	30,906	32,196	4.2
Bloomington, IN	29,288	30,080	2.7
Bloomington-Normal, IL	38,823	39,404	1.5
Boise City-Nampa, ID	33,614	34,623	3.0
Boston-Cambridge-Quincy, MA-NH	52,976	54,199	2.3
Boulder, CO	47,264	49,115	3.9
Bowling Green, KY	30,695	31,306	2.0
Bremerton-Silverdale, WA	35,599	36,467	2.4
Bridgeport-Stamford-Norwalk, CT	67,223	71,095	5.8
Brownsville-Harlingen, TX	24,222	24,893	2.8
Brunswick, GA	30,408	30,902	1.6
Buffalo-Niagara Falls, NY	34,923	35,302	1.1
Burlington, NC	30,218	31,084	2.9
Burlington-South Burlington, VT	37,319	38,582	3.4
Canton-Massillon, OH	31,304	32,080	2.5
Cape Coral-Fort Myers, FL	33,932	35,649	5.1
Carson City, NV	36,799	38,428	4.4
Casper, WY	32,284	34,810	7.8
Cedar Rapids, IA	36,546	37,902	3.7
Champaign-Urbana, IL	32,595	33,278	2.1
Charleston, WV	34,236	35,363	3.3
Charleston-North Charleston, SC	32,233	33,896	5.2
Charlotte-Gastonia-Concord, NC-SC	41,897	43,728	4.4
Charlottesville, VA	35,743	37,392	4.6
Chattanooga, TN-GA	32,701	33,743	3.2
Cheyenne, WY	31,007	32,208	3.9
Chicago-Naperville-Joliet, IL-IN-WI	45,181	46,609	3.2
Chico, CA	29,082	30,007	3.2
Cincinnati-Middletown, OH-KY-IN	39,170	40,343	3.0
Clarksville, TN-KY	28,353	29,870	5.4
Cleveland, TN	31,529	32,030	1.6
Cleveland-Elyria-Mentor, OH	39,172	39,973	2.0
Coeur d'Alene, ID	27,505	28,208	2.6
College Station-Bryan, TX	27,716	29,032	4.7
Colorado Springs, CO	36,318	37,268	2.6
Columbia, MO	30,462	31,263	2.6
Columbia, SC	32,619	33,386	2.4
Columbus, GA-AL	30,263	31,370	3.7
Columbus, IN	38,076	38,446	1.0
Columbus, OH	38,687	39,806	2.9
Corpus Christi, TX	31,907	32,975	3.3
Corvallis, OR	37,248	39,357	5.7

See footnotes at end of table.

Table 26. Average annual wages for 2004 and 2005 for all covered workers¹ by metropolitan area — Continued

Metropolitan area ²	Average annual wages ³		
	2004	2005	Percent change, 2004-05
Cumberland, MD-WV	\$28,143	\$28,645	1.8
Dallas-Fort Worth-Arlington, TX	43,925	45,337	3.2
Dalton, GA	31,972	32,848	2.7
Danville, IL	31,218	31,861	2.1
Danville, VA	27,855	28,449	2.1
Davenport-Moline-Rock Island, IA-IL	34,555	35,546	2.9
Dayton, OH	36,996	37,922	2.5
Decatur, AL	32,772	33,513	2.3
Decatur, IL	36,487	38,444	5.4
Deltona-Daytona Beach-Ormond Beach, FL	29,346	29,927	2.0
Denver-Aurora, CO	44,568	45,940	3.1
Des Moines, IA	38,499	39,760	3.3
Detroit-Warren-Livonia, MI	45,798	46,790	2.2
Dothan, AL	29,492	30,253	2.6
Dover, DE	32,358	33,132	2.4
Dubuque, IA	31,596	32,414	2.6
Duluth, MN-WI	32,512	32,638	0.4
Durham, NC	45,892	46,743	1.9
Eau Claire, WI	30,161	30,763	2.0
El Centro, CA	28,935	29,879	3.3
Elizabethtown, KY	30,144	30,912	2.5
Elkhart-Goshen, IN	34,626	35,573	2.7
Elmira, NY	31,048	32,989	6.3
El Paso, TX	27,988	28,666	2.4
Erie, PA	31,247	32,010	2.4
Eugene-Springfield, OR	31,344	32,295	3.0
Evansville, IN-KY	34,388	35,302	2.7
Fairbanks, AK	37,847	39,399	4.1
Fajardo, PR	20,331	20,011	-1.6
Fargo, ND-MN	31,571	32,291	2.3
Farmington, NM	32,281	33,695	4.4
Fayetteville, NC	29,506	30,325	2.8
Fayetteville-Springdale-Rogers, AR-MO	33,678	34,598	2.7
Flagstaff, AZ	29,121	30,733	5.5
Flint, MI	38,243	37,982	-0.7
Florence, SC	31,838	32,326	1.5
Florence-Muscle Shoals, AL	28,586	28,885	1.0
Fond du Lac, WI	31,760	32,634	2.8
Fort Collins-Loveland, CO	35,522	36,612	3.1
Fort Smith, AR-OK	28,251	29,599	4.8
Fort Walton Beach-Crestview-Destin, FL	31,163	32,976	5.8
Fort Wayne, IN	34,204	34,717	1.5
Fresno, CA	31,429	32,266	2.7
Gadsden, AL	27,904	28,438	1.9
Gainesville, FL	30,832	32,992	7.0
Gainesville, GA	32,849	33,828	3.0
Glens Falls, NY	30,288	31,710	4.7
Goldsboro, NC	27,461	28,316	3.1
Grand Forks, ND-MN	27,601	28,138	1.9
Grand Junction, CO	29,965	31,611	5.5
Grand Rapids-Wyoming, MI	36,302	36,941	1.8
Great Falls, MT	27,060	28,021	3.6
Greeley, CO	32,593	33,636	3.2
Green Bay, WI	34,861	35,467	1.7
Greensboro-High Point, NC	34,129	34,876	2.2
Greenville, NC	30,592	31,433	2.7
Greenville, SC	33,557	34,469	2.7
Guayama, PR	22,359	23,263	4.0
Gulfport-Biloxi, MS	28,857	31,688	9.8
Hagerstown-Martinsburg, MD-WV	32,088	33,202	3.5
Hanford-Corcoran, CA	29,655	29,989	1.1
Harrisburg-Carlisle, PA	38,204	39,144	2.5
Harrisonburg, VA	29,145	30,366	4.2
Hartford-West Hartford-East Hartford, CT	48,381	50,154	3.7
Hattiesburg, MS	27,973	28,568	2.1
Hickory-Lenoir-Morganton, NC	29,568	30,090	1.8
Hinesville-Fort Stewart, GA	28,058	30,062	7.1
Holland-Grand Haven, MI	35,505	36,362	2.4
Honolulu, HI	36,618	37,654	2.8
Hot Springs, AR	26,176	27,024	3.2
Houma-Bayou Cane-Thibodaux, LA	31,689	33,696	6.3
Houston-Baytown-Sugar Land, TX	44,656	47,157	5.6
Huntington-Ashland, WV-KY-OH	30,434	31,415	3.2
Huntsville, AL	40,964	42,401	3.5
Idaho Falls, ID	28,937	29,795	3.0
Indianapolis, IN	38,968	39,830	2.2
Iowa City, IA	33,777	34,785	3.0
Ithaca, NY	36,071	36,457	1.1
Jackson, MI	35,031	35,879	2.4
Jackson, MS	32,178	33,099	2.9

See footnotes at end of table.

Table 26. Average annual wages for 2004 and 2005 for all covered workers¹ by metropolitan area — Continued

Metropolitan area ²	Average annual wages ³		
	2004	2005	Percent change, 2004-05
Jackson, TN	\$32,525	\$33,286	2.3
Jacksonville, FL	36,870	38,224	3.7
Jacksonville, NC	23,969	24,803	3.5
Janesville, WI	34,022	34,107	0.2
Jefferson City, MO	30,027	30,991	3.2
Johnson City, TN	29,293	29,840	1.9
Johnstown, PA	28,315	29,335	3.6
Jonesboro, AR	27,540	28,550	3.7
Joplin, MO	28,386	29,152	2.7
Kalamazoo-Portage, MI	36,113	36,042	-0.2
Kankakee-Bradley, IL	31,322	31,802	1.5
Kansas City, MO-KS	38,650	39,749	2.8
Kennewick-Richland-Pasco, WA	37,611	38,453	2.2
Killeen-Temple-Fort Hood, TX	28,883	30,028	4.0
Kingsport-Bristol-Bristol, TN-VA	33,100	33,568	1.4
Kingston, NY	29,506	30,752	4.2
Knoxville, TN	34,718	35,724	2.9
Kokomo, IN	44,394	44,462	0.2
La Crosse, WI-MN	30,445	31,029	1.9
Lafayette, IN	34,064	35,176	3.3
Lafayette, LA	33,042	34,729	5.1
Lake Charles, LA	32,077	33,728	5.1
Lakeland, FL	31,163	32,235	3.4
Lancaster, PA	34,296	35,264	2.8
Lansing-East Lansing, MI	36,706	38,135	3.9
Laredo, TX	25,954	27,401	5.6
Las Cruces, NM	27,492	28,569	3.9
Las Vegas-Paradise, NV	37,066	38,940	5.1
Lawrence, KS	27,665	28,492	3.0
Lawton, OK	27,276	28,459	4.3
Lebanon, PA	30,239	30,704	1.5
Lewiston, ID-WA	28,995	29,414	1.4
Lewiston-Auburn, ME	30,415	31,008	1.9
Lexington-Fayette, KY	36,051	36,683	1.8
Lima, OH	31,618	32,630	3.2
Lincoln, NE	32,108	32,711	1.9
Little Rock-North Little Rock, AR	34,019	34,920	2.6
Logan, UT-ID	25,281	25,869	2.3
Longview, TX	29,925	32,603	8.9
Longview, WA	32,742	33,993	3.8
Los Angeles-Long Beach-Santa Ana, CA	45,085	46,592	3.3
Louisville, KY-IN	36,466	37,144	1.9
Lubbock, TX	29,061	30,174	3.8
Lynchburg, VA	30,956	32,025	3.5
Macon, GA	32,275	33,110	2.6
Madera, CA	28,108	29,356	4.4
Madison, WI	37,250	38,210	2.6
Manchester-Nashua, NH	43,638	45,066	3.3
Mansfield, OH	32,352	32,688	1.0
Mayaguez, PR	19,066	19,597	2.8
McAllen-Edinburg-Pharr, TX	24,529	25,315	3.2
Medford, OR	29,786	30,502	2.4
Memphis, TN-MS-AR	38,292	39,094	2.1
Merced, CA	29,122	30,209	3.7
Miami-Fort Lauderdale-Miami Beach, FL	38,557	40,174	4.2
Michigan City-La Porte, IN	30,065	30,724	2.2
Midland, TX	35,566	38,267	7.6
Milwaukee-Waukesha-West Allis, WI	39,315	40,181	2.2
Minneapolis-St. Paul-Bloomington, MN-WI	45,064	45,507	1.0
Missoula, MT	28,625	29,627	3.5
Mobile, AL	31,925	33,496	4.9
Modesto, CA	33,127	34,325	3.6
Monroe, LA	27,917	29,264	4.8
Monroe, MI	39,106	39,449	0.9
Montgomery, AL	32,694	33,441	2.3
Morgantown, WV	30,516	31,529	3.3
Morristown, TN	31,112	31,215	0.3
Mount Vernon-Anacortes, WA	30,016	31,387	4.6
Muncie, IN	30,742	32,172	4.7
Muskegon-Norton Shores, MI	32,578	33,035	1.4
Myrtle Beach-Conway-North Myrtle Beach, SC	26,074	26,642	2.2
Napa, CA	39,026	40,180	3.0
Naples-Marco Island, FL	34,856	38,211	9.6
Nashville-Davidson--Murfreesboro, TN	37,394	38,753	3.6
New Haven-Milford, CT	43,007	43,931	2.1
New Orleans-Metairie-Kenner, LA	34,487	37,239	8.0
New York-Northern New Jersey-Long Island, NY-NJ-PA	55,431	57,660	4.0
Niles-Benton Harbor, MI	34,718	35,029	0.9
Norwich-New London, CT	41,443	42,151	1.7
Ocala, FL	29,013	30,008	3.4

See footnotes at end of table.

Table 26. Average annual wages for 2004 and 2005 for all covered workers: by metropolitan area — Continued

Metropolitan area ^a	Average annual wages ^b		
	2004	2005	Percent change, 2004-05
Ocean City, NJ	\$30,227	\$31,033	2.7
Odessa, TX	31,744	33,475	5.5
Ogden-Clearfield, UT	30,406	31,195	2.6
Okiahoma City, OK	32,328	33,142	2.5
Olympia, WA	35,033	36,230	3.4
Omaha-Council Bluffs, NE-IA	35,208	36,329	3.2
Orlando, FL	35,041	36,466	4.1
Oshkosh-Neenah, WI	38,135	38,820	1.8
Owensboro, KY	30,606	31,379	2.5
Oxnard-Thousand Oaks-Ventura, CA	42,805	44,597	4.2
Palm Bay-Melbourne-Titusville, FL	37,912	38,287	1.0
Panama City-Lynn Haven, FL	30,257	31,894	5.4
Parkersburg-Marietta, WV-OH	30,427	30,747	1.1
Pascagoula, MS	32,323	34,735	7.5
Pensacola-Ferry Pass-Brent, FL	30,361	32,064	5.6
Peoria, IL	37,182	39,871	7.2
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	45,008	46,454	3.2
Phoenix-Mesa-Scottsdale, AZ	38,816	40,245	3.7
Pine Bluff, AR	29,892	30,794	3.0
Pittsburgh, PA	37,821	38,809	2.6
Pittsfield, MA	34,672	35,807	3.3
Pocatello, ID	26,784	27,686	3.4
Ponce, PR	19,430	19,660	1.2
Portland-South Portland-Biddeford, ME	34,983	35,857	2.5
Portland-Vancouver-Beaverton, OR-WA	39,973	41,048	2.7
Port St. Lucie-Fort Pierce, FL	31,726	33,235	4.8
Poughkeepsie-Newburgh-Middletown, NY	36,773	38,187	3.8
Prescott, AZ	27,906	29,295	5.0
Providence-New Bedford-Fall River, RI-MA	36,841	37,796	2.6
Provo-Orem, UT	29,501	30,395	3.0
Pueblo, CO	30,463	30,165	-1.0
Punta Gorda, FL	29,998	31,937	6.5
Racine, WI	37,082	37,659	1.6
Raleigh-Cary, NC	38,450	39,465	2.6
Rapid City, SD	27,945	28,758	2.9
Reading, PA	35,414	36,210	2.2
Redding, CA	31,036	32,139	3.6
Reno-Sparks, NV	37,260	38,453	3.2
Richmond, VA	39,629	41,274	4.2
Riverside-San Bernardino-Ontario, CA	34,287	35,201	2.7
Roanoke, VA	32,801	32,987	0.6
Rochester, MN	40,176	41,296	2.8
Rochester, NY	37,243	37,991	2.0
Rockford, IL	34,150	35,652	4.4
Rocky Mount, NC	30,569	30,983	1.4
Rome, GA	32,930	33,896	2.9
Sacramento-Arden-Arcade-Roseville, CA	41,317	42,800	3.6
Saginaw-Saginaw Township North, MI	36,322	36,325	0.0
St. Cloud, MN	31,693	31,705	0.0
St. George, UT	24,518	26,046	6.2
St. Joseph, MO-KS	29,047	30,009	3.3
St. Louis, MO-IL	38,640	39,985	3.5
Salem, OR	30,490	31,289	2.6
Salinas, CA	34,681	36,067	4.0
Salisbury, MD	31,118	32,240	3.6
Salt Lake City, UT	35,562	36,857	3.6
San Angelo, TX	28,990	29,530	1.9
San Antonio, TX	33,919	35,097	3.5
San Diego-Carlsbad-San Marcos, CA	42,382	43,824	3.4
Sandusky, OH	32,586	32,631	0.1
San Francisco-Oakland-Fremont, CA	55,793	58,634	5.1
San German-Cabo Rojo, PR	18,158	18,745	3.2
San Jose-Sunnyvale-Santa Clara, CA	69,637	71,970	3.4
San Juan-Caguas-Guaynabo, PR	23,219	23,952	3.2
San Luis Obispo-Paso Robles, CA	32,942	33,759	2.5
Santa Barbara-Santa Maria-Goleta, CA	37,471	39,080	4.3
Santa Cruz-Watsonville, CA	37,386	38,016	1.7
Santa Fe, NM	32,590	33,253	2.0
Santa Rosa-Petaluma, CA	38,512	40,017	3.9
Sarasota-Bradenton-Venice, FL	32,118	33,905	5.6
Savannah, GA	32,839	34,104	3.9
Scranton-Wilkes-Barre, PA	31,329	32,057	2.3
Seattle-Tacoma-Bellevue, WA	45,095	46,644	3.4
Sheboygan, WI	34,844	35,067	0.6
Sherman-Denison, TX	31,623	32,800	3.7
Shreveport-Bossier City, LA	31,435	31,962	1.7
Sioux City, IA-NE-SD	30,830	31,122	0.9
Sioux Falls, SD	32,030	33,257	3.8
South Bend-Mishawaka, IN-MI	33,812	34,086	0.8
Spartanburg, SC	34,984	35,526	1.5

See footnotes at end of table.

Table 26. Average annual wages for 2004 and 2005 for all covered workers¹ by metropolitan area — Continued

Metropolitan area ²	Average annual wages ³		
	2004	2005	Percent change, 2004-05
Spokane, WA	\$31,643	\$32,621	3.1
Springfield, IL	38,256	39,299	2.7
Springfield, MA	35,793	36,791	2.8
Springfield, MO	29,298	30,124	2.8
Springfield, OH	30,287	30,814	1.7
State College, PA	33,042	34,109	3.2
Stockton, CA	34,175	35,030	2.5
Sumter, SC	26,770	27,469	2.6
Syracuse, NY	35,863	36,494	1.8
Tallahassee, FL	32,610	33,548	2.9
Tampa-St. Petersburg-Clearwater, FL	35,328	36,374	3.0
Terre Haute, IN	29,839	30,597	2.5
Texarkana, TX-Texarkana, AR	30,185	31,302	3.7
Toledo, OH	35,122	35,848	2.1
Topeka, KS	32,071	33,303	3.8
Trenton-Ewing, NJ	50,467	52,034	3.1
Tucson, AZ	33,992	35,650	4.9
Tulsa, OK	34,014	35,211	3.5
Tuscaloosa, AL	32,223	34,124	5.9
Tyler, TX	33,704	34,731	3.0
Utica-Rome, NY	30,174	30,902	2.4
Valdosta, GA	24,779	25,712	3.8
Vallejo-Fairfield, CA	37,118	38,431	3.5
Vero Beach, FL	31,812	32,591	2.4
Victoria, TX	33,316	34,327	3.0
Vineland-Millville-Bridgeton, NJ	36,228	36,387	0.4
Virginia Beach-Norfolk-Newport News, VA-NC	33,458	34,580	3.4
Visalia-Porterville, CA	27,927	28,582	2.3
Waco, TX	30,709	32,325	5.3
Warner Robins, GA	34,535	36,762	6.4
Washington-Arlington-Alexandria, DC-VA-MD-WV	53,134	55,525	4.5
Waterloo-Cedar Falls, IA	32,322	33,123	2.5
Wausau, WI	32,399	33,259	2.7
Weirton-Steubenville, WV-OH	30,173	30,596	1.4
Wenatchee, WA	26,440	27,163	2.7
Wheeling, WV-OH	28,772	29,808	3.6
Wichita, KS	34,618	35,976	3.9
Wichita Falls, TX	28,144	29,343	4.3
Williamsport, PA	30,050	30,699	2.2
Wilmington, NC	30,379	31,792	4.7
Winchester, VA-WV	32,396	33,787	4.3
Winston-Salem, NC	36,559	36,654	0.3
Worcester, MA	40,428	41,094	1.6
Yakima, WA	26,497	27,334	3.2
Yauco, PR	18,274	17,818	-2.5
York-Hanover, PA	34,966	36,834	5.3
Youngstown-Warren-Boardman, OH-PA	31,943	32,176	0.7
Yuba City, CA	30,913	32,133	3.9
Yuma, AZ	25,978	27,168	4.6

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

² Includes data for Metropolitan Statistical Areas (MSA) and Primary Metropolitan Statistical Areas (PMSA) as defined by OMB Bulletin No. 99-04. In the New England areas, the New England County Metropolitan Area (NECMA) definitions were used.

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	1996	1997 ¹	1998 ¹	1999 ¹	2000 ¹	2001	2002	2003	2004	2005	2006
Civilian noninstitutional population.....	200,591	203,133	205,220	207,753	212,577	215,092	217,570	221,168	223,357	226,082	228,815
Civilian labor force.....	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428
Labor force participation rate.....	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2	66	66	66.2
Employed.....	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427
Employment-population ratio.....	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1
Unemployed.....	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001
Unemployment rate.....	5.4	4.9	4.5	4.2	4	4.7	5.8	6	5.5	5.1	4.6
Not in the labor force.....	66,647	66,837	67,547	68,385	69,994	71,359	72,707	74,658	75,956	76,762	77,387

¹ Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

Industry	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total private employment.....	100,169	103,113	106,021	108,686	110,996	110,707	108,828	108,416	109,814	111,899	114,184
Total nonfarm employment.....	119,708	122,776	125,930	128,993	131,785	131,826	130,341	129,999	131,435	133,703	136,174
Goods-producing.....	23,410	23,886	24,354	24,465	24,649	23,873	22,557	21,816	21,882	22,190	22,570
Natural resources and mining.....	637	654	645	598	599	606	583	572	591	628	684
Construction.....	5,536	5,813	6,149	6,545	6,787	6,826	6,716	6,735	6,976	7,336	7,689
Manufacturing.....	17,237	17,419	17,560	17,322	17,263	16,441	15,259	14,510	14,315	14,226	14,197
Private service-providing.....	76,759	79,227	81,667	84,221	86,346	86,834	86,271	86,599	87,932	89,709	91,615
Trade, transportation, and utilities.....	24,239	24,700	25,186	25,771	26,225	25,983	25,497	25,287	25,533	25,959	26,231
Wholesale trade.....	5,522.00	5,663.90	5,795.20	5,892.50	5,933.20	5,772.70	5,652.30	5,607.50	5,662.90	5,764.40	5,897.60
Retail trade.....	14,142.50	14,388.90	14,609.30	14,970.10	15,279.80	15,238.60	15,025.10	14,917.30	15,058.20	15,279.60	15,319.30
Transportation and warehousing.....	3,935.30	4,026.50	4,168.00	4,300.30	4,410.30	4,372.00	4,223.60	4,185.40	4,248.60	4,360.90	4,465.80
Utilities.....	639.6	620.9	613.4	608.5	601.3	599.4	596.2	577	563.8	554	548.5
Information.....	2,940	3,084	3,218	3,419	3,631	3,629	3,395	3,188	3,118	3,061	3,055
Financial activities.....	6,969	7,178	7,462	7,648	7,687	7,807	7,847	7,977	8,031	8,153	8,363
Professional and business services.....	13,462	14,335	15,147	15,957	16,666	16,476	15,976	15,987	16,395	16,954	17,552
Education and health services.....	13,683	14,087	14,446	14,798	15,109	15,645	16,199	16,588	16,953	17,372	17,838
Leisure and hospitality.....	10,777	11,018	11,232	11,543	11,862	12,036	11,986	12,173	12,493	12,816	13,143
Other services.....	4,690	4,825	4,976	5,087	5,168	5,258	5,372	5,401	5,409	5,395	5,432
Government.....	19,539	19,664	19,909	20,307	20,790	21,118	21,513	21,583	21,621	21,804	21,990

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

Industry	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Private sector:											
Average weekly hours.....	34.3	34.5	34.5	34.3	34.3	34	33.9	33.7	33.7	33.8	33.9
Average hourly earnings (in dollars).....	12.04	12.51	13.01	13.49	14.02	14.54	14.97	15.37	15.69	16.13	16.76
Average weekly earnings (in dollars).....	413.28	431.86	448.56	463.15	481.01	493.79	506.72	518.06	529.09	544.33	567.87
Goods-producing:											
Average weekly hours.....	40.8	41.1	40.8	40.8	40.7	39.9	39.9	39.8	40	40.1	40.5
Average hourly earnings (in dollars).....	13.38	13.82	14.23	14.71	15.27	15.78	16.33	16.8	17.19	17.6	18.02
Average weekly earnings (in dollars).....	546.48	568.43	580.99	599.99	621.86	630.04	651.61	669.13	688.17	705.31	729.87
Natural resources and mining											
Average weekly hours.....	46	46.2	44.9	44.2	44.4	44.6	43.2	43.6	44.5	45.6	45.6
Average hourly earnings (in dollars).....	15.1	15.57	16.2	16.33	16.55	17	17.19	17.56	18.07	18.72	19.9
Average weekly earnings (in dollars).....	695.07	720.11	727.28	721.74	734.92	757.92	741.97	765.94	803.82	853.71	908.01
Construction:											
Average weekly hours.....	38.9	38.9	38.8	39	39.2	38.7	38.4	38.4	38.3	38.6	39
Average hourly earnings (in dollars).....	15.11	15.67	16.23	16.8	17.48	18	18.52	18.95	19.23	19.46	20.02
Average weekly earnings (in dollars).....	588.48	609.48	629.75	655.11	685.78	695.89	711.82	726.83	735.55	750.22	781.04
Manufacturing:											
Average weekly hours.....	41.3	41.7	41.4	41.4	41.3	40.3	40.5	40.4	40.8	40.7	41.1
Average hourly earnings (in dollars).....	12.75	13.14	13.45	13.85	14.32	14.76	15.29	15.74	16.15	16.56	16.8
Average weekly earnings (in dollars).....	526.55	548.22	557.12	573.17	590.65	595.19	618.75	635.99	658.59	673.37	690.83
Private service-providing:											
Average weekly hours.....	32.6	32.8	32.8	32.7	32.7	32.5	32.5	32.4	32.3	32.4	32.5
Average hourly earnings (in dollars).....	11.59	12.07	12.61	13.09	13.62	14.18	14.59	14.99	15.29	15.74	16.42
Average weekly earnings (in dollars).....	377.37	395.51	413.5	427.98	445.74	461.08	473.8	484.81	494.22	509.58	532.84
Trade, transportation, and utilities:											
Average weekly hours.....	34.1	34.3	34.2	33.9	33.8	33.5	33.6	33.6	33.5	33.4	33.4
Average hourly earnings (in dollars).....	11.46	11.9	12.39	12.82	13.31	13.7	14.02	14.34	14.58	14.92	15.4
Average weekly earnings (in dollars).....	390.64	407.57	423.3	434.31	449.88	459.53	471.27	481.14	488.42	498.43	514.61
Wholesale trade:											
Average weekly hours.....	38.6	38.8	38.6	38.6	38.8	38.4	38	37.9	37.8	37.7	38
Average hourly earnings (in dollars).....	13.8	14.41	15.07	15.62	16.28	16.77	16.98	17.36	17.65	18.16	18.91
Average weekly earnings (in dollars).....	533.29	559.39	582.21	602.77	631.4	643.45	644.38	657.29	667.09	685	718.3
Retail trade:											
Average weekly hours.....	38.6	38.8	38.6	38.6	38.8	38.4	38	37.9	37.8	37.7	38
Average hourly earnings (in dollars).....	13.8	14.41	15.07	15.62	16.28	16.77	16.98	17.36	17.65	18.16	18.91
Average weekly earnings (in dollars).....	533.29	559.39	582.21	602.77	631.4	643.45	644.38	657.29	667.09	685	718.3
Transportation and warehousing:											
Average weekly hours.....	39.1	39.4	38.7	37.6	37.4	36.7	36.8	36.8	37.2	37	36.9
Average hourly earnings (in dollars).....	13.45	13.78	14.12	14.55	15.05	15.33	15.76	16.25	16.52	16.7	17.28
Average weekly earnings (in dollars).....	525.6	542.55	546.86	547.97	562.31	562.7	579.75	598.41	614.82	618.58	637.14
Utilities:											
Average weekly hours.....	42	42	42	42	42	41.4	40.9	41.1	40.9	41.1	41.4
Average hourly earnings (in dollars).....	19.78	20.59	21.48	22.03	22.75	23.58	23.96	24.77	25.61	26.68	27.42
Average weekly earnings (in dollars).....	830.74	865.26	902.94	924.59	955.66	977.18	979.09	1,017.27	1,048.44	1,095.90	1,136.08
Information:											
Average weekly hours.....	36.4	36.3	36.6	36.7	36.8	36.9	36.5	36.2	36.3	36.5	36.6
Average hourly earnings (in dollars).....	16.3	17.14	17.67	18.4	19.07	19.8	20.2	21.01	21.4	22.06	23.23
Average weekly earnings (in dollars).....	592.68	622.4	646.52	675.32	700.89	731.11	738.17	760.81	777.05	805	850.81
Financial activities:											
Average weekly hours.....	35.5	35.7	36	35.8	35.9	35.8	35.6	35.5	35.5	35.9	35.8
Average hourly earnings (in dollars).....	12.71	13.22	13.93	14.47	14.98	15.59	16.17	17.14	17.52	17.94	18.8
Average weekly earnings (in dollars).....	451.49	472.37	500.95	517.57	537.37	558.02	575.51	609.08	622.87	645.1	672.4
Professional and business services:											
Average weekly hours.....	34.1	34.3	34.3	34.4	34.5	34.2	34.2	34.1	34.2	34.2	34.6
Average hourly earnings (in dollars).....	13	13.57	14.27	14.85	15.52	16.33	16.81	17.21	17.48	18.08	19.12
Average weekly earnings (in dollars).....	442.81	465.51	490	510.99	535.07	557.84	574.66	587.02	597.56	618.87	662.23
Education and health services:											
Average weekly hours.....	31.9	32.2	32.2	32.1	32.2	32.3	32.4	32.3	32.4	32.6	32.5
Average hourly earnings (in dollars).....	12.17	12.56	13	13.44	13.95	14.64	15.21	15.64	16.15	16.71	17.38
Average weekly earnings (in dollars).....	388.27	404.65	418.82	431.35	449.29	473.39	492.74	505.69	523.78	544.59	564.95
Leisure and hospitality:											
Average weekly hours.....	25.9	26	26.2	26.1	26.1	25.8	25.8	25.6	25.7	25.7	25.7
Average hourly earnings (in dollars).....	6.99	7.32	7.67	7.96	8.32	8.57	8.81	9	9.15	9.38	9.75
Average weekly earnings (in dollars).....	180.98	190.52	200.82	208.05	217.2	220.73	227.17	230.42	234.86	241.36	250.11
Other services:											
Average weekly hours.....	32.5	32.7	32.6	32.5	32.5	32.3	32	31.4	31	30.9	30.9
Average hourly earnings (in dollars).....	10.85	11.29	11.79	12.26	12.73	13.27	13.72	13.84	13.98	14.34	14.77
Average weekly earnings (in dollars).....	352.62	368.63	384.25	398.77	413.41	428.64	439.76	434.41	433.04	443.37	456.6

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	2004	2005				2006				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
	Dec. 2006										
Civilian workers²	97.0	98.0	98.6	99.4	100.0	100.7	101.6	102.7	103.3	0.6	3.3
Workers by occupational group											
Management, professional, and related.....	96.8	98.0	98.5	99.4	100.0	100.9	101.6	103.0	103.7	.7	3.7
Management, business, and financial.....	97.7	99.0	99.4	99.7	100.0	101.3	101.9	102.7	103.2	.5	3.2
Professional and related.....	96.3	97.5	98.1	99.3	100.0	100.7	101.4	103.2	104.0	.8	4.0
Sales and office.....	96.8	97.7	98.4	99.3	100.0	100.5	101.6	102.4	103.0	.6	3.0
Sales and related.....	96.3	97.3	97.9	99.2	100.0	99.9	101.1	101.7	102.3	.6	2.3
Office and administrative support.....	97.1	98.0	98.7	99.4	100.0	100.9	101.9	102.8	103.5	.7	3.5
Natural resources, construction, and maintenance.....	97.0	97.8	98.8	99.5	100.0	100.8	102.0	103.0	103.6	.6	3.6
Construction and extraction.....	97.1	97.6	98.5	99.4	100.0	100.7	102.0	103.0	103.7	.7	3.7
Installation, maintenance, and repair.....	96.9	98.0	99.1	99.6	100.0	100.9	102.0	103.0	103.6	.6	3.6
Production, transportation, and material moving.....	97.7	98.4	99.0	99.7	100.0	100.4	101.1	101.8	102.4	.6	2.4
Production.....	97.7	98.5	99.1	99.6	100.0	100.4	101.0	101.6	102.0	.4	2.0
Transportation and material moving.....	97.6	98.2	98.8	99.8	100.0	100.5	101.3	102.2	102.8	.6	2.8
Service occupations.....	97.0	97.8	98.3	99.4	100.0	100.8	101.4	102.5	103.5	1.0	3.5
Workers by industry											
Goods-producing.....	96.9	98.0	99.0	99.8	100.0	100.3	101.3	102.0	102.5	.5	2.5
Manufacturing.....	96.9	98.2	99.1	99.8	100.0	100.1	101.0	101.4	101.8	.4	1.8
Service-providing.....	97.0	97.9	98.5	99.3	100.0	100.9	101.6	102.9	103.5	.6	3.5
Education and health services.....	96.4	97.2	97.6	99.1	100.0	100.6	101.3	103.5	104.2	.7	4.2
Health care and social assistance.....	96.7	97.8	98.5	99.3	100.0	101.1	102.0	103.5	104.3	.8	4.3
Hospitals.....	96.2	97.5	98.2	99.3	100.0	101.2	101.9	103.2	104.0	.8	4.0
Nursing and residential care facilities.....	96.6	97.5	98.3	99.2	100.0	101.0	101.4	102.6	103.7	1.1	3.7
Education services.....	96.1	96.7	97.0	99.0	100.0	100.2	100.7	103.4	104.1	.7	4.1
Elementary and secondary schools.....	96.0	96.4	96.7	98.9	100.0	100.2	100.5	103.5	104.2	.7	4.2
Public administration ³	95.8	97.1	97.5	99.0	100.0	100.6	101.2	102.4	103.8	1.4	3.8
Private industry workers.....	97.2	98.2	98.9	99.5	100.0	100.8	101.7	102.5	103.2	.7	3.2
Workers by occupational group											
Management, professional, and related.....	97.1	98.5	99.1	99.6	100.0	101.1	101.9	102.9	103.5	.6	3.5
Management, business, and financial.....	97.9	99.1	99.6	99.7	100.0	101.3	102.0	102.7	103.1	.4	3.1
Professional and related.....	96.5	98.0	98.8	99.5	100.0	101.0	101.8	103.1	103.9	.8	3.9
Sales and office.....	96.8	97.8	98.5	99.3	100.0	100.5	101.6	102.3	102.9	.6	2.9
Sales and related.....	96.2	97.2	97.9	99.2	100.0	99.9	101.1	101.7	102.3	.6	2.3
Office and administrative support.....	97.2	98.1	98.9	99.5	100.0	100.9	101.9	102.7	103.4	.7	3.4
Natural resources, construction, and maintenance.....	97.1	97.9	98.9	99.5	100.0	100.8	102.1	103.0	103.6	.6	3.6
Construction and extraction.....	97.2	97.7	98.7	99.5	100.0	100.7	102.2	103.1	103.7	.6	3.7
Installation, maintenance, and repair.....	97.0	98.1	99.3	99.6	100.0	100.9	102.1	103.0	103.4	.4	3.4
Production, transportation, and material moving.....	97.8	98.5	99.0	99.7	100.0	100.4	101.1	101.7	102.3	.6	2.3
Production.....	97.7	98.6	99.1	99.6	100.0	100.4	101.0	101.6	102.0	.4	2.0
Transportation and material moving.....	97.9	98.3	99.0	99.8	100.0	100.4	101.2	102.0	102.6	.6	2.6
Service occupations.....	97.7	98.5	99.0	99.5	100.0	100.8	101.5	102.3	103.1	.8	3.1
Workers by industry and occupational group											
Goods-producing industries.....	96.9	98.0	99.0	99.8	100.0	100.3	101.3	102.0	102.5	.5	2.5
Management, professional, and related.....	95.6	98.0	99.2	100.2	100.0	100.2	100.7	101.6	102.0	.4	2.0
Sales and office.....	95.8	96.8	98.0	99.7	100.0	99.9	102.7	102.1	102.8	.7	2.8
Natural resources, construction, and maintenance.....	97.3	97.9	98.9	99.6	100.0	100.6	101.9	102.7	103.3	.6	3.3
Production, transportation, and material moving.....	97.8	98.6	99.2	99.8	100.0	100.3	101.0	101.6	102.0	.4	2.0
Construction.....	96.7	97.4	98.5	99.7	100.0	100.7	101.9	103.0	103.6	.6	3.6
Manufacturing.....	96.9	98.2	99.1	99.8	100.0	100.1	101.0	101.4	101.8	.4	1.8
Management, professional, and related.....	95.1	97.6	98.9	99.8	100.0	100.0	100.5	101.3	101.4	.1	1.4
Sales and office.....	96.3	97.6	98.7	99.9	100.0	99.5	102.8	101.3	102.1	.8	2.1
Natural resources, construction, and maintenance.....	97.9	98.3	99.2	99.5	100.0	100.1	100.8	101.5	102.1	.6	2.1
Production, transportation, and material moving.....	97.9	98.7	99.3	99.8	100.0	100.2	100.9	101.5	101.9	.4	1.9
Service-providing industries.....	97.3	98.3	98.9	99.5	100.0	101.0	101.8	102.7	103.4	.7	3.4
Management, professional, and related.....	97.4	98.6	99.1	99.5	100.0	101.3	102.2	103.2	103.8	.6	3.8
Sales and office.....	96.9	97.9	98.5	99.3	100.0	100.6	101.5	102.3	102.9	.6	2.9
Natural resources, construction, and maintenance.....	96.7	97.9	99.0	99.4	100.0	101.2	102.5	103.6	104.0	.4	4.0
Production, transportation, and material moving.....	97.7	98.3	98.8	99.6	100.0	100.6	101.3	101.9	102.6	.7	2.6
Service occupations.....	97.7	98.5	99.0	99.5	100.0	100.9	101.5	102.3	103.1	.8	3.1
Trade, transportation, and utilities.....	97.0	98.1	98.5	99.4	100.0	100.8	101.4	102.4	103.0	.6	3.0

See footnotes at end of table.

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

[December 2005 = 100]

Series	2004	2005				2006				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
	Dec. 2006										
Wholesale trade.....	96.0	97.7	97.7	99.2	100.0	100.3	100.8	102.4	102.9	0.5	2.9
Retail trade.....	97.1	98.1	98.8	99.5	100.0	100.6	101.2	101.9	102.7	.8	2.7
Transportation and warehousing.....	98.5	98.4	98.6	99.7	100.0	100.4	101.0	101.6	102.2	.6	2.2
Utilities.....	95.1	98.1	99.3	99.5	100.0	107.8	109.3	110.1	110.4	.3	10.4
Information.....	96.8	98.3	99.2	99.5	100.0	100.9	102.1	103.0	103.2	.2	3.2
Financial activities.....	96.8	98.4	99.4	99.2	100.0	101.2	101.8	102.1	102.5	.4	2.5
Finance and insurance.....	97.8	98.7	100.0	99.5	100.0	101.5	102.4	102.6	102.9	.3	2.9
Real estate and rental and leasing.....	91.2	96.9	96.7	98.6	100.0	99.8	99.3	100.2	100.8	.6	.8
Professional and business services.....	98.5	99.1	99.5	99.6	100.0	101.1	102.2	102.9	103.5	.6	3.5
Education and health services.....	96.7	97.7	98.4	99.3	100.0	101.0	101.8	103.2	104.1	.9	4.1
Education services.....	96.4	97.1	97.5	99.6	100.0	100.7	101.5	103.2	104.2	1.0	4.2
Health care and social assistance.....	96.7	97.8	98.5	99.3	100.0	101.1	101.9	103.2	104.1	.9	4.1
Hospitals.....	96.0	97.5	98.2	99.2	100.0	101.3	102.0	103.2	103.9	.7	3.9
Leisure and hospitality.....	97.7	98.5	99.1	99.6	100.0	100.6	101.3	102.4	103.7	1.3	3.7
Accommodation and food services.....	97.9	98.7	98.9	99.5	100.0	100.5	101.4	102.5	104.0	1.5	4.0
Other services, except public administration.....	97.2	98.0	98.6	99.9	100.0	101.4	102.7	103.6	104.0	.4	4.0
State and local government workers.....	96.1	96.9	97.2	99.1	100.0	100.5	100.9	103.2	104.1	.9	4.1
Workers by occupational group											
Management, professional, and related.....	96.2	97.0	97.3	99.0	100.0	100.3	100.8	103.3	104.0	.7	4.0
Professional and related.....	96.1	96.8	97.1	98.9	100.0	100.2	100.8	103.4	104.0	.6	4.0
Sales and office.....	96.5	97.5	97.6	99.3	100.0	100.9	101.5	103.3	104.1	.8	4.1
Office and administrative support.....	96.4	97.4	97.5	99.2	100.0	101.0	101.6	103.5	104.2	.7	4.2
Service occupations.....	95.5	96.2	96.7	99.1	100.0	100.6	101.2	103.1	104.5	1.4	4.5
Workers by industry											
Education and health services.....	96.1	96.7	97.0	99.0	100.0	100.3	100.8	103.7	104.3	.6	4.3
Education services.....	96.1	96.6	96.9	98.9	100.0	100.2	100.5	103.5	104.1	.6	4.1
Schools.....	96.1	96.6	96.9	98.9	100.0	100.2	100.5	103.5	104.1	.6	4.1
Elementary and secondary schools.....	96.0	96.4	96.6	98.8	100.0	100.2	100.5	103.6	104.2	.6	4.2
Health care and social assistance.....	96.5	97.6	98.0	99.5	100.0	101.3	102.9	105.1	105.7	.6	5.7
Hospitals.....	96.7	97.6	98.0	99.5	100.0	100.9	101.3	103.3	104.3	1.0	4.3
Public administration ³	95.8	97.1	97.5	99.0	100.0	100.6	101.2	102.4	103.8	1.4	3.8

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	2004	2005				2006				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
	Dec. 2006										
Civilian workers¹	97.5	98.1	98.7	99.4	100.0	100.7	101.5	102.6	103.2	0.6	3.2
Workers by occupational group											
Management, professional, and related	97.5	98.3	98.8	99.4	100.0	100.8	101.6	102.9	103.6	.7	3.6
Management, business, and financial	98.4	99.1	99.5	99.6	100.0	101.2	102.0	102.7	103.1	.4	3.1
Professional and related	97.1	97.8	98.3	99.3	100.0	100.6	101.4	103.1	103.8	.7	3.8
Sales and office	97.2	97.8	98.4	99.3	100.0	100.4	101.6	102.4	103.0	.6	3.0
Sales and related	96.6	97.3	97.8	99.2	100.0	99.8	101.3	102.0	102.5	.5	2.5
Office and administrative support	97.6	98.2	98.8	99.4	100.0	100.8	101.8	102.6	103.3	.7	3.3
Natural resources, construction, and maintenance	97.4	97.8	98.7	99.4	100.0	100.7	101.8	102.7	103.4	.7	3.4
Construction and extraction	97.4	97.8	98.4	99.3	100.0	100.7	101.9	102.9	103.7	.8	3.7
Installation, maintenance, and repair	97.4	97.8	99.0	99.5	100.0	100.6	101.6	102.6	103.1	.5	3.1
Production, transportation, and material moving	97.8	98.3	98.9	99.6	100.0	100.6	101.2	101.9	102.5	.6	2.5
Production	97.5	98.2	98.9	99.5	100.0	100.7	101.2	101.8	102.3	.5	2.3
Transportation and material moving	98.2	98.4	98.9	99.7	100.0	100.5	101.2	102.1	102.7	.6	2.7
Service occupations	97.6	98.2	98.7	99.5	100.0	100.5	101.2	102.2	103.2	1.0	3.2
Workers by industry											
Goods-producing	97.2	97.9	98.7	99.5	100.0	100.7	101.8	102.3	102.9	.6	2.9
Manufacturing	97.4	98.2	98.9	99.6	100.0	100.7	101.7	101.9	102.3	.4	2.3
Service-providing	97.5	98.2	98.7	99.4	100.0	100.7	101.5	102.7	103.3	.6	3.3
Education and health services	97.0	97.6	98.0	99.1	100.0	100.4	101.1	103.1	103.8	.7	3.8
Health care and social assistance	97.1	98.0	98.5	99.2	100.0	100.8	101.8	103.2	104.1	.9	4.1
Hospitals	96.7	97.6	98.2	99.2	100.0	100.9	101.7	102.9	103.8	.9	3.8
Nursing and residential care facilities	96.9	97.7	98.4	99.1	100.0	100.7	101.2	102.2	103.3	1.1	3.3
Education services	96.9	97.4	97.6	99.0	100.0	100.2	100.5	103.0	103.5	.5	3.5
Elementary and secondary schools	96.9	97.1	97.3	98.9	100.0	100.0	100.3	102.9	103.4	.5	3.4
Public administration ²	97.0	97.9	98.3	99.3	100.0	100.5	101.1	102.0	103.5	1.5	3.5
Private industry workers	97.6	98.3	98.9	99.5	100.0	100.7	101.7	102.5	103.2	.7	3.2
Workers by occupational group											
Management, professional, and related	97.8	98.6	99.2	99.6	100.0	101.1	102.0	103.0	103.6	.6	3.6
Management, business, and financial	98.5	99.2	99.7	99.5	100.0	101.3	102.2	102.8	103.1	.3	3.1
Professional and related	97.2	98.2	98.8	99.6	100.0	100.9	101.8	103.1	104.0	.9	4.0
Sales and office	97.2	97.8	98.5	99.3	100.0	100.4	101.6	102.4	103.0	.6	3.0
Sales and related	96.6	97.3	97.8	99.2	100.0	99.8	101.3	102.0	102.6	.6	2.6
Office and administrative support	97.6	98.2	99.0	99.4	100.0	100.9	101.9	102.6	103.3	.7	3.3
Natural resources, construction, and maintenance	97.5	97.8	98.7	99.4	100.0	100.7	101.8	102.8	103.4	.6	3.4
Construction and extraction	97.5	97.8	98.5	99.3	100.0	100.7	102.0	103.0	103.7	.7	3.7
Installation, maintenance, and repair	97.4	97.8	99.1	99.5	100.0	100.7	101.6	102.6	103.0	.4	3.0
Production, transportation, and material moving	97.8	98.3	98.9	99.6	100.0	100.6	101.2	101.8	102.4	.6	2.4
Production	97.5	98.3	98.9	99.5	100.0	100.7	101.2	101.7	102.2	.5	2.2
Transportation and material moving	98.2	98.5	98.9	99.7	100.0	100.4	101.2	102.0	102.6	.6	2.6
Service occupations	97.9	98.6	99.0	99.6	100.0	100.6	101.3	102.0	102.9	.9	2.9
Workers by industry and occupational group											
Goods-producing industries	97.2	97.9	98.7	99.5	100.0	100.7	101.8	102.3	102.9	.6	2.9
Management, professional, and related	97.2	98.0	98.8	99.7	100.0	101.1	101.7	102.4	102.8	.4	2.8
Sales and office	96.2	96.8	97.9	99.7	100.0	99.8	103.4	102.2	103.1	.9	3.1
Natural resources, construction, and maintenance	97.4	97.9	98.6	99.4	100.0	100.7	101.9	102.7	103.4	.7	3.4
Production, transportation, and material moving	97.5	98.2	98.9	99.5	100.0	100.7	101.3	101.9	102.4	.5	2.4
Construction	96.9	97.3	98.3	99.4	100.0	100.6	102.0	102.9	103.7	.8	3.7
Manufacturing	97.4	98.2	98.9	99.6	100.0	100.7	101.7	101.9	102.3	.4	2.3
Management, professional, and related	97.5	98.2	98.9	99.9	100.0	101.1	101.5	102.2	102.3	.1	2.3
Sales and office	97.2	97.9	98.6	100.0	100.0	99.5	103.8	101.1	102.0	.9	2.0
Natural resources, construction, and maintenance	97.1	97.8	98.6	99.1	100.0	100.9	101.7	102.3	103.0	.7	3.0
Production, transportation, and material moving	97.5	98.3	99.0	99.5	100.0	100.7	101.3	101.8	102.3	.5	2.3
Service-providing industries	97.7	98.4	99.0	99.5	100.0	100.8	101.7	102.6	103.3	.7	3.3
Management, professional, and related	97.9	98.7	99.2	99.6	100.0	101.1	102.0	103.1	103.7	.6	3.7
Sales and office	97.3	97.9	98.5	99.3	100.0	100.5	101.4	102.4	102.9	.5	2.9
Natural resources, construction, and maintenance	97.6	97.8	98.9	99.4	100.0	100.7	101.8	103.0	103.4	.4	3.4
Production, transportation, and material moving	98.2	98.5	98.9	99.7	100.0	100.4	101.0	101.7	102.4	.7	2.4
Service occupations	98.0	98.6	99.1	99.6	100.0	100.6	101.3	102.0	102.9	.9	2.9
Trade, transportation, and utilities	97.3	97.9	98.4	99.5	100.0	100.4	100.9	102.1	102.7	.6	2.7

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

[December 2005 = 100]

Series	2004	2005				2006				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
	Dec. 2006										
Wholesale trade.....	96.1	97.5	97.4	99.0	100.0	100.2	100.7	102.7	103.0	0.3	3.0
Retail trade.....	97.4	98.0	98.8	99.6	100.0	100.5	100.9	101.9	102.8	.9	2.8
Transportation and warehousing.....	98.7	98.2	98.8	99.9	100.0	100.1	100.7	101.4	101.9	.5	1.9
Utilities.....	97.4	98.4	99.2	99.5	100.0	100.8	102.1	103.0	103.5	.5	3.5
Information.....	97.6	98.4	99.2	99.3	100.0	101.0	101.7	102.6	102.4	-.2	2.4
Financial activities.....	97.8	98.7	99.8	99.4	100.0	101.3	102.3	102.5	102.8	.3	2.8
Finance and insurance.....	99.2	99.1	100.7	99.7	100.0	101.6	102.8	102.9	103.2	.3	3.2
Real estate and rental and leasing.....	90.7	96.8	96.2	98.3	100.0	99.8	99.9	100.8	101.4	.6	1.4
Professional and business services.....	99.0	99.5	99.7	99.7	100.0	101.0	102.3	103.0	103.5	.5	3.5
Education and health services.....	97.0	97.9	98.4	99.3	100.0	100.7	101.6	103.0	104.0	1.0	4.0
Education services.....	96.8	97.4	97.8	99.7	100.0	100.7	101.4	103.1	104.1	1.0	4.1
Health care and social assistance.....	97.1	97.9	98.6	99.2	100.0	100.7	101.6	103.0	103.9	.9	3.9
Hospitals.....	96.5	97.4	98.1	99.1	100.0	100.9	101.8	102.9	103.7	.8	3.7
Leisure and hospitality.....	97.6	98.3	98.8	99.5	100.0	100.6	101.3	102.3	103.7	1.4	3.7
Accommodation and food services.....	97.5	97.9	98.3	99.3	100.0	100.5	101.3	102.2	103.8	1.6	3.8
Other services, except public administration.....	97.1	97.8	98.4	99.8	100.0	101.3	102.6	103.4	103.8	.4	3.8
State and local government workers.....	97.0	97.6	97.8	99.1	100.0	100.3	100.8	102.8	103.5	.7	3.5
Workers by occupational group											
Management, professional, and related.....	97.0	97.5	97.8	99.0	100.0	100.2	100.7	102.9	103.5	.6	3.5
Professional and related.....	96.9	97.4	97.7	98.9	100.0	100.2	100.7	103.0	103.6	.6	3.6
Sales and office.....	97.6	98.1	98.0	99.4	100.0	100.6	101.2	102.6	103.2	.6	3.2
Office and administrative support.....	97.5	98.0	97.9	99.3	100.0	100.7	101.4	102.7	103.4	.7	3.4
Service occupations.....	96.8	97.3	97.7	99.3	100.0	100.3	100.8	102.4	103.9	1.5	3.9
Workers by industry											
Education and health services.....	97.0	97.4	97.6	99.0	100.0	100.2	100.7	103.1	103.6	.5	3.6
Education services.....	96.9	97.3	97.5	98.9	100.0	100.1	100.4	103.0	103.4	.4	3.4
Schools.....	96.9	97.3	97.5	98.9	100.0	100.1	100.4	103.0	103.4	.4	3.4
Elementary and secondary schools.....	96.9	97.1	97.2	98.9	100.0	100.0	100.3	103.0	103.4	.4	3.4
Health care and social assistance.....	97.3	98.1	98.5	99.4	100.0	101.0	103.0	104.8	105.5	.7	5.5
Hospitals.....	97.7	98.3	98.6	99.4	100.0	100.9	101.4	103.1	104.4	1.3	4.4
Public administration ²	97.0	97.9	98.3	99.3	100.0	100.5	101.1	102.0	103.5	1.5	3.5

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	2004	2005				2006				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 2006	
Civilian workers.....	95.7	97.6	98.3	99.5	100.0	100.9	101.6	102.8	103.6	0.8	3.6
Private industry workers.....	96.2	98.1	99.0	99.7	100.0	101.0	101.7	102.5	103.1	.6	3.1
Workers by occupational group											
Management, professional, and related.....	95.4	98.2	99.0	99.8	100.0	101.3	101.8	102.8	103.4	.6	3.4
Sales and office.....	95.8	97.6	98.5	99.3	100.0	100.8	101.6	102.0	102.9	.9	2.9
Natural resources, construction, and maintenance.....	96.4	98.0	99.3	99.8	100.0	101.1	102.7	103.5	104.0	.5	4.0
Production, transportation, and material moving.....	97.7	98.7	99.3	100.0	100.0	100.1	101.0	101.6	102.0	.4	2.0
Service occupations.....	97.0	98.3	98.9	99.5	100.0	101.5	102.2	103.0	103.6	.6	3.6
Workers by industry											
Goods-producing.....	96.3	98.3	99.6	100.4	100.0	99.6	100.4	101.3	101.7	.4	1.7
Manufacturing.....	96.0	98.3	99.4	100.0	100.0	99.0	99.7	100.5	100.8	.3	.8
Service-providing.....	96.1	98.1	98.7	99.4	100.0	101.5	102.3	103.0	103.7	.7	3.7
State and local government workers.....	94.1	95.5	96.0	99.0	100.0	100.7	101.3	104.1	105.2	1.1	5.2

NOTE: The Employment Cost Index data reflect the conversion to the 2002 North American Classification System (NAICS) and the 2000 Standard Occupational Classification (SOC) system. The NAICS and SOC data shown prior

to 2006 are for informational purposes only. Series based on NAICS and SOC became the official BLS estimates starting in March 2006.

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

[December 2005 = 100]

Series	2004	2005				2006				Percent change	
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	3 months ended	12 months ended
										Dec. 2006	
COMPENSATION											
Workers by bargaining status ¹											
Union.....	97.3	97.9	98.8	99.6	100.0	100.5	101.8	102.4	103.0	0.6	3.0
Goods-producing.....	97.2	97.7	98.8	99.6	100.0	99.9	101.2	101.8	102.2	.4	2.2
Manufacturing.....	97.8	98.3	99.1	99.7	100.0	99.3	100.1	100.5	100.8	.3	.8
Service-providing.....	97.3	98.1	98.8	99.6	100.0	101.0	102.2	102.9	103.6	.7	3.6
Nonunion.....	97.2	98.3	98.9	99.5	100.0	100.9	101.7	102.6	103.2	.6	3.2
Goods-producing.....	96.8	98.1	99.0	99.9	100.0	100.5	101.4	102.0	102.5	.5	2.5
Manufacturing.....	96.6	98.2	99.1	99.8	100.0	100.3	101.3	101.7	102.1	.4	2.1
Service-providing.....	97.3	98.3	98.9	99.4	100.0	101.0	101.8	102.7	103.4	.7	3.4
Workers by region ¹											
Northeast.....	96.6	97.6	98.5	99.2	100.0	100.9	101.8	102.5	103.3	.8	3.3
South.....	97.7	98.9	99.3	99.7	100.0	101.0	101.6	102.8	103.5	.7	3.5
Midwest.....	96.9	97.8	98.4	99.5	100.0	100.7	101.7	102.3	102.8	.5	2.8
West.....	97.4	98.4	99.3	99.7	100.0	100.6	101.8	102.5	103.0	.5	3.0
WAGES AND SALARIES											
Workers by bargaining status ¹											
Union.....	97.6	97.9	98.7	99.5	100.0	100.3	101.2	101.7	102.3	.6	2.3
Goods-producing.....	97.1	97.5	98.5	99.2	100.0	100.5	101.6	101.9	102.3	.4	2.3
Manufacturing.....	97.1	97.6	98.3	99.0	100.0	100.6	101.2	101.4	101.7	.3	1.7
Service-providing.....	98.0	98.2	99.0	99.7	100.0	100.1	100.9	101.6	102.2	.6	2.2
Nonunion.....	97.6	98.3	98.9	99.5	100.0	100.8	101.8	102.7	103.3	.6	3.3
Goods-producing.....	97.3	98.0	98.7	99.6	100.0	100.7	101.9	102.4	103.0	.6	3.0
Manufacturing.....	97.5	98.4	99.0	99.8	100.0	100.7	101.8	102.0	102.5	.5	2.5
Service-providing.....	97.7	98.4	99.0	99.5	100.0	100.8	101.7	102.7	103.4	.7	3.4
Workers by region ¹											
Northeast.....	97.2	97.8	98.6	99.2	100.0	100.8	101.7	102.5	103.1	.6	3.1
South.....	98.0	98.9	99.3	99.7	100.0	101.0	101.6	102.9	103.6	.7	3.6
Midwest.....	97.1	97.8	98.2	99.4	100.0	100.4	101.4	102.0	102.6	.6	2.6
West.....	98.0	98.4	99.3	99.6	100.0	100.7	102.1	102.7	103.2	.5	3.2

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, 2003–2006

Series	Year			
	2003	2004	2005	2006
All retirement				
Percentage of workers with access				
All workers.....	57	59	60	60
White-collar occupations.....	67	69	70	69
Blue-collar occupations.....	59	59	60	62
Service occupations.....	28	31	32	34
Full-time.....	67	68	69	69
Part-time.....	24	27	27	29
Union.....	86	84	88	84
Nonunion.....	54	56	56	57
Average wage less than \$15 per hour.....	45	46	46	47
Average wage \$15 per hour or higher.....	76	77	78	77
Goods-producing industries.....	70	70	71	73
Service-producing industries.....	53	55	56	56
Establishments with 1–99 workers.....	42	44	44	44
Establishments with 100 or more workers.....	75	77	78	78
Percentage of workers participating				
All workers.....	49	50	50	51
White-collar occupations.....	59	61	61	60
Blue-collar occupations.....	50	50	51	52
Service occupations.....	21	22	22	24
Full-time.....	58	60	60	60
Part-time.....	18	20	19	21
Union.....	83	81	85	80
Nonunion.....	45	47	46	47
Average wage less than \$15 per hour.....	35	36	35	36
Average wage \$15 per hour or higher.....	70	71	71	70
Goods-producing industries.....	63	63	64	64
Service-producing industries.....	45	47	47	47
Establishments with 1–99 workers.....	35	37	37	37
Establishments with 100 or more workers.....	65	67	67	67
Take-up rate (all workers)¹	–	–	85	85
Defined benefit				
Percentage of workers with access				
All workers.....	20	21	22	21
White-collar occupations.....	23	24	25	23
Blue-collar occupations.....	24	26	26	25
Service occupations.....	8	6	7	8
Full-time.....	24	25	25	24
Part-time.....	8	9	10	9
Union.....	74	70	73	70
Nonunion.....	15	16	16	15
Average wage less than \$15 per hour.....	12	11	12	11
Average wage \$15 per hour or higher.....	34	35	35	34
Goods-producing industries.....	31	32	33	32
Service-producing industries.....	17	18	19	18
Establishments with 1–99 workers.....	9	9	10	9
Establishments with 100 or more workers.....	34	35	37	35
Percentage of workers participating				
All workers.....	20	21	21	20
White-collar occupations.....	22	24	24	22
Blue-collar occupations.....	24	25	26	25
Service occupations.....	7	6	7	7
Full-time.....	24	24	25	23
Part-time.....	8	9	9	8
Union.....	72	69	72	68
Nonunion.....	15	15	15	14
Average wage less than \$15 per hour.....	11	11	11	10

See footnotes at end of table.

**34. Continued—National Compensation Survey: retirement benefits in private industry
by access, participation, and selected series, 2003–2006**

Series	Year			
	2003	2004	2005	2006
Average wage \$15 per hour or higher.....	33	35	34	33
Goods-producing industries.....	31	31	32	31
Service-producing industries.....	16	18	18	17
Establishments with 1–99 workers.....	8	9	9	9
Establishments with 100 or more workers.....	33	34	36	33
Take-up rate (all workers) ¹	—	—	97	96
Defined contribution				
Percentage of workers with access				
All workers.....	51	53	53	54
White-collar occupations.....	62	64	64	65
Blue-collar occupations.....	49	49	50	53
Service occupations.....	23	27	28	30
Full-time.....	60	62	62	63
Part-time.....	21	23	23	25
Union.....	45	48	49	50
Nonunion.....	51	53	54	55
Average wage less than \$15 per hour.....	40	41	41	43
Average wage \$15 per hour or higher.....	67	68	69	69
Goods-producing industries.....	60	60	61	63
Service-producing industries.....	48	50	51	52
Establishments with 1–99 workers.....	38	40	40	41
Establishments with 100 or more workers.....	65	68	69	70
Percentage of workers participating				
All workers.....	40	42	42	43
White-collar occupations.....	51	53	53	53
Blue-collar occupations.....	38	38	38	40
Service occupations.....	16	18	18	20
Full-time.....	48	50	50	51
Part-time.....	14	14	14	16
Union.....	39	42	43	44
Nonunion.....	40	42	41	43
Average wage less than \$15 per hour.....	29	30	29	31
Average wage \$15 per hour or higher.....	57	59	59	58
Goods-producing industries.....	49	49	50	51
Service-producing industries.....	37	40	39	40
Establishments with 1–99 workers.....	31	32	32	33
Establishments with 100 or more workers.....	51	53	53	54
Take-up rate (all workers) ¹	—	—	78	79
Employee contribution requirement				
Employee contribution required.....	—	—	61	61
Employee contribution not required.....	—	—	31	33
Not determinable.....	—	—	8	6
Percent of establishments				
Offering retirement plans.....	47	48	51	48
Offering defined benefit plans.....	10	10	11	10
Offering defined contribution plans.....	45	46	48	47

¹The take-up rate is an estimate of the percentage of workers with access to a plan who participate in the plan.

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

**35. National Compensation Survey: health insurance benefits in private industry
by access, participation, and selected series, 2003–2006**

Series	Year			
	2003	2004	2005	2006
Medical insurance				
Percentage of workers with access				
All workers.....	60	69	70	71
White-collar occupations.....	65	76	77	77
Blue-collar occupations.....	64	76	77	77
Service occupations.....	38	42	44	45
Full-time.....	73	84	85	85
Part-time.....	17	20	22	22
Union.....	67	89	92	89
Nonunion.....	59	67	68	68
Average wage less than \$15 per hour.....	51	57	58	57
Average wage \$15 per hour or higher.....	74	86	87	88
Goods-producing industries.....	68	83	85	86
Service-producing industries.....	57	65	66	66
Establishments with 1–99 workers.....	49	58	59	59
Establishments with 100 or more workers.....	72	82	84	84
Percentage of workers participating				
All workers.....	45	53	53	52
White-collar occupations.....	50	59	58	57
Blue-collar occupations.....	51	60	61	60
Service occupations.....	22	24	27	27
Full-time.....	56	66	66	64
Part-time.....	9	11	12	13
Union.....	60	81	83	80
Nonunion.....	44	50	49	49
Average wage less than \$15 per hour.....	35	40	39	38
Average wage \$15 per hour or higher.....	61	71	72	71
Goods-producing industries.....	57	69	70	70
Service-producing industries.....	42	48	48	47
Establishments with 1–99 workers.....	36	43	43	43
Establishments with 100 or more workers.....	55	64	65	63
Take-up rate (all workers) ¹	–	–	75	74
Dental				
Percentage of workers with access				
All workers.....	40	46	46	46
White-collar occupations.....	47	53	54	53
Blue-collar occupations.....	40	47	47	46
Service occupations.....	22	25	25	27
Full-time.....	49	56	56	55
Part-time.....	9	13	14	15
Union.....	57	73	73	69
Nonunion.....	38	43	43	43
Average wage less than \$15 per hour.....	30	34	34	34
Average wage \$15 per hour or higher.....	55	63	62	62
Goods-producing industries.....	48	56	56	56
Service-producing industries.....	37	43	43	43
Establishments with 1–99 workers.....	27	31	31	31
Establishments with 100 or more workers.....	55	64	65	64
Percentage of workers participating				
All workers.....	32	37	36	36
White-collar occupations.....	37	43	42	41
Blue-collar occupations.....	33	40	39	38
Service occupations.....	15	16	17	18
Full-time.....	40	46	45	44
Part-time.....	6	8	9	10
Union.....	51	68	67	63
Nonunion.....	30	33	33	33
Average wage less than \$15 per hour.....	22	26	24	23

See footnotes at end of table.

36. National Compensation Survey: percent of workers in private industry with access to selected benefits, 2003–2006

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

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^p	Feb. ^p	
Number of stoppages:																
Beginning in period.....	22	20	1	2	2	1	4	1	4	1	3	1	0	0	1	
In effect during period.....	24	23	4	5	6	5	7	4	6	6	5	5	3	2	2	
Workers involved:																
Beginning in period (in thousands).....	99.6	70.1	3.6	4.2	3.1	5.0	10.8	3.0	19.6	3.9	15.0	1.9	.0	.0	2.8	
In effect during period (in thousands).....	102.2	191	10.1	12.9	14.2	13.9	18.2	10.4	25.8	22.2	19.9	20.6	16.3	3.7	4.6	
Days idle:																
Number (in thousands).....	1,736.1	2,687.5	124.3	261.5	176.1	179.8	188.0	146.8	215.4	247.7	342.7	349.2	326.0	58.8	73.4	
Percent of estimated working time ¹	.01	.01	(²)	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	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.

² Less than 0.005.

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		2006											2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items.....	195.3	201.6	198.7	199.8	201.5	202.5	202.9	203.5	203.9	202.9	201.8	201.5	201.8	202.416	203.499
All items (1967 = 100).....	585.0	603.9	595.2	598.6	603.5	606.5	607.8	609.6	610.9	607.9	604.6	603.6	604.5	606.348	609.594
Food and beverages.....	191.2	195.7	194.4	194.5	194.2	194.7	195.1	195.6	196.0	196.7	197.5	197.2	197.4	199.198	200.402
Food.....	190.7	195.2	194.0	194.0	193.7	194.2	194.5	195.0	195.5	196.2	197.1	196.8	197.0	198.812	200.000
Food at home.....	189.8	193.1	192.6	192.3	191.5	191.9	192.2	192.6	193.1	194.1	195.1	194.3	194.3	196.671	198.193
Cereals and bakery products.....	209.0	212.8	210.3	210.9	210.9	211.9	212.8	214.6	214.6	213.6	214.6	214.5	214.8	216.276	219.041
Meats, poultry, fish, and eggs.....	184.7	186.6	185.4	185.9	185.5	184.7	186.0	185.1	187.1	188.0	188.1	188.4	188.6	189.609	190.491
Dairy and related products ¹	182.4	181.4	183.4	183.0	181.3	181.0	179.6	180.8	180.0	179.9	182.0	180.6	181.0	183.453	183.779
Fruits and vegetables.....	241.4	252.9	253.4	248.5	246.6	248.0	248.0	249.1	249.2	258.2	261.6	256.8	257.2	262.949	268.565
Nonalcoholic beverages and beverage materials.....	144.4	147.4	147.3	148.0	146.3	146.6	146.6	146.3	146.9	147.5	148.3	148.9	148.5	151.127	151.716
Other foods at home.....	167.0	169.6	169.1	169.2	168.8	170.0	170.0	171.0	170.6	169.8	170.1	169.2	168.7	170.878	171.483
Sugar and sweets.....	165.2	171.5	167.3	170.1	171.0	171.3	171.9	173.3	173.5	172.1	172.5	172.7	172.4	175.151	174.300
Fats and oils.....	167.7	168.0	170.4	168.5	165.0	168.6	167.3	166.9	167.5	167.9	169.1	168.1	166.7	170.152	171.667
Other foods.....	182.5	185.0	184.7	184.5	184.3	185.4	185.6	186.9	186.1	185.0	185.2	184.0	183.5	185.499	186.358
Other miscellaneous foods ^{1,2}	111.3	113.9	113.4	113.0	113.2	114.3	114.4	115.0	113.8	114.2	113.7	113.8	115.1	114.655	114.939
Food away from home ¹	193.4	199.4	197.2	197.6	198.0	198.7	199.2	199.7	200.2	200.5	201.1	201.6	202.2	203.171	203.909
Other food away from home ^{1,2}	131.3	136.6	134.7	135.2	135.8	136.0	136.3	136.8	137.3	137.6	138.0	138.6	139.1	140.919	141.626
Alcoholic beverages.....	195.9	200.7	199.5	200.1	200.1	200.8	201.6	201.3	201.2	201.4	201.9	201.6	201.1	202.968	204.385
Housing.....	195.7	203.2	200.5	201.3	201.7	202.2	203.7	204.7	205.1	205.0	204.4	204.5	204.8	206.057	207.177
Shelter.....	224.4	232.1	228.3	229.9	230.7	231.2	232.2	233.6	234.2	233.9	234.8	234.9	235.1	236.504	237.972
Rent of primary residence.....	217.3	225.1	221.6	222.3	222.9	223.6	224.4	225.2	226.2	227.1	228.0	228.9	230.0	230.806	231.739
Lodging away from home.....	130.3	136.0	133.4	140.4	140.4	137.9	139.1	142.8	141.1	135.0	135.7	130.7	127.7	133.633	139.160
Owners' equivalent rent of primary residence ³	230.2	238.2	234.1	234.9	235.8	236.9	237.9	238.8	239.7	240.4	241.3	242.1	242.8	243.345	244.020
Tenants' and household insurance ^{1,2}	117.6	116.5	116.2	116.2	116.2	116.3	116.4	116.4	116.2	116.4	116.2	118.3	117.1	117.417	117.320
Fuels and utilities.....	179.0	194.7	194.6	192.3	190.8	192.0	197.6	198.5	199.0	199.6	190.1	190.6	192.6	194.378	194.890
Fuels.....	161.6	177.1	177.5	174.8	173.2	174.4	180.4	181.1	181.5	182.0	171.5	172.1	174.2	175.718	176.092
Fuel oil and other fuels.....	208.6	234.9	230.5	230.4	236.4	239.8	239.1	241.9	245.3	237.1	227.9	227.2	233.2	227.930	231.800
Gas (piped) and electricity.....	166.5	182.1	182.8	179.9	177.7	178.8	185.6	186.2	186.4	187.4	176.4	177.0	179.0	181.064	181.232
Household furnishings and operations.....	126.1	127.0	126.8	126.7	126.9	127.2	127.3	127.1	127.1	127.1	127.4	127.2	127.0	127.093	127.495
Apparel.....	119.5	119.5	116.6	122.0	123.4	122.4	118.9	113.8	116.1	121.7	123.3	121.7	118.6	115.988	119.017
Men's and boys' apparel.....	116.1	114.1	112.7	116.2	118.0	116.5	113.0	110.3	110.8	114.4	116.4	115.6	113.2	110.327	111.233
Women's and girls' apparel.....	110.8	110.7	106.3	115.0	116.3	114.4	110.3	102.3	105.7	114.6	116.4	113.9	110.2	105.891	110.871
Infants' and toddlers' apparel ¹	116.7	116.5	116.6	118.7	118.2	118.3	115.0	114.4	115.6	116.5	119.4	117.6	114.1	112.444	115.416
Footwear.....	122.6	123.5	122.8	125.4	126.1	125.8	123.0	119.1	120.6	124.2	125.6	124.5	123.0	120.915	121.930
Transportation.....	173.9	180.9	175.8	177.4	184.1	187.6	187.3	189.0	188.5	180.6	174.8	173.9	175.4	174.463	174.799
Private transportation.....	170.2	177.0	171.9	173.5	180.4	183.9	183.2	184.9	184.5	176.5	170.7	170.0	171.8	170.562	170.775
New and used motor vehicles ²	95.6	95.6	96.2	96.0	96.0	95.8	95.7	95.6	95.5	95.3	95.2	94.9	94.8	94.840	94.591
New vehicles.....	137.9	137.6	139.3	138.8	138.4	137.7	137.2	136.9	136.4	136.3	136.8	136.8	137.1	137.603	137.340
Used cars and trucks ¹	139.4	140.0	139.5	140.0	140.4	140.9	141.5	142.1	142.4	141.0	139.3	137.3	136.2	135.257	134.597
Motor fuel.....	195.7	221.0	198.1	205.8	235.4	250.9	248.4	255.6	254.4	220.1	193.8	191.4	199.3	193.900	195.377
Gasoline (all types).....	194.7	219.9	197.0	204.7	234.4	249.8	247.3	254.6	253.2	219.0	192.7	190.3	198.1	192.806	194.282
Motor vehicle parts and equipment.....	111.9	117.3	114.9	115.4	115.8	117.0	117.0	117.9	118.2	118.7	118.9	119.5	119.5	119.759	120.196
Motor vehicle maintenance and repair.....	206.9	215.6	212.9	213.4	213.9	214.9	215.5	216.7	216.2	217.0	218.5	218.5	218.8	219.262	220.530
Public transportation.....	217.3	226.6	221.3	222.6	225.3	229.2	234.3	237.4	234.3	229.5	226.9	220.4	217.8	221.403	224.061
Medical care.....	323.2	336.2	332.1	333.8	334.7	335.6	336.0	337.0	337.7	338.3	339.3	340.1	340.1	343.510	346.457
Medical care commodities.....	276.0	285.9	283.1	284.3	285.3	286.3	286.3	287.1	287.6	288.1	288.1	288.6	288.9	288.088	287.703
Medical care services.....	336.7	350.6	346.1	348.0	348.8	349.7	350.3	351.2	352.1	352.7	354.0	355.6	356.0	359.757	363.908
Professional services.....	281.7	289.3	286.5	287.8	288.5	289.0	289.2	289.8	290.2	290.6	291.4	291.9	292.4	295.219	298.393
Hospital and related services.....	439.9	468.1	460.4	463.3	464.6	466.1	467.6	469.3	471.1	472.0	474.2	477.7	477.2	482.258	487.881
Recreation ²	109.4	110.9	110.2	110.6	111.1	111.2	111.2	111.3	111.3	111.1	111.2	111.2	110.8	111.012	111.174
Video and audio ^{1,2}	104.2	104.6	104.3	105.2	105.8	105.5	105.2	105.0	104.7	104.5	104.1	103.7	102.8	102.784	103.144
Education and communication ²	113.7	116.8	115.7	115.6	115.8	115.7	115.9	116.3	117.5	118.4	118.5	118.1	118.0	117.815	117.971
Education ²	152.7	162.1	158.4	158.4	158.6	158.9	159.5	160.3	163.9	166.6	167.1	167.4	167.6	167.624	167.927
Educational books and supplies.....	365.6	388.9	382.0	383.1	383.1	384.7	386.7	386.3	391.3	393.9	398.4	398.5	399.5	405.668	407.809
Tuition, other school fees, and child care.....	440.9	468.1	457.2	457.2	457.7	458.6	460.2	462.9	473.4	481.7	482.9	483.7	484.0	483.705	484.459
Communication ^{1,2}	84.7	84.1	84.5	84.4	84.5	84.2	84.3	84.3	84.3	84.2	84.0	83.3	83.1	82.778	82.845
Information and information processing ^{1,2}	82.6	81.7	82.0	81.9	82.1	81.7	81.8	81.9	81.8	81.7	81.5	80.8	80.6	80.246	80.311
Telephone services ^{1,2}	94.9	95.8	95.2	95.0	95.4	95.2	95.4	95.6	95.9	96.1	96.8	96.5	96.8	96.898	97.096
Information and information processing other than telephone services ^{1,4}	13.6	12.5	13.0	13.0	12.9	12.8	12.7	12.7	12.5	12.3	11.9	11.4	11.2	10.900	10.853
Personal computers and peripheral equipment ^{1,2}	12.8	10.8	11.5	11.4	11.1	10.8	10.7	10.6	10.6	10.5	10.4	10.3	10.3	10.259	10.174
Other goods and services.....	313.4	321.7	319.1	320.0	320.0	320.2	321.5	321.2	321.7	323.3	324.3	324.3	326.7	329.198	330.459
Tobacco and smoking products.....	502.8	519.9	515.9	519.0	518.1	517.5	521.5	521.5	521.1	520.8	521.1	519.4	527.3	543.477	548.896
Personal care ¹	185.6	190.2	188.6	189.1	189.1	189.4	189.9	189.7	190.1	191.3	192.0	192.2	193.3	193.560	193.987
Personal care products ¹	154.4	155.8	155.6	155.2	155.0	154.6	155.2	155.0	154.9	156.4	156.6	156.1	159.0	157.699	158.038
Personal care services ¹	203.9	209.7	207.9	208.5	208.5	208.7	209.1	209.5	210.1	210.7	211.7	212.3	212.5	214.045	214.616

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
Miscellaneous personal services.....	303.0	313.6	309.3	310.9	311.3	312.4	313.3	312.9	314.4	316.4	317.6	318.2	318.7	320.047	320.725	
Commodity and service group:																
Commodities.....	160.2	164.0	161.4	162.8	165.5	166.9	166.3	166.4	166.6	164.4	162.5	161.8	162.1	161.978	162.890	
Food and beverages.....	191.2	195.7	194.4	194.5	194.2	194.7	195.1	195.6	196.0	196.7	197.5	197.2	197.4	199.198	200.402	
Commodities less food and beverages.....	142.5	145.9	142.8	144.7	148.6	150.3	149.3	149.3	149.4	146.0	143.0	142.1	142.5	141.529	142.290	
Nondurables less food and beverages.....	168.4	176.7	169.1	173.3	181.8	185.6	183.8	183.8	184.5	177.7	171.2	169.7	170.9	168.788	170.479	
Apparel.....	119.5	119.5	116.6	122.0	123.4	122.4	118.9	113.8	116.1	121.7	123.3	121.7	118.6	115.988	119.017	
Nondurables less food, beverages, and apparel.....	202.6	216.3	205.7	209.3	222.3	229.2	228.4	231.6	231.2	216.6	205.0	203.5	207.3	205.498	206.395	
Durables.....	115.3	114.5	115.3	115.1	115.1	114.9	114.6	114.6	114.3	113.8	113.8	113.5	113.3	113.263	113.210	
Services.....	230.1	238.9	235.7	236.6	237.1	237.7	239.2	240.2	240.9	241.1	240.9	240.9	241.2	242.540	243.793	
Rent of shelter ³	233.7	241.9	237.8	239.6	240.4	241.0	242.0	243.4	244.1	243.8	244.7	244.7	245.0	246.476	248.024	
Transportation services.....	225.7	230.8	228.7	228.8	229.6	230.7	231.8	232.7	232.2	231.7	232.3	231.5	230.8	231.367	232.077	
Other services.....	268.4	277.5	273.9	274.6	275.5	275.8	276.6	277.2	279.1	280.8	281.2	281.1	280.9	281.282	281.864	
Special indexes:																
All items less food.....	196.0	202.7	199.5	200.8	202.8	203.9	204.3	204.9	205.4	204.1	202.6	202.3	202.6	203.035	204.101	
All items less shelter.....	186.1	191.9	189.4	190.3	192.3	193.5	193.7	194.0	194.4	193.1	191.2	190.7	191.1	191.328	192.272	
All items less medical care.....	188.7	194.7	191.9	193.0	194.7	195.6	196.1	196.6	197.1	196.0	194.9	194.5	194.8	195.295	196.298	
Commodities less food.....	144.5	148.0	144.9	146.8	150.6	152.3	151.3	151.3	151.4	148.0	145.1	144.3	144.7	143.775	144.558	
Nondurables less food.....	170.1	178.2	171.0	175.0	182.9	186.5	184.9	184.9	185.5	179.1	173.1	171.7	172.7	170.878	172.552	
Nondurables less food and apparel.....	201.2	213.9	204.2	207.5	219.2	225.5	224.8	227.6	227.3	214.2	203.8	202.5	205.8	204.403	205.347	
Nondurables.....	180.2	186.7	182.2	184.4	188.7	191.0	190.2	190.4	191.0	187.8	184.8	183.8	184.5	184.284	185.751	
Services less rent of shelter ³	243.2	253.3	251.0	250.9	251.0	251.8	253.9	254.6	255.4	256.2	254.4	254.6	254.9	256.164	257.147	
Services less medical care services.....	221.2	229.6	226.5	227.3	227.8	228.4	229.9	231.0	231.6	231.8	231.5	231.5	231.7	232.892	233.963	
Energy.....	177.1	196.9	186.4	188.6	201.4	209.3	211.3	215.1	214.7	199.1	181.3	180.4	185.2	183.567	184.451	
All items less energy.....	198.7	203.7	201.6	202.6	203.0	203.3	203.6	203.9	204.4	204.9	205.6	205.3	205.1	205.993	207.106	
All items less food and energy.....	200.9	205.9	203.6	204.9	205.5	205.7	205.9	206.2	206.7	207.2	207.8	207.6	207.3	208.009	209.112	
Commodities less food and energy.....	140.3	140.6	140.3	141.5	141.7	141.5	140.7	139.6	139.9	140.9	141.2	140.6	139.9	139.628	140.305	
Energy commodities.....	197.4	223.0	201.1	208.3	236.6	251.4	249.0	256.0	255.0	222.3	196.9	194.6	202.4	196.983	198.617	
Services less energy.....	236.6	244.7	241.1	242.4	243.2	243.7	244.7	245.8	246.5	246.6	247.5	247.5	247.5	248.836	250.199	
CONSUMER PRICE INDEX FOR URBAN																
WAGE EARNERS AND CLERICAL WORKERS																
All items.....	191.0	197.1	194.2	195.3	197.2	198.2	198.6	199.2	199.6	198.4	197.0	196.8	197.2	197.559	198.544	
All items (1967 = 100).....	568.9	587.2	578.6	581.8	587.3	590.5	591.7	593.2	594.6	591.0	586.7	586.1	587.3	588.467	591.403	
Food and beverages.....	190.5	194.9	193.7	193.8	193.4	193.9	194.2	194.6	195.2	195.9	196.7	196.5	196.5	198.280	199.540	
Food.....	190.1	194.4	193.3	193.2	192.8	193.3	193.7	194.1	194.7	195.5	196.2	196.0	196.1	197.886	199.111	
Food at home.....	188.9	192.2	191.7	191.4	190.5	190.9	191.2	191.6	192.2	193.3	194.2	193.4	193.2	195.531	197.044	
Cereals and bakery products.....	208.9	213.1	210.5	211.1	211.2	212.2	213.1	214.9	214.8	214.1	214.9	214.9	215.2	216.416	219.191	
Meats, poultry, fish, and eggs.....	184.7	186.1	185.1	185.8	185.1	184.4	185.4	184.7	186.7	187.5	187.5	188.0	188.0	189.119	189.996	
Dairy and related products ¹	182.2	180.9	183.3	182.7	180.8	180.5	179.1	180.3	179.4	179.4	181.4	179.9	180.3	182.711	183.185	
Fruits and vegetables.....	238.9	251.0	251.3	245.9	244.0	246.0	245.7	247.0	247.9	257.3	260.8	255.1	254.7	260.176	266.159	
Nonalcoholic beverages and beverage materials.....	143.7	146.7	146.7	147.3	145.7	145.9	146.1	145.6	146.3	146.8	147.7	148.3	147.8	150.620	150.968	
Other foods at home.....	166.5	169.1	168.7	168.7	168.2	169.4	169.5	170.4	170.0	169.3	169.5	168.7	168.1	170.242	170.861	
Sugar and sweets.....	164.3	170.5	166.5	169.0	169.9	170.5	170.9	172.5	172.5	171.3	171.4	171.3	171.3	173.929	173.081	
Fats and oils.....	167.8	168.7	171.2	169.4	165.7	169.1	167.9	167.9	168.2	168.6	169.8	168.9	167.3	170.559	172.380	
Other foods.....	182.8	185.2	185.0	184.8	184.5	185.5	185.9	187.0	186.2	185.3	185.3	184.3	183.7	185.681	186.473	
Other miscellaneous foods ^{1,2}	111.8	114.2	113.8	113.4	113.4	114.4	115.0	115.2	114.2	114.5	113.8	114.1	115.3	114.759	115.151	
Food away from home ¹	193.3	199.1	197.0	197.4	197.8	198.4	198.9	199.4	199.9	200.2	200.8	201.4	202.0	202.905	203.689	
Other food away from home ^{1,2}	131.1	136.2	134.4	134.8	135.6	135.8	136.0	136.3	136.7	137.1	137.5	138.3	138.7	140.499	141.274	
Alcoholic beverages.....	195.8	200.6	199.4	200.5	200.3	200.6	201.0	200.8	200.7	200.9	201.8	201.9	201.1	202.821	204.616	
Housing.....	191.2	198.5	196.1	196.6	196.8	197.4	198.9	199.7	200.3	200.4	199.6	199.9	200.5	201.509	202.370	
Shelter.....	217.5	224.8	221.2	222.4	223.1	223.7	224.7	225.8	226.5	226.6	227.5	227.8	228.3	229.359	230.472	
Rent of primary residence.....	216.5	224.2	220.8	221.4	222.0	222.7	223.5	224.3	225.3	226.2	227.1	228.0	229.1	229.921	230.860	
Lodging away from home ²	130.0	135.3	133.1	140.4	139.8	136.6	138.7	142.6	141.1	134.0	134.7	129.3	127.1	132.607	138.083	
Owners' equivalent rent of primary residence ³	208.8	216.0	212.4	213.0	213.9	214.8	215.7	216.5	217.3	218.0	218.8	219.5	220.1	220.602	221.185	
Tenants' and household insurance ^{1,2}	117.9	116.8	116.5	116.5	116.5	116.6	116.7	116.7	116.6	116.8	116.6	116.6	117.4	117.748	117.622	
Fuels and utilities.....	177.9	193.1	193.2	190.8	189.4	190.4	196.0	196.7	197.2	197.7	188.1	188.9	190.9	192.895	193.330	
Fuels.....	159.7	174.4	175.0	172.4	170.8	171.8	177.8	178.3	178.6	179.0	168.7	169.4	171.5	173.352	173.654	
Fuel oil and other fuels.....	208.1	234.0	229.7	229.8	235.8	238.9	238.3	241.3	244.6	235.8	226.6	226.3	232.2	226.971	231.136	
Gas (piped) and electricity.....	165.4	180.2	181.1	178.3	176.1	177.1	183.7	184.1	184.3	185.3	174.3	175.1	177.1	179.457	179.550	
Household furnishings and operations.....	121.8	122.6	122.4	122.5	122.5	122.8	122.9	122.7	122.7	122.7	122.8	122.8	122.6	122.623	122.962	
Apparel.....	119.1	119.1	116.1	121.6	123.1	121.9	118.4	113.2	115.7	121.4	123.1	121.8	118.6	115.315	118.211	
Men's and boys' apparel.....	115.6	114.0	112.7	115.7	117.5	116.5	113.0	110.3	110.9	114.5	116.4	115.8	113.0	109.762	111.079	
Women's and girls' apparel.....	110.4	110.3	105.4	114.3	115.9	114.0	109.8	101.3	105.4	114.3	115.9	114.2	110.4	105.697	110.214	
Infants' and toddlers' apparel ¹	119.3	118.6	118.1	120.8	120.3	120.2	116.8	115.9	117.7	118.5	121.8	120.5	116.8	114.948	118.037	
Footwear.....	121.8	123.1	122.1	124.7	125.4	125.1	122.6	119.1	120.3	123.9	125.2	124.2	122.6	120.506	121.679	
Transportation.....	173.0	180.3	174.8	176.6	183.9	187.7	187.1	189.0	188.6	180.1	173.7	172.7	174.4	173.182	173.518	
Private transportation.....	170.3	177.5	172.0	173.8	181.2	184.9	184.2	186.1	185.8	177.1	169.9	171.7	170.321	170.588		
New and used motor vehicles ²	94.7	94.7	95.2	95.1	95.1	95.0	94.9	94.9	94.8	94.5	94.3	93.9	93.7	93.709	93.455	

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		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
New vehicles.....	138.9	138.6	140.3	139.9	139.5	138.8	138.3	137.9	137.4	137.4	137.8	137.9	138.2	138.722	138.4	
Used cars and trucks ¹	140.3	140.8	140.3	140.8	141.3	141.8	142.4	143.0	143.2	141.9	140.1	138.1	137.0	136.063	135.4	
Motor fuel.....	196.3	221.6	198.7	206.5	236.1	251.3	248.8	256.2	255.1	220.8	194.4	192.0	199.8	194.278	195.9	
Gasoline (all types).....	195.4	220.7	197.7	205.6	235.2	250.3	247.8	255.3	254.1	219.7	193.4	191.0	198.8	193.262	194.9	
Motor vehicle parts and equipment.....	111.5	116.9	114.3	114.9	115.3	116.5	116.6	117.5	117.8	118.4	118.6	119.2	119.2	119.464	119.8	
Motor vehicle maintenance and repair.....	209.3	218.1	215.4	215.8	216.3	217.4	218.0	219.1	218.6	219.4	221.1	221.1	221.4	221.769	223.0	
Public transportation.....	215.5	225.0	220.4	221.6	224.0	227.5	232.0	234.1	231.4	227.8	225.6	219.7	217.4	220.809	223.3	
Medical care.....	322.8	335.7	331.5	333.2	334.2	335.0	335.5	336.5	337.3	337.8	338.9	339.8	340.0	343.138	346.1	
Medical care commodities.....	269.2	279.0	276.3	277.3	278.4	279.4	279.4	280.3	280.6	281.1	281.0	279.7	279.1	281.098	280.5	
Medical care services.....	337.3	351.1	346.4	348.3	349.2	350.0	350.6	351.6	352.5	353.1	354.6	356.3	356.7	360.251	364.5	
Professional services.....	284.3	291.7	288.9	290.2	290.8	291.3	291.5	292.1	292.5	292.8	293.6	294.2	294.7	297.335	300.7	
Hospital and related services.....	436.1	463.6	455.4	458.4	459.9	461.2	462.8	464.8	466.7	467.5	469.9	473.9	473.0	477.603	482.8	
Recreation ²	106.8	108.2	107.5	107.9	108.4	108.5	108.6	108.7	108.5	108.3	108.4	108.5	108.1	108.281	108.4	
Video and audio ^{1,2}	103.4	103.9	103.6	104.4	104.9	104.7	104.5	104.3	104.1	103.9	103.5	103.3	102.4	102.334	102.6	
Education and communication ²	111.4	113.9	113.1	113.0	113.2	113.0	113.3	113.5	114.5	115.3	115.4	114.9	114.8	114.703	114.8	
Education ²	151.0	160.3	156.7	156.8	156.9	157.2	157.8	158.4	161.7	164.7	165.2	165.4	165.5	165.789	166.1	
Educational books and supplies.....	367.1	390.7	383.5	384.9	384.7	386.2	388.1	387.6	393.0	395.4	400.9	401.0	402.0	409.068	411.1	
Tuition, other school fees, and child care.....	427.1	453.3	443.2	443.1	443.5	444.4	446.1	448.0	457.7	466.6	467.4	468.0	468.3	468.417	469.2	
Communication ^{1,2}	86.4	86.0	86.3	86.2	86.3	86.0	86.1	86.2	86.2	86.2	86.1	85.4	85.2	85.030	85.1	
Information and information processing ^{1,2}	84.9	84.3	84.6	84.5	84.6	84.3	84.4	84.5	84.5	84.4	84.4	83.7	83.5	83.256	83.3	
Telephone services ^{1,2}	95.0	95.9	95.4	95.2	95.6	95.3	95.5	95.7	96.0	96.2	96.9	96.7	96.9	97.045	97.2	
Information and information processing other than telephone services ^{1,4}	14.2	13.0	13.5	13.6	13.5	13.3	13.3	13.3	13.1	12.9	12.4	11.9	11.6	11.321	11.2	
Personal computers and peripheral equipment ^{1,2}	12.6	10.7	11.3	11.3	11.0	10.7	10.5	10.4	10.5	10.3	10.2	10.2	10.2	10.081	9.9	
Other goods and services.....	322.2	330.9	328.4	329.4	329.3	329.3	330.8	330.7	331.0	332.2	333.1	332.9	335.7	339.084	340.9	
Tobacco and smoking products.....	504.2	521.6	517.9	520.9	519.9	519.4	523.5	523.3	522.9	522.4	522.7	521.1	528.6	544.568	550.0	
Personal care ¹	184.0	188.3	186.8	187.2	187.2	187.3	187.9	187.9	188.2	189.2	189.9	190.0	191.1	191.311	191.9	
Personal care products ¹	154.5	155.7	155.6	155.2	155.0	154.7	155.1	155.0	155.0	156.3	156.5	156.0	158.6	157.505	157.9	
Personal care services ¹	204.2	209.8	208.0	208.5	208.6	208.6	209.2	209.7	210.2	210.8	211.9	212.5	212.7	214.254	214.7	
Miscellaneous personal services.....	303.4	314.1	309.7	311.4	311.8	312.7	313.8	313.9	315.1	316.8	317.9	318.5	318.7	319.885	321.2	
Commodity and service group:																
Commodities.....	161.4	165.7	162.7	164.3	167.3	168.9	168.2	168.5	168.8	166.1	163.8	163.1	163.5	163.212	164.1	
Food and beverages.....	190.5	194.9	193.7	193.8	193.4	193.9	194.2	194.6	195.2	195.9	196.7	196.5	196.5	198.280	199.5	
Commodities less food and beverages.....	144.7	148.7	145.1	147.2	151.8	153.7	152.7	152.8	153.0	148.9	145.3	144.4	145.0	143.764	144.5	
Nondurables less food and beverages.....	173.2	182.6	174.0	178.7	188.4	192.8	190.8	191.1	191.8	183.6	176.0	174.6	176.1	173.542	175.3	
Apparel.....	119.1	119.1	116.1	121.6	123.1	121.9	118.4	113.2	115.7	121.4	123.1	121.8	118.6	115.315	118.2	
Nondurables less food, beverages, and apparel.....	210.6	226.1	213.9	218.1	233.2	241.1	240.1	243.8	243.4	226.2	212.7	211.2	215.7	213.546	214.7	
Durables.....	115.1	114.6	115.3	115.2	115.2	115.0	114.8	114.8	114.5	114.0	113.9	113.6	113.3	113.270	113.1	
Services.....	225.7	234.1	231.2	231.8	232.2	232.8	234.3	235.2	235.9	236.3	235.8	236.2	236.6	237.761	238.7	
Rent of shelter ³	209.5	216.6	213.1	214.3	215.0	215.6	216.5	217.6	218.3	218.4	219.3	219.5	220.0	221.062	222.1	
Transportation services.....	225.9	230.6	229.0	229.0	229.5	230.3	231.0	231.4	231.1	231.3	232.2	231.9	231.4	231.783	232.3	
Other services.....	260.0	268.2	265.0	265.7	266.6	266.8	267.6	268.1	269.6	271.0	271.4	271.2	270.9	271.323	271.9	
Special indexes:																
All items less food.....	191.0	197.5	194.2	195.5	197.8	199.0	199.4	199.9	200.4	198.8	196.9	196.7	197.2	197.317	198.2	
All items less shelter.....	183.4	189.2	186.5	187.6	189.8	191.1	191.3	191.6	192.0	190.3	188.0	187.6	188.0	188.108	189.0	
All items less medical care.....	185.4	191.3	188.4	189.5	191.3	192.4	192.8	193.3	193.8	192.5	191.0	190.8	191.2	191.475	192.3	
Commodities less food.....	146.5	150.6	147.0	149.1	153.6	155.5	154.5	154.6	154.8	150.8	147.3	146.4	147.0	145.822	146.6	
Nondurables less food.....	174.6	183.8	175.6	180.1	189.3	193.4	191.6	191.9	192.5	184.7	177.6	176.3	177.7	175.341	177.1	
Nondurables less food and apparel.....	208.4	223.0	211.7	215.6	229.4	236.6	235.7	239.1	238.7	223.1	210.9	209.5	213.5	211.702	212.9	
Nondurables.....	182.5	189.5	184.5	186.9	191.8	194.2	193.4	193.8	194.4	190.5	186.9	186.1	186.9	186.434	187.9	
Services less rent of shelter ³	215.9	224.7	222.9	222.7	222.7	223.3	225.3	225.8	226.3	227.2	225.2	225.5	225.8	226.994	227.8	
Services less medical care services.....	217.2	225.3	222.5	223.0	223.4	224.0	225.5	226.4	227.0	227.4	226.9	227.1	227.6	228.608	229.4	
Energy.....	177.2	196.8	185.9	188.4	202.0	210.0	211.8	215.7	215.3	198.7	180.6	179.8	184.7	182.878	183.8	
All items less energy.....	193.5	198.0	196.1	197.0	197.4	197.7	197.9	198.0	198.6	199.2	199.9	199.7	199.6	200.245	201.2	
All items less food and energy.....	194.6	199.2	197.1	198.2	198.7	198.9	199.1	199.2	199.8	200.4	201.0	200.9	200.7	201.110	202.0	
Commodities less food and energy.....	140.6	141.1	140.7	141.9	142.2	141.9	141.2	140.0	140.4	141.4	141.7	141.1	140.4	139.999	140.6	
Energy commodities.....	197.7	223.0	200.9	208.4	236.9	251.4	249.1	256.2	255.4	222.3	196.7	194.4	202.1	196.605	198.3	
Services less energy.....	232.3	239.9	236.5	237.5	238.2	238.8	239.7	240.6	241.4	241.7	242.6	242.8	243.0	244.080	245.2	

¹ Not seasonally adjusted.

⁴ Indexes on a December 1988 = 100 base.

² Indexes on a December 1997 = 100 base.

³ Indexes on a December 1982 = 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 sched- ule ¹	All Urban Consumers						Urban Wage Earners					
		2006				2007		2006				2007	
		Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
U.S. city average.....	M	202.9	201.8	201.5	201.8	202.416	203.499	198.4	197.0	196.8	197.2	197.559	198.544
Region and area size²													
Northeast urban.....	M	216.3	215.2	214.8	215.2	215.813	216.651	212.7	211.1	210.9	211.5	212.054	212.649
Size A—More than 1,500,000.....	M	219.1	217.7	217.4	217.8	218.365	219.330	214.0	212.1	212.2	212.7	213.163	213.892
Size B/C—50,000 to 1,500,000 ³	M	127.2	126.9	126.4	126.7	127.237	127.546	127.5	127.0	126.5	126.9	127.395	127.587
Midwest urban ⁴	M	193.7	192.3	192.8	192.9	193.068	194.458	188.7	187.0	187.5	187.8	187.811	189.121
Size A—More than 1,500,000.....	M	195.7	194.1	194.5	194.7	195.073	196.507	189.8	187.9	188.3	188.6	188.802	190.087
Size B/C—50,000 to 1,500,000 ³	M	123.2	122.6	123.1	123.0	122.861	123.854	122.5	121.7	122.2	122.3	122.103	123.121
Size D—Nonmetropolitan (less than 50,000).....	M	189.1	187.1	187.0	187.1	187.587	188.122	187.3	185.1	185.2	185.5	185.949	186.458
South urban.....	M	195.8	194.7	194.3	194.8	195.021	195.950	192.9	191.5	191.1	191.8	191.671	192.574
Size A—More than 1,500,000.....	M	198.3	197.2	196.6	197.3	197.650	198.516	196.4	195.0	194.4	195.1	195.057	196.032
Size B/C—50,000 to 1,500,000 ³	M	124.4	123.7	123.4	123.8	123.817	124.521	122.9	122.1	121.8	122.3	122.204	122.842
Size D—Nonmetropolitan (less than 50,000).....	M	197.1	195.7	195.4	196.0	196.077	196.043	196.9	195.2	195.2	195.7	195.466	195.444
West urban.....	M	207.8	207.1	206.3	206.2	207.790	208.995	202.4	201.3	200.6	200.8	201.946	203.036
Size A—More than 1,500,000.....	M	211.3	210.5	209.7	209.6	211.102	212.549	204.3	203.0	202.2	202.4	203.537	204.885
Size B/C—50,000 to 1,500,000 ³	M	125.9	125.5	125.1	125.0	126.244	126.805	125.6	125.0	124.5	124.6	125.593	126.161
Size classes:													
A ⁵	M	186.1	185.0	184.7	184.9	185.608	186.673	184.3	182.8	182.6	183.0	183.443	184.447
B/C ³	M	124.8	124.2	124.1	124.3	124.571	125.243	124.0	123.3	123.1	123.4	123.578	124.203
D.....	M	195.6	194.3	194.2	194.6	194.724	194.945	194.1	192.5	192.5	192.9	192.985	193.060
Selected local areas⁶													
Chicago—Gary—Kenosha, IL—IN—WI.....	M	199.6	197.5	197.9	197.8	199.401	200.630	192.8	190.3	190.8	190.9	192.166	193.451
Los Angeles—Riverside—Orange County, CA.....	M	212.9	211.4	211.1	210.6	212.584	214.760	205.3	203.5	203.3	202.9	204.498	206.632
New York, NY—Northern NJ—Long Island, NY—NJ—CT—PA.....	M	222.9	221.7	220.9	221.3	221.767	223.066	216.9	215.3	214.7	215.2	215.793	216.771
Boston—Brockton—Nashua, MA—NH—ME—CT.....	1	224.5	—	223.1	—	224.432	—	224.3	—	223.4	—	224.256	—
Cleveland—Akron, OH.....	1	190.7	—	189.4	—	191.610	—	181.7	—	179.5	—	181.559	—
Dallas—Ft. Worth, TX.....	1	192.0	—	188.4	—	188.890	—	193.7	—	189.6	—	190.187	—
Washington—Baltimore, DC—MD—VA—WV ⁷	1	130.2	—	129.3	—	129.956	—	129.9	—	128.7	—	128.978	—
Atlanta, GA.....	2	—	192.7	—	194.8	—	194.886	—	190.9	—	193.1	—	193.446
Detroit—Ann Arbor—Flint, MI.....	2	—	196.6	—	196.4	—	198.064	—	191.2	—	191.0	—	192.717
Houston—Galveston—Brazoria, TX.....	2	—	180.4	—	179.2	—	181.217	—	178.9	—	177.5	—	179.288
Miami—Ft. Lauderdale, FL.....	2	—	204.8	—	205.4	—	207.989	—	203.1	—	203.6	—	205.688
Philadelphia—Wilmington—Atlantic City, PA—NJ—DE—MD.....	2	—	211.6	—	211.6	—	213.152	—	211.1	—	211.2	—	212.986
San Francisco—Oakland—San Jose, CA.....	2	—	211.0	—	210.4	—	213.688	—	206.2	—	205.6	—	208.803
Seattle—Tacoma—Bremerton, WA.....	2	—	209.8	—	209.3	—	211.704	—	203.9	—	204.3	—	205.746

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; Cincinnati, OH—KY—IN; Kansas City, MO—KS; Milwaukee—Racine, WI; Minneapolis—St. Paul, MN—WI; Pittsburgh, PA; Portland—Salem, OR—WA; St. Louis, MO—IL; San Diego, CA; Tampa—St. Petersburg—Clearwater, FL.

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	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Consumer Price Index for All Urban Consumers:											
All items:											
Index.....	156.9	160.5	163.0	166.6	172.2	177.1	179.9	184.0	188.9	195.3	201.6
Percent change.....	3.0	2.3	1.6	2.2	3.4	2.8	1.6	2.3	2.7	3.4	3.2
Food and beverages:											
Index.....	153.7	157.7	161.1	164.6	168.4	173.6	176.8	180.5	186.6	191.2	195.7
Percent change.....	3.2	2.6	2.2	2.2	2.3	3.1	1.8	2.1	3.3	2.5	2.4
Housing:											
Index.....	152.8	156.8	160.4	163.9	169.6	176.4	180.3	184.8	189.5	195.7	203.2
Percent change.....	2.9	2.6	2.3	2.2	3.5	4.0	2.2	2.5	2.5	3.3	3.8
Apparel:											
Index.....	131.7	132.9	133.0	131.3	129.6	127.3	124.0	120.9	120.4	119.5	119.5
Percent change.....	-2	.9	.1	-1.3	-1.3	-1.8	-2.6	-2.5	-4	-7	.0
Transportation:											
Index.....	143.0	144.3	141.6	144.4	153.3	154.3	152.9	157.6	163.1	173.9	180.9
Percent change.....	2.8	0.9	-1.9	2.0	6.2	0.7	-9	3.1	3.5	6.6	4.0
Medical care:											
Index.....	228.2	234.6	242.1	250.6	260.8	272.8	285.6	297.1	310.1	323.2	336.2
Percent change.....	3.5	2.8	3.2	3.5	4.1	4.6	4.7	4.0	4.4	4.2	4.0
Other goods and services:											
Index.....	215.4	224.8	237.7	258.3	271.1	282.6	293.2	298.7	304.7	313.4	321.7
Percent change.....	4.1	4.4	5.7	8.7	5.0	4.2	3.8	1.9	2.0	2.9	2.6
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index.....	154.1	157.6	159.7	163.2	168.9	173.5	175.9	179.8	184.5	191.0	197.1
Percent change.....	2.9	2.3	1.3	2.2	3.5	2.7	1.4	2.2	5.1	1.1	3.2

41. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2006												2007	
	2005	2006	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P	Dec. ^P	Jan. ^P	Feb. ^P	
Finished goods.....	155.7	160.4	158.0	159.1	160.7	161.2	161.8	161.7	162.3	160.3	158.9	159.8	160.5	160.2	162.0	
Finished consumer goods.....	160.4	166.0	163.0	164.5	166.5	167.2	168.0	168.3	168.8	165.9	163.8	164.5	165.5	164.9	167.2	
Finished consumer foods.....	155.7	156.7	153.8	154.4	154.8	154.2	156.1	156.4	158.3	159.2	158.4	157.9	160.1	161.4	164.3	
Finished consumer goods excluding foods.....	161.9	169.2	166.2	168.0	170.7	171.9	172.3	172.5	172.5	168.2	165.5	166.7	167.2	165.8	167.9	
Nondurable goods less food.....	172.0	182.6	177.9	180.6	184.7	186.5	187.2	188.8	188.4	181.7	177.1	177.8	178.9	176.7	179.8	
Durable goods.....	136.6	136.9	137.5	137.4	137.1	137.1	136.7	134.1	135.1	135.6	136.9	139.1	138.5	138.7	138.8	
Capital equipment.....	144.6	146.9	146.2	146.4	146.6	146.7	146.7	145.8	146.4	146.7	147.5	148.8	148.6	149.1	149.4	
Intermediate materials, supplies, and components.....	154.0	164.0	160.7	161.2	163.1	164.9	166.1	166.6	167.4	165.4	162.9	163.3	164.1	163.1	164.7	
Materials and components for manufacturing.....	146.0	155.9	151.9	152.7	153.9	156.3	157.3	158.2	158.6	158.4	158.1	157.4	157.1	157.7	158.5	
Materials for food manufacturing.....	146.0	146.2	144.6	144.4	143.7	144.4	145.7	147.5	146.8	148.1	147.7	148.1	147.9	151.3	153.7	
Materials for nondurable manufacturing.....	163.2	175.0	173.4	173.3	173.1	176.2	178.1	177.7	178.1	176.3	175.1	173.8	172.9	174.3	175.6	
Materials for durable manufacturing.....	158.3	180.5	169.6	170.5	175.4	182.4	183.4	186.4	186.7	186.9	187.3	185.3	185.0	184.9	185.5	
Components for manufacturing.....	129.9	134.5	131.7	133.1	133.8	134.0	134.4	135.0	135.7	136.0	136.0	136.2	136.2	136.3	136.4	
Materials and components for construction.....	176.6	188.4	185.0	185.5	186.7	188.2	189.2	190.2	190.7	191.0	190.4	189.6	189.6	190.2	190.4	
Processed fuels and lubricants.....	150.0	162.8	160.1	160.0	165.6	167.4	169.4	169.2	171.5	161.6	149.9	153.9	157.5	149.9	155.6	
Containers.....	167.1	175.0	171.2	173.1	172.8	173.3	176.3	176.6	177.1	178.0	177.5	176.8	176.8	178.6	178.4	
Supplies.....	151.9	157.0	155.6	155.9	156.2	156.5	156.8	157.2	157.5	157.5	158.2	158.6	159.3	160.1	160.6	
Crude materials for further processing.....	182.2	184.8	182.9	178.4	183.0	186.9	181.6	186.2	191.1	183.8	167.0	186.6	191.2	183.0	199.9	
Foodstuffs and feedstuffs.....	122.7	119.3	116.6	114.2	113.1	112.7	116.9	118.8	119.3	121.3	124.8	127.5	126.9	128.5	138.5	
Crude nonfood materials.....	223.4	230.6	229.3	223.4	232.4	239.6	226.7	233.4	241.8	227.1	194.7	227.2	235.7	218.3	240.4	
Special groupings:																
Finished goods, excluding foods.....	155.5	161.0	158.8	160.1	161.9	162.7	163.0	162.8	163.1	160.3	158.8	160.0	160.3	159.5	161.0	
Finished energy goods.....	132.6	145.9	139.1	143.1	149.6	151.9	153.1	155.4	155.0	144.3	136.8	137.9	139.1	135.1	139.1	
Finished goods less energy.....	155.9	157.9	156.9	157.2	157.2	157.3	157.7	156.9	157.8	158.2	158.6	159.4	159.9	160.6	161.7	
Finished consumer goods less energy.....	160.8	162.7	161.5	161.8	161.9	161.9	162.4	161.8	162.7	163.3	163.5	164.0	164.9	165.6	167.1	
Finished goods less food and energy.....	156.4	158.7	158.3	158.5	158.5	158.7	158.6	157.5	158.0	158.3	159.1	160.3	160.3	160.7	161.2	
Finished consumer goods less food and energy.....	164.3	166.7	166.5	166.7	166.5	166.9	166.6	165.4	165.8	166.1	166.9	168.1	168.1	168.5	169.2	
Consumer nondurable goods less food and energy.....	187.1	191.5	190.6	191.0	191.0	191.7	191.6	191.9	191.6	191.8	192.0	192.2	192.7	193.3	194.7	
Intermediate materials less foods and feeds.....	155.1	165.4	162.1	162.6	164.6	166.5	167.6	168.2	169.0	166.9	164.2	164.6	165.3	164.1	165.6	
Intermediate foods and feeds.....	133.8	135.2	133.6	133.8	133.0	133.1	133.9	135.2	134.6	135.2	135.7	138.6	140.4	144.2	148.1	
Intermediate energy goods.....	149.2	162.8	160.5	160.4	165.9	168.1	169.9	169.3	170.9	161.3	149.7	153.9	156.8	149.8	155.2	
Intermediate goods less energy.....	153.3	162.1	158.7	159.4	160.3	162.0	162.9	163.8	164.4	164.3	164.2	163.7	163.9	164.5	165.1	
Intermediate materials less foods and energy.....	154.6	163.8	160.3	161.0	162.0	163.7	164.7	165.6	166.2	166.1	166.0	165.3	165.4	165.8	166.2	
Crude energy materials.....	234.0	226.9	233.6	223.6	231.6	233.5	216.9	224.7	240.2	218.1	174.3	220.5	230.9	203.9	231.9	
Crude materials less energy.....	143.5	152.3	144.9	144.1	146.4	151.4	153.4	155.8	153.9	156.2	157.2	159.2	159.9	161.6	171.7	
Crude nonfood materials less energy.....	202.4	244.5	224.0	227.7	239.4	259.5	255.4	259.3	250.9	253.8	247.9	248.1	252.3	254.5	264.2	

p = preliminary

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

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2006										2007		
		Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P	Dec. ^P	Jan. ^P	Feb. ^P
	Total mining industries (December 1984=100).....	207.4	202.0	210.6	215.4	204.2	211.3	220.4	204.8	176.1	205.5	212.2	183.8	204.5
211	Oil and gas extraction (December 1985=100)	259.2	247.1	257.1	259.3	241.7	252.6	270.1	242.1	191.7	244.5	256.2	212.0	244.4
212	Mining, except oil and gas.....	137.4	140.0	146.1	154.8	150.3	154.0	151.8	152.9	150.8	149.3	150.7	149.7	152.3
213	Mining support activities.....	163.4	167.2	172.7	174.3	176.6	174.1	175.6	173.2	174.0	177.1	175.3	168.7	169.0
	Total manufacturing industries (December 1984=100).....	153.5	155.0	157.2	158.5	159.5	159.4	159.8	156.8	155.9	156.4	156.9	156.5	157.8
311	Food manufacturing (December 1984=100).....	145.1	145.2	144.1	144.7	146.4	147.4	147.5	147.9	147.6	149.0	149.8	152.0	154.3
312	Beverage and tobacco manufacturing.....	106.4	106.6	106.5	106.6	106.9	106.2	105.5	105.9	105.9	106.5	106.9	107.5	108.9
313	Textile mills.....	106.1	106.0	106.1	106.8	106.6	106.8	107.0	106.9	107.1	107.3	106.8	106.9	107.3
315	Apparel manufacturing.....	100.2	100.3	100.4	100.5	100.4	100.4	100.6	100.6	100.9	100.8	100.8	101.0	101.1
316	Leather and allied product manufacturing (December 1984=100).....	145.6	145.9	146.4	146.6	146.5	146.6	146.8	147.0	147.3	147.4	147.6	148.2	148.0
321	Wood products manufacturing.....	109.8	110.1	110.2	110.9	109.6	108.7	107.4	107.5	105.9	105.8	106.0	106.7	106.6
322	Paper manufacturing.....	109.5	110.5	110.6	111.7	112.9	113.3	113.7	114.1	114.3	114.1	114.3	114.5	114.6
323	Printing and related support activities.....	104.8	105.2	105.3	105.4	105.5	105.6	105.8	105.9	106.3	106.3	106.3	106.4	105.9
324	Petroleum and coal products manufacturing (December 1984=100).....	205.9	222.8	249.2	260.0	267.6	267.4	268.3	227.1	213.0	211.8	216.6	203.0	211.9
325	Chemical manufacturing (December 1984=100).....	196.2	196.2	195.7	196.6	197.2	197.6	197.8	197.9	197.2	196.5	197.0	197.7	198.3
326	Plastics and rubber products manufacturing (December 1984=100).....	149.1	148.7	148.8	148.8	148.9	149.5	150.5	150.6	151.2	151.1	150.6	150.1	149.5
331	Primary metal manufacturing (December 1984=100).....	165.6	166.4	171.4	178.4	182.3	186.7	186.9	188.1	189.1	186.3	186.5	185.3	185.8
332	Fabricated metal product manufacturing (December 1984=100).....	152.5	153.0	153.6	154.3	155.4	156.4	157.3	157.7	158.3	158.5	159.0	159.4	160.5
333	Machinery manufacturing.....	107.6	107.8	108.0	108.3	108.6	108.9	109.1	109.4	109.9	110.1	110.2	110.9	111.7
334	Computer and electronic products manufacturing.....	96.5	96.5	96.7	96.6	96.5	96.5	96.5	96.6	96.4	96.3	96.2	96.5	96.3
335	Electrical equipment, appliance, and components manufacturing.....	112.3	112.8	114.1	116.0	117.6	117.8	119.2	119.5	119.7	119.4	119.2	119.6	119.1
336	Transportation equipment manufacturing.....	103.2	103.4	103.4	103.4	103.1	101.1	101.9	102.2	103.2	105.1	104.8	105.1	105.2
337	Furniture and related product manufacturing (December 1984=100).....	161.3	161.5	161.6	162.3	162.5	162.9	163.0	163.1	163.5	163.6	163.6	164.6	165.6
339	Miscellaneous manufacturing.....	103.9	104.2	104.5	104.9	104.8	105.1	105.2	104.9	104.8	105.3	105.4	105.9	106.3
	Retail trade													
441	Motor vehicle and parts dealers.....	109.6	112.4	113.2	114.3	114.7	113.8	113.5	113.3	113.3	113.5	112.2	112.5	112.6
442	Furniture and home furnishings stores.....	115.1	116.1	114.9	116.1	116.8	117.0	118.4	118.8	118.4	115.7	115.6	114.7	114.3
443	Electronics and appliance stores.....	97.0	102.9	105.6	103.9	96.9	97.0	96.2	100.5	96.7	104.4	93.7	86.0	84.1
446	Health and personal care stores.....	114.1	120.5	120.1	118.7	118.7	118.6	119.3	120.3	119.8	119.4	119.5	120.8	122.2
447	Gasoline stations (June 2001=100).....	58.3	44.9	44.4	48.9	44.7	49.3	52.4	63.6	55.4	50.9	52.5	74.7	56.2
454	Nonstore retailers.....	120.4	112.0	111.8	111.6	113.0	108.1	120.0	134.1	121.4	123.9	130.2	127.2	131.7
	Transportation and warehousing													
481	Air transportation (December 1992=100).....	180.1	182.5	182.7	179.7	185.4	186.9	185.6	176.4	176.9	179.0	172.0	183.0	178.2
483	Water transportation.....	109.6	111.0	110.5	111.1	110.9	111.5	111.9	112.2	112.5	111.6	111.4	110.5	112.6
491	Postal service (June 1989=100).....	164.7	164.7	164.7	164.7	164.7	164.7	164.7	164.7	164.7	164.7	164.7	164.7	164.7
	Utilities													
221	Utilities.....	127.0	123.5	121.5	121.0	120.8	122.3	126.2	123.3	116.3	121.4	122.9	119.6	125.7
	Health care and social assistance													
6211	Office of physicians (December 1996=100).....	116.9	117.2	117.1	117.2	117.6	117.8	117.8	117.7	117.6	117.6	118.0	119.7	123.2
6215	Medical and diagnostic laboratories.....	104.2	104.2	104.4	104.4	104.4	104.5	104.5	104.5	104.5	104.5	104.6	104.5	104.5
6216	Home health care services (December 1996=100).....	121.6	121.7	121.7	121.7	121.8	121.8	121.8	122.3	122.2	122.3	122.5	122.6	122.6
622	Hospitals (December 1992=100).....	151.5	151.7	152.1	152.3	152.5	153.3	153.6	153.8	155.7	155.8	156.0	156.9	156.6
6231	Nursing care facilities.....	108.5	108.6	108.7	108.8	109.0	110.1	110.2	110.4	110.8	110.8	110.8	111.8	112.0
62321	Residential mental retardation facilities.....	107.3	107.3	108.0	108.0	108.0	108.4	108.9	109.2	109.3	109.9	110.0	111.1	110.2
	Other services industries													
511	Publishing industries, except Internet	105.5	105.2	105.3	106.1	106.0	106.4	106.5	106.7	106.9	107.2	107.0	107.6	107.9
515	Broadcasting, except Internet.....	101.1	101.7	102.6	103.8	103.4	100.9	100.9	102.7	106.8	105.2	103.8	103.0	103.1
517	Telecommunications.....	97.1	97.6	97.8	97.8	98.1	98.4	98.7	99.0	99.3	99.2	99.7	99.8	99.5
5182	Data processing and related services.....	99.3	99.2	99.0	99.6	99.5	99.8	100.2	100.2	100.1	100.0	99.9	100.2	100.2
523	Security, commodity contracts, and like activity.....	111.4	111.4	111.9	113.5	114.2	114.5	114.7	114.6	115.8	115.9	116.1	117.5	118.8
53112	Lessors or nonresidential buildings (except miniwarehouse).....	105.5	106.5	106.9	107.5	107.2	109.5	109.2	110.4	108.9	107.1	108.0	108.8	107.2
5312	Offices of real estate agents and brokers.....	110.4	111.3	111.3	110.6	110.8	111.8	111.3	110.7	110.7	110.7	110.7	110.7	110.7
5313	Real estate support activities.....	102.7	103.2	103.1	103.1	102.9	102.6	102.8	102.9	102.7	102.6	102.9	102.6	103.7
5321	Automotive equipment rental and leasing (June 2001=100).....	114.4	114.2	114.9	111.6	114.6	116.4	112.9	113.5	117.5	117.9	121.4	114.4	116.6
5411	Legal services (December 1996=100).....	144.1	144.3	144.7	144.9	144.8	144.9	145.4	146.3	146.3	146.7	146.9	150.3	150.5
541211	Offices of certified public accountants.....	105.9	106.7	105.3	106.5	106.6	106.7	108.2	108.9	107.7	108.0	110.1	111.2	109.2
5413	Architectural, engineering, and related services (December 1996=100).....	132.7	132.8	132.9	134.1	134.4	134.7	135.5	135.5	136.1	136.3	136.4	137.9	138.1
54181	Advertising agencies.....	103.6	103.6	103.5	103.5	103.5	104.7	104.7	104.7	104.7	104.7	104.7	104.9	104.9
5613	Employment services (December 1996=100).....	117.8	118.8	118.9	118.4	118.6	119.2	120.0	119.9	120.1	120.2	120.7	120.7	121.0
56151	Travel agencies.....	98.3	98.4	98.5	99.1	101.5	99.4	98.6	98.3	102.5	102.3	99.1	99.3	101.4
56172	Janitorial services.....	102.6	102.6	103.3	103.6	103.7	103.8	104.2	104.3	104.6	104.8	104.8	105.2	105.2
5621	Waste collection.....	104.0	104.0	104.0	104.0	104.2	104.2	104.5	104.5	104.7	106.1	106.0	105.2	105.2
721	Accommodation (December 1996=100).....	133.5	134.9	135.7	136.3	137.3	138.1	139.1	138.1	138.7	138.3	136.1	137.5	137.0

p = preliminary.

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

[1982 = 100]

Index	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Finished goods											
Total.....	131.3	131.8	130.7	133.0	138.0	140.7	138.9	143.3	148.5	155.7	160.3
Foods.....	133.6	134.5	134.3	135.1	137.2	141.3	140.1	145.9	152.7	155.7	156.7
Energy.....	83.2	83.4	75.1	78.8	94.1	96.8	88.8	102.0	113.0	132.6	145.9
Other.....	142.0	142.4	143.7	146.1	148.0	150.0	150.2	150.5	152.7	156.4	158.6
Intermediate materials, supplies, and components											
Total.....	125.7	125.6	123.0	123.2	129.2	129.7	127.8	133.7	142.6	154.0	164.0
Foods.....	125.3	123.2	123.2	120.8	119.2	124.3	123.2	134.4	145.0	146.0	146.3
Energy.....	89.8	89.0	80.8	84.3	101.7	104.1	95.9	111.9	123.2	149.2	162.6
Other.....	134.0	134.2	133.5	133.1	136.6	136.4	135.8	138.5	146.5	154.6	163.9
Crude materials for further processing											
Total.....	113.8	111.1	96.8	98.2	120.6	121.0	108.1	135.3	159.0	182.2	185.4
Foods.....	121.5	112.2	103.9	98.7	100.2	106.1	99.5	113.5	127.0	122.7	119.3
Energy.....	85.0	87.3	68.6	78.5	122.1	122.3	102.0	147.2	174.6	234.0	228.5
Other.....	105.7	103.5	84.5	91.1	118.0	101.5	101.0	116.9	149.2	176.7	210.0

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

[2000 = 100]

Category	2006											2007	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
ALL COMMODITIES.....	108.6	108.8	109.6	110.4	111.2	111.6	112.1	111.7	111.4	111.8	112.5	113.0	113.9
Foods, feeds, and beverages.....	121.9	121.7	121.0	122.0	125.6	128.5	129.5	128.8	130.2	135.8	138.7	139.0	143.4
Agricultural foods, feeds, and beverages.....	121.6	121.5	120.8	121.9	125.7	128.9	129.8	129.1	130.9	137.4	140.5	140.8	145.6
Nonagricultural (fish, beverages) food products.....	124.2	123.2	122.5	122.9	125.0	125.6	126.9	126.0	124.5	122.4	123.5	123.6	125.6
Industrial supplies and materials.....	130.6	131.3	133.9	136.5	138.8	139.2	141.2	139.5	137.3	137.8	139.4	140.3	143.1
Agricultural industrial supplies and materials.....	117.2	116.8	117.2	116.4	117.3	116.6	118.8	118.1	117.8	120.2	123.9	127.2	127.0
Fuels and lubricants.....	169.7	173.5	187.0	194.9	196.3	199.0	207.2	191.1	177.5	180.5	183.5	173.8	183.2
Nonagricultural supplies and materials, excluding fuel and building materials.....	128.1	128.5	129.8	132.0	134.7	134.9	136.0	136.3	135.5	135.5	136.8	139.1	141.2
Selected building materials.....	108.4	108.5	108.6	109.0	109.8	109.8	110.1	110.0	110.5	110.5	111.5	111.8	112.2
Capital goods.....	98.1	98.2	98.4	98.4	98.4	98.5	98.3	98.5	98.7	98.8	98.8	99.1	99.1
Electric and electrical generating equipment.....	104.0	104.4	104.5	104.6	104.8	104.8	104.9	105.1	105.9	106.0	106.2	105.9	105.9
Nonelectrical machinery.....	92.7	92.7	92.7	92.7	92.7	92.7	92.4	92.6	92.7	92.6	92.6	92.7	92.6
Automotive vehicles, parts, and engines.....	104.2	104.4	104.6	104.7	104.9	105.1	105.1	105.2	105.3	105.3	105.5	105.7	105.8
Consumer goods, excluding automotive.....	102.4	102.3	102.6	103.2	103.5	103.7	103.9	104.0	103.9	103.9	104.0	104.8	104.8
Nondurables, manufactured.....	102.5	102.4	102.7	103.0	103.3	103.6	103.7	103.8	103.6	103.7	104.0	105.0	105.1
Durables, manufactured.....	101.4	101.3	101.4	102.2	102.4	102.5	102.9	103.1	103.0	102.9	102.8	103.5	103.3
Agricultural commodities.....	120.8	120.7	120.2	120.9	124.1	126.5	127.7	127.1	128.4	134.1	137.3	138.1	142.0
Nonagricultural commodities.....	107.8	108.0	108.8	109.6	110.3	110.5	111.0	110.6	110.1	110.2	110.7	111.2	111.9

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

[2000 = 100]

Category	2006												2007	
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	
ALL COMMODITIES.....	112.7	112.7	115.1	117.2	117.3	118.2	118.8	116.2	113.3	113.8	115.1	113.7	114.1	
Foods, feeds, and beverages.....	117.0	117.0	116.2	118.1	118.0	118.1	120.6	120.9	121.1	121.6	122.6	124.5	124.8	
Agricultural foods, feeds, and beverages.....	125.4	125.4	124.6	127.1	126.8	126.5	129.9	130.4	130.9	132.2	133.7	135.5	135.4	
Nonagricultural (fish, beverages) food products.....	98.3	98.3	97.6	98.1	98.5	99.4	99.8	99.8	99.2	98.1	97.9	99.8	101.1	
Industrial supplies and materials.....	160.4	160.4	170.1	178.2	178.1	180.9	182.8	172.2	160.4	162.2	166.6	160.4	162.0	
Fuels and lubricants.....	201.5	201.5	221.1	233.9	230.2	237.6	240.9	216.3	192.3	195.5	204.3	190.1	193.8	
Petroleum and petroleum products.....	207.2	207.2	230.7	245.4	242.6	251.3	253.7	225.9	202.5	199.2	207.1	193.5	196.7	
Paper and paper base stocks.....	107.7	107.7	109.3	110.4	111.3	111.9	112.9	113.1	113.0	113.2	112.8	111.4	111.4	
Materials associated with nondurable supplies and materials.....	119.3	119.3	119.0	119.5	120.6	121.7	121.4	121.8	122.1	123.0	123.0	123.5	124.3	
Selected building materials.....	118.0	118.0	118.1	120.0	117.2	116.8	115.2	115.8	112.1	110.8	110.6	111.5	110.9	
Unfinished metals associated with durable goods.....	161.1	161.1	165.4	180.2	193.2	184.2	188.7	194.4	192.4	193.7	195.9	197.9	197.6	
Nonmetals associated with durable goods.....	100.8	100.8	101.0	101.0	101.1	101.2	101.5	101.3	101.5	101.6	101.7	101.9	102.0	
Capital goods.....	91.1	91.1	91.0	91.0	91.2	91.3	91.3	91.3	91.3	91.4	91.5	91.5	91.2	
Electric and electrical generating equipment.....	100.1	100.1	100.3	100.9	102.1	102.2	102.1	102.7	102.6	102.9	103.0	104.2	104.1	
Nonelectrical machinery.....	88.0	88.0	87.8	87.7	87.8	87.9	87.9	87.8	87.8	87.8	87.9	87.8	87.4	
Automotive vehicles, parts, and engines.....	103.5	103.5	103.6	103.7	103.9	104.1	104.1	104.1	104.3	104.3	104.3	104.3	104.4	
Consumer goods, excluding automotive.....	99.6	99.6	99.5	99.7	99.8	100.3	100.4	100.5	100.6	100.7	101.0	101.2	101.2	
Nondurables, manufactured.....	102.8	102.8	102.6	102.5	102.6	103.0	103.0	103.0	102.9	103.1	103.4	104.2	104.1	
Durables, manufactured.....	96.3	96.3	96.4	96.9	97.0	97.5	97.7	97.8	98.0	98.1	98.2	98.0	98.1	
Nonmanufactured consumer goods.....	98.2	98.2	98.4	98.4	98.6	99.7	100.1	100.5	101.8	101.7	101.8	102.1	102.1	

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

[2000 = 100, unless indicated otherwise]

Category	2004	2005				2006			
	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.
Air freight (inbound).....	125.1	126.3	125.6	127.5	124.6	124.6	129.2	128.9	127.2
Air freight (outbound).....	104.7	103.8	107.2	112.4	112.0	113.5	117.2	116.9	113.8
Inbound air passenger fares (Dec. 2003 = 100).....	112.5	114.5	116.1	118.3	108.5	110.5	121.0	123.9	118.5
Outbound air passenger fares (Dec. 2003 = 100).....	105.4	105.0	120.5	120.1	110.8	110.6	128.7	126.4	119.3
Ocean liner freight (inbound).....	122.7	121.3	128.5	127.9	126.8	125.4	114.9	114.2	114.0

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

[1992 = 100]

Item	2003	2004				2005				2006			
	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Business													
Output per hour of all persons.....	130.3	131.4	132.8	133.0	133.5	134.6	134.8	136.2	136.1	137.4	137.7	137.6	138.0
Compensation per hour.....	153.6	154.4	155.7	157.5	160.0	161.7	161.8	164.7	165.7	170.8	170.2	170.5	173.7
Real compensation per hour.....	118.9	118.5	118.3	119.0	119.9	120.5	119.4	119.9	119.7	122.9	120.9	120.2	123.1
Unit labor costs.....	117.9	117.5	117.3	118.5	119.9	120.1	120.0	120.9	121.8	124.4	123.6	123.9	125.9
Unit nonlabor payments.....	119.5	122.9	126.1	125.6	125.9	127.9	129.9	131.2	132.4	130.2	134.2	134.6	132.1
Implicit price deflator.....	118.5	119.5	120.6	121.1	122.1	123.0	123.7	124.7	125.7	126.6	127.5	127.9	128.2
Nonfarm business													
Output per hour of all persons.....	129.9	130.6	132.1	132.2	132.3	133.6	134.1	135.4	135.2	136.3	136.7	136.6	137.1
Compensation per hour.....	152.9	153.5	154.8	156.5	158.6	160.5	160.8	163.5	164.5	169.6	169.0	169.2	172.6
Real compensation per hour.....	118.4	117.8	117.6	118.3	118.9	119.5	118.7	119.1	118.8	122.0	120.0	119.3	122.3
Unit labor costs.....	117.7	117.5	117.2	118.4	119.9	120.1	119.9	120.8	121.7	124.4	123.6	123.9	125.9
Unit nonlabor payments.....	120.5	123.6	126.7	126.6	127.0	129.4	131.8	133.2	134.4	132.2	136.5	136.7	133.7
Implicit price deflator.....	118.7	119.8	120.7	121.4	122.5	123.5	124.3	125.3	126.4	127.3	128.3	128.6	128.8
Nonfinancial corporations													
Output per hour of all employees.....	136.6	137.4	138.2	139.7	139.8	141.2	142.1	142.2	142.3	145.9	144.3	145.7	—
Compensation per hour.....	152.0	151.8	153.2	154.9	157.0	158.7	159.1	161.8	162.8	167.4	167.1	167.5	—
Real compensation per hour.....	117.7	116.5	116.4	117.1	117.6	118.2	117.4	117.9	117.6	120.4	118.7	118.1	—
Total unit costs.....	110.9	110.1	110.5	110.6	111.7	112.2	111.9	114.1	114.1	113.8	115.2	114.2	—
Unit labor costs.....	111.2	110.5	110.8	110.9	112.3	112.4	111.9	113.8	114.4	114.7	115.8	114.9	—
Unit nonlabor costs.....	110.0	109.2	109.7	109.8	110.2	111.5	111.9	114.9	113.3	111.1	113.7	112.1	—
Unit profits.....	117.8	131.3	139.7	143.1	143.6	150.2	161.4	152.9	163.7	177.3	172.1	184.4	—
Unit nonlabor payments.....	112.1	115.1	117.7	118.7	119.1	121.9	125.2	125.1	126.8	128.8	129.3	131.4	—
Implicit price deflator.....	111.5	112.0	113.1	113.5	114.6	115.6	116.4	117.6	118.5	119.4	120.3	120.4	—
Manufacturing													
Output per hour of all persons.....	162.4	161.7	163.0	164.1	166.3	168.7	171.2	172.6	173.9	175.7	177.3	179.9	180.9
Compensation per hour.....	161.9	157.4	159.7	163.0	165.3	166.2	167.8	170.7	170.9	176.4	173.9	173.9	176.8
Real compensation per hour.....	125.3	120.8	121.4	123.2	123.9	123.8	123.8	124.3	123.4	126.9	123.6	122.6	125.4
Unit labor costs.....	99.7	97.4	98.0	99.3	99.4	98.5	98.0	98.9	98.2	100.4	98.1	96.7	97.8

NOTE: Dash indicates data not available.

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

[2000 = 100, unless otherwise indicated]

Item	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Private business													
Productivity:													
Output per hour of all persons.....	86.4	87.2	87.4	90.0	91.7	94.3	97.2	100.0	102.8	107.1	111.2	114.7	117.1
Output per unit of capital services.....	104.0	105.6	104.4	104.5	104.7	103.3	102.2	100.0	96.1	95.0	95.9	98.0	99.1
Multifactor productivity.....	93.2	93.9	93.7	95.3	96.2	97.4	98.7	100.0	100.2	101.9	104.6	107.3	109.2
Output.....	73.2	76.8	79.2	82.8	87.2	91.5	96.2	100.0	100.5	102.0	105.2	109.9	114.1
Inputs:													
Labor input.....	82.6	86.3	88.8	90.6	94.2	96.4	99.0	100.0	98.6	97.2	96.9	98.4	100.2
Capital services.....	70.3	72.8	75.8	79.2	83.3	88.5	94.2	100.0	104.5	107.4	109.7	112.2	115.1
Combined units of labor and capital input.....	78.5	81.8	84.5	86.9	90.7	93.9	97.5	100.0	100.3	100.2	100.6	102.4	104.5
Capital per hour of all persons.....	83.0	82.6	83.8	86.1	87.6	91.2	95.1	100.0	106.9	112.7	116.0	117.1	118.1
Private nonfarm business													
Productivity:													
Output per hour of all persons.....	86.7	87.7	88.2	90.5	92.0	94.5	97.3	100.0	102.7	107.1	111.0	114.4	116.8
Output per unit of capital services.....	105.2	106.5	105.5	105.3	105.1	103.7	102.4	100.0	96.1	94.9	95.7	97.7	99.1
Multifactor productivity.....	93.7	94.5	94.5	95.8	96.4	97.7	98.8	100.0	100.1	101.9	104.4	107.1	109.1
Output.....	73.2	76.7	79.3	82.8	87.2	91.5	96.3	100.0	100.5	102.1	105.2	109.9	114.1
Inputs:													
Labor input.....	82.3	85.7	88.2	90.2	93.9	96.2	99.0	100.0	98.7	97.2	97.1	98.6	100.4
Capital services.....	69.6	72.1	75.2	78.7	82.9	88.2	94.0	100.0	104.6	107.6	110.0	112.4	115.1
Combined units of labor and capital input.....	78.1	81.2	83.9	86.5	90.4	93.7	97.5	100.0	100.4	100.2	100.7	102.5	104.6
Capital per hour of all persons.....	82.4	82.4	83.6	86.0	87.5	91.1	95.0	100.0	106.9	112.8	116.1	117.0	117.9
Manufacturing [1996 = 100]													
Productivity:													
Output per hour of all persons.....	73.5	76.1	79.4	82.4	86.9	91.7	95.8	100.0	101.5	108.7	115.3	117.4	—
Output per unit of capital services.....	93.7	96.7	98.2	97.7	100.3	100.5	100.3	100.0	93.6	92.7	93.5	94.9	—
Multifactor productivity.....	86.7	89.1	90.6	91.0	93.6	95.8	96.5	100.0	98.7	102.5	106.6	105.6	—
Output.....	72.1	76.4	80.3	83.1	89.2	93.8	97.3	100.0	94.9	94.4	95.3	96.6	—
Inputs:													
Hours of all persons.....	98.0	100.4	101.2	100.8	102.6	102.3	101.6	100.0	93.5	86.8	82.6	82.3	—
Capital services.....	76.9	78.9	81.8	85.1	88.9	93.3	97.1	100.0	101.4	101.9	102.0	101.8	—
Energy.....	107.1	110.4	113.7	110.3	108.2	105.4	105.5	100.0	90.6	89.3	82.5	87.0	—
Nonenergy materials.....	71.9	74.8	78.8	86.0	92.9	97.7	102.6	100.0	93.3	88.3	85.1	91.0	—
Purchased business services.....	81.7	84.7	88.9	88.5	92.1	95.0	100.0	100.0	100.7	98.2	97.3	99.5	—
Combined units of all factor inputs.....	83.1	85.7	88.7	91.3	95.3	97.9	100.9	100.0	96.2	92.1	89.4	91.4	—

NOTE: Dash indicates data not available.

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

[1992 = 100]

Item	1961	1971	1981	1991	1998	1999	2000	2001	2002	2003	2004	2005	2006
Business													
Output per hour of all persons.....	50.6	69.0	80.8	95.9	109.5	112.8	116.1	119.1	123.9	128.7	132.6	135.4	137.7
Compensation per hour.....	14.4	25.1	59.3	95.1	119.9	125.8	134.7	140.4	145.3	151.2	156.9	163.5	171.3
Real compensation per hour.....	62.5	80.2	89.3	97.4	105.2	108.0	112.0	113.5	115.7	117.7	118.9	119.9	121.7
Unit labor costs.....	28.5	36.3	73.5	99.1	109.5	111.5	116.0	117.9	117.3	117.5	118.3	120.7	124.4
Unit nonlabor payments.....	25.3	34.1	69.1	96.7	110.0	109.4	107.2	110.0	114.1	118.3	125.1	130.4	132.8
Implicit price deflator.....	27.3	35.5	71.8	98.2	109.7	110.7	112.7	114.9	116.1	117.8	120.8	124.3	127.5
Nonfarm business													
Output per hour of all persons.....	53.5	70.7	81.7	96.1	109.4	112.5	115.7	118.6	123.5	128.0	131.8	134.6	136.7
Compensation per hour.....	15.0	25.2	59.7	95.0	119.6	125.2	134.2	139.5	144.6	150.4	155.9	162.3	170.1
Real compensation per hour.....	64.8	80.7	89.8	97.4	104.9	107.5	111.5	112.8	115.1	117.1	118.1	119.0	120.8
Unit labor costs.....	28.0	35.7	73.1	98.9	109.3	111.3	116.0	117.7	117.1	117.5	118.3	120.6	124.4
Unit nonlabor payments.....	24.8	33.8	67.7	96.8	111.0	110.9	108.7	111.6	116.0	119.6	126.0	132.2	134.8
Implicit price deflator.....	26.8	35.0	71.1	98.1	109.9	111.1	113.3	115.4	116.7	118.3	121.1	124.9	128.2
Nonfinancial corporations													
Output per hour of all employees.....	57.9	72.7	82.9	97.4	113.7	117.9	122.4	124.7	129.7	134.6	138.8	142.0	—
Compensation per hour.....	16.7	27.3	62.4	95.5	118.3	124.1	133.0	138.6	143.6	149.5	154.2	160.6	—
Real compensation per hour.....	72.4	87.4	93.9	97.9	103.8	106.6	110.5	112.1	114.3	116.3	116.9	117.8	—
Total unit costs.....	27.5	36.5	74.8	99.3	102.9	104.0	107.4	111.6	110.7	111.0	110.7	113.1	—
Unit labor costs.....	28.8	37.6	75.3	98.0	104.1	105.3	108.6	111.2	110.7	111.0	111.1	113.1	—
Unit nonlabor costs.....	23.8	33.6	73.5	102.7	99.5	100.4	104.2	112.6	110.8	111.1	109.7	112.9	—
Unit profits.....	50.3	50.5	81.0	93.2	137.0	129.1	108.7	82.2	98.0	109.9	139.5	157.1	—
Unit nonlabor payments.....	30.9	38.1	75.5	100.2	109.5	108.0	105.4	104.5	107.4	110.7	117.7	124.7	—
Implicit price deflator.....	29.5	37.8	75.4	98.7	105.9	106.2	107.5	108.9	109.6	110.9	113.3	117.0	—
Manufacturing													
Output per hour of all persons.....	—	—	—	96.3	127.9	133.5	139.4	141.5	151.5	160.9	163.8	171.6	178.4
Compensation per hour.....	—	—	—	95.6	118.8	123.4	134.7	137.9	147.9	158.3	161.4	168.9	175.3
Real compensation per hour.....	—	—	—	98.0	104.2	106.0	112.0	111.5	117.7	123.2	122.3	123.9	124.5
Unit labor costs.....	—	—	—	99.2	92.9	92.4	96.7	97.4	97.6	98.4	98.5	98.4	98.2
Unit nonlabor payments.....	—	—	—	98.5	102.7	103.0	103.7	102.2	100.4	102.3	110.5	—	—
Implicit price deflator.....	—	—	—	98.7	99.5	99.5	101.4	100.6	99.5	101.0	106.6	—	—

Dash indicates data not available.

50. Annual indexes of output per hour for selected NAICS industries, 1987-2005

[1997=100]

NAICS	Industry	1987	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Mining														
21	Mining	85.5	85.1	101.7	101.3	100.0	103.6	111.4	111.2	109.1	113.9	116.2	107.2	-
211	Oil and gas extraction	80.1	75.7	95.3	98.1	100.0	101.2	107.9	119.4	121.6	124.0	130.3	112.4	-
212	Mining, except oil and gas	69.8	79.3	94.0	96.0	100.0	104.6	105.9	106.8	109.0	111.4	114.0	115.4	-
2121	Coal mining	58.4	68.1	88.2	94.9	100.0	106.5	110.3	115.8	114.4	112.2	113.1	112.8	-
2122	Metal ore mining	71.2	79.9	98.5	95.3	100.0	109.5	112.7	124.4	131.8	142.4	146.3	139.4	-
2123	Nonmetallic mineral mining and quarrying	88.5	92.3	97.3	97.1	100.0	101.3	101.2	96.2	99.3	103.6	108.1	112.5	-
Utilities														
2211	Power generation and supply	65.6	71.1	88.5	95.2	100.0	103.7	103.5	107.0	106.4	102.9	105.1	107.5	-
2212	Natural gas distribution	67.8	71.4	89.0	96.0	100.0	99.0	102.7	113.2	110.1	115.4	114.1	118.6	-
Manufacturing														
3111	Animal food	83.6	91.5	93.8	86.1	100.0	109.0	110.9	109.7	131.4	142.7	165.8	149.5	166.0
3112	Grain and oilseed milling	81.1	88.6	98.7	90.0	100.0	107.5	116.1	113.1	119.5	122.4	123.9	130.3	137.7
3113	Sugar and confectionery products	87.6	89.5	93.2	97.8	100.0	103.5	106.5	109.9	108.6	108.0	112.5	118.2	131.3
3114	Fruit and vegetable preserving and specialty	92.4	87.6	98.3	98.8	100.0	107.1	109.5	111.8	121.4	126.9	123.0	126.2	132.1
3115	Dairy products	82.7	91.1	97.6	97.8	100.0	100.0	93.6	95.9	97.1	105.0	110.5	107.4	109.5
3116	Animal slaughtering and processing	97.4	94.3	99.0	94.2	100.0	100.0	101.2	102.6	103.7	107.3	106.6	108.0	117.4
3117	Seafood product preparation and packaging	123.1	119.7	110.3	118.0	100.0	120.2	131.6	140.5	153.0	169.8	173.2	162.2	186.2
3118	Bakeries and tortilla manufacturing	100.9	94.5	100.7	97.3	100.0	103.8	108.6	108.3	109.9	108.9	109.3	113.8	115.4
3119	Other food products	97.5	92.5	104.1	105.1	100.0	107.8	111.4	112.6	106.2	111.9	118.8	119.3	115.4
3121	Beverages	77.1	87.6	103.2	102.0	100.0	99.0	90.7	90.8	92.7	99.4	108.3	114.1	119.4
3122	Tobacco and tobacco products	71.9	79.1	97.3	98.4	100.0	98.5	91.0	95.9	98.2	67.0	78.7	82.4	93.1
3131	Fiber, yarn, and thread mills	66.5	74.4	91.9	98.9	100.0	102.1	103.9	101.3	109.1	133.3	148.8	154.1	150.4
3132	Fabric mills	68.0	75.3	95.5	98.1	100.0	104.2	110.0	110.1	110.3	125.4	137.2	138.6	150.5
3133	Textile and fabric finishing mills	91.3	82.0	84.3	85.0	100.0	101.2	102.2	104.4	108.5	119.8	125.1	127.7	139.9
3141	Textile furnishings mills	91.2	88.0	92.3	93.8	100.0	99.3	99.1	104.5	103.1	105.5	114.4	122.3	135.1
3149	Other textile product mills	92.2	91.4	95.9	97.2	100.0	96.7	107.6	108.9	103.1	105.1	104.2	120.4	127.9
3151	Apparel knitting mills	76.2	86.2	109.3	122.1	100.0	96.1	101.4	108.9	105.6	112.0	105.9	96.8	119.8
3152	Cut and sew apparel	69.8	70.1	85.2	90.6	100.0	102.3	114.6	119.8	119.5	103.9	117.2	108.4	113.1
3159	Accessories and other apparel	97.8	101.3	112.1	112.6	100.0	109.0	99.2	98.3	105.2	76.1	78.8	70.9	81.7
3161	Leather and hide tanning and finishing	79.8	64.6	79.7	91.2	100.0	100.0	104.8	115.1	114.9	83.2	80.8	82.2	90.7
3162	Footwear	76.7	78.1	96.5	103.7	100.0	102.1	117.3	122.3	130.7	102.7	104.8	100.7	107.6
3169	Other leather products	99.4	102.9	74.4	80.3	100.0	113.2	105.8	113.4	109.1	95.0	101.0	135.8	155.0
3211	Sawmills and wood preservation	77.6	79.4	90.4	95.9	100.0	100.3	104.7	105.4	108.8	114.4	121.3	118.2	127.9
3212	Plywood and engineered wood products	99.7	102.8	101.4	101.0	100.0	105.1	98.7	98.8	105.2	110.3	107.0	102.9	110.3
3219	Other wood products	103.0	105.3	99.8	100.4	100.0	101.0	104.5	103.0	104.7	113.9	113.9	119.6	125.8
3221	Pulp, paper, and paperboard mills	81.7	84.0	98.4	95.4	100.0	102.5	111.1	116.3	119.9	133.1	141.4	148.0	148.9
3222	Converted paper products	89.0	90.1	97.2	97.7	100.0	102.5	100.1	101.1	100.5	105.6	109.5	112.9	115.3
3231	Printing and related support activities	97.6	97.5	98.9	99.9	100.0	100.6	102.8	104.6	105.3	110.2	111.1	114.5	119.7
3241	Petroleum and coal products	71.1	75.4	89.9	93.5	100.0	102.2	107.1	113.5	112.1	118.0	119.2	123.4	123.8
3251	Basic chemicals	94.6	93.4	91.3	89.4	100.0	102.7	115.7	117.5	108.8	123.8	136.0	154.4	163.1
3252	Resin, rubber, and artificial fibers	77.4	76.4	95.4	93.1	100.0	106.0	109.8	109.8	106.2	123.1	122.2	121.9	127.8
3253	Agricultural chemicals	80.4	85.8	89.9	91.7	100.0	98.8	87.4	92.1	90.0	99.2	108.4	117.4	134.1
3254	Pharmaceuticals and medicines	87.3	91.3	95.9	100.0	100.0	93.8	95.7	95.6	99.5	97.4	101.5	104.1	107.8
3255	Paints, coatings, and adhesives	89.3	87.1	92.3	99.1	100.0	100.1	100.3	100.8	105.6	108.9	115.2	119.1	123.5
3256	Soap, cleaning compounds, and toiletries	84.4	84.8	96.1	97.3	100.0	98.0	93.0	102.8	106.0	124.1	118.2	135.3	152.6
3259	Other chemical products and preparations	75.4	77.8	93.5	94.0	100.0	99.2	109.3	119.7	110.4	120.8	123.0	121.3	123.5
3261	Plastics products	83.1	85.2	94.5	96.6	100.0	104.2	109.9	112.3	114.6	123.8	129.5	131.9	135.6
3262	Rubber products	75.5	83.5	92.9	94.2	100.0	99.4	100.2	101.7	102.3	107.1	111.0	114.4	119.3
3271	Clay products and refractories	86.9	89.4	97.4	102.4	100.0	101.2	102.7	102.9	98.4	99.7	103.5	109.2	116.5
3272	Glass and glass products	82.3	79.1	87.5	94.7	100.0	101.4	106.7	108.2	102.8	107.4	115.2	113.9	122.7
3273	Cement and concrete products	93.6	96.6	99.7	102.0	100.0	105.1	105.9	101.6	98.0	102.4	108.3	102.8	105.5
3274	Lime and gypsum products	88.2	85.4	90.0	93.7	100.0	114.9	104.4	98.5	101.8	99.0	107.1	104.2	116.9
3279	Other nonmetallic mineral products	83.0	79.5	91.4	96.0	100.0	99.0	95.6	96.6	98.6	106.9	113.6	110.6	118.3
3311	Iron and steel mills and ferroalloy production	64.8	70.2	90.0	94.1	100.0	101.3	104.8	106.0	104.4	125.1	130.4	164.9	160.5
3312	Steel products from purchased steel	79.7	84.4	100.6	100.5	100.0	100.6	93.8	96.4	97.9	96.8	93.9	88.6	90.4
3313	Alumina and aluminum production	90.5	90.7	95.9	95.4	100.0	101.5	103.5	96.6	96.2	124.5	126.8	137.3	153.8
3314	Other nonferrous metal production	96.8	96.3	102.7	105.9	100.0	111.3	108.4	102.3	99.5	107.6	120.5	122.9	122.2
3315	Foundries	81.4	86.5	93.1	96.0	100.0	101.2	104.5	103.6	107.4	116.7	116.3	123.9	128.0
3321	Forging and stamping	85.4	89.0	93.9	97.4	100.0	103.5	110.9	121.1	120.7	125.0	133.1	142.0	146.7
3322	Cutlery and hand tools	86.3	85.4	97.2	103.8	100.0	99.9	108.0	105.9	110.3	113.4	113.2	107.6	116.4
3323	Architectural and structural metals	88.7	87.9	93.3	93.9	100.0	101.0	102.0	100.7	101.7	106.0	108.8	105.4	108.1
3324	Boilers, tanks, and shipping containers	86.0	90.1	97.3	100.7	100.0	100.0	96.5	94.2	94.4	98.9	101.6	93.6	94.0
3325	Hardware	88.7	84.8	97.2	102.2	100.0	100.5	105.2	114.3	113.5	115.5	125.4	126.0	132.5
3326	Spring and wire products	82.2	85.2	99.0	102.4	100.0	110.6	111.4	112.6	111.9	125.7	135.3	133.8	146.3
3327	Machine shops and threaded products	76.9	79.2	98.3	99.8	100.0	99.6	104.2	108.2	108.8	114.8	115.7	114.6	115.3

50. Continued - Annual indexes of output per hour for selected NAICS industries, 1987-2005

[1997=100]

NAICS	Industry	1987	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3328	Coating, engraving, and heat treating metals	75.5	81.3	102.2	101.7	100.0	100.9	101.0	105.5	107.3	116.1	118.3	125.3	136.0
3329	Other fabricated metal products	91.0	86.5	96.3	98.2	100.0	101.9	99.6	99.9	96.7	106.5	111.6	111.2	112.6
3331	Agriculture, construction, and mining machinery	74.6	83.3	95.4	95.7	100.0	103.3	94.3	100.3	100.3	103.7	116.1	125.4	130.8
3332	Industrial machinery	75.1	81.6	97.1	98.5	100.0	95.1	105.8	130.0	105.8	117.6	117.0	126.5	121.9
3333	Commercial and service industry machinery	86.9	95.6	103.6	107.2	100.0	105.9	109.8	100.9	94.3	97.6	104.4	106.4	113.4
3334	HVAC and commercial refrigeration equipment	84.0	90.6	96.4	97.2	100.0	106.2	110.2	107.9	110.8	118.6	130.0	132.8	137.7
3335	Metalworking machinery	85.1	86.5	99.2	97.5	100.0	99.1	100.3	106.1	103.3	112.7	115.2	117.1	126.6
3336	Turbine and power transmission equipment	80.2	85.9	91.3	98.0	100.0	105.0	110.8	114.9	126.9	130.7	143.0	126.4	131.1
3339	Other general purpose machinery	83.5	86.8	94.0	94.9	100.0	103.7	106.0	113.7	110.5	117.9	128.1	127.1	137.2
3341	Computer and peripheral equipment	11.0	14.7	49.9	72.6	100.0	140.4	195.8	234.9	252.0	297.4	373.8	416.6	576.5
3342	Communications equipment	39.8	48.4	74.4	84.5	100.0	107.1	135.4	164.1	152.9	128.2	143.1	148.4	144.4
3343	Audio and video equipment	61.7	77.0	141.6	106.1	100.0	105.4	119.6	126.3	128.4	150.1	171.0	239.3	239.2
3344	Semiconductors and electronic components	17.0	21.9	63.8	83.1	100.0	125.8	173.9	232.4	230.4	263.7	324.2	361.1	386.6
3345	Electronic instruments	70.2	78.5	97.9	97.6	100.0	102.3	106.7	116.7	119.3	118.1	125.3	145.4	139.8
3346	Magnetic media manufacturing and reproduction	85.7	83.7	105.0	103.1	100.0	106.4	108.9	105.8	99.8	110.4	126.1	142.6	143.6
3351	Electric lighting equipment	91.1	88.2	91.9	95.8	100.0	104.4	102.7	102.0	106.7	112.4	111.2	122.9	133.8
3352	Household appliances	73.3	76.5	91.7	91.8	100.0	105.2	104.0	117.2	124.6	132.3	146.7	159.6	165.1
3353	Electrical equipment	68.7	73.6	98.0	100.4	100.0	100.2	98.7	99.4	101.0	101.8	103.4	110.8	116.7
3359	Other electrical equipment and components	78.8	76.1	92.0	96.3	100.0	105.8	114.7	119.7	113.1	114.0	116.2	115.6	121.7
3361	Motor vehicles	75.4	85.6	88.5	91.0	100.0	113.4	122.6	109.7	110.0	126.0	140.7	142.1	147.0
3362	Motor vehicle bodies and trailers	85.0	75.9	97.4	98.5	100.0	102.9	103.1	98.8	88.7	105.4	109.8	110.7	114.2
3363	Motor vehicle parts	78.7	76.0	92.3	93.0	100.0	105.0	110.0	112.3	114.8	130.5	137.0	138.0	144.4
3364	Aerospace products and parts	87.2	89.1	95.7	99.4	100.0	119.1	120.8	103.4	115.7	118.6	119.0	113.0	125.8
3365	Railroad rolling stock	55.6	77.6	81.8	80.8	100.0	103.3	116.5	118.5	126.1	146.1	139.8	131.5	121.0
3366	Ship and boat building	95.5	99.6	93.1	93.5	100.0	99.3	112.0	121.9	121.5	131.0	133.9	138.7	133.2
3369	Other transportation equipment	73.7	62.9	94.1	101.5	100.0	111.5	113.8	132.4	140.2	150.9	163.0	168.3	182.8
3371	Household and institutional furniture	85.2	88.2	97.2	99.8	100.0	102.2	103.1	101.9	105.5	111.8	114.7	113.6	121.3
3372	Office furniture and fixtures	85.8	82.2	84.9	86.3	100.0	100.0	98.2	100.2	98.0	115.9	125.1	131.1	136.7
3379	Other furniture-related products	86.3	88.9	94.8	97.6	100.0	106.9	102.0	99.5	105.0	110.2	110.0	121.3	123.3
3391	Medical equipment and supplies	76.3	82.9	96.6	100.5	100.0	108.7	110.4	114.6	119.3	127.3	137.0	137.5	148.2
3399	Other miscellaneous manufacturing	85.4	90.5	95.9	99.7	100.0	102.1	105.0	113.6	111.8	118.0	124.7	128.6	139.0
Wholesale Trade														
42	Wholesale trade	73.2	79.8	94.0	97.1	100.0	103.4	110.9	116.2	118.0	123.8	127.9	134.7	135.5
423	Durable goods	62.3	67.5	90.1	94.7	100.0	106.9	118.9	124.6	128.3	139.7	145.5	159.8	164.8
4231	Motor vehicles and parts	74.5	78.6	94.6	96.1	100.0	106.4	120.4	116.6	119.9	133.4	137.8	144.0	153.0
4232	Furniture and furnishings	80.5	90.1	102.7	103.2	100.0	99.9	102.3	112.4	110.5	116.0	123.9	129.8	127.2
4233	Lumber and construction supplies	109.1	108.4	101.6	103.9	100.0	105.4	109.3	107.6	116.4	123.9	133.2	138.9	131.5
4234	Commercial equipment	28.0	34.2	74.5	88.1	100.0	124.8	160.3	179.0	213.4	261.0	288.1	332.2	359.1
4235	Metals and minerals	101.7	103.1	105.2	102.3	100.0	100.9	94.0	93.9	94.4	96.3	97.8	108.9	105.0
4236	Electric goods	42.8	50.3	83.8	89.2	100.0	105.9	127.4	152.7	147.4	159.4	165.9	194.7	201.8
4237	Hardware and plumbing	82.2	88.0	99.2	99.2	100.0	101.8	104.3	103.7	100.5	102.6	104.0	107.7	105.9
4238	Machinery and supplies	74.1	81.5	90.0	94.3	100.0	104.3	102.9	105.5	102.8	100.3	103.1	111.9	118.2
4239	Miscellaneous durable goods	89.8	90.5	99.5	101.0	100.0	100.8	113.7	114.7	116.8	124.6	119.5	134.8	135.7
424	Nondurable goods	91.0	98.9	98.5	99.2	100.0	99.1	100.8	105.1	105.1	105.8	110.7	113.5	114.2
4241	Paper and paper products	85.6	81.0	95.4	95.0	100.0	98.4	100.1	100.9	104.6	116.6	119.7	131.1	144.9
4242	Druggists' goods	70.7	80.6	94.8	99.5	100.0	94.2	93.1	85.9	84.9	89.8	100.5	106.4	112.0
4243	Apparel and piece goods	86.3	99.3	90.6	97.0	100.0	103.6	105.1	108.8	115.2	122.8	125.9	130.8	144.1
4244	Grocery and related products	87.9	96.2	103.9	100.4	100.0	101.1	101.0	102.4	101.8	98.6	104.3	103.2	101.5
4245	Farm product raw materials	81.6	79.4	87.4	89.2	100.0	94.3	101.6	105.1	102.1	98.1	98.2	109.1	100.5
4246	Chemicals	90.4	101.1	98.7	98.7	100.0	97.1	93.3	87.9	85.3	89.1	91.9	90.1	88.1
4247	Petroleum	83.8	109.3	100.6	106.9	100.0	88.5	102.9	138.1	140.6	153.6	155.9	167.0	152.8
4248	Alcoholic beverages	99.3	110.0	101.5	101.2	100.0	106.5	105.6	108.4	106.4	106.8	107.9	103.0	108.9
4249	Miscellaneous nondurable goods	111.2	109.0	99.8	101.2	100.0	105.4	106.8	115.0	111.9	106.1	109.1	119.7	126.7
425	Electronic markets and agents and brokers	64.3	74.3	95.4	100.4	100.0	103.3	110.9	119.3	117.8	117.8	111.8	107.4	98.1
Retail Trade														
44-45	Retail trade	79.1	81.4	94.0	97.6	100.0	105.7	112.7	116.1	120.1	125.6	131.6	138.0	142.7
441	Motor vehicle and parts dealers	78.3	82.7	95.5	98.5	100.0	106.4	115.1	114.3	116.0	119.9	124.3	127.4	128.0
4411	Automobile dealers	79.2	84.1	95.8	98.3	100.0	106.5	116.3	113.7	115.5	117.2	119.5	124.7	123.4
4412	Other motor vehicle dealers	70.6	69.7	88.3	98.1	100.0	109.6	114.8	115.3	124.6	133.6	133.8	142.8	150.5
4413	Auto parts, accessories, and tire stores	71.8	79.0	95.2	97.8	100.0	105.1	107.6	108.4	101.3	107.7	115.1	110.3	118.6
442	Furniture and home furnishings stores	75.1	79.0	93.7	97.3	100.0	104.1	110.8	115.9	122.4	129.3	134.6	147.0	149.4
4421	Furniture stores	77.3	84.8	93.6	96.0	100.0	104.3	107.5	112.0	119.7	125.2	128.8	139.4	138.4
4422	Home furnishings stores	71.3	71.0	93.3	98.7	100.0	104.1	115.2	121.0	126.1	134.9	142.6	157.1	163.8
443	Electronics and appliance stores	38.0	47.7	87.8	93.5	100.0	122.6	150.6	173.7	196.7	233.5	292.7	334.7	365.1
444	Building material and garden supply stores	75.8	79.5	91.9	96.6	100.0	107.4	113.8	113.3	116.8	120.8	127.1	134.6	135.1

50. Continued - Annual indexes of output per hour for selected NAICS industries, 1987-2005

[1997=100]

NAICS	Industry	1987	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
4441	Building material and supplies dealers	77.6	81.6	93.4	97.1	100.0	108.3	115.3	115.1	116.7	121.3	127.5	134.0	134.6
4442	Lawn and garden equipment and supplies stores	66.9	69.0	83.9	93.8	100.0	102.3	105.5	103.1	118.4	118.3	125.7	140.2	139.4
445	Food and beverage stores	110.9	107.5	102.3	101.0	100.0	100.0	101.9	101.1	103.9	104.8	107.2	113.1	119.1
4451	Grocery stores	111.1	106.9	102.7	100.9	100.0	99.6	102.5	101.1	103.3	104.8	106.7	112.3	117.3
4452	Specialty food stores	138.5	127.2	102.9	101.0	100.0	100.5	96.4	98.5	108.2	105.3	112.2	121.1	137.4
4453	Beer, wine and liquor stores	94.7	98.7	95.4	101.7	100.0	105.9	100.3	107.0	108.3	111.4	118.4	129.9	147.6
446	Health and personal care stores	84.0	91.0	91.4	96.3	100.0	104.0	107.1	112.2	116.2	122.9	129.5	134.0	132.8
447	Gasoline stations	83.9	84.2	99.4	99.5	100.0	106.7	110.7	107.7	112.9	125.1	119.9	122.3	129.5
448	Clothing and clothing accessories stores	66.3	69.8	92.7	99.5	100.0	106.3	114.0	123.5	126.4	131.3	138.9	139.2	147.5
4481	Clothing stores	67.1	70.0	91.7	98.8	100.0	108.7	114.2	125.0	130.3	136.0	141.8	141.0	153.7
4482	Shoe stores	65.3	70.8	96.4	103.7	100.0	94.2	104.9	110.0	111.5	125.2	132.5	124.9	129.4
4483	Jewelry, luggage, and leather goods stores	64.5	68.1	94.1	98.8	100.0	108.7	122.5	130.5	123.9	118.7	132.9	144.5	137.2
451	Sporting goods, hobby, book, and music stores	74.4	82.1	95.0	95.9	100.0	107.9	114.0	121.1	127.1	127.5	131.3	151.1	164.2
4511	Sporting goods and musical instrument stores	70.5	79.5	94.7	95.1	100.0	111.6	119.3	127.8	132.4	132.7	136.7	160.1	172.8
4512	Book, periodical, and music stores	84.3	87.9	95.4	97.6	100.0	100.9	104.0	108.7	116.9	117.8	121.8	134.8	149.3
452	General merchandise stores	73.5	75.1	92.0	96.7	100.0	105.3	113.4	120.2	124.8	129.1	136.9	140.7	146.1
4521	Department stores	87.2	83.9	94.6	98.5	100.0	100.4	104.5	106.2	103.8	102.0	106.8	109.0	109.6
4529	Other general merchandise stores	54.8	61.2	87.2	93.8	100.0	114.7	131.0	147.3	164.7	179.3	188.8	192.9	203.5
453	Miscellaneous store retailers	65.1	69.5	88.8	94.8	100.0	108.9	111.3	114.1	112.6	119.1	126.1	131.2	142.0
4531	Florists	77.6	73.3	82.4	92.8	100.0	102.3	116.2	115.2	102.7	113.8	108.9	103.0	127.5
4532	Office supplies, stationery and gift stores	61.4	66.4	91.7	93.3	100.0	111.5	119.2	127.3	132.3	141.5	153.9	173.0	182.6
4533	Used merchandise stores	64.5	70.4	85.9	94.8	100.0	119.1	113.4	116.5	121.9	142.0	149.7	155.7	168.1
4539	Other miscellaneous store retailers	68.3	75.0	88.9	97.0	100.0	105.3	103.0	104.4	96.9	94.4	99.9	97.2	104.3
454	Nonstore retailers	50.7	54.7	79.8	91.4	100.0	114.3	128.9	152.2	163.6	182.1	195.5	216.1	222.3
4541	Electronic shopping and mail-order houses	39.4	43.4	72.5	85.5	100.0	120.2	142.6	160.2	179.6	212.7	243.6	272.8	284.2
4542	Vending machine operators	95.5	95.1	86.4	94.6	100.0	106.3	105.4	111.1	95.7	91.2	102.3	110.4	112.7
4543	Direct selling establishments	70.8	74.1	93.2	101.7	100.0	101.9	104.2	122.5	127.9	135.0	127.0	131.8	128.7
Transportation and Warehousing														
481	Air transportation	81.1	77.5	95.3	98.8	100.0	97.6	98.2	98.2	91.9	102.2	112.7	125.6	-
482111	Line-haul railroads	58.9	69.8	92.0	98.4	100.0	102.1	105.5	114.3	121.9	131.9	142.0	146.4	-
48412	General freight trucking, long-distance	85.7	89.2	95.8	95.3	100.0	99.4	99.1	101.9	103.2	107.0	110.7	109.8	-
48421	Used household and office goods moving	106.7	112.6	101.4	97.7	100.0	91.0	96.1	94.8	84.0	81.6	86.2	88.7	-
491	U.S. Postal service	90.9	94.2	97.7	96.7	100.0	101.6	102.8	105.5	106.3	106.4	107.8	110.1	-
492	Couriers and messengers	148.3	138.5	101.5	100.2	100.0	112.6	117.6	121.9	123.4	131.1	134.1	126.5	-
Information														
5111	Newspaper, book, and directory publishers	105.9	96.3	92.7	92.5	100.0	103.9	104.1	107.7	105.8	104.7	109.6	107.0	-
5112	Software publishers	10.2	28.4	73.2	88.3	100.0	134.8	129.2	119.2	117.4	122.1	138.1	161.6	-
51213	Motion picture and video exhibition	90.7	109.2	99.4	98.9	100.0	99.8	101.8	106.5	101.6	99.8	100.6	103.9	-
515	Broadcasting, except internet	99.5	98.2	102.5	101.3	100.0	100.8	102.9	103.6	99.2	104.0	106.7	108.2	-
5151	Radio and television broadcasting	98.1	97.7	104.8	103.4	100.0	91.5	92.6	92.1	89.6	95.1	94.4	91.4	-
5152	Cable and other subscription programming	105.6	100.3	92.8	93.0	100.0	136.2	139.1	141.2	128.1	129.8	145.9	158.4	-
5171	Wired telecommunications carriers	56.9	66.0	87.6	96.5	100.0	107.7	116.7	122.7	116.7	124.1	130.2	131.3	-
5172	Wireless telecommunications carriers	75.6	70.4	90.0	101.7	100.0	110.5	145.2	152.8	191.9	217.9	242.5	288.7	-
5175	Cable and other program distribution	105.2	100.0	92.6	92.6	100.0	97.1	95.8	91.6	87.7	95.0	101.2	113.7	-
Finance and Insurance														
52211	Commercial banking	72.8	80.7	95.6	100.0	100.0	96.9	99.1	101.7	97.5	100.3	102.6	108.1	-
Real Estate and Rental and Leasing														
532111	Passenger car rental	90.5	88.5	100.2	109.0	100.0	100.0	112.2	111.9	112.2	114.1	120.4	118.3	-
53212	Truck, trailer and RV rental and leasing	60.6	68.8	88.7	96.9	100.0	115.1	120.4	119.9	114.4	112.6	113.7	134.5	-
53223	Video tape and disc rental	77.0	97.1	119.5	102.4	100.0	113.2	129.4	134.9	133.3	130.3	148.5	154.7	-
Professional, Scientific, and Technical Services														
541213	Tax preparation services	82.9	76.2	90.6	96.2	100.0	107.6	105.8	100.9	94.4	111.4	110.0	101.3	-
54131	Architectural services	90.0	93.8	106.5	110.2	100.0	111.4	106.8	107.8	111.0	107.6	112.6	118.4	-
54133	Engineering Services	90.2	99.4	94.4	98.3	100.0	98.2	98.0	102.0	100.1	100.5	100.5	108.0	-
54181	Advertising agencies	95.9	107.9	102.5	103.4	100.0	89.2	97.9	107.5	106.9	112.9	120.7	133.0	-
541921	Photography studios, portrait	98.1	95.9	107.3	100.6	100.0	124.8	109.8	108.9	102.2	97.6	104.2	92.1	-
Administrative and Waste Management														
56151	Travel agencies	89.3	94.6	93.0	100.1	100.0	111.4	115.5	119.4	115.2	127.6	147.3	167.7	-
56172	Janitorial services	70.1	87.0	90.4	96.4	100.0	95.6	99.0	101.4	102.5	106.0	119.2	117.5	-
Health Care and Social Assistance														
6215	Medical and diagnostic laboratories	-	-	90.8	94.5	100.0	118.8	124.8	131.9	135.4	137.6	141.0	141.1	-
621511	Medical laboratories	-	-	91.3	94.7	100.0	117.1	121.5	127.4	127.7	123.1	128.7	130.8	-
621512	Diagnostic imaging centers	-	-	89.8	94.1	100.0	121.4	129.7	139.9	148.6	163.3	160.3	154.3	-
Accommodation and Food Services														
7211	Traveler accommodations	82.9	80.0	97.7	99.6	100.0	100.3	106.4	112.9	109.3	113.3	115.6	122.2	-
722	Food services and drinking places	96.0	102.4	100.3	99.1	100.0	101.0	100.9	103.5	103.8	104.4	106.3	107.1	108.8

50. Continued - Annual indexes of output per hour for selected NAICS industries, 1987-2005

[1997=100]

NAICS	Industry	1987	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
7221	Full-service restaurants	92.1	99.4	96.2	96.1	100.0	100.9	100.8	103.0	103.6	104.4	104.2	104.9	107.5
7222	Limited-service eating places	96.5	103.6	104.1	102.0	100.0	101.2	100.4	102.0	102.5	102.7	105.4	106.9	106.8
7223	Special food services	89.9	99.8	100.8	98.3	100.0	100.6	105.2	115.0	115.3	114.9	117.6	118.8	122.8
7224	Drinking places, alcoholic beverages	136.7	123.3	104.6	102.4	100.0	99.7	98.8	100.6	97.6	102.9	118.6	112.6	119.7
	Other Services (except Public Administration)													
8111	Automotive repair and maintenance	85.9	89.9	103.2	99.8	100.0	103.6	106.0	109.4	108.9	103.6	104.0	112.1	-
81211	Hair, nail and skin care services	83.4	82.1	93.3	96.4	100.0	108.5	108.5	108.1	114.4	110.2	119.4	126.2	-
81221	Funeral homes and funeral services	103.7	98.4	102.4	98.6	100.0	106.8	103.3	94.8	91.8	94.6	95.7	93.3	-
8123	Drycleaning and laundry services	97.1	94.8	99.2	100.9	100.0	100.1	105.1	107.6	110.9	112.5	103.8	111.5	-
81292	Photofinishing	95.8	107.7	108.0	106.6	100.0	69.2	76.3	73.8	81.2	100.5	100.4	102.9	-

NOTE: Dash indicates data are not available.

51. Unemployment rates, approximating U.S. concepts, nine countries, seasonally adjusted

[Percent]

Country	2005	2006	2005				2006			
			I	II	III	IV	I	II	III	IV
United States.....	5.1	4.6	5.3	5.1	5.0	5.0	4.7	4.7	4.7	4.5
Canada.....	6.0	5.5	6.2	6.0	6.0	5.8	5.7	5.5	5.6	5.4
Australia.....	5.1	4.9	5.1	5.1	5.0	5.2	5.2	5.0	4.8	4.6
Japan.....	4.5	4.2	4.6	4.4	4.4	4.5	4.3	4.2	4.2	4.1
France.....	9.9	9.7	9.8	9.9	9.9	10.0	10.0	9.8	9.6	9.3
Germany.....	11.2	10.3	11.4	11.4	11.2	10.9	10.9	10.5	10.0	9.6
Italy.....	7.8	6.9	7.9	7.9	7.7	7.7	7.3	7.0	6.8	6.6
Sweden.....	7.7	7.0	-	-	-	-	-	-	-	-
United Kingdom.....	4.8	5.5	4.7	4.8	4.8	5.1	5.3	5.5	5.6	5.5

NOTE: Dash indicates data not available.

Quarterly figures for France, Germany, and Italy 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. There are breaks in series for Germany (2005) and Sweden (2005). For details on breaks in series, see the technical notes of the report *Comparative Civilian Labor Force Statistics, Ten Countries, 1960-2006* (Bureau of Labor Statistics, March 19, 2007), available on the Internet at <http://www.bls.gov/fls/flscomparelf.htm>. For further qualifications and historical annual data, see the full report, also available at this site.

For monthly unemployment rates, as well as the quarterly and annual rates published in this table, see the report *Unemployment rates in nine countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted, 1995-2007*, (Bureau of Labor Statistics), available on the Internet at <ftp://ftp.bls.gov/pub/special.requests/ForeignLabor/flssec.txt>. Data may differ between the two reports mentioned, because the former is updated on a bi-annual basis, 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	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Civilian labor force											
United States.....	133,943	136,297	137,673	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428
Canada.....	14,604	14,863	15,115	15,389	15,632	15,891	16,367	16,729	16,956	17,114	17,351
Australia.....	9,115	9,204	9,339	9,414	9,590	9,752	9,907	10,092	10,244	10,524	10,714
Japan.....	66,450	67,200	67,240	67,090	66,990	66,860	66,240	66,010	65,770	65,850	65,956
France.....	24,982	25,116	25,434	25,791	26,099	26,393	26,645	26,904	26,954	27,071	-
Germany.....	39,142	39,415	39,752	39,375	39,302	39,459	39,413	39,276	39,711	40,760	-
Italy.....	22,679	22,753	23,004	23,176	23,361	23,524	23,728	24,020	24,084	24,179	24,362
Netherlands.....	7,455	7,612	7,744	7,881	8,011	8,098	8,186	8,255	8,279	8,291	8,353
Sweden.....	4,459	4,418	4,402	4,430	4,489	4,530	4,544	4,567	4,576	4,693	4,745
United Kingdom.....	28,239	28,401	28,474	28,777	28,952	29,085	29,335	29,557	29,775	30,087	30,525
Participation rate¹											
United States.....	66.8	67.1	67.1	67.1	67.1	66.8	66.6	66.2	66.0	66.0	66.2
Canada.....	64.6	64.9	65.3	65.7	65.8	65.9	66.7	67.3	67.3	67.0	67.4
Australia.....	64.6	64.3	64.3	64.0	64.4	64.4	64.4	64.6	64.7	65.4	65.7
Japan.....	63.0	63.2	62.8	62.4	62.0	61.6	60.8	60.3	60.0	60.0	60.0
France.....	55.7	55.6	56.0	56.4	56.6	56.8	56.9	57.0	56.7	56.6	-
Germany.....	57.1	57.3	57.7	56.9	56.7	56.7	56.4	56.0	56.4	57.6	-
Italy.....	47.3	47.3	47.7	47.9	48.1	48.3	48.5	49.1	49.1	48.7	48.8
Netherlands.....	60.2	61.1	61.8	62.5	63.1	63.3	63.5	63.7	63.6	63.4	63.7
Sweden.....	64.0	63.3	62.8	62.8	63.8	63.7	64.0	64.0	63.7	64.9	65.0
United Kingdom.....	62.4	62.5	62.5	62.8	62.9	62.7	62.9	63.0	63.0	63.1	63.5
Employed											
United States.....	126,708	129,558	131,463	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427
Canada.....	13,309	13,607	13,946	14,314	14,676	14,866	15,221	15,579	15,864	16,087	16,393
Australia.....	8,364	8,444	8,618	8,762	8,989	9,091	9,271	9,481	9,677	9,987	10,190
Japan.....	64,200	64,900	64,450	63,920	63,790	63,460	62,650	62,510	62,640	62,910	63,206
France.....	22,036	22,176	22,597	23,080	23,714	24,167	24,311	24,337	24,330	24,392	-
Germany.....	35,637	35,508	36,059	36,042	36,236	36,350	36,018	35,615	35,604	36,185	-
Italy.....	20,124	20,169	20,370	20,617	20,973	21,359	21,666	21,972	22,124	22,290	22,701
Netherlands.....	6,966	7,189	7,408	7,605	7,781	7,875	7,925	7,895	7,847	7,860	7,979
Sweden.....	4,019	3,973	4,034	4,117	4,229	4,303	4,310	4,303	4,276	4,333	4,413
United Kingdom.....	25,941	26,413	26,686	27,051	27,368	27,599	27,812	28,073	28,358	28,628	28,859
Employment-population ratio²											
United States.....	63.2	63.8	64.1	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1
Canada.....	59.0	59.5	60.3	61.2	61.9	61.9	62.4	63.0	63.4	63.4	63.6
Australia.....	59.3	59.0	59.3	59.6	60.3	60.1	60.3	60.7	61.2	62.1	62.5
Japan.....	60.9	61.0	60.2	59.4	59.0	58.4	57.5	57.1	57.1	57.3	57.5
France.....	49.1	49.1	49.7	50.4	51.4	52.0	51.9	51.6	51.2	51.0	-
Germany.....	52.0	51.6	52.3	52.1	52.2	52.2	51.5	50.8	50.6	51.2	-
Italy.....	42.0	41.9	42.2	42.6	43.2	43.8	44.3	44.9	45.1	44.9	45.5
Netherlands.....	56.2	57.7	59.1	60.3	61.3	61.5	61.5	62.8	60.3	60.1	60.8
Sweden.....	57.7	56.9	57.6	58.4	60.1	60.5	60.7	60.3	59.5	59.9	60.4
United Kingdom.....	57.3	58.2	58.5	59.1	59.4	59.5	59.6	59.8	60.0	60.0	60.0
Unemployed											
United States.....	7,236	6,739	6,210	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001
Canada.....	1,295	1,256	1,162	1,075	956	1,026	1,146	1,150	1,092	1,027	958
Australia.....	751	759	721	652	602	661	636	611	567	537	524
Japan.....	2,250	2,300	2,790	3,170	3,200	3,400	3,590	3,500	3,130	2,940	2,750
France.....	2,946	2,940	2,837	2,711	2,385	2,226	2,334	2,567	2,624	2,679	-
Germany.....	3,505	3,907	3,693	3,333	3,065	3,110	3,396	3,661	4,107	4,575	-
Italy.....	2,555	2,584	2,634	2,559	2,388	2,164	2,062	2,048	1,960	1,889	1,662
Netherlands.....	489	423	337	277	231	223	261	360	422	432	374
Sweden.....	440	445	368	313	260	227	234	264	300	361	332
United Kingdom.....	2,298	1,987	1,788	1,726	1,584	1,486	1,524	1,484	1,417	1,459	1,666
Unemployment rate											
United States.....	5.4	4.9	4.5	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6
Canada.....	8.9	8.4	7.7	7.0	6.1	6.5	7.0	6.9	6.4	6.0	5.5
Australia.....	8.2	8.3	7.7	6.9	6.3	6.8	6.4	6.1	5.5	5.1	4.9
Japan.....	3.4	3.4	4.1	4.7	4.8	5.1	5.4	5.3	4.8	4.5	4.2
France.....	11.8	11.7	11.2	10.5	9.1	8.4	8.8	9.5	9.7	9.9	9.2
Germany.....	9.0	9.9	9.3	8.5	7.8	7.9	8.6	9.3	10.3	11.2	10.3
Italy.....	11.3	11.4	11.5	11.0	10.2	9.2	8.7	8.5	8.1	7.8	6.8
Netherlands.....	6.6	5.6	4.4	3.5	2.9	2.8	3.2	4.4	5.1	5.2	4.5
Sweden.....	9.9	10.1	8.4	7.1	5.8	5.0	5.1	5.8	6.6	7.7	7.0
United Kingdom.....	8.1	7.0	6.3	6.0	5.5	5.1	5.2	5.0	4.8	4.8	5.5

¹ Labor force as a percent of the working-age population.

² Employment as a percent of the working-age population.

NOTE: Dash indicates data not available. There are breaks in series for the United States (1997, 1998, 1999, 2000, 2003, 2004), Australia (2001), Germany (1999, 2005), and Sweden (2005). For details on breaks in series, see the technical notes of the report *Comparative Civilian Labor Force Statistics, Ten Countries, 1960-2006*

(Bureau of Labor Statistics, March 19, 2007), available on the Internet at <http://www.bls.gov/fls/flscompare.htm>. For further qualifications and historical annual data, see the full report, also available at this site. Data in this report may not be consistent with data in *Unemployment rates in nine countries, civilian labor force basis, approximating U.S. concepts, seasonally adjusted, 1995-2007*, (Bureau of Labor Statistics), because the former is updated on a bi-annual basis, whereas the latter is updated monthly and reflects the most recent revisions in source data.

53. Annual indexes of manufacturing productivity and related measures, 16 economies

[1992 = 100]

Measure and economy	1980	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Output per hour																
United States.....	68.4	93.5	96.3	102.7	108.1	112.1	116.8	121.7	130.2	136.7	147.7	149.2	165.0	175.5	187.8	194.0
Canada.....	74.2	93.4	95.3	105.8	110.8	112.4	109.7	114.2	119.6	124.5	131.9	129.0	131.7	130.7	130.8	135.6
Australia.....	69.3	91.6	96.6	105.9	104.8	105.7	112.6	114.7	117.8	119.2	126.7	130.9	135.2	140.5	139.7	142.4
Japan.....	63.6	94.4	99.0	101.7	103.3	111.0	116.1	120.7	120.4	124.9	131.7	128.9	133.1	142.3	150.4	154.1
Korea.....	—	82.7	92.7	108.3	118.1	129.7	142.6	160.8	179.3	199.4	216.4	214.8	235.8	252.2	281.2	305.1
Taiwan.....	49.1	89.8	96.8	101.3	105.2	112.9	121.5	126.5	132.7	140.9	148.4	155.1	166.7	171.7	179.9	192.7
Belgium.....	65.4	96.8	99.1	102.5	107.9	112.7	114.3	121.5	122.9	121.5	125.7	126.9	131.1	134.5	141.0	144.9
Denmark.....	82.3	98.5	99.7	100.3	112.7	112.7	109.0	117.7	117.1	119.0	123.2	123.4	124.2	129.3	138.8	141.6
France.....	60.5	92.7	96.4	101.2	109.4	116.0	116.7	125.8	132.6	138.7	148.2	150.7	157.4	164.2	170.0	176.7
Germany.....	77.2	99.0	98.3	101.0	108.5	110.2	113.3	119.9	120.4	123.4	132.0	135.4	136.7	141.6	146.6	154.8
Italy.....	75.3	97.3	96.5	102.8	107.6	111.1	112.5	113.3	112.5	112.5	116.0	116.2	114.2	111.3	112.4	112.5
Netherlands.....	69.1	98.7	99.0	102.0	113.1	117.3	120.5	121.2	124.5	129.3	138.5	139.2	143.4	146.4	153.7	160.0
Norway.....	78.5	98.3	98.7	99.9	99.9	98.7	101.6	101.8	99.2	102.7	105.9	108.9	111.9	121.6	128.8	132.4
Spain.....	67.3	93.1	96.3	101.8	104.9	108.6	107.2	108.3	110.2	112.1	113.2	115.8	116.3	118.8	120.6	121.5
Sweden.....	73.1	94.6	95.5	107.3	118.2	125.1	130.2	142.0	150.7	164.1	176.8	172.6	190.7	204.5	227.9	241.9
United Kingdom.....	57.3	90.1	94.3	104.1	106.7	105.0	104.0	105.4	106.9	112.4	119.4	123.4	126.8	132.3	139.7	143.3
Output																
United States.....	73.6	98.2	96.8	104.2	112.2	117.3	121.6	129.0	137.7	143.7	152.7	144.2	148.2	149.9	159.6	163.0
Canada.....	85.0	106.0	99.0	105.9	114.1	119.6	119.6	127.7	134.0	145.0	159.4	152.7	154.2	152.9	155.9	157.0
Australia.....	89.6	104.1	100.9	103.6	108.9	108.7	111.6	114.7	117.9	117.6	122.5	122.4	127.7	130.0	129.9	129.9
Japan.....	60.8	97.1	102.0	96.3	94.9	98.9	103.0	106.1	99.2	99.9	105.1	99.3	97.5	102.7	107.5	108.7
Korea.....	28.6	88.1	96.0	105.1	117.1	130.8	139.2	146.0	134.5	163.7	191.5	195.7	210.5	222.2	246.8	264.1
Taiwan.....	45.4	91.0	96.4	100.9	106.9	112.7	118.7	125.5	129.5	139.0	149.2	138.1	148.3	155.9	170.6	181.7
Belgium.....	78.2	101.0	100.7	97.0	101.4	104.2	104.6	109.5	111.3	111.2	115.7	115.7	114.8	113.4	117.9	117.3
Denmark.....	92.3	101.7	100.3	97.0	107.5	112.7	107.5	116.3	117.2	118.2	122.5	122.5	119.0	115.7	119.6	121.6
France.....	80.0	97.7	99.2	95.9	100.6	106.2	106.3	113.3	119.0	123.1	128.7	130.0	129.9	132.3	134.5	136.5
Germany.....	85.3	99.1	102.4	92.0	94.9	94.0	92.0	96.1	97.2	98.2	104.8	106.6	104.4	105.2	108.8	112.3
Italy.....	81.0	100.5	100.2	97.6	104.1	109.1	107.8	109.6	109.9	109.6	112.9	111.8	110.4	107.8	108.6	106.4
Netherlands.....	76.9	99.0	99.8	97.7	104.5	108.2	109.8	111.3	115.1	119.4	127.4	127.2	127.2	125.8	127.8	128.1
Norway.....	105.7	101.7	99.4	102.0	104.7	105.2	109.4	114.1	113.3	113.2	112.6	111.8	111.2	114.9	121.4	124.4
Spain.....	78.6	98.4	100.3	96.1	97.8	101.5	104.0	110.7	117.4	124.1	129.6	133.7	133.5	134.7	135.2	135.6
Sweden.....	90.7	110.1	104.1	101.9	117.5	132.5	137.1	147.6	159.5	173.9	189.7	185.6	196.4	203.6	224.4	233.5
United Kingdom.....	87.3	105.3	100.1	101.4	106.2	107.9	108.6	110.6	111.3	112.3	115.0	113.5	110.5	110.7	113.0	111.7
Total hours																
United States.....	107.5	105.0	100.5	101.4	103.8	104.6	104.2	106.0	105.7	105.1	103.4	96.6	89.8	85.4	84.9	84.0
Canada.....	114.6	113.5	103.9	100.1	103.0	106.4	109.0	111.8	112.1	116.5	120.9	118.4	117.1	117.0	119.2	115.8
Australia.....	129.3	113.6	104.4	97.8	103.9	102.8	99.1	100.0	100.1	98.7	96.7	93.5	94.5	92.5	93.0	91.2
Japan.....	95.5	102.9	103.1	94.7	91.9	89.1	88.8	87.9	82.4	79.9	79.8	77.1	73.3	72.2	71.5	70.5
Korea.....	—	106.4	103.6	97.1	99.2	100.9	97.6	90.8	75.0	82.1	88.5	91.1	89.3	88.1	87.8	86.5
Taiwan.....	92.4	101.4	99.6	99.6	101.7	99.8	97.7	99.2	97.6	98.7	100.5	89.0	89.0	90.8	94.9	94.3
Belgium.....	119.7	104.3	101.5	94.7	94.0	92.4	91.5	90.2	90.5	91.5	92.1	91.2	87.5	84.3	83.6	80.9
Denmark.....	112.1	103.3	100.6	96.8	95.4	100.0	98.6	98.8	100.1	99.4	99.4	99.3	95.8	89.5	86.2	85.9
France.....	132.3	105.5	102.9	94.8	91.9	91.6	90.1	89.7	88.7	86.8	86.3	82.5	80.6	79.1	77.2	77.2
Germany.....	110.5	100.1	104.1	91.1	87.5	85.3	81.3	80.1	80.8	79.6	79.4	78.7	76.4	74.3	74.2	72.6
Italy.....	107.6	103.3	103.8	95.0	96.8	98.2	95.8	96.7	97.7	97.4	97.3	96.2	96.7	96.8	96.6	94.5
Netherlands.....	111.2	100.3	100.8	95.8	92.4	92.3	91.1	91.8	92.4	92.3	91.9	91.4	88.7	85.9	83.2	80.0
Norway.....	134.7	103.4	100.7	102.1	104.8	106.6	107.7	112.1	114.2	110.3	106.4	102.7	99.3	94.5	94.2	93.9
Spain.....	116.7	105.7	104.1	94.4	93.2	93.5	97.0	102.2	106.5	110.7	114.4	115.4	114.8	113.4	112.2	111.6
Sweden.....	124.0	116.4	109.0	94.9	99.4	105.9	105.3	103.9	105.9	106.0	107.3	107.5	103.0	99.6	98.5	96.5
United Kingdom.....	152.3	116.9	106.2	97.5	99.6	102.7	104.4	105.0	104.1	99.9	96.3	92.0	87.2	83.7	80.9	78.0
Hourly compensation (national currency basis)																
United States.....	55.9	90.5	95.6	102.0	105.3	107.3	109.3	112.2	118.7	123.4	134.7	137.9	147.8	158.2	161.4	168.8
Canada.....	47.9	88.5	95.0	102.0	103.9	106.5	107.4	109.0	114.6	117.1	120.9	124.6	129.1	133.0	134.6	139.8
Australia.....	—	86.7	94.6	106.8	104.1	112.6	122.4	125.1	127.5	132.3	139.3	148.0	154.0	161.9	166.3	176.6
Japan.....	58.6	90.6	96.5	102.7	104.7	108.3	109.1	112.7	115.6	115.5	114.9	116.4	117.2	114.6	115.1	117.0
Korea.....	—	68.0	85.5	115.9	133.1	161.6	188.1	204.5	222.7	223.9	239.1	246.7	271.6	285.0	325.5	345.6
Taiwan.....	29.6	85.2	93.5	105.9	111.1	120.2	128.2	132.1	137.1	139.6	142.3	151.4	145.0	147.3	144.0	146.3
Belgium.....	52.5	90.1	97.3	104.8	105.6	108.6	110.6	114.7	116.5	118.0	120.1	126.4	131.9	135.8	138.8	144.6
Denmark.....	44.5	93.6	97.8	102.4	106.0	108.2	112.6	116.5	119.6	122.6	125.0	130.9	136.5	145.7	150.6	153.7
France.....	37.1	88.5	93.9	104.3	108.0	110.7	112.5	116.3	117.2	121.0	127.0	130.6	137.4	141.4	144.7	148.7
Germany.....	53.6	89.4	91.4	106.2	111.0	117.0	122.5	124.9	126.7	129.6	136.3	140.6	144.0	147.2	148.0	149.7
Italy.....	30.6	87.7	94.3	105.7	107.3	112.0	120.0	124.1	123.3	125.6	128.7	133.5	136.9	140.6	145.1	149.5
Netherlands.....	60.5	89.8	94.8	104.5	109.0	112.1	114.6	117.6	122.4	126.5	132.8	138.9	146.8	152.8	158.0	163.2
Norway.....	39.0	92.3	97.5	101.5	104.5	109.2	113.8	118.8	125.8	133.0	140.5	149.0	157.9	164.3	169.7	175.6
Spain.....	28.0	79.9	88.4	109.4	113.4	118.3	121.1	124.0	124.9	124.7	126.6	131.6	135.4	142.2	147.0	153.0
Sweden.....	37.3	87.8	95.5	97.4	99.8	106.8	115.2	121.0	125.6	130.3	136.8	143.8	151.7	159.2	163.5	167.2
United Kingdom.....	35.8	88.7	99.8	104.5	106.0	107.9	108.3	112.3	121.5	129.0	136.1	141.8	150.1	156.8	164.2	171.7

See notes at end of table.

53. Continued— Annual indexes of manufacturing productivity and related measures, 16 economies

Measure and economy	1980	1990	1991	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Unit labor costs (national currency basis)																
United States.....	81.8	96.8	99.2	99.3	97.4	95.7	93.6	92.2	91.2	90.3	91.2	92.4	89.6	90.2	85.9	87.0
Canada.....	64.6	94.8	99.7	96.5	93.8	94.7	97.9	95.5	95.9	94.0	91.7	96.6	98.0	101.8	102.9	103.1
Australia.....	—	94.7	97.9	100.8	99.4	106.5	108.7	109.0	108.3	111.0	109.9	113.1	113.8	115.2	119.1	124.1
Japan.....	92.1	95.9	97.4	101.0	101.4	97.6	94.0	93.4	96.1	92.5	87.3	90.3	88.0	80.5	76.5	75.9
Korea.....	44.4	82.1	92.2	107.0	112.7	124.6	131.9	127.1	124.2	112.3	110.5	114.8	115.2	113.0	115.8	113.3
Taiwan.....	60.3	94.9	96.5	104.6	105.6	106.5	105.5	104.5	103.4	99.1	95.9	97.6	87.0	85.8	80.1	75.9
Belgium.....	80.3	93.0	98.1	102.3	97.9	96.4	96.8	94.5	94.8	97.2	95.6	99.6	100.6	101.0	98.4	99.8
Denmark.....	54.1	95.0	98.1	102.2	94.1	96.0	103.3	98.9	102.1	103.0	101.4	106.1	109.9	112.7	108.5	108.5
France.....	61.3	95.5	97.4	103.1	98.7	95.4	96.4	92.4	88.3	87.3	85.7	86.7	87.3	86.1	85.1	84.1
Germany.....	69.4	90.3	93.0	105.2	102.4	106.2	108.2	104.2	105.2	105.1	103.3	103.8	105.3	104.0	100.9	96.7
Italy.....	40.7	90.2	97.6	102.9	99.8	100.8	106.6	109.5	109.6	111.7	110.9	114.9	119.8	126.3	129.2	132.9
Netherlands.....	87.6	91.1	95.7	102.4	96.4	95.6	95.1	97.1	98.3	97.8	95.9	99.8	102.4	104.3	102.8	102.0
Norway.....	49.7	93.9	98.8	101.6	104.6	110.7	112.0	116.7	126.8	129.5	132.7	136.8	141.0	135.1	131.7	132.6
Spain.....	41.5	85.8	91.8	107.4	108.1	108.9	112.9	114.5	113.4	111.2	111.8	113.6	116.4	119.7	122.0	125.9
Sweden.....	51.0	92.9	100.0	90.8	84.4	85.3	88.5	85.2	83.3	79.4	77.4	83.3	79.5	77.9	71.7	69.1
United Kingdom.....	62.4	98.5	105.9	100.4	99.4	102.7	104.1	106.5	113.6	114.8	114.0	115.0	118.4	118.6	117.6	119.8
Unit labor costs (U.S. dollar basis)																
United States.....	81.8	96.8	99.2	99.3	97.4	95.7	93.6	92.2	91.2	90.3	91.2	92.4	89.6	90.2	85.9	87.0
Canada.....	66.7	98.1	105.2	90.4	83.0	83.4	86.7	83.3	78.1	76.5	74.6	75.4	75.4	87.8	95.5	102.8
Australia.....	—	100.7	103.7	93.2	98.9	107.2	115.7	110.3	92.6	97.4	86.9	79.5	84.2	102.2	119.2	128.7
Japan.....	51.5	83.9	91.8	115.3	125.8	131.7	109.6	97.8	93.0	103.1	102.6	94.2	89.1	88.1	89.7	87.4
Korea.....	57.3	90.7	98.2	104.2	109.6	126.5	128.6	105.3	69.6	74.0	76.7	69.7	72.3	74.4	79.3	86.8
Taiwan.....	42.1	88.7	90.8	99.6	100.4	101.1	96.7	91.3	77.5	77.2	77.2	72.6	63.4	62.7	60.4	59.4
Belgium.....	88.3	89.5	92.3	95.1	94.2	105.2	100.4	84.8	83.9	82.5	70.3	71.1	75.8	91.1	97.5	99.0
Denmark.....	57.9	92.7	92.5	95.1	89.4	103.5	107.6	90.4	92.0	89.0	75.6	76.9	84.2	103.4	109.4	109.3
France.....	76.9	92.8	91.3	96.3	94.2	101.3	99.7	83.8	79.3	75.0	63.8	62.6	66.6	78.7	85.5	84.5
Germany.....	59.6	87.3	87.5	99.3	98.6	115.8	112.3	93.8	93.4	89.4	76.2	74.2	79.5	94.0	100.2	96.1
Italy.....	58.5	92.7	96.9	80.6	76.3	76.2	85.2	79.2	77.7	75.7	65.1	65.5	72.1	91.0	102.2	105.3
Netherlands.....	77.5	87.9	90.0	96.9	93.2	104.8	99.2	87.4	87.2	83.2	70.7	71.3	77.3	94.3	102.1	101.3
Norway.....	62.6	93.3	94.5	88.9	92.1	108.6	107.7	102.3	104.3	103.1	93.6	94.5	109.8	118.6	121.4	128.0
Spain.....	59.3	86.2	90.5	86.3	82.6	89.5	91.3	80.0	77.7	72.9	63.5	62.6	67.7	83.4	93.3	96.4
Sweden.....	70.2	91.3	96.3	67.8	63.7	69.6	76.9	64.9	61.1	55.9	49.1	46.9	47.6	56.2	56.9	53.9
United Kingdom.....	82.2	99.5	106.0	85.3	86.2	91.8	92.0	98.8	106.6	105.1	97.8	93.7	100.7	109.7	122.0	123.5

NOTE: Data for Germany for years before 1991 are for the former West Germany. Data for 1991 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 industry¹, 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

Profiles of Significant Collective Bargaining Disputes in 2006

by [David Pongrace](#)

Bureau of Labor Statistics

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Twenty work stoppages that began in 2006 and three major work stoppages that continued from 2005 collectively idled 70,000 workers and resulted in 2.7 million workdays of idleness.¹ This article profiles the issues involved in the three most significant stoppages of the year as measured by number of workers involved, days of idleness, and length of stoppage.²

Goodyear Tire And Rubber Company And The United Steelworkers Of America

A work stoppage involving the Goodyear Tire and Rubber Company and the United Steelworkers of America (USW) was the largest work stoppage in 2006 in terms of the number of workers involved. It was the second longest work stoppage beginning in 2006, and the second largest work stoppage in terms of days of idleness.

The work stoppage began on October 6, after the union rejected a final offer from Goodyear. Workers at twelve Goodyear plants in the United States and four plants in Canada were involved in the dispute.³ After the two sides were unable to come to an agreement on job security issues and health care coverage, USW gave Goodyear a three-day notice that it would terminate the day-to-day extension of a contract that had expired on July 22.

One major issue was Goodyear's proposal to leave two of its twelve United States plants -- one in Gadsden, Alabama, and one in Tyler, Texas -- without protected status, meaning that Goodyear would then be able to close these two plants. In 2003, Goodyear shut down the plant in Huntsville, Alabama, after successfully negotiating the option to take this action. The union believed it would be "unacceptable" to close any more plants.⁴

The work stoppage ended on December 29, when union members approved a new master contract. The new agreement provided for the creation of a company funded trust to secure medical and prescription drug benefits for retirees. The company also agreed not to close any plants except for the Tyler, Texas, plant, which will be closed at the end of 2007 instead of midyear, as Goodyear had originally planned. Current benefit levels will remain fixed for retiree medical and prescription drug coverage. Goodyear also agreed to employ no less than 90 percent of workers in the bargaining unit and a 100-percent staffing level of the total technical maintenance workforce. The company will also invest over a half-billion dollars to upgrade its plants. Employees at the Tyler plant will receive a buyout offer of \$2,000 per year of service with a minimum of \$15,000 and a maximum of \$40,000 as well as a weekly \$750 benefit for a minimum of 15 weeks and a maximum of 48 weeks. Tyler employees will also have preferential hiring rights at the plant in Lawton, Oklahoma. The contract also streamlines the wage structure from one containing "hundreds" of wage classifications, according to USW spokesman Wayne Ranick, to one with only six wage grades ranging from \$13 to \$24 per hour.⁵

Northwest Airlines And The Aircraft Mechanics Fraternal Association

A work stoppage between Northwest Airlines and the Aircraft Mechanics Fraternal Association (AMFA) was the largest work stoppage in 2006 in terms of idleness, with 812,100 days idle during 2006. This work stoppage, which began in 2005, had 1,183,800 days of idleness over its duration. The stoppage began on August 20, 2005, when union members rejected a proposed 25-percent pay cut and a layoff of 2,000 employees. Northwest brought in replacement workers when the work stoppage began.⁶

The work stoppage ended on November 6, 2006 when 72 percent of union members voted to approve a new contract. Under the new contract, replacement workers who were hired during the work stoppage will keep their jobs. Union members who lost their jobs received the choice to classify themselves as "laid off" and reapply for jobs while retaining seniority to determine hiring order or to leave permanently and receive ten weeks of severance pay.⁷ The company also rehired some

furloughed mechanics. These workers had their pay cut to a top wage rate of \$26.53 per hour, down from a top wage rate of \$36.39 per hour. The five-year contract also provided for improvements in vacation, overtime, and sick leave benefits, as well as a 1.5-percent pay raise each year.⁸

AK Steel Corporation And The Armco Employees Independent Federation

A work stoppage between AK Steel Corporation and the Armco Employees Independent Federation (AEIF) was the longest work stoppage beginning in 2006 as well as the third largest work stoppage in terms of days of idleness. The work stoppage began on March 1, when the company and 2,700 workers at its Middletown, Ohio, plant were unable to reach an agreement. The union wanted to have minimum staffing and job security guarantees, while AK Steel wanted to reduce employment and streamline employment classifications. The company contends that the steel industry has seen drastic changes, such as the removal of job security and minimum workforce provisions from new contracts, since the previous agreement was signed.⁹ In late July, AEIF employees voted to affiliate with the International Association of Machinists (IAM), hoping the larger union would be more effective in settling the dispute.¹⁰

The work stoppage ended on March 1, 2007.¹¹

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Notes

¹ For more detail, please see the news release [Major Work Stoppages in 2006](http://www.bls.gov/news.release/archives/wkstp_02272007.pdf), USDL 07-0304 (U.S. Department of Labor), February 27, 2007, on the Internet at http://www.bls.gov/news.release/archives/wkstp_02272007.pdf.

² For information about methodology and a glossary of terms, see "Major Work Stoppages in 2004 and 2005," *Compensation and Working Conditions Online*, October 25, 2006: available on the Internet at <http://www.bls.gov/opub/cwc/cb20061018ar01p1.htm>.

³ Workers at the four Canadian plants are not included in BLS figures.

⁴ See "USW Members Strike 16 Goodyear Plants After Union Ends Master Contract Extension," *Daily Labor Report*, October 6, 2006, p. A-8.

⁵ See "USW Members Begin Returning to Work After Ratifying Goodyear Contract, End Strike," *Daily Labor Report*, January 3, 2007, p. AA-1.

⁶ See Joshua Freed, "Northwest Hires Replacements as Strike Goes On," *The Washington Post*, August 22, 2005.

⁷ See "Northwest Mechanics Vote to End Strike," *Associated Press*, November 6, 2006, viewed at <http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2006/11/06/financial/f091319S10.DTL&feed=rss.news>.

⁸ See Susan Carey, "Northwest's Pact With Mechanics Would End Strike it Weathered," *The Wall Street Journal*, October 10, 2006.

⁹ See "AK Steel Locks Out Union Workers in Ohio When Bargaining Fails to Produce New Pact," *Daily Labor Report*, March 2, 2006, p. A-2.

¹⁰ See "Members of Independent Union at AK Steel Vote to Join IAM in Attempt to End Lockout," *Daily Labor Report*, July 31, 2006.

¹¹ See "Tentative Pact Comes on Anniversary of Lockout at AK Steel's Middletown Plant," *Daily Labor Report*, March 1, 2007, p. A-6.

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