U.S. Department of Labor
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Date	Time	Release
Friday, July 02, 2010	8:30 AM	Employment Situation for June 2010
Wednesday, July 07, 2010	10:00 AM	County Employment and Wages for Fourth Quarter 2009
Tuesday, July 13, 2010	10:00 AM	Job Openings and Labor Turnover Survey for May 2010
Wednesday, July 14, 2010	8:30 AM	U.S. Import and Export Price Indexes for June 2010
Thursday, July 15, 2010	8:30 AM	Producer Price Index for June 2010
Friday, July 16, 2010	8:30 AM	Consumer Price Index for June 2010
Friday, July 16, 2010	8:30 AM	Real Earnings for June 2010
Tuesday, July 20, 2010	10:00 AM	Regional and State Employment and Unemployment (Monthly) for June 2010
Tuesday, July 20, 2010	10:00 AM	Usual Weekly Earnings of Wage and Salary Workers for Second Quarter 2010
Friday, July 23, 2010	10:00 AM	Mass Layoffs (Monthly) for June 2010
Wednesday, July 28, 2010	10:00 AM	Metropolitan Area Employment and Unemployment (Monthly) for June 2010
Friday, July 30, 2010	8:30 AM	Employment Cost Index for Second Quarter 2010

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MONTHLY LABOR
REVIEW

Volume 133, Number 6
June 2010

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

June 30, 2010

Effects of imported intermediate inputs on productivity

A framework for estimating the effects of imported intermediate inputs on U.S. major-sector labor productivity is used together with the Solow multifactor productivity equation to show that private business sector multifactor productivity may have grown about 0.1 percent more slowly than what the BLS published series indicates

Lucy P. Eldridge
and
Michael J. Harper

Offshoring, or offshore outsourcing—the substitution of imported intermediate inputs for domestic labor or domestically produced intermediate inputs—affects U.S. economic performance. The existing framework for measuring productivity does not permit an analysis of offshoring; thus, the framework needs to be adjusted in order to assess the effects of imported intermediate inputs on the U.S. economy. The BLS Major Sector Productivity program develops measures of labor productivity for broad sectors of the economy: business, nonfarm business, manufacturing, and nonfinancial corporations. In addition, the program develops annual indexes of multifactor productivity for the private business sector, the manufacturing sector, and most manufacturing groups. This article focuses on BLS productivity measures for the private business sector and the manufacturing sector. Productivity measures for these two sectors are constructed under different methodologies: the private business sector productivity measures use a value-added output concept, while the manufacturing sector measures use a sectoral output approach. This difference in methodology influences the effects of imported intermediates on BLS measures of productivity.

In the sections that follow, the private business sector and the manufacturing sector are analyzed separately with an eye toward developing a framework for estimating the effects of imported intermediate inputs on U.S. major-sector labor productivity. First, the production model used to calculate the BLS private business sector multifactor productivity measures is expanded to treat imported intermediate inputs as an input, rather than as a subtraction from output. Then, the BLS framework for constructing manufacturing multifactor productivity is decomposed in order to isolate imported intermediate inputs. For both sectors, the Solow multifactor productivity equation is used to estimate the effects on labor productivity of substitution between imported intermediate inputs and U.S. hours worked.[1] The data reveal that growth in imported intermediate inputs contributed 14 percent to the average annual growth in labor productivity for the private business sector, and 23 percent to the average annual growth in labor productivity in the manufacturing sector, from 1997 to 2006.[2]

Data sources

Output. Real output measures used by the BLS to construct major-sector productivity statistics are produced by the Bureau of Eco-

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nomic Analysis (BEA) of the U.S. Department of Commerce. The most widely known measure of aggregate output for the U.S. economy is the gross domestic product (GDP): the sum of personal consumption expenditures, gross private domestic investment, government consumption expenditures and gross investment, and exports of goods and services less imports of goods and services. The BEA constructs nominal outputs for detailed components of GDP from various data sources, converts the outputs to real measures, and then aggregates them to calculate real GDP.

As a fundamental part of the national accounts, the BEA also distinguishes three primary sectors of GDP: business, household, and government.[3] The business sector accounts for the bulk of national output. The BEA calculates business sector output by removing from GDP the gross products of general government, private households, and nonprofit institutions.[4]

Ideally, productivity statistics measure the productivity of the U.S. economy at the most aggregate level of domestic output—that is, GDP. However, the BLS must exclude several activities from aggregate output in order to remove potential sources of bias that are specific to the measurement of productivity. The real gross products of general government, of private households, and of nonprofit institutions are estimated primarily from data on labor compensation. Trends in such output measures will, by definition, move with measures of input data and will tend to imply little or no labor productivity growth. Although these measures are the best available estimates of nonmarket components of GDP, including them in measures of the aggregate productivity of the economy would bias labor productivity trends toward zero.

The BLS business sector also excludes the gross product of owner-occupied housing and the rental value of buildings and equipment owned and used by nonprofit institutions serving individuals.[5] These components are excluded because no adequate corresponding labor input measures have been developed. To measure multifactor productivity, the BLS must further restrict output to the U.S. private business sector, excluding the output of government enterprises. Appropriate weights for labor and capital in government enterprises are not estimated because subsidies account for a substantial portion of capital income; therefore, there is no adequate measure of government enterprise capital income in GDP. In 2006, the BLS measure of the U.S. private business sector output accounted for approximately 76 percent of the value of GDP.[6]

In the manufacturing sector, the BLS measures output for productivity statistics differently. Output in the manufacturing sector is defined as the deflated value of production shipped to purchasers outside of the sector, including shipments to final users and establishments elsewhere within the private business sector. This is a *sectoral* output concept: output is gross output, excluding intrasectoral transactions (sales or transfers between establishments within the sector); sectoral output represents sales to final demand plus intermediate goods sent to other industries. The manufacturing multifactor productivity indexes are based on sectoral output in an effort to avoid the problem of double-counting that occurs when one establishment provides materials used by other establishments in the same sector.

Labor input. Labor input for the U.S. private business sector is measured as total hours actually worked by all persons, multiplied by a labor composition index. The measure of hours actually worked is based on the sources and methods used to measure the quarterly labor productivity of the business sector. The BLS labor composition index estimates the effects that shifts in age, education, and gender have on labor input growth and multifactor productivity growth.

Labor input is based on a jobs concept. The Current Employment Statistics (CES) survey is the primary source of data used to construct hours for the BLS productivity measures.[7] Data from the CES survey on average weekly hours paid are adjusted to an hours-at-work concept with the use of a ratio of hours worked to hours paid.[8] Current Population Survey (CPS) data on average weekly hours of nonproduction and supervisory workers are incorporated into the methodology to expand coverage to all employees.[9] To expand sectoral coverage, hours actually worked for employees of farms, proprietors, and unpaid family workers reported in the CPS are incorporated into the labor input measure; remaining data are obtained from various sources.[10]

Construction of the multifactor productivity labor composition measure begins with estimates of the number of hours worked by each type of worker, based on CPS data. The BLS assembles data on workers' hours, classified by their educational attainment, age, and gender, using actual wage averages for weights. The sum, over all groups, of the growth rates of hours, multiplied by the labor cost shares, gives the growth in adjusted labor input. Subtracting from this the growth in total (unweighted) hours yields the growth in labor composition.[11]

The same methods are used to construct the labor input measure for the U.S. manufacturing sector, except that no adjustment is made for labor composition (age, education,

and gender of the workforce) because the CPS sample size is too small for that purpose.[12]

Capital inputs. Capital inputs for private business and manufacturing multifactor productivity measures are similar. The BLS capital input measures include assets that are owned and operated by a business within the sector; rented capital services are included in intermediate inputs. Capital input measures the services derived from the stock of physical assets and software. Among the capital input measures are fixed business equipment, structures, inventories, and land. Financial assets, owner-occupied residential structures, and nonprofit capital are excluded from the capital input measures. The aggregate capital input measures are obtained by Tőrnqvist aggregation of the capital stocks for each type of asset within each of 60 NAICS industry groupings; estimated rental prices are used for each type of asset. Rental prices reflect the nominal rates of return and nominal rates of economic depreciation and revaluation for the specific types of assets. Rental prices are adjusted for the effects of taxes; rental prices of capital are computed for 18 three-digit NAICS industries within manufacturing. Data on investments in physical assets are obtained from the BEA.[13]

Energy, materials, and purchased business services. In the manufacturing sector, inputs include intermediate inputs, as well as capital and labor inputs. Data on intermediate inputs (energy, materials, and purchased business services) are obtained from BEA's annual input-output tables. Tőrnqvist indexes of each of these three input classes are derived at the three-digit NAICS level and then aggregated to total manufacturing. For manufacturing, materials inputs are adjusted to exclude transactions between manufacturing establishments, to maintain consistency with the sectoral output concept.[14]

Nominal values of materials, fuels, and electricity and nominal quantities of electricity consumed are obtained from economic censuses and annual surveys conducted by the U.S. Bureau of the Census. Purchased business services are estimated with the use of benchmark input-output tables and other annual industry data from BEA. Prices for many service inputs are based on the BLS price programs and obtained from the National Income and Product Accounts.

Imported intermediate inputs. The BEA produces import matrices as supplementary tables to the annual input-output accounts. For each commodity, the import-matrix table shows the value of imports of that commodity used by each industry. Because such information is not available from most businesses, the estimates must be imputed from data available in the annual input-output accounts. The imputed import values are based on the assumption that each industry uses imports of a commodity in the same proportion as the ratio of imports to domestic supply of the same commodity. (Domestic supply represents the total amount of a commodity available for consumption within the United States; it equals domestic output, plus imports, less exports.) Using this assumption to calculate the estimates implies that whatever variability of import usage there is across industries is not based on industry-specific information.[15]

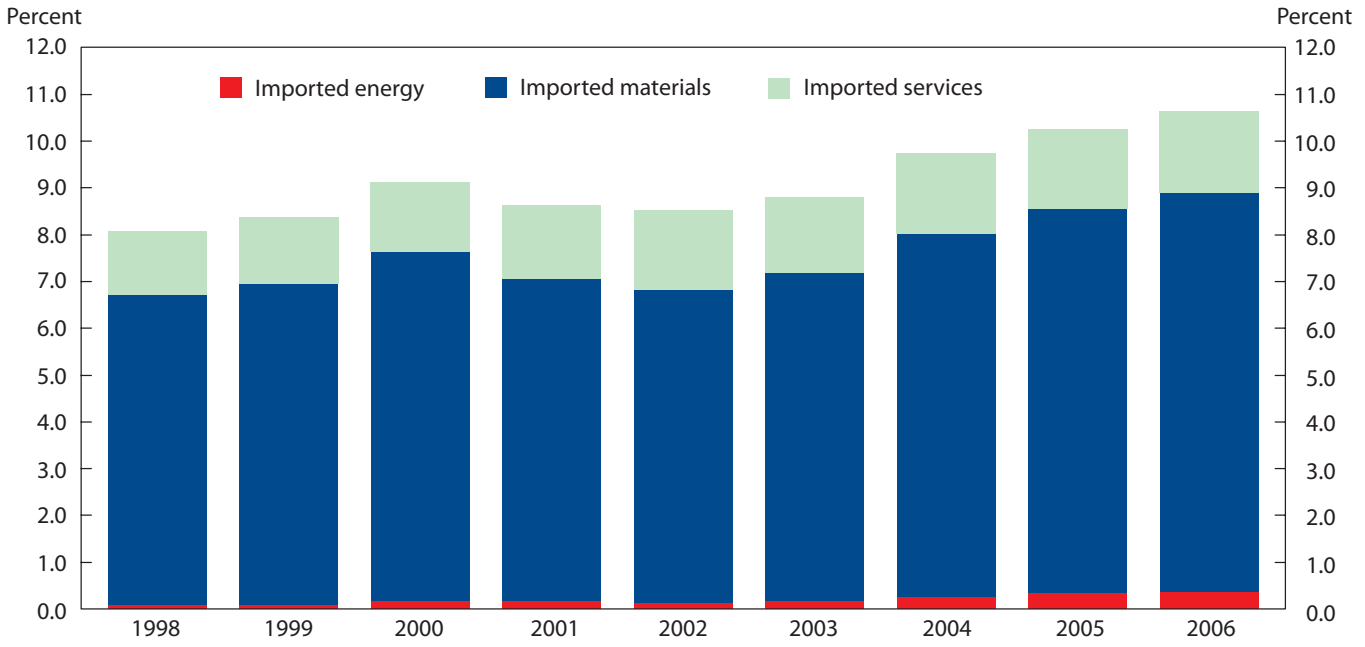
The BEA provided the BLS with detailed statistics on imported intermediates for this article. These data are not included in BEA published tables because their quality is significantly lower than that of the higher level aggregates in which they are included. Compared with these aggregates, the detailed statistics are more likely to be based on judgmental trends, on trends in the higher level aggregate, or on less reliable source data.[16]

The BEA data reveal trends in the shares of imported intermediate inputs. For all private industries, the share of intermediate inputs that is accounted for by imports grew from 8 percent in 1998 to more than 10 percent in 2006. Chart 1 shows that there was a decline in the share of imports used by private industries around the 2001 recession; however, beginning in 2002, the share increased steadily. Purchased materials account for the majority of imported intermediates, and their share grew steadily, again with a slight dip around the 2001 recession. Imported material inputs, which accounted for 15 percent of total materials used by private industries in 1998, saw their share grow to 21 percent by 2006.[17]

Although it was once thought that services were not subject to offshoring, there is evidence that service inputs are now being imported. Imported service inputs accounted for 1.4 percent of total intermediates used by private industries in 1998 and 1.7 percent in 2006. However, imported service inputs accounted for roughly 3 percent of all service inputs used by private industries, a percentage that stayed relatively steady from 1998 to 2006. Interestingly, the share of energy inputs that are imported appears to be growing: three percent of all energy inputs used by private industries were imported in 1998, and 8 percent were imported by 2006.[18] However, imported energy inputs are less than 0.4 percent of total intermediates used by private industries.

Looking at the imported intermediate data by industry reveals that the manufacturing sector consumed more than 60 percent of all imported intermediates used by

Chart 1. Imported intermediate inputs' share of total intermediates, by type of input, private industries, 1998–2006



SOURCE: Bureau of Economic Analysis.

private industries. For the manufacturing sector, the share of intermediate inputs that is accounted for by imports is significantly larger than it is for all private industries, and it grew at a faster rate. The BLS uses the term *sectoral intermediate inputs* to denote total intermediates less domestically manufactured inputs. Chart 2 shows imported intermediates' share of sectoral intermediate inputs, as well as the import share of total intermediates. The sectoral intermediate inputs for the BLS manufacturing sector are less than the total intermediates in the BEA annual input-output accounts because intermediates that are purchased from other firms within the U.S. manufacturing sector have been removed. Therefore, imports' share of sectoral intermediates is greater than imports' share of total intermediate inputs. The sectoral intermediate inputs for the manufacturing sector are 55 percent of the BEA total intermediates.

The data show that 24 percent of sectoral intermediates in manufacturing were imported in 1998; the percentage grew to almost 34 percent in 2006. Notice in chart 2 that, beginning in 2002, there has been a steady increase in the share of imported intermediates used by U.S. manufacturing firms relative to sectoral and total intermediates.[19] As observed for the private business sector, imported materials accounted for the majority of imported intermediate inputs. However, service inputs also were imported by the manufacturing sector. Imported services' share of sectoral intermediates in the manufacturing sector grew from 1.4 percent in 1998 to 2.1 percent in 2006, while imported energy's share grew slightly, from 0.1 percent to 0.3 percent, over the same period.

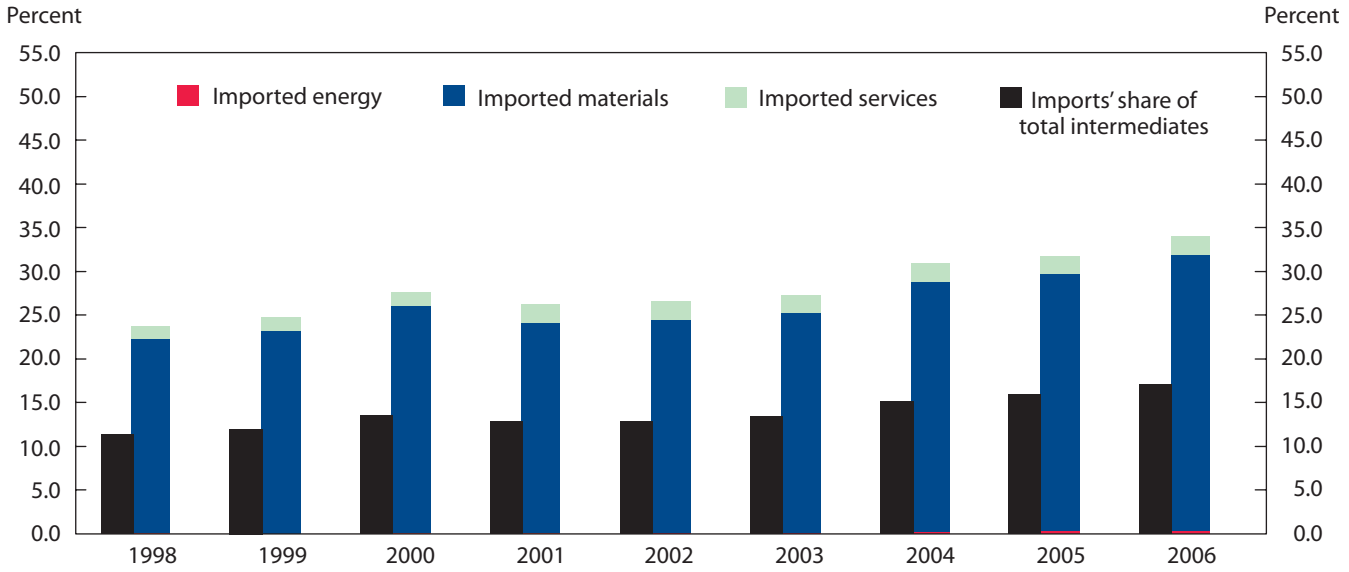
BLS multifactor productivity

Solow model of productivity. It is generally acknowledged that technical progress can best be captured with a total-factor productivity concept. The most common model of total-factor productivity is credited to Robert M. Solow. First proposed in 1957, the Solow residual model evaluates technical progress as the difference between the growth rate of output and the weighted aggregate of the growth rates of each factor of production. This measure of disembodied technological change evaluates the expansion of the production possibilities frontier without the addition of resources. Mathematically, given a production function $Y = f(X,t)$, the growth rate of total-factor productivity A can be written as

$$\frac{\Delta A}{A} = \frac{\Delta Y}{Y} - \sum_i \left(\beta_i \frac{\Delta x_i}{x_i} \right), \qquad (1)$$

where Δ represents a time derivative, Y denotes real aggre-

Chart 2. **Imports' share of sectoral intermediate inputs and of total intermediates, by type of input, U.S. manufacturing, 1998–2006**



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

gate output, X_i denotes the ith factor of production, and β_i represents the corresponding elasticity of output. This productivity growth model requires well-defined concepts of output and inputs that correspond to a specified production process. To construct measures of productivity, a discrete approximation for the time derivatives[20] must be made and cost-minimizing behavior is assumed in order to measure the β_i with cost shares.

BLS multifactor productivity for the private business sector. The BLS labor productivity measures for the private business sector compare output, measured as the real gross domestic product of all U.S. businesses, with hours worked by all U.S. workers who contribute to the production of that output. Real gross domestic product is measured by adding all exports and subtracting all imports from domestic final demand. Thus, imported intermediate inputs are excluded from the scope of the output measures, and as a result, the contribution of the labor hours worked overseas that produce the imported intermediate inputs also are absent from the analysis of U.S. productivity. The output measure used to construct the productivity measure for the private business sector removes the output of intermediate inputs produced and used within a sector, as well as all imported intermediate inputs and other domestic intermediate inputs produced outside the sector. Consequently, BLS multifactor productivity, A_{BLS}, contains only two factor inputs—labor (L) and capital services (K)—and can be written as

$$\frac{\Delta A_{BLS}}{A_{BLS}} = \frac{\Delta Y_{BLS}}{Y_{BLS}} - w_L \frac{\Delta L}{L} - w_K \frac{\Delta K}{K}, \quad (2)$$

or

$$d\ln A_{BLS} = d\ln Y_{BLS} - w_L \, d\ln L - w_K \, d\ln K, \quad (3)$$

where Y_{BLS} is BLS real private business sector output, $d\ln A_{BLS}$ denotes the difference in logarithms of A_{BLS} for successive years ($\ln A_{(BLS,t)} - \ln A_{(BLS,t-1)}$), and the weights for labor and capital, w_i, are the averages of each factor's nominal cost C_i relative to nominal output Y^N_{BLS} in two successive years, so that

$$w_{i=L,K} = \frac{1}{2}\left(\frac{C_{i,t}}{Y^N_{BLS,t}} + \frac{C_{i,t-1}}{Y^N_{BLS,t-1}}\right). \quad (4)$$

Because of this design, it is impossible to observe the impact of offshoring intermediate inputs on production. To incorporate intermediate inputs into the model, a sectoral

output concept must be used.

Private business sector multifactor productivity adjusted to include imports. Sectoral output removes from the value of output only intermediate inputs that are produced elsewhere within the sector, to eliminate double counting. Intermediate inputs that are produced outside of the sector (that is, imported intermediates) remain in output.[21] To bring imported intermediate inputs inside the major-sector model framework requires not excluding them as a component of output and including them as a factor input to production. With imported intermediate inputs denoted as II, the production function becomes $Y_S = f(L, K, \mathrm{II}, t)$ and multifactor productivity can be written as

$$d \ln A_s = d \ln Y_s - \theta w_L d \ln L - \theta w_K d \ln K - \sum_j \left[w_j \ d \ln \mathrm{II}_j \right], \quad (5)$$

where the factor weights for imported intermediate inputs of energy (IE), materials (IM), and services (IS) are defined as

$$w_{(j=\mathrm{IE,IM,IS})} = \frac{1}{2}\left(\frac{C_{j,t}}{Y^N_{S,t}} + \frac{C_{j,t-1}}{Y^N_{S,t-1}}, \right) \quad (6)$$

and an output adjustment ratio θ, used to correct the weights on labor and capital, is written as a two-period average:

$$\theta = \frac{1}{2}\left(\frac{Y^N_{\mathrm{BLS},t}}{Y^N_{S,t}} + \frac{Y^N_{\mathrm{BLS},t-1}}{Y^N_{S,t-1}} \right). \quad (7)$$

Algebraically working through the model yields an adjusted multifactor productivity measure that encompasses imported intermediate inputs in both the output and input indexes. Assuming that growth in sectoral output is a weighted average of growth in the BLS output measure and intermediate imports gives the multifactor productivity growth rate as a scalar of the existing BLS multifactor productivity growth rate:

$$d\ln A_s = \theta \ d\ln A_{\mathrm{BLS}}. \quad (8)$$

Table 1 presents growth rates for the components of the multifactor productivity model for the private business sector.[22] Notice that imported intermediates grew faster than labor and capital in most years, except around the 2001 recession. The growth of imported intermediate inputs has an impact on the growth of sectoral output trends as well. Sectoral output grew somewhat faster than the published value-added output measure for all years except 2001 and 2002. The year-to-year growth rates of imported intermediates fluctuate quite a bit. Over the 1997–2006 period, energy and service imports grew faster than imported materials. However, because of the small share of all imports held by energy and service imports in comparison with imported materials, the growth in imported materials drove the growth in total imported intermediate inputs.

Using BEA estimates of imported intermediate inputs yields the adjustment scalar for the private business sector multifactor productivity measures. Table 2 shows the results of adjusting the published BLS multifactor productivity data. Notice that, by incorporating the imported intermediate inputs into the multifactor productivity framework, the annual growth in private business sector multifactor productivity is reduced by 0.1 to 0.2 percentage point in all but two of the years shown.

Substitution of imported intermediates for U.S. labor in the private business sector. The effects on labor productivity of substitution between imported intermediate inputs and U.S. hours worked are estimated with the Solow multifactor productivity equation. The growth in imported intermediate inputs, combined with both growth in capital inputs and technical change, directly influences labor productivity. Thus, labor productivity can be written as the sum of the intensity of each of the other input factors (increases in the factor's quantities relative to domestically employed labor):

$$d \ln Y_s - d \ln L = d \ln A_s + \theta w_K \left(d \ln K - d \ln L \right) + \sum_j w_j \left(d \ln \mathrm{II}_j - d \ln L \right). \quad (9)$$

Chart 3 shows the contributions to private business sector labor productivity of the remaining nonlabor factor inputs. From 1998 through 2002, year-to-year growth in capital services accounted for the majority of labor productivity growth. Beginning in 2003, capital's contribution to labor productivity declined and was outpaced by multifactor productivity growth. Also, beginning in 2004, imported intermediate inputs contributed more to labor productivity growth than did capital growth. Again, the influence of imported material inputs dominated the contribution of all imported intermediate inputs.

The sectoral output approach reveals that, for the 1997–2006 period, approximately 14 percent (0.37/2.56) of labor productivity growth was attributable to growth in imported intermediate inputs, 11 percent (0.27/2.56) to materials, 3 percent (0.08/2.56) to services, and less than 0.5 percent (0.01/2.56) to energy. The following tabula-

Table 1. Growth of components of private business sector multifactor productivity, alternative output concepts, annual percent changes, 1997–2006

[Percent change from previous year]

Year	Original output	Sectoral output	Labor	Capital	Imported intermediates	Imported energy	Imported materials	Imported services
1998	4.9	5.3	2.3	6.3	10.7	3.8	10.9	10.3
1999	5.2	5.4	2.7	6.5	8.5	9.2	8.3	9.3
2000	3.9	4.4	1.0	6.3	9.6	11.2	9.5	9.7
2001	.5	.1	–1.4	4.6	–3.8	–1.9	–5.4	3.8
2002	1.5	1.4	–1.4	2.9	–.1	–6.5	–1.3	5.5
2003	3.1	3.1	–.3	2.3	3.1	3.4	4.4	–2.4
2004	4.3	4.9	1.5	2.3	11.8	27.3	10.3	16.4
2005	3.7	3.9	1.8	2.5	5.7	13.9	5.6	4.7
2006	3.2	3.4	2.6	2.7	4.9	2.8	4.7	6.8
Average annual percent change, 1997–2006	3.4	3.5	1.0	4.0	5.5	6.6	5.1	7.0

tion shows the contribution (average annual growth rates) of nonlabor inputs and multifactor productivity to labor productivity growth in the private business sector over that period:[23]

Factor	*Contribution to labor productivity growth (percent)*
Output per unit of labor (including imports)	2.56
Multifactor productivity (including imports)	1.31
Capital intensity	.88
Imported intermediates	.37
Imported materials	.27
Imported services	.08
Imported energy	.01

BLS multifactor productivity for the U.S. manufacturing sector. As mentioned earlier, BLS productivity measures for the manufacturing sector are constructed with the use of a sectoral output concept. Therefore, imported intermediates are within the productivity model framework. For the multifactor productivity measures, imported intermediate inputs are a component of measured output and intermediate inputs. To identify the impact of imported intermediates on manufacturing productivity, it is not necessary to adjust the measures to include imports; instead, the intermediates must be separated into domestic and imported components. This demarcation is achieved by using the BEA estimates of imported intermediates, which were provided to the BLS at the industry level of detail.

Table 3 presents the year-to-year growth rates and the average annual growth for the components of the manufacturing multifactor productivity model over the 1997–2006 period. Notice that in most years labor inputs declined and imported intermediates grew faster than capital and domestic nonmanufactured intermediate inputs. Prior to the 2001 recession, there was strong growth in capital services, imported intermediates, and domestic nonmanufactured intermediates. However, as the table shows, domestic nonmanufactured intermediates were affected by the recession sooner than imported intermediates were. Also, imported intermediates were able to rebound after the recession, whereas domestic nonmanufactured inputs shrank through 2004. Over the entire 1997–2006 period, labor and domestic nonmanufactured intermediates inputs declined, while capital services and imported intermediates grew.[24]

Table 4 compares the growth of domestic nonmanufactured intermediate inputs and imported intermediates by type of input. In general, imported intermediates showed stronger growth than domestic nonmanufactured inputs. It is interesting to note that domestic material inputs (excluding materials purchased from other manufacturing industries) declined in most years, while imported materials grew.

Table 2. Multifactor productivity growth for the private business sector, by alternative treatment of imports, annual percent changes, 1997–2006

[Percent change from previous year]

Year	Official BLS measure (excludes imported intermediate inputs)	Adjusted measure (includes imported intermediate inputs)	Difference (adjusted measure minus official measure)
1998	1.3	1.2	–.1
1999	1.3	1.2	–.1
2000	1.3	1.2	–.1
2001	.1	.1	.0
2002	1.7	1.5	–.2
2003	2.6	2.4	–.2
2004	2.5	2.3	–.2
2005	1.6	1.5	–.1
2006	.5	.5	.0
Average annual percent change, 1997–2006	1.4	1.3	–.1

Chart 4 presents the trends in constant-dollar factor input costs for the U.S. manufacturing sector. Note that labor represents the highest cost and was constant prior to the 2001 recession, when it declined together with falling employment in manufacturing. Energy and imported services represented a very small portion of the overall factor costs in manufacturing and were relatively constant over the 1997–2006 period. Interestingly, the cost of imported materials increased over the period, while the cost of domestic nonmanufactured materials declined. The factor costs of capital services and purchased domestic services increased somewhat.

Substitution of imported intermediates for U.S. labor in the manufacturing sector. In this subsection, the effects of imported intermediate inputs on labor productivity are estimated. The model used by the BLS to measure multifactor productivity for the U.S. manufacturing sector can be written as

$$d\ln A_G = d\ln Y_G - w_L\, d\ln L - w_K\, d\ln K - w_E\, d\ln E - w_M\, d\ln M - w_S\, d\ln S, \quad (10)$$

where Y_G is real sectoral output for the manufacturing sector; $d\ln A_G$ denotes the difference in logarithms of A_G for successive years ($\ln A_{(G,t)} - \ln A_{(G,t-1)}$); and the weights for labor, capital, energy, materials, and purchased business services, w_i, are the averages of each factor's nominal cost relative to nominal output Y_G^N in 2 successive years and are given by

$$w_{i=L,K,E,M,S} = \frac{1}{2}\left(\frac{C_{i,t}}{Y_{Gt}^N} + \frac{C_{i,t-1}}{Y_{G,t-1}^N}\right). \quad (11)$$

The growth in imported intermediate inputs, combined with growth in capital inputs, growth in domestic intermediate inputs, and technical change, directly influence labor productivity. Thus, labor productivity can be written as the sum of the intensity of each of the other input factors (increases in the factors' quantities relative to domestically employed labor):

$$d\ln Y_G - d\ln L = d\ln A_G + w_K\left(d\ln K - d\ln L\right) + \sum_j w_{\mathrm{DI}j}\left(d\ln \mathrm{DI}_j - d\ln L\right) + \sum_j w_{\mathrm{II}j}\left(d\ln \mathrm{II}_j - d\ln L\right). \quad (12)$$

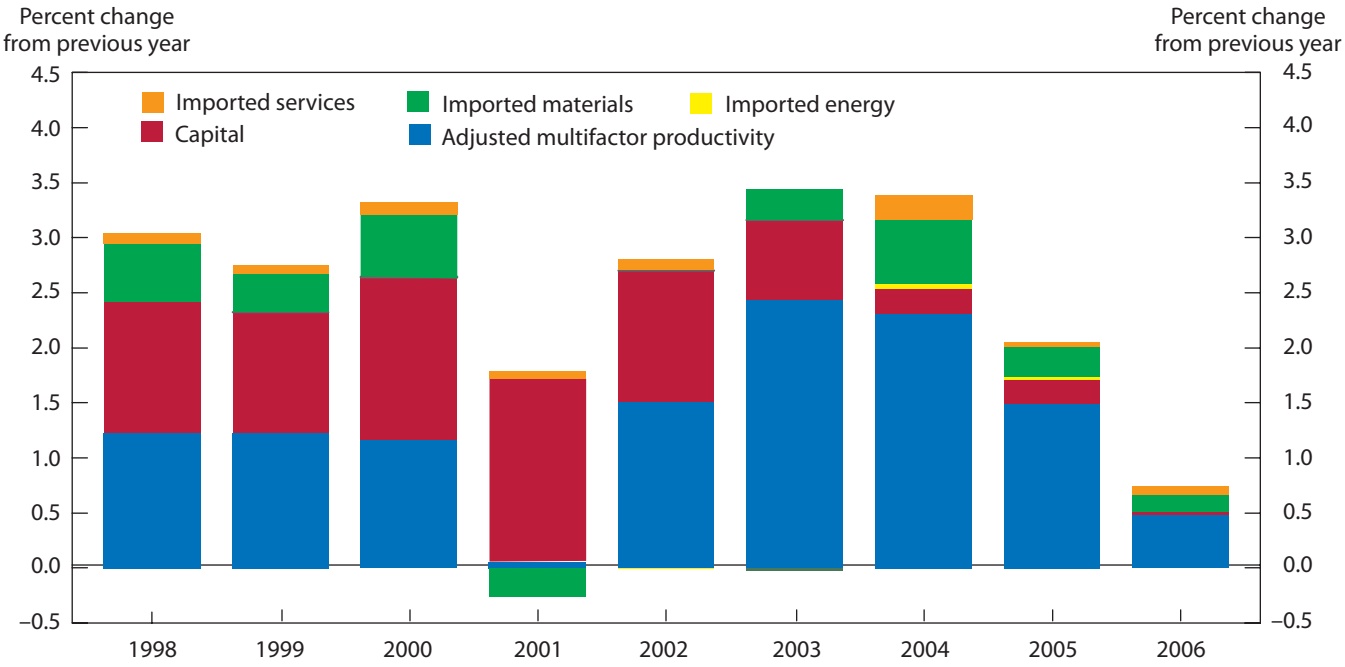
In the preceding equation, $w_{\mathrm{DI}j}$ denotes the weights on domestic intermediates $j = E,M,S$ and $w_{\mathrm{II}j}$ denotes the weights on imported intermediates $j = E,M,S$.

Chart 5 shows the contributions of nonlabor input factors to the year-to-year growth of manufacturing sector labor productivity. Notice that in most years multifactor productivity contributed the most to labor productivity growth. Notice also that growth in capital services contributed to labor productivity growth prior to 2004, but very little thereafter. Imported intermediate inputs made a relatively constant contribution to labor productivity growth in all years, with the exception of 2001. Over the period 1997–2006, multifactor productivity accounted for 45 percent (1.79/3.96) of productivity growth and imported intermediate inputs accounted for 23 percent (.92/3.96). The following tabulation shows the contributions of nonlabor factor inputs to the average annual growth of labor productivity in the manufacturing sector over the entire period from 1997 to 2006:

Factor	*Average annual growth (percent)*
Output per unit of labor	3.96
Multifactor productivity	1.79
Capital intensity	.64
Domestic intermediates	.65
Imported intermediates	.92
Imported materials	.80
Imported services	.10
Imported energy	.01

THIS ARTICLE DEVELOPS A FRAMEWORK for estimating the effects of imported intermediate inputs on U.S. major-sector labor productivity. The production model used to calculate the BLS private business sector multifac-

Chart 3. **Labor productivity growth, by contributing input factors, private business sector, annual percent changes, 1997–2006**



SOURCE: Bureau of Labor Statistics, Bureau of Economic Analysis (unpublished import data).

tor productivity measures is expanded to treat imported intermediate inputs as an input, rather than as a subtraction from output. Once the imported intermediate inputs are placed inside the framework, the Solow multifactor productivity equation is used to estimate the effects on labor productivity of substitution between imported intermediate inputs and U.S. hours worked. Separate effects are estimated for imported energy, materials, and services. The data show that imports increased as a share of total intermediates used by private industries, from 8 percent in 1998 to 10 percent in 2006. By including imported intermediates in the multifactor productivity model, the adjusted private business sector multifactor productivity is seen to have grown 0.1 percent to 0.2 percent per year more slowly than is indicated by the BLS published series. Also, the growth in imported intermediate inputs is estimated to have contributed 14 percent to the average annual growth of labor productivity for the private business sector from 1997 to 2006.

On the basis of the analysis presented here, it likely is not a good idea to alter the labor productivity model to incorporate imported intermediates, because then the trend could be considered biased to the extent that output would reflect the growth in imported intermediates while labor input would not include the corresponding hours worked overseas. However, as is attested to by the aforementioned 0.1-percent to 0.2-percent less growth than the BLS published series, the role of imported intermediates can be meaningfully assessed in the multifactor productivity model.

Because more than 60 percent of imported intermediate inputs purchased by private industries are used by the manufacturing sector, the role of imported intermediates in the U.S. manufacturing sector is also evaluated. The BLS methods for constructing manufacturing multifactor productivity include intermediates in the model framework. Therefore, the imported components are isolated to assess their impact on labor productivity. The data reveal that, over the 1998–2006 period, imported intermediate inputs grew as a share of total intermediate inputs. In addition, labor inputs and domestic nonmanufactured inputs declined over the entire period while capital services and imported intermediates grew. Finally, the analysis shows that growth in imported intermediate inputs contributed 23 percent to the average annual growth in labor productivity in the manufacturing sector.

Questions have been raised concerning whether the quantity of imported materials is measured accurately. The issue is that foreign imports may provide input of the

Table 3. Multifactor productivity and components in the U.S. manufacturing sector, annual percent changes, 1997–2006

[Percent change from previous year]

Year	Sectoral output	Labor	Capital	Domestic intermediates	Imported intermediates	Multifactor productivity
1998	5.2	–0.2	5.0	2.3	9.6	2.3
1999	3.8	–.7	4.1	4.2	7.1	.8
2000	2.7	–1.3	3.1	–4.1	5.5	3.5
2001	–5.1	–6.5	1.5	–3.0	–4.9	–1.3
2002	–.7	–7.1	.6	–4.4	–2.1	3.7
2003	1.0	–4.9	.0	–1.3	2.6	2.8
2004	1.7	–.5	–.6	–5.2	8.7	2.6
2005	3.7	–1.1	.0	7.7	4.9	.4
2006	1.8	.6	.5	–2.0	4.3	1.6
Average annual percent change, 1997–2006	1.5	–2.4	1.6	–.7	3.9	1.8

NOTE: Combined intermediates are constructed as a weighted aggregate of energy, materials, and purchased services.

Table 4. Comparison of imported and domestic intermediate inputs, by type of input, U.S. manufacturing sector, annual percent changes, 1997–2006

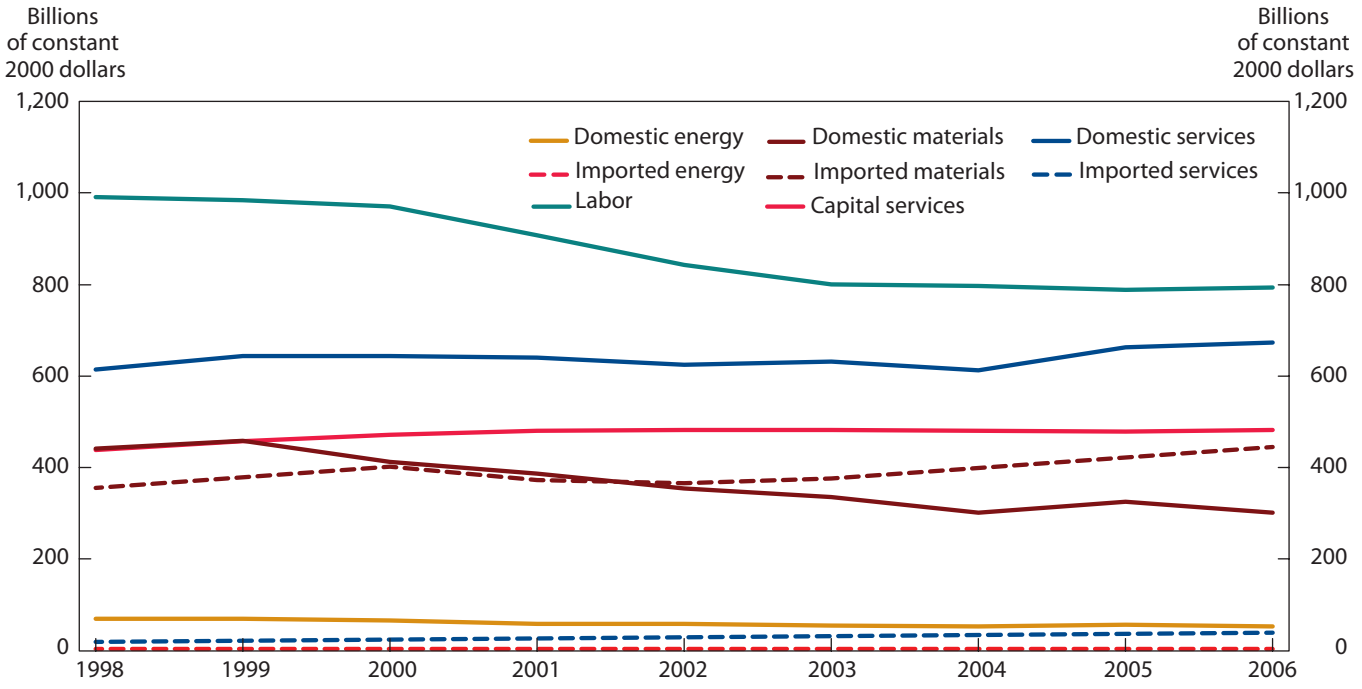
[Percent change from previous year]

Year	Total intermediates		Energy		Materials		Services	
	Domestic	Imported	Domestic	Imported	Domestic	Imported	Domestic	Imported
1998	2.3	9.6	–2.5	–7.8	1.9	9.7	3.0	8.5
1999	4.2	7.1	.1	.4	3.8	6.6	4.9	15.8
2000	–4.1	5.5	–5.0	–11.1	–10.1	5.9	–.1	1.5
2001	–3.0	–4.9	–9.5	–7.0	–6.1	–7.3	–.5	28.5
2002	–4.4	–2.1	–1.5	–1.2	–8.4	–2.1	–2.5	–1.8
2003	–1.3	2.6	–6.1	13.0	–4.9	3.2	1.1	–4.2
2004	–5.2	8.7	–2.2	35.1	–10.0	8.1	–2.9	13.9
2005	7.7	4.9	8.1	25.1	7.4	4.6	7.9	6.4
2006	–2.0	4.3	–6.8	10.7	–7.4	3.9	1.7	8.2
Average annual percent change, 1997–2006	–.7	3.9	–2.9	5.3	–3.9	3.5	1.4	8.1

NOTE: Combined intermediates are constructed as a weighted aggregate of energy, materials, and purchased services.

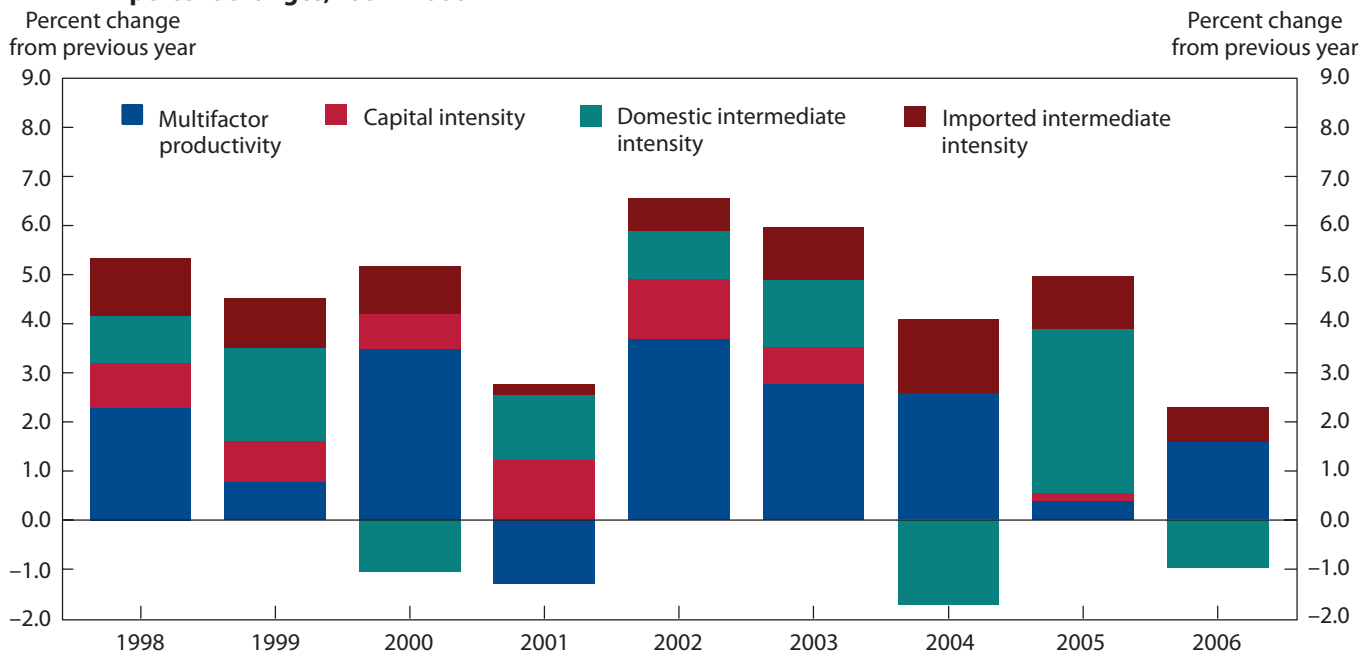
same quality at a lower price than domestic products and the advantage of substituting foreign for domestic inputs may not be reflected in the productivity statistics. Prices of imports enter the BLS business sector productivity measures when they are removed from real GDP by the BEA. Therefore, the impact of any possible inaccuracy in the measurement of import prices on the BLS business sector productivity measures would be weighted by the relative importance of imported intermediate inputs in measured business sector output, which has grown from 8 percent in 1998 to almost 11 percent in 2006. Prices of imports enter the BLS manufacturing sector multifactor productivity model when imports are included in the construction of purchased intermediate inputs. Thus, in the manufacturing sector, the impact of any possible inaccuracy in the measurement of import prices on the BLS multifactor productivity measures would be weighted by the relative importance of imports in measured intermediate inputs in that sector: 12 percent to 18 percent. Research is being carried out on this topic[25] both within and outside the statistical agencies, but economic analysis has not reached a definitive conclusion concerning its importance. □

Chart 4. **Input costs for the manufacturing sector, by type, 1998–2006**



SOURCE: Bureau of Labor Statistics, Bureau of Economic Analysis (unpublished import data).

Chart 5. **Labor productivity growth, by contributing nonlabor input factors, manufacturing sector, annual percent changes, 1997–2006**



SOURCE: Bureau of Labor Statistics, Bureau of Economic Analysis (unpublished import data).

Notes

ACKNOWLEDGMENT: The authors thank Erich Strassner and Robert Yuskavage of the Bureau of Economic Analysis for providing the import data necessary for this study. We also thank Steve Rosenthal and Randy Kinoshita for helpful comments and assistance. All views expressed in this article are those of the authors and do not necessarily reflect the views or policies of the Bureau of Labor Statistics.

[1] Robert M. Solow, "Technical Change and the Aggregate Production Function," *Review of Economics and Statistics*, August 1957, pp. 312–20.

[2] Annual input-output tables, as well as data on imported intermediate inputs, from the Bureau of Economic Analysis (BEA) are used in the analysis presented. (See Robert E. Yuskavage, Erich Strassner, and Gabriel W. Medeiros, "Domestic Outsourcing and Imported Inputs in the U.S. Economy: Insights from Integrated Economic Accounts," paper prepared for the World Congress on National Accounts and Economic Performance (Arlington, VA, Bureau of Economic Analysis, May 15, 2008).

[3] Allan H. Young and Helen Stone Tice, "An Introduction to National Economic Accounting," *Survey of Current Business*, March 1985, pp. 59–76.

[4] The gross product of general government is the sum of government expenditures on compensation of general government employees and the general government consumption of fixed capital, which measures the services of general government fixed assets. Government expenditures on goods and services purchased from the private sector are not excluded from private business sector output. The gross product of private households is the compensation of paid employees of private households; the gross product of nonprofit institutions serving individuals is the compensation paid to employees of those institutions.

[5] This value is measured as the sum of the consumption of fixed capital, indirect business taxes, and interest paid.

[6] BLS data in this article originate in the multifactor productivity program and cover the private business sector, which differs from the business sector covered by the BLS quarterly labor productivity program in that the former excludes government enterprises. In addition, the multifactor productivity measures are available only on an annual basis.

[7] The Current Employment Statistics (CES) survey is an establishment survey whose sample is benchmarked annually to levels based on administrative records of employees covered by State unemployment insurance tax records. Data on employee hours from establishments provide consistency with output data from industries and thus are well suited to producing industry-level measures. CES data on employment and average weekly hours paid for production workers in goods-producing industries and for nonsupervisory workers in service-providing industries are the building blocks of labor input.

[8] Information from the BLS National Compensation Survey program is used to construct the ratio of hours worked to hours paid. Prior to 2000, the annual Hours at Work Survey was used.

[9] In August 2004, the BLS introduced this new method of constructing estimates of hours for nonproduction and supervisory workers; see Lucy P. Eldridge, Marilyn E. Manser, and Phyllis F. Otto, "Alternative measures of supervisory employee hours and productivity growth," *Monthly Labor Review*, April 2004, pp. 9–28.

[10] Employment counts for employees in agricultural services, forestry, and fishing are reported from the BLS QCEW program and are based on administrative records from the unemployment insurance system.

[11] Additional information concerning data sources and methods of measuring labor composition can be found at **www.bls.gov/mfp/mprlabor.pdf** and in *Labor Composition and U.S. Productivity Growth, 1948–90*, Bulletin 2426 (Bureau of Labor Statistics, December 1993).

[12] The BLS is investigating the possibility of constructing labor composition estimates for the manufacturing sector productivity measures.

[13] See "Multifactor Productivity Trends, 2007," news release 09–0302 (Bureau of Labor Statistics, March 25, 2009).

[14] A nonprofit adjustment is made to intermediate inputs, but not to imported intermediates, because it is doubtful that nonprofits use a significant amount of imported intermediates. Note, however, that, absent a nonprofit adjustment to imported intermediates, the importance of imports may be slightly overstated.

[15] Erich H. Strassner, Robert E. Yuskavage, and Jennifer Lee, "Imported Inputs and Industry Contributions to Economic Growth: An Assessment of Alternative Approaches," paper presented at the Conference on Measurement Issues Arising from the Growth of Globalization, Washington, DC, Nov. 6–7, 2009. This study uses International Transaction Account data from the BEA to assess the import comparability assumption. The authors find that real imported materials may be understated in the annual input-output accounts. However, they indicate that the assumption provides reasonable results at the aggregate level. In another paper presented at the same conference ("Evaluating Estimates of Materials Offshoring from U.S. Manufacturing"), Robert C. Feenstra and J. Bradford Jensen use an alternative method for allocating imported input across industries to derive imported intermediates. Comparing the results with the BEA import matrix that uses the comparability assumption, Feenstra and Jensen find differences between the two approaches and identify cells in the input-output table in which the differences are greatest. Unfortunately, data limitations prevent them from resolving those differences.

[16] Notes about the imported intermediate input data are from BEA documentation that accompanied the data.

[17] Imported materials inputs include crude petroleum as a raw material for the refining and coal products industry. The increase in crude petroleum prices over the 1998–2006 period could be responsible for the increase in imported materials' share of intermediate inputs used by private industries and for the increase in imported materials' share of intermediate inputs in the manufacturing sector.

[18] Crude oil is classified as a nonenergy material input to U.S. refineries, rather than an energy input.

[19] In 2006, total materials imported by the petroleum industry accounted for 34 percent of material imports by the manufacturing sector. Over the 1997–2006 period, the price of imported intermediates for the petroleum industry grew 14 percent, compared with the 4-percent average growth of prices in the manufacturing sector as a whole.

[20] W. Erwin Diewert, "Exact and Superlative Index Numbers," *Journal of Econometrics*, vol. 4, 1976, pp. 15–145.

[21] Evsey Domar, "On the Measurement of Technological Change," *Economic Journal*, vol. 71, 1961, pp. 709–29.

[22] The time series does not cover the business cycles sufficiently to divide the data into subperiods that would allow a meaningful analy-

sis. A categorization of the data into subperiods of 1997–2000 and 2001–2006, as well as 1997–2002 and 2003–2006, and a comparison of results revealed a high sensitivity to the years into which the data were divided. Accordingly, no subperiod analysis is presented in this article.

[23] Note that because output has been expanded to include imports, labor productivity growth is 2.6 percent per year, rather than 2.4 percent per year.

[24] Christopher Kurz and Paul Lengermann, "Outsourcing and U.S. Economic Growth: The Role of Imported Intermediates," paper presented at the 2008 World Congress on National Accounts, May 12–17, 2008, Washington, DC, construct a gross output productivity measure in order to keep U.S. manufactured intermediates in the model. The Kurz-Lengermann model allows an analysis of the shift from domestic to imported intermediate inputs.

[25] See, for example, papers presented at the Conference on Measurement Issues Arising from the Growth of Globalization, sponsored by the Upjohn Institute, Washington, DC, November 6–7, 2009.

Nonmanufacturing industry contributions to multifactor productivity, 1987–2006

To overcome data deficiencies in measuring trends in U.S. nonmanufacturing productivity, the Bureau of Labor Statistics, the Bureau of Economic Analysis, and the Census Bureau have expanded and improved the measurement of service sector and other data; even with these changes, many nonmanufacturing industries continue to exhibit negative productivity trends

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The share of U.S. employment devoted to services has increased steadily over time. The largest share of nonmanufacturing industries, the service sector has grown at the expense of the manufacturing sector, which now represents 12 percent of business sector employment. The growth of services has led researchers and policymakers to demand more and better data on service and other nonmanufacturing industries in order to get a clearer picture of overall economic growth.

Productivity growth, or output per unit of input, is a key component of economic growth. Changes in what is produced are partly explained by changes in the inputs into production; the portion that is not explained by the inputs used is called *productivity,* of which there are two measures. *Labor productivity*, measured as output per hour worked by all employed persons, describes contributions to output made by capital and other measurable and nonmeasurable inputs. *Multifactor productivity*, measured as output per unit of labor, capital, and other measurable inputs, describes the intangible influences on labor productivity, such as improvements in efficiency and technology.

Researchers have long been concerned with the "productivity paradox," a term inspired by Robert Solow's assertion that "you can see the computer age everywhere but in the productivity statistics."[1] Since Solow made that statement, productivity statistics have improved and the effects of the late 1990s Internet revolution did show up in productivity statistics, particularly in the computer and electronics industry. However, even with improvements in measures, a number of studies, including the one to be presented here, show negative productivity growth rates in nonmanufacturing industries, implying that a productivity paradox still exists. In this article, the term refers to an industry that exhibits negligible or negative productivity growth rates, despite evidence of large investments in research, innovation, computer technology, and the like that are expected to spur productivity growth. The paradox has been present in recent decades for many service and other nonmanufacturing industries. Still, this focus on industries in which productivity growth appears negligible or negative, despite anecdotal evidence to the contrary, is not reason enough to state that the data for all industries with negative productivity are unreliable. Nor does a posi-

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tive trend in multifactor productivity growth rates rule out data problems.

Nonetheless, as the nonmanufacturing sector continues to expand its relative importance in the economy, researchers have called for better data to tackle measurement problems that have stymied analysis. Historically, Federal data collection focused on the goods-producing industries through the 1990s; data on service-related industries were sparse. The main obstacles to measuring services were the wide range of service commodities and the related conceptual difficulties in measuring what each industry produced. Because of these problems, either service sector data in national accounts and productivity statistics did not cover the industries or output was measured with data on inputs or input costs, thus reducing the reliability of productivity measures.

In the 1990s, several economists drew attention to the consequences of having poor-quality data for service-providing industries.[2] Federal Reserve economists Carol Corrado and Lawrence Slifman presented evidence in support of Alan Greenspan's statements that productivity trends, stagnating near 1 percent from 1973 to 1995, were being underestimated.[3] Zvi Griliches's 1994 presidential address to the American Economic Association questioned the absence of aggregate productivity growth despite sustained expenditures on research and development and rapid progress in information technology. Griliches noted that more than three-quarters of investment in information technology was directed at the "unmeasurable" sectors, such as construction; trade; finance, insurance, and real estate; other services; and consumer and government purchases. He also called for better funding of statistical agencies and better measurement of services.[4] Subsequently, the Boskin Commission expressed concerns about the mismeasurement of the Consumer Price Index and related effects on productivity measures.[5] BLS economists also took it upon themselves to analyze this productivity paradox by using multifactor productivity measures.[6]

Three measurement problems were identified as affecting productivity: the need to improve the coverage of service price indexes in the BLS Producer Price Index program, the need to expand detailed service output measures in Census Bureau business surveys, and inconsistencies between BLS and Bureau of Economic Analysis (BEA) output measures. Funding was provided for statistical agencies to initiate data improvements in these areas. Since 2001, the BLS has developed many new producer price indexes in services and the Census Bureau has expanded the coverage, detail, and frequency of data collected for services. As a result, the BEA annual industry accounts based on the improved Census data now provide a more reliable source for intermediate inputs, as well as outputs, for services and other nonmanufacturing industries. Improvements made by government statistical agencies in the area of nonmanufacturing industries were based on guidance from the research community, most notably through a series of Brookings Institute seminars organized by Jack Triplett and Barry Bosworth. Proceedings of the seminar in 2004 and a subsequent update in 2007 inform BLS improvements.[7]

All these improvements have expanded coverage and raised the quality of BLS industry data sets. The BLS regularly publishes quarterly labor productivity measures for the business and nonfarm business sectors, as well as annual multifactor productivity measures for the private business and private nonfarm business sectors; the manufacturing, durable manufacturing, and nondurable manufacturing sectors; and manufacturing industries.[8] The first BLS multifactor productivity measures, major-sector measures that built on a 1979 research study,[9] were published in 1983. In 1996, regular publication of multifactor productivity measures for manufacturing industry groups that match National Income and Product Accounts (NIPA) sectors began, based on a line of research followed by William Gullickson and Michael Harper.[10] Efforts to expand these results by using the same methodology for difficult-to-measure industries in the nonmanufacturing sector have been limited by data of less-than-desired quality and a paucity of detailed data. Multifactor productivity measures require more detailed data on capital, energy, materials, and services than do data on labor productivity. These detailed data are often unavailable or less accurate than data that are published at a more aggregate level.

The nonmanufacturing industry productivity measures presented in this article are not published regularly, because of continuing concerns about the quality of the data and the persistent trends in negative productivity growth rates, primarily in construction and a variety of service industries. The data set is designed to complement the manufacturing multifactor productivity measures that the BLS does publish regularly, in order to provide a more complete picture of the private business sector. There are 42 nonmanufacturing industries, including goods-producing industries (for example, farms, mining, and construction) and service-providing industries (such as utilities;[11] transportation; information; trade; finance, insurance, and real estate; and business and personal services). The industry categories reflect NIPA sectors, which are the basis of the BEA's measurement of the Nation's gross domestic prod-

uct (GDP). The data correspond roughly to the two- and three-digit North American Industrial Classification System (NAICS) level of detail and cover the years from 1987 through 2006. The industries are identified by their NAICS codes.

The data set used in this article differs from data sets used by Gullickson and Harper in previous BLS studies of the nonmanufacturing sector.[12] The data on output and purchased intermediate inputs are based on data published by the BEA and, where available, the BLS. Previously, real output was based on input-output tables. In addition, as mentioned in the previous paragraph, the data set described here is based on NAICS, whereas the earlier one was based on the Standard Industrial Classification (SIC) system. Furthermore, the study presented here applies a concept of sectoral output to industry-level data; sectoral output equals gross output minus transactions between establishments within the sector in question. Earlier studies used a gross output measure at the industry level.[13]

The article proceeds by reviewing the model that underlies multifactor productivity measures. Nonmanufacturing industry concepts, sources, and methods are presented in the context of other BLS productivity measures. This discussion provides the basis for describing the trends in detailed data for 42 industries and how these trends differ from those found in previous BLS analyses. The data also are compared with regularly published private business sector productivity measures and examined in light of the productivity speedup exhibited in the late 1990s. Furthermore, industry-level multifactor productivity measures are compared against major-sector productivity measures to identify the industries that contribute to productivity growth in a given sector. The analysis includes background information on the mismatch between anecdotal evidence that productivity has increased and findings indicating that productivity trends are negative. Compared with earlier BLS research, the results presented show a reduction in the share of industries that exhibit negative productivity trends. This improvement to the data will allow the BLS to update the nonmanufacturing industry productivity data series on a periodic basis and thereby respond to continued demand from data users, even though the data are not of sufficiently high quality to publish in a regular news release format.

The model

The nonmanufacturing industry multifactor productivity measures presented in this article are based on the growth accounting methods of the earlier BLS studies. The concepts, sources, and methods used are similar to those used for the annual published measures of multifactor productivity in the manufacturing sector.[14] Multifactor productivity measures describe the relationship between output in real terms and the inputs involved in the production of output. Multifactor productivity indexes are derived by dividing an output index by an index of the combined inputs of capital, labor, and the intermediate inputs of energy, materials, and purchased business services. These inputs are known collectively by the acronym KLEMS, for the first letter of each input (with K substituting for C in "capital").[15]

The multifactor productivity measures for nonmanufacturing industries maintain the same concepts of output and labor input used in the regularly produced BLS measures for NIPA manufacturing industries. These concepts differ from the major-sector measures of private businesses in two important ways. First, the concept of labor input used for industry-level measures is hours at work of employed persons. This concept is narrower than the one used for major-sector measures of private business and nonfarm business; such measures account for labor composition in addition to hours at work. Second, the concept of output used is one of sectoral output rather than value-added output. A sectoral concept of output and input categorizes intermediate goods and services used by an industry as inputs when those goods and services are purchased from outside of that industry. A sectoral concept also categorizes intermediate goods and services produced by an industry as part of output when those goods or services are purchased by another industry that uses them as inputs. This sectoral concept contrasts with the value-added concept of output used for private business and private nonfarm business multifactor productivity measures; these measures include capital and labor input, but do not include any purchased intermediate goods or services in either input or output.

BLS multifactor productivity measures are formulated with the use of traditional growth accounting equations developed for the total national economy by Solow[16] and by Dale Jorgenson and Zvi Griliches.[17] The Solow approach was extended to the study of industries by Evsey Domar,[18] Ernst Berndt and David Wood,[19] and Jorgenson, Frank Gollop, and Barbara Fraumeni.[20] The approach involves the use of superlative index numbers, as described by W. Erwin Diewert.[21] Specifically, the BLS uses an annually chained Tőrnqvist index to combine most subcategories of inputs.

The multifactor productivity growth rate is calculated as a residual, namely, the observed rate of change of an in-

dustry's output that cannot be accounted for by the rate of change of combined inputs. In the process of building up an index of combined inputs, the BLS weights together the rates of change of capital, labor, and intermediate inputs (energy, materials, and purchased business services), using factor cost shares as weights. The shares for each period are the averages of those for the previous and current years, recalculated for every period. Intermediate inputs are chained and combined with the rates of change of capital and labor inputs in order to obtain an index of combined inputs. The rate of change of multifactor productivity is then measured as

$$\frac{\dot{A}}{A} = \frac{\dot{Q}}{Q} - \left(w_k \frac{\dot{K}}{K} + w_l \frac{\dot{L}}{L} + w_e \frac{\dot{E}}{E} + w_m \frac{\dot{M}}{M} + w_s \frac{\dot{S}}{S} \right),$$

where a dot over a variable denotes a derivative with respect to time and the variables and weights[22] used for factors in these equations are as follows:

A = multifactor productivity,
Q = sectoral output,
K = capital input,
L = labor input,
E = energy input,
M = materials input,
S = purchased business services input,
w_k = weight for capital,
w_l = weight for labor,
w_e = weight for energy,
w_m = weight for materials, and
w_s = weight for business services.

This article also draws on recent collaborative work between the BLS and the BEA on a production account framework. The framework proposed by Fraumeni, Harper, Susan Powers, and Robert Yuskavage[23] was designed to unify concepts underlying the BEA's NIPA and input-output tables and BLS multifactor productivity measures. The production account framework assumes that establishments have been grouped into industries, traces nominal flows for a detailed array of commodities, uses corresponding price indexes to describe the deflation of outputs and inputs, and describes the construction of aggregate productivity trends from the detailed information. The production account framework has improved consistency in data series across agencies when calculating multifactor productivity. Taken together, the nonmanufacturing and manufacturing industry data reported herein constitute an industry-level production account for the private business sector.

Data sources and methods

Multifactor productivity measures for nonmanufacturing industries combine data from the BEA and the BLS to produce measures of sectoral output divided by input that combines

1. hours at work of persons employed by the industry,
2. capital services employed by nonmanufacturing establishments, and
3. purchases of energy, materials, and business services from outside each industry.

The multifactor productivity measures in this article are developed and presented for 42 nonmanufacturing industries classified according to the NIPA industry classification and consisting of two- to three-digit NAICS industries. For 35 of the 42 industries, data for output and for energy, materials, and services inputs are based on BEA data on gross output and annual industry accounts, respectively, as described by Eric Strassner, Gabriel Medeiros, and George Smith.[24] The data for the 7 other nonmanufacturing industries are based on output from the BLS. These industries are oil and gas extraction (NAICS 211); mining, except oil and gas (NAICS 212); utilities (NAICS 22); air transportation (NAICS 481); publishing industries (NAICS 511); accommodation (NAICS 721); and food services and drinking places (NAICS 722).

Data from these sources are adjusted to match the concept of sectoral output and to make industry coverage consistent with that of the private business sector. First, using its own data, the BLS adjusts BEA output to remove intraindustry transactions. Second, nonprofit institutions are excluded from output.

Data on hours at work per employed person are consistent with all other published major-sector productivity measures. Data on the paid hours of production workers are obtained from the BLS Current Employment Statistics (CES) program and converted to hours at work with data from the National Compensation Survey (NCS) and the Hours at Work Survey. Hours at work for nonproduction workers are estimated with data from the Current Population Survey (CPS), the CES, and the NCS. The hours at work of proprietors and unpaid family workers are obtained from the CPS. Data are reported on a jobs basis and incorporate hours at work on all jobs. The industry-level measures of hours at work are not adjusted for changes in labor composition (as are the measures of hours used by the BLS for private business and private nonfarm business multifactor productivity). Instead, changes in labor

composition in the private business and private nonfarm business sectors are measured by shifts in the age and educational attainment of the workforce.

Data on capital services by industry are consistent with all major-sector multifactor productivity measures (that is, measures for private business and nonfarm business sectors and NIPA manufacturing industries).[25] Capital measures for nonmanufacturing industries are constructed at the same level of detail as the BEA published industry measures of output and capital stock. Capital is defined as equipment (including software), structures, inventories, and land. The BLS uses BEA data on investment by detailed asset type for each industry. The BLS capital model for each industry aggregates across vintages (for depreciable asset types) and then across asset types. Aggregation across asset types involves estimating rental prices and constructing annually chained Tőrnqvist indexes,[26] using the methodology originally described by Jorgenson and Griliches.[27] The BLS uses detailed BEA data on the components of property income in constructing these rental prices. Within the equipment category, the BLS provides additional details for information processing equipment and software, a category composed of four broad classes of assets: computers and related equipment, software, communications equipment, and other information processing equipment and software (medical equipment and related instruments, electromedical instruments, nonmedical instruments, photocopying and related equipment, and office and accounting machinery).

The input indexes for each of the five industry groups (capital services, hours, energy, materials, and purchased business services) are combined into one input index by means of Tőrnqvist aggregation. Labor share is based on labor compensation, and capital share is derived from capital income;[28] both are part of industry value added, the difference between an industry's gross output and the cost of intermediate inputs. Total costs are constrained to equal the sum of the values of the nonmanufacturing industry groups' sectoral output.

Because data series lack detail or contain data that are not based on NAICS, estimates are used for a number of variables for years previous to 1997. Many property income series lack data from before 1997. For 1987 to 1997, property income data are estimated by applying 1997 SIC-to-NAICS conversion factors to SIC data and adjusting the resulting figures to the estimated NAICS totals for 1997. A similar procedure was applied to the data used to calculate inventories and land before 1997 and hours worked before 2002. Also, intermediate input data were less detailed in years prior to 1997, and separate data series were not published for energy, materials, and purchased business services, so the aggregate data series are linked to data for more recent years.

The NIPA-level nonmanufacturing multifactor productivity data presented here complement the NIPA-level manufacturing multifactor productivity data that the BLS regularly publishes. This article presents the regularly published BLS data for manufacturing industries, thereby completing the picture of the relationship between private business sector productivity and the manufacturing and nonmanufacturing industries that make up the sector.[29]

Basic results

Data results point to a number of negative growth rates, some of which reflect earlier findings, and a few highly positive growth rates. The growth rates presented here also reflect the well-known story of the bump-up in productivity that occurred in the late 1990s and continued through the first decade of the 2000s. Private business sector multifactor productivity rose 0.5 percent per year from 1990 to 1995, 1.3 percent per year from 1995 to 2000, and 1.5 percent per year from 2000 to 2006. Productivity growth during the second half of the 1990s outpaced that of previous periods because of advances in technology.

Annual multifactor productivity growth rates for the NIPA-level nonmanufacturing industry groupings (111 to 811, based on NAICS industry codes) for 1987 through 2006 are shown in table 1 and illustrated graphically in chart 1. Over the period examined, the average annual compound multifactor productivity growth rates for 42 nonmanufacturing industries were positive or zero for 25 of the 42 industries and negative for 17 industries. Of the 17 industries reporting negative productivity over the 20-year period, 2 recorded declines of more than 1.0 percent per year: rental and leasing services (NAICS 532 and 533), reporting the lowest growth rate, –2.3 percent, and legal services (NAICS 5411), with a growth rate of –1.7 percent. Among other industries with long-term negative productivity growth rates were construction (NAICS 23), hospitals and nursing and residential care facilities (NAICS 622 and 623), and transit and ground passenger transportation (NAICS 485).

The persistently negative multifactor productivity trends presented here echo findings of earlier BLS studies. Gullickson and Harper's first study reported 14 of 32 nonmanufacturing industries with negative multifactor productivity growth rates from 1977 to 1992; their subsequent analysis of 1977–97 data identified negative growth in 13 industries.[30] These earlier studies used the

Table 1. Multifactor productivity growth for 42 nonmanufacturing industries, compound annual rates of change,1987–2006

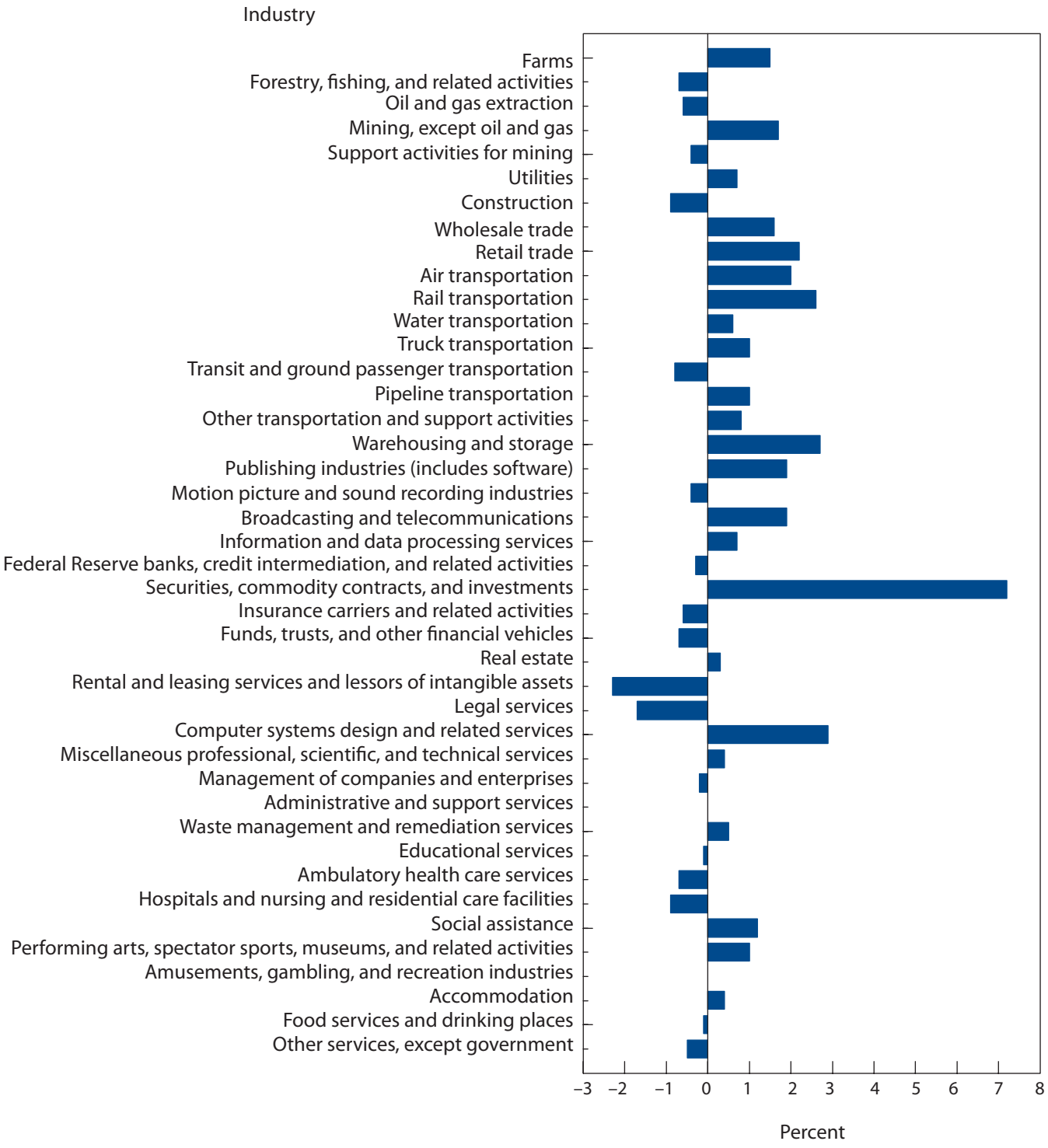
[In percent]

1997 NAICS code	Industry	All years, 1987–2006	The 1990s		Before and after 2000	
			1990–95	1995–2000	1987–2000	2000–06
111, 112	Farms	1.5	–0.2	3.5	1.5	1.4
113–115	Forestry, fishing, and related activities	–.7	–3.2	1.0	–1.8	1.8
211	Oil and gas extraction	–.6	2.1	–1.9	.1	–2.0
212	Mining, except oil and gas	1.7	2.5	3.4	2.8	–.6
213	Support activities for mining	–.4	.8	–1.6	.1	–1.6
22	Utilities	.7	1.5	.7	1.2	–.2
23	Construction	–.9	–.3	–1.3	–.6	–1.7
42	Wholesale trade	1.6	1.8	2.7	1.8	1.2
44, 45	Retail trade	2.2	1.5	2.9	2.1	2.4
481	Air transportation	2.0	3.0	2.4	1.4	3.2
482	Rail transportation	2.6	4.4	.6	2.1	3.6
483	Water transportation	.6	2.0	.2	1.5	–1.3
484	Truck transportation	1.0	2.0	–.7	1.3	.4
485	Transit and ground passenger transportation	–.8	–1.0	–.4	–.7	–1.0
486	Pipeline transportation	1.0	–.3	1.1	.8	1.3
487, 488, 492	Other transportation and support activities	.8	–1.3	1.7	–.2	3.1
493	Warehousing and storage	2.7	4.0	2.5	3.4	1.4
511	Publishing industries (includes software)	1.9	1.4	3.4	2.0	1.6
512	Motion picture and sound recording industries	–.4	–2.1	–1.0	–1.7	2.4
513	Broadcasting and telecommunications	1.9	1.7	–.7	1.0	3.8
514	Information and data processing services	.7	–.9	–2.7	–1.4	5.1
521, 522	Federal Reserve banks, credit intermediation, and related activities	–.3	–2.9	–2.7	–2.1	3.7
523	Securities, commodity contracts, and investments	7.2	7.5	12.8	7.7	6.3
524	Insurance carriers and related activities	–.6	.1	–.1	.4	–2.5
525	Funds, trusts, and other financial vehicles	–.7	–.2	–1.9	–1.0	.0
531	Real estate	.3	.7	.3	.0	1.1
532, 533	Rental and leasing services and lessors of intangible assets	–2.3	–1.2	–3.6	–1.5	–4.1
5411	Legal services	–1.7	–2.8	–1.5	–1.2	–2.7
5415	Computer systems design and related services	2.9	3.6	5.1	4.0	.7
5412–5414, 5416–5419	Miscellaneous professional, scientific, and technical services	.4	–.8	.9	.3	.6
55	Management of companies and enterprises	–.2	–.7	–.4	.0	–.6
561	Administrative and support services	.0	–.9	–1.2	–.6	1.4
562	Waste management and remediation services	.5	–.7	1.2	.5	.4
61	Educational services	–.1	.1	.3	.0	–.2
621	Ambulatory health care services	–.7	–3.0	–.3	–1.2	.6
622, 623	Hospitals and nursing and residential care facilities	–.9	–1.0	–1.9	–1.2	–.1
624	Social assistance	1.2	.4	2.2	.9	1.9
711, 712	Performing arts, spectator sports, museums, and related activities	1.0	1.5	.4	1.3	.4
713	Amusements, gambling, and recreation industries	.0	–1.5	–.3	–.1	.2
721	Accommodation	.4	2.7	1.3	1.2	–1.3
722	Food services and drinking places	–.1	–.9	.1	–.3	.3
81	Other services, except government	–.5	–.2	–1.3	–.8	.0

SIC industry classification, which provides more detail for industries involving trade (SIC 50–59) and for finance, insurance, and real estate (SIC 60–67). SIC and NAICS industries are not directly comparable, and data concepts and methods differ between the earlier Gullickson-Harper estimates and the estimates presented here. Nonetheless, the broad categories of industries with negative multifactor productivity growth rates between the earlier studies, on the one hand, and this study, on the other, are similar. Negative growth rates in all studies can be found in construction, transit, insurance, and some service industries.

Among the 42 NIPA industries, 6 exhibited average annual multifactor productivity growth rates of 2.0 percent per year or higher. Securities, commodity contracts, and investments (NAICS 523) had by far the highest growth rate: 7.2 percent. In hindsight, this percentage could be reflective of an overheated financial market. Computer systems design (NAICS 5415) and warehousing and stor-

Chart 1. **Trends in multifactor productivity for farm and nonmanufacturing industries, compound annual rates of change, 1987–2006**



age (NAICS 493) also showed strong growth: 2.9 percent and 2.7 percent per year, respectively.

Over time, fewer industries exhibited negative multifactor productivity growth rates. This finding is consistent with the acceleration of productivity growth in the private business sector since 1995. From 1990 to 1995, of 42 industries, 21 exhibited negative multifactor productivity trends. The number fell to 19 industries for the 1995–2000 period and to 14 for 2000–06. This trend tracks the positive growth in private business multifactor productivity mentioned earlier.

The 42 nonmanufacturing industries are grouped into 9 sectors, and the components of multifactor productivity growth rates are presented, for the 9 nonmanufacturing sectors and for manufacturing, in table 2. At this aggregate level, only 2 of 9 sectors—construction and mining—reported negative productivity growth rates over the 1987–2006 period referenced in the table. Even though many individual service industries showed negative growth, all services combined exhibited essentially zero growth during the period examined. Overall output and input growth for all sectors over the near-20-year period were positive.

The percentage-point contributions of inputs into overall input growth are presented in a Solow-type breakdown. The information sector, followed by far by the finance, insurance, and real estate sector, saw the greatest percentage-point contribution to input growth, a contribution that came mostly from information technology input growth. By contrast, labor input growth declined in industries facing strong international competition—farming, mining, manufacturing, and utilities—contributing negatively to total input.

Domar contributions

One way to determine the consistency of industry-level productivity growth rates is to see how they add up at a more aggregate level, such as the level of the private business sector. Accounting for private business sector productivity by considering contributions from industries that make up the sector is done with the use of *Domar contributions*. Evsey Domar's application of the Solow growth accounting framework to industry data provided an analytical tool for showing how each industry contributes to aggregate multifactor productivity growth.[31] It is his proposal to establish a measurement convention for industry output and input that the BLS uses as the basis of its industry and manufacturing productivity measures. This measurement convention counts industry output as final output plus intermediate output delivered to establishments outside of the industry and counts an industry's inputs as those inputs obtained from sources outside of the industry. Furthermore, deliveries of intermediates from one establishment to another within an industry are not counted in either outputs or inputs for that industry. Output and input measures that are consistent with these conventions are called *sectoral* outputs and inputs.[32] Domar then derived weights that could be used to account for aggregate multifactor productivity in terms of industry contributions, noting that this approach led to a narrower scope of outputs and inputs at higher levels of aggregation. Domar percentage-point contributions for

Table 2. Multifactor productivity, output, and input growth, and percentage-point contribution of individual input categories to total input growth, compound annual rates of change ,1987–2006

[In percent]

Sector	Growth			Percentage-point contribution to input growth, by type of input			
	Multifactor productivity	Output	Total input	Information processing equipment and software capital input	Other capital input	Labor input	Intermediate inputs
Farms	1.38	1.62	0.24	0.04	0.18	–0.19	0.21
Mining	–.05	.58	.63	.13	–.08	–.23	.82
Construction	–.94	1.80	2.77	.16	.20	.91	1.33
Manufacturing	1.37	2.49	1.10	.21	.16	–.35	1.08
Transportation	1.26	3.23	1.95	.33	.01	.68	.91
Information	1.82	6.62	4.71	1.19	.36	.27	2.83
Utilities	.73	1.14	.40	.31	.37	–.24	–.19
Trade	2.08	4.41	2.27	.31	.40	.33	1.22
Finance, insurance, and real estate	.79	4.23	3.41	.67	.79	.44	1.47
Services	–.03	4.02	4.05	.44	.20	1.42	1.95

NOTE: Sum of percentage-point contributions of inputs may not equal total input growth because of independent rounding.

all industries roughly sum to multifactor productivity for the overall private business sector.[33]

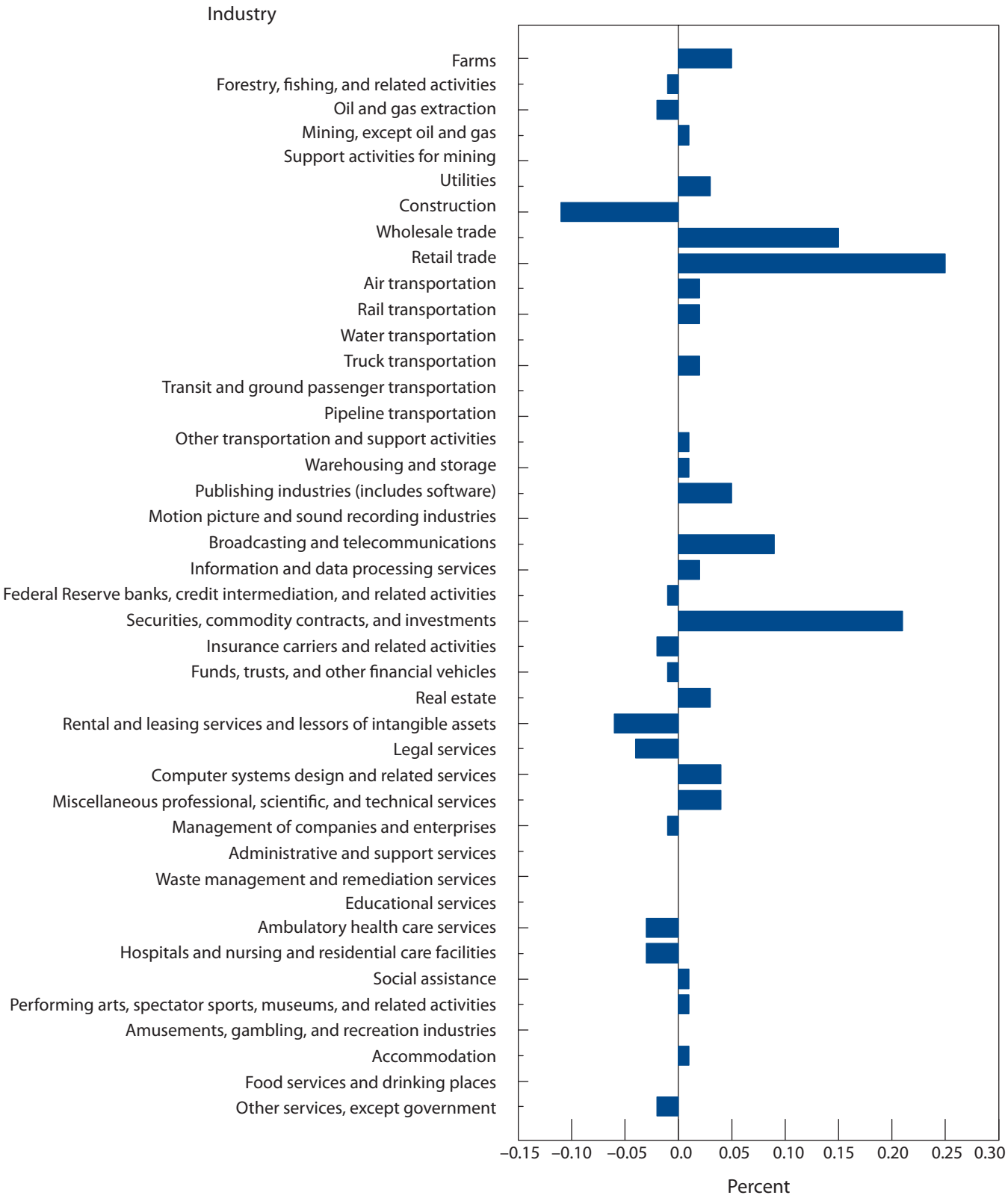
Now consider the Domar contributions of the NAICS NIPA level for nonmanufacturing and manufacturing industries, relative to private business sector multifactor productivity growth. For nonmanufacturing industries over the 1987–2006 period, the three industries that made the greatest contributions to private business sector multifactor productivity growth rates were retail trade (NAICS 44 and 45), securities and investments (NAICS 523), and wholesale trade (NAICS 42), with contributions of 0.25 percent, 0.21 percent, and 0.15 percent, respectively. (See table 3 and chart 2.) The three industries whose contributions were least (that is, those with the largest negative

Table 3. Domar percentage-point contributions of 42 nonmanufacturing industries to private business multifactor productivity growth, compound annual rates of change, 1987–2006 and selected subperiods therefrom

[In percent]

1997 NAICS code	Industry	All years, 1987–2006	The 1990s		Before and after 2000	
			1990–95	1995–2000	1987–2000	2000–06
...	Private business sector multifactor productivity	1.04	0.52	1.30	0.83	1.50
...	Total nonmanufacturing contribution	.66	.24	.71	.51	.98
111, 112	Farms	.05	.01	.11	.05	.04
113–115	Forestry, fishing, and related activities	–.01	–.02	.00	–.01	.01
211	Oil and gas extraction	–.02	.02	–.03	.00	–.04
212	Mining, except oil and gas	.01	.02	.02	.02	.00
213	Support activities for mining	.00	.00	–.01	.00	.00
22	Utilities	.03	.07	.02	.05	–.01
23	Construction	–.11	–.03	–.14	–.06	–.20
42	Wholesale trade	.15	.16	.27	.17	.11
44, 45	Retail trade	.25	.17	.33	.24	.28
481	Air transportation	.02	.04	.03	.02	.03
482	Rail transportation	.02	.03	.00	.02	.02
483	Water transportation	.00	.01	.00	.01	.00
484	Truck transportation	.02	.05	–.02	.03	.01
485	Transit and ground passenger transportation	.00	.00	.00	.00	.00
486	Pipeline transportation	.00	.00	.00	.00	.01
487, 488, 492	Other transportation and support activities	.01	–.01	.02	.00	.04
493	Warehousing and storage	.01	.01	.01	.01	.01
511	Publishing industries (includes software)	.05	.03	.09	.05	.04
512	Motion picture and sound recording industries	.00	–.01	–.01	–.01	.02
513	Broadcasting and telecommunications	.09	.07	–.03	.04	.22
514	Information and data processing services	.02	–.01	–.02	–.01	.07
521, 522	Federal Reserve banks, credit intermediation, and related activities	–.01	–.13	–.14	–.10	.18
523	Securities, commodity contracts, and investments	.21	.14	.38	.20	.21
524	Insurance carriers and related activities	–.02	.00	.00	.01	–.08
525	Funds, trusts, and other financial vehicles	–.01	.00	–.02	–.01	.00
531	Real estate	.03	.05	.02	.00	.09
532, 533	Rental and leasing services and lessors of intangible assets	–.06	–.02	–.08	–.04	–.10
5411	Legal services	–.04	–.07	–.03	–.03	–.07
5415	Computer systems design and related services	.04	.03	.09	.05	.01
5412–5414, 5416–5419	Miscellaneous professional, scientific, and technical services	.04	–.05	.07	.02	.06
55	Management of companies and enterprises	–.01	–.03	–.02	.00	–.02
561	Administrative and support services	.00	–.03	–.07	–.03	.08
562	Waste management and remediation services	.00	.00	.01	.00	.00
61	Educational services	.00	.00	.00	.00	.00
621	Ambulatory health care services	–.03	–.16	–.02	–.06	.03
622, 623	Hospitals and nursing and residential care facilities	–.03	–.04	–.07	–.05	–.01
624	Social assistance	.01	.00	.02	.01	.02
711, 712	Performing arts, spectator sports, museums, and related activities	.01	.01	.00	.01	.00
713	Amusements, gambling, and recreation industries	.00	–.01	.00	.00	.00
721	Accommodation	.01	.04	.02	.02	–.02
722	Food services and drinking places	.00	–.03	.00	–.01	.01
81	Other services, except government	– .02	– .01	– .06	– .03	.00

Chart 2. **Domar contributions of nonmanufacturing industries to private business multifactor productivity growth, compound annual rates of change, 1987–2006**



contributions) were construction (NAICS 23), rental and leasing services and lessors of intangible assets (NAICS 532 and 533), and legal services (NAICS 5411). The contributions of these industries to the private business sector's multifactor productivity growth rate were –0.11, –0.06, and –0.04, respectively.

Table 3 also presents data over shorter periods and is thus able to highlight which industries contributed to the speedup in multifactor productivity that took place in the late 1990s. For the period 1995–2000, productivity growth was largest in securities and investments, wholesale trade, and retail trade. From 2000 to 2006, an additional major contributor to multifactor productivity growth for the private business sector was broadcasting and telecommunications (NAICS 513).

In manufacturing industries (see table 4), only one industry stands out as a large contributor to overall private business sector multifactor productivity growth rates: computers and electronics (NAICS 334), over all years, but especially after 1995.

The impact of negative multifactor productivity growth rates at the industry level on major sector multifactor productivity growth can be roughly measured through Domar contributions. Whether the negative measure be due to measurement error or actual trends, an analysis using Domar percentage-point contributions provides a snapshot of the cumulative effect of all industries on multifactor productivity growth. The next section presents further adjustments to improve the comparability of industry and sector productivity trends.

Production accounts and Domar contributions

The BEA-BLS collaborative project conducted by Fraumeni, Harper, Powers, and Yuskavage linked the concepts of gross domestic product for the total economy and the BLS measure of private business sector inputs and outputs.[34] Their research showed that the BLS manufacturing industry and business sector multifactor productivity measures, constructed from the same underlying data on real flows of inputs and outputs, fit within the NIPA framework. Many of the data series used in preparing the nonmanufacturing industry measures in the BLS data set presented here are derived from the same data sources as those underlying the published BLS multifactor productivity measures for the private business sector. As a result, the nonmanufacturing industry data presented are consistent with the BEA NIPA data and can be used in comparing industry and major-sector productivity trends.

The relationship between industry trends and major sector multifactor productivity trends can be seen in table 5, in which Domar contributions are tabulated and then labor composition is assessed. First, the industry percentage-point contributions from tables 3 and 4 are used to produce a total industry measure. This Domar contribution measure presents a slightly faster growth trend compared with the published private business sector productivity growth rates for the same period.[35] The percentage-point differences between the growth rates of total industry contributions and the published private business sector multifactor productivity growth rates are no more than two-tenths of a percentage point.

An underlying difference between the total industry contribution growth rate and the private business sector multifactor productivity growth rate is a methodological one. The industry-level multifactor productivity growth rates account for labor composition, or the improvement in workers' skills and education, whereas the private business sector multifactor productivity growth rate does not account for labor composition, because labor composition effects are measured separately. Table 5 presents an adjusted private business sector multifactor productivity growth rate in which labor composition effects are accounted for—that is, have not been removed. The total industry contribution is very close to the adjusted private business sector trend, this time by no more than two-tenths of a percentage point in the opposite direction.

Information technology

Domar contribution analysis provides a reasonably good breakdown of private business productivity into industries' contributions. Combining industry results with private business results creates a production account that enables the examination of complex issues concerning the sources of productivity growth. A good example is the role of information technology in explaining changes in aggregate productivity growth.

Like similar data sets recently constructed,[36] the ones described in this article can be used to estimate two different information technology influences, both of which contribute to multifactor and labor productivity growth in the private business sector. (See table 6.) Drawing on BLS data for the private business sector,[37] the Solow contribution of growing information technology capital per worker is the contribution of information technology capital to industries that *use* information technology. This contribution was 0.5 percent from 1990 to 1995, 0.9 percent from 1995 to 2000, and 0.6 percent from 2000 to

Table 4. Domar percentage-point contributions of manufacturing industries to private business multifactor productivity, growth, compound annual rates of change, 1987–2006 and selected subperiods

[In percent]

1997 NAICS code	Industry	All years, 1987–2006	The 1990s		Before and after 2000	
			1990–95	1995–2000	1987–2000	2000–06
...	Private business sector multifactor productivity	1.04	0.52	1.30	0.83	1.50
...	Total manufacturing contribution	.54	.54	.79	.53	.56
311, 312	Food, beverage, and tobacco	–.02	.12	–.13	–.03	.02
313, 314	Textiles	.01	.01	.02	.01	.01
315, 316	Apparel and leather	.01	.04	.00	.02	.01
321	Wood	.00	–.01	.00	.00	.01
322	Paper	.00	–.01	.00	.00	.02
323	Printing	.00	.00	.00	.00	.01
324	Petroleum and coal	–.01	.02	.00	.01	–.04
325	Chemicals	.00	–.05	.00	–.03	.06
326	Plastics and rubber	.02	.01	.03	.02	.01
327	Leather	.01	.01	.01	.01	.00
331	Primary metals	.01	.00	.01	.01	.02
332	Fabricated metals	.02	.04	.00	.01	.02
333	Machinery	.00	–.06	–.03	–.02	.05
334	Computers and electronics	.50	.51	.91	.61	.24
335	Electrical equipment	–.02	–.03	–.02	–.03	.01
336	Transportation equipment	.02	–.02	.02	–.03	.12
337	Furniture	.00	.01	.00	.00	.00
339	Miscellaneous manufacturing	.02	.00	.02	.02	.02

Table 5. Domar percentage-point contributions to multifactor productivity growth compared with published measures for the private business sector, compound annual rates of change, 1987–2006 and selected subperiods

[In percent]

Period	Years	Domar contributions			Private business sector measures		
		Nonmanufacturing industries	Manufacturing industries	All industries in private business sector[1]	Published private business multifactor productivity growth	Labor composition effects	Private business multifactor productivity adjusted for labor composition effects
All years	1987–2006	0.66	0.54	1.20	1.04	0.37	1.41
The 1990s	1990–95	.24	.54	.78	.52	.43	.95
...	1995–2000	.71	.79	1.50	1.30	.26	1.56
Before and after 2000	1987–2000	.51	.53	1.04	.83	.36	1.19
...	2000–06	.98	.56	1.54	1.50	.38	1.88

[1] Sum of manufacturing and nonmanufacturing contributions.

2006. The second measure of the influence of information technology is the Domar contribution of NAICS 334, the computers and electronics industry.[38] This contribution is the contribution of productivity advances in industries that *produce* information technology. The Domar contribution accelerated from 0.5 in 1990–95 to 0.9 in 1995–2000, before falling to just 0.2 during 2000–06. The 1995–2000 increase in both the Solow and the Domar contribution was found to explain much of the speedup in multifactor productivity during that period, but the post-2000 reductions in the combined information technology effect leave the further acceleration unexplained, at least in a context that seeks to account for growth. Stephen Oliner, Daniel Sichel, and Kevin Stiroh report a similar finding and examine some possible explanations of the continued strength of productivity since 2000.[39]

The challenge of negative trends

This section reviews possible explanations for negative productivity growth rates and develops a thought experiment that holds all negative productivity growth rate trends to zero and recalculates private business sector productivity. This type of analysis was first developed by Corrado and Slifman to determine the possible implications of negative productivity growth rate trends at the industry level.[40]

It is important to state that there are numerous

Table 6. Percentage-point contributions to labor productivity growth in the private business sector, compound annual rates of change, 1987–2006 and selected subperiods

[In percent]

Measure	All years, 1987–2006	The 1990s		Before and after 2000		Most recent year, 2005–06
		1990–95	1995–2000	1987–2000	2000–06	
Output per hour of all persons	2.3	1.5	2.7	2.0	2.8	1.1
Contribution of capital intensity	.8	.6	1.1	.8	.9	.2
Contribution of all other capital services	.2	.1	.2	.2	.3	–.2
Contribution of information processing equipment and software (Solow contribution of information technology)	.6	.5	.9	.6	.6	.3
Contribution of labor composition	.4	.4	.3	.4	.4	.3
Multifactor productivity	1.0	.5	1.3	.8	1.5	.5
Contribution of computers and electronics (NAICS 334; Domar contribution of information technology)	.5	.5	.9	.6	.2	.3
Addendum: total contribution of information technology[1]	1.1	1.0	1.8	1.2	.8	.6

[1] Total contribution of information technology = sum of the Solow and Domar contributions.

SOURCES: "Multifactor Productivity Trends, 2005," news release USDL 07–0422 (Bureau of Labor Statistics, May 24, 2007); and "Multifactor Productivity Trends in Manufacturing, 2005," news release USDL 07–0822 (Bureau of Labor Statistics, June 7, 2007).

circumstances that can lead to bona fide declines in productivity. Often, productivity declines during cyclical downturns if workers are kept on while production declines or if economies of scale are lost, to name two reasons. Negative productivity due to a cyclical downturn is not likely to persist for more than a decade, however. Negative productivity growth also manifests itself in industries that experience declining demand. When declines persist because of newer technologies or competition from imports, firms may not make the investments required to acquire new technologies, whereupon they become less productive. Finally, the productivity growth of an industry group might be negative when substantial structural changes result in relatively more growth in less productive establishments.

However, a negative productivity trend may be an indication that something is amiss in the measurement process. The sign of an industry productivity trend has been viewed as a test of the reliability of the measure of real output upon which the trend is based. The reasoning is grounded in the idea that when there is evidence of technological progress in an industry, productivity can be expected to rise. Under this assumption, a negative productivity trend could be a "red flag" for data problems. Input (particularly labor hours) is relatively straightforward to measure, compared with output, which can be problematic for conceptual reasons, the foremost of which is perhaps that identifying the basic output unit is not an easy task in many nonmanufacturing industries. To further complicate matters, quality adjustment is problematic in industries that are constantly undergoing improvements in quality, such as better computer hardware. Suspicion falls more heavily on the output measures if the methodology involves assumptions that bypass the conceptual issues. For example, some real output trends are derived by deflating nominal output with an input price index. When output and input measures are the same, productivity change is zero.

Three previous thought experiments have been carried out. In one study, Corrado and Slifman broke down business sector output per hour into contributions from major industry groups.[41] The resulting labor productivity trends for 1977–97 were negative for 9 of 11 industry groups within business and personal services and also for construction. Corrado and Slifman's "benchmark thought experiment" consisted of raising all of the negative productivity industries to zero. They concluded that this adjustment would have raised business sector productivity trends by about 0.4 percentage point per year over the entire period.

In another study, covering the 1977–92 period, BLS researchers Gullickson and Harper found significant negative multifactor productivity trends in construction, banks, utilities, and health services. Their analogous "thought experiment effect" also led to a 0.4-percentage-point increase in business productivity.[42]

When Gullickson and Harper revisited the productivity topic in 2002 with improved NIPA data, they found that the significant negative multifactor productivity trends for 1977–97 in construction and health services were still present.[43] Negative trends for banking and utilities had moderated, and insurance carriers that previously had shown a positive trend developed an important negative trend. Overall, the "thought experiment effect" still raised

productivity trends by about 0.3 percentage point yearly.

In a slight variation of this type of analysis, Triplett and Bosworth found negative trends in labor productivity for education, amusement and recreation, hotels, insurance, local transit, and construction from 1995 to 2001. They also found negative multifactor productivity growth rates in some industries, notably health and educational services. Unlike either Slifman and Corrado or Gullickson and Harper, Triplett and Bosworth did not engage in a thought experiment that set negative trends to zero in order to then recalculate aggregate productivity. Instead, they concluded that "statistical agencies should take negative productivity growth rates as an indicator of areas in which they need to allocate resources to improve measurement,"[44] but emphasized that a positive productivity trend does not validate the data.

Negative multifactor productivity growth trends persist for a large proportion of nonmanufacturing industries in the data set presented in this article. To see whether the situation has improved, a thought experiment raising negative multifactor productivity growth trends to zero is conducted. The experiment accounts for the fact that some industry-level outputs are shipped to other industries; to the extent that this happens, measurement error would have no impact on private business sector output or multifactor productivity. To exclude these intermediate outputs from the experiment, the (negative) Domar contribution for each industry with negative multifactor productivity is multiplied by the ratio of (a) the industry's shipments to final demand to (b) the industry's sectoral output. These reduced negative contributions are then summed up to obtain the results displayed in the following tabulation, which shows the possible effects of negative productivity growth rates in nonmanufacturing industries on private business multifactor productivity from 1987 to 2006 and selected subperiods therefrom (figures shown are compound annual rates of change):[45]

Period or subperiod	*Percent*
All years, 1987–2006.....	-0.26
The 1990s:	
1990–95.....	-.38
1995–2000.....	-.45
Before and after 2000:	
1987–2000.....	-.29
2000–06.....	-.35

To obtain these results, the nonmanufacturing industries with negative multifactor productivity trends over the 1987–2006 period were identified and the extent to which each such industry contributed to slowing aggregate multifactor productivity trends over time was estimated. Negative industry output trends were adjusted sufficiently to pull up each negative industry multifactor productivity trend to zero.

For the entire 1987–2006 period, overall negative nonmanufacturing industry multifactor productivity at the private business sector level would depress the aggregate multifactor productivity trends by 0.26 percentage point. That is, private business sector multifactor productivity growth rates would be a quarter of a percentage point higher if there were no negative productivity at the industry level. The depressing effect on private business sector productivity would be 0.29 percent for 1987–2000 and 0.35 percent for 2000–06. The rate for the pre-2000 period is similar to that of Gullickson and Harper's most recent result of 0.3 percent for the 20 years from 1977 to 1997.[46] If problems with source data were the reason for negative trends, improvements in source data made since 2000 should have had a perceptible effect on the trends in some industries, but the data show otherwise. The fact that there is not even a slight dampening in negative productivity trends after 2000 is an indication that problems may remain in measuring some outputs or that something else is responsible for negative productivity.

Significant disagreements among researchers remain on how to measure output for many industries, and consensus is lacking as well on fundamental issues surrounding other measurement concepts. Among the more difficult measurement problems are those in the health care (NAICS 621–623) and financial (NAICS 521–525) sectors. Multifactor productivity trends for these industries are puzzling, with several long-term negative trends but a positive 7.2-percent trend for securities, commodities, and investments (NAICS 523). The issues relating to banking and credit intermediation (NAICS 521 and 522) are particularly difficult, and researchers are divided as to the best approach to dealing with them. The chief difficulty is that the nominal value of output is difficult to define in banking, and removing price change effects also is problematic.

THE WORK PRESENTED IN THIS ARTICLE highlights the continuing paradox that many nonmanufacturing industries continue to show negative productivity growth rates, even as the quality of output and input measures has improved. Domar contribution analysis, together with the thought experiment that uses the new BLS data set to analyze the implications of negative industry productivity growth, contributes to a comprehensive view

of how private business sector multifactor productivity trends can be derived from individual industries. This nonmanufacturing data set, based on NAICS, expands upon, and is complementary to, the NAICS manufacturing data set on multifactor productivity regularly published by the BLS. As shown here, the new data set explains multifactor productivity growth and provides the basis for a production account up to the level of the private business sector. The BLS plans to issue these results periodically to help researchers and experts understand the sources of economic growth.

BLS economists continue to have concerns, however, about some industry productivity measures. The long-term trend of negative productivity for some industries, coupled with unresolved conceptual and methodological issues, may affect output measures for those industries. Some results may be less reliable than others. In pursuing research and analysis in this area in the future, the BLS will strive to improve data sources for nonmanufacturing industries whenever possible. □

Notes

ACKNOWLEDGMENT: The authors thank Lucy Eldridge and Susan Powers for comments, Lisa Usher for supplying data from the BLS Industry Productivity Studies program, and Susan Fleck for extensive editorial contributions to this article.

[1] Robert Solow, "We'd Better Watch Out," *New York Times Book Review*, July 12, 1987, p. 36.

[2] The situation was actually noticed earlier. Zvi Griliches, "Productivity, R&D, and the Data Constraint," *American Economic Review*, March 1994, pp. 1–23, provides a list of earlier studies, including *The Stigler committee report on government price statistics* (National Bureau of Economic Research, 1961); Richard Ruggles, "The United States National Income Accounts, 1947–1977: Their Conceptual Basis and Evolution" (the Ruggles report), in Murray F. Foss (ed.), *The U.S. National Income and Product Accounts: Selected Topics* (Chicago, University of Chicago Press, 1983), pp. 15–106; and Albert Rees and others, *Measurement and Interpretation of Productivity* (Washington, DC, National Academy of Sciences, 1979).

[3] Carol Corrado and Lawrence Slifman, "Decomposition of Productivity and Unit Costs," *American Economic Review, Papers and Proceedings*, vol. 89, May 1999, pp. 328–32.

[4] Griliches, "Productivity, R&D, and the Data Constraint."

[5] Michael Boskin, Ellen Dulberger, Robert Gordon, Zvi Griliches, and Dale Jorgenson, *Toward a More Accurate Measure of the Cost of Living: Final Report to the Senate Finance Committee from the Advisory Commission to Study the Consumer Price Index*, Dec. 4, 1996, on the Internet at **www.ssa.gov/history/reports/boskinrpt.html** (visited Mar. 17, 2010).

[6] See William Gullickson and Michael J. Harper, "Possible measurement bias in aggregate productivity growth," *Monthly Labor Review*, February 1999, pp. 47–67; and "Bias in aggregate productivity trends revisited," *Monthly Labor Review*, March 2002, pp. 32–40.

[7] Jack Triplett and Barry Bosworth, *Productivity in the U.S. Services Sector* (Washington, DC, The Brookings Institution, 2004); and "Is the 21st Century Productivity Expansion Still in Services? And What Should Be Done About It?" paper presented at the January 2007 meeting of the American Economic Association, Washington, DC, on the Internet at **www.brookings.edu/~/media/Files/rc/papers/2007/01_productivity_bosworth/01_productivity_bosworth.pdf** (visited Mar. 17, 2010).

[8] The BLS prepares both major sector and detailed industry productivity data. For labor productivity, major sectors range from business and nonfarm business sectors to manufacturing sectors; for multifactor productivity, detailed industries cut across private business and nonfarm business sectors through manufacturing industries at the two- and three-digit NAICS levels. Detailed industries consist of four-digit industries throughout the domestic economy. The BLS publishes both labor and multifactor measures. BLS multifactor productivity measures for detailed industries undergird major sector measures in general and the nonmanufacturing sector measures presented here. BLS labor productivity data are on the Internet at **www.bls.gov/lpc**, multifactor productivity data at **www.bls.gov/mfp**.

[9] J. R. Norsworthy, Michael J. Harper, and Kent Kunze, "The Slowdown in Productivity Growth: Analysis of Some Contributing Factors", *Brookings Papers on Economic Activity*, no. 2 (Washington, DC, The Brookings Institution, 1979), pp. 387–421.

[10] See Gullickson and Harper, "Possible measurement bias" and "Bias in aggregate productivity."

[11] Utilities may be categorized as a goods-producing or service-providing industry, depending on the activity in question. For example, the conversion of coal to energy or of sewage to gray water could be considered a goods-producing activity, whereas the delivery of utilities is a service.

[12] Gullickson and Harper, "Possible measurement bias" and "Bias in aggregate productivity."

[13] The sectoral output concept is used at the industry level to apply the BLS model of multifactor productivity more accurately.

[14] See "Multifactor Productivity Trends in Manufacturing, 2006," news release USDL 08-0857 (Bureau of Labor Statistics, May 1, 2008), on the Internet at **www.bls.gov/news.release/archives/prod5_05012008.pdf** (visited Mar. 17, 2010).

[15] The KLEMS model measures the factor intensity of the five inputs listed. Intermediate inputs from outside an industry contribute to total production, or output, inside that industry. Thus, an industry's output includes both intermediate and final output, and an industry's input includes only intermediate inputs that are from outside the industry. At a more aggregate level of private business and nonfarm business sectors, a value-added concept of output, typically called final output, is used. Intermediate inputs cannot be disaggregated by sector or added to final output, because major sectors produce a majority of the domestic economic output. The KLEMS model of multifactor productivity analysis for industry-level production was first presented in William Gullickson and Michael J. Harper, "Multifactor productivity in U.S.

manufacturing, 1949–83," *Monthly Labor Review*, October 1987, pp. 18–28, on the Internet at **www.bls.gov/opub/mlr/1987/10/art3full.pdf** (visited Mar. 17, 2010).

[16] Robert Solow, "Technical Change and the Aggregate Production Function," *Review of Economics and Statistics*, August 1957, pp. 312–20.

[17] Dale Jorgenson and Zvi Griliches, "The Expansion of Productivity Change," *Review of Economic Studies*, July 1967, pp. 249–83.

[18] Evsey Domar, "On the Measurement of Technological Change," *Economic Journal*, December 1961, pp. 709–29.

[19] Ernst Berndt and David Wood, "Technology, Prices and the Derived Demand for Energy," *Review of Economics and Statistics*, August 1975, pp. 259–68.

[20] Dale Jorgenson, Frank Gollop, and Barbara Fraumeni, *Productivity and U.S. Economic Growth* (Cambridge, MA, Harvard University Press, 1987).

[21] W. Erwin Diewert, "Exact and Superlative Index Numbers," *Journal of Econometrics*, 1976, pp. 115–146.

[22] The sum of the weights is assumed to be unity.

[23] Barbara Fraumeni, Michael Harper, Susan Powers, and Robert Yuskavage, "An Aggregate BEA/BLS Production Account: A First Step and Theoretical Considerations," in Dale Jorgenson, Steven Landefeld, and William Nordhaus, *A New Architecture for the U.S. National Accounts*, Studies in Income and Wealth, vol. 66 (Chicago, University of Chicago Press, 2006), pp. 355–435.

[24] Eric Strassner, Gabriel Medieros, and George Smith, "Annual Industry Accounts: Introducing KLEMS Input Estimates, 1997–2003," *Survey of Current Business*, September 2005, pp. 31–65.

[25] Michael Harper, "Estimating Capital Inputs for Productivity Measurement: An Overview of U.S. Concepts and Methods," *International Statistical Review*, no. 3, 1999, pp. 327–37.

[26] The chained Tőrnqvist index is a chain of antilogarithms of growth rates. The antilogarithms are computed as weighted averages of differences in successive logarithms of the input indexes. The weights, which change each year, are 2-year averages of respective inputs' shares of total input costs for the 2 years being compared.

[27] See Jorgenson and Griliches, "The Expansion of Productivity Change." Further specifics on the BLS aggregation methods are detailed in Harper, "Estimating Capital Inputs."

[28] Labor compensation equals wages and salaries of employees, plus employers' contributions to social insurance and private benefit plans and all other fringe benefits, in current dollars. An estimate of the wages, salaries, and supplemental payments for the self-employed and unpaid family workers is included. Capital income is corporate capital income plus imputed noncorporate capital income. Corporate capital income equals corporate capital consumption allowances, plus corporate profits, plus corporate inventory valuation adjustment, plus corporate net interest, plus business transfer payments, plus the part of indirect business taxes associated with capital (property taxes and motor vehicle taxes). Noncorporate capital income equals total cost, less corporate capital income, less total labor compensation.

[29] "Multifactor Productivity Trends in Manufacturing, 2005," news release USDL 07-0822 (Bureau of Labor Statistics, June 7, 2007).

[30] Gullickson and Harper, "Possible Measurement Bias," p. 56; and "Bias in Aggregate Productivity," p. 35.

[31] Domar, "Measurement of Technological Change."

[32] Frank Gollop, "Growth Accounting in an Open Economy," in A. Dogramici (ed.), *Developments in Econometric Analyses of Productivity* (Boston, Klumer Nijhoff, 1982).

[33] An industry's Domar contribution to aggregate multifactor productivity growth is the industry's multifactor productivity growth multiplied by its Domar weight. Each industry's Domar weight is the ratio of the industry's current-dollar value of production to aggregate current-dollar value added. Domar showed that, although the weights sum to more than unity, the sum of industry contributions will equate to aggregate multifactor productivity.

[34] Fraumeni, Harper, Powers, and Yuskavage, "An Aggregate BEA/BLS Production Account."

[35] "Multifactor Productivity Trends, 2005," news release USDL 07-0422 (Bureau of Labor Statistics, May 24, 2007).

[36] See Stephen Oliner and Daniel Sichel, "The Resurgence of Growth in the Late 1990s: Is Information Technology the Story?" *Journal of Economic Perspectives*, fall 2000, pp. 3–22; and Dale Jorgenson, Kevin Stiroh, and Mun Ho, "Growth of U.S. Industries and Investments in Information Technology and Higher Education," in Carol Corrado, John Haltiwanger, and Daniel Sichel (eds.), *Measuring Capital in the New Economy: Studies in Income and Wealth*, vol. 65 (Chicago, University of Chicago Press, 2005), pp. 403–72.

[37] "Multifactor Productivity Trends, *2006*," news release USDL 08-0410 (Bureau of Labor Statistics, Mar. 27, 2008).

[38] This contribution is based on *Multifactor Productivity Trends in Manufacturing, 2005*, and is shown to one decimal place in table 6.

[39] Stephen Oliner, Daniel Sichel, and Kevin Stiroh, "Explaining a Productive Decade," *Brookings Papers on Economic Activity*, fall 2007, pp. 81–137.

[40] Corrado and Slifman, "Decomposition of Productivity."

[41] *Ibid.*

[42] Gullickson and Harper, "Possible Measurement Bias."

[43] Gullickson and Harper, "Bias in Aggregate Productivity."

[44] Triplett and Bosworth, *Productivity in the U.S. Services Sector*, p. 331.

[45] Percentage-point contributions are weighted on the basis of the ratio of the industry's value of production to aggregate value added. The sum of negative weights for each period or subperiod represents only those industries that have a negative percentage-point contribution for that period or subperiod.

[46] Gullickson and Harper, "Bias in Aggregate Productivity."

Compensation costs in manufacturing across industries and countries, 1975–2007

Rankings of manufacturing industries based on employers' labor costs for production workers changed very little from 1975 to 2007 and also did not tend to differ much from country to country; however, trends in the range and dispersion of labor costs have varied substantially across countries

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Lower wages in foreign markets and the rise in outsourcing by U.S. companies have become important topics in the debate on U.S. competitiveness. Though discussion of these issues tends to evoke images of the quickly growing information technology sector and of other service sectors especially vulnerable to outsourcing, debate has also focused on the impact of globalized markets on U.S. manufacturing activities. The United States remains, by far, the world's leading producer of manufactured goods, accounting for 17.5 percent of total world manufacturing output in 2008.[1] However, manufacturing employment in the United States has been declining over the long term, partly because of rising productivity[2] and partly because of the emergence of developing economies as important producers and exporters of manufactured goods.[3]

One measurement of the international standing of U.S. manufacturing is the hourly cost to the manufacturer of employing labor, or what is referred to in this article as the hourly compensation cost. This cost is one of the important factors used in evaluating international manufacturing competitiveness,[4] both at the sector level and at levels below it. Average compensation costs in industries within the manufacturing sector, however, can differ greatly from the average cost of manufacturing compensation. Measures of compensation costs at the sector level are instructive but often mask important differences among industries. A country's overall compensation cost advantage in the production of manufactured goods does not imply that its compensation costs for the production of, for example, apparel and automobiles are equally competitive.

This article compares hourly compensation cost data from 1975 to 2007 published by BLS across 18 industries within manufacturing[5] in the United States and in selected foreign economies. A fairly basic use of these industry data is to directly compare labor costs in similar industries across countries. This study, however, takes an additional step by analyzing how industries' compensation costs vary not only across countries but also over time. As a foundation, a brief literature review and an overview of general trends in compensation costs at the all-manufacturing level are first presented. The analysis then moves to industries within the manufacturing sector. To elucidate differences in labor costs at the industry level, this article ranks manufacturing industries according to their mean hourly compensation costs for employers, focusing on the highest and lowest ranked industries in several representative countries. Because data suggest that ranking order has remained fairly stable over time

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and is similar across countries, each manufacturing industry is classified into one of four compensation cost categories ranging from "low" to "high." Such groupings allow for a generalized discussion of relative compensation costs at the industry level. Next, the article addresses national differences in the dispersion of compensation costs between the industries with the lowest compensation costs for employers and those with the highest costs. The study concludes with an analysis of whether the positioning of industries in other countries is similar or dissimilar to that in the United States.

This article finds that BLS comparative data are consistent with the larger economic literature on the dispersion of earnings across industries. That is, BLS data indicate that the rankings of industries within manufacturing by employers' compensation costs have changed little over time and are similar from country to country. In contrast, differences among countries in the degree of dispersion of hourly compensation costs are more notable: differences in labor costs among industries are small and have remained so over time for some countries, whereas for others, such differentials are large and have fluctuated greatly from year to year.[6] Finally, the study analyzes ratios involving manufacturing industries and the manufacturing sector as a whole both in the United States and in other countries, and it identifies those economies which are most and least similar to that of the United States with regard to these ratios.

Framework for analysis

The data in this article are from a long-standing BLS comparative series on international hourly compensation costs in manufacturing.[7] Compensation cost data for industries within manufacturing have been made available by BLS (though not always formally published) since 1980. This study analyzes hourly compensation cost data for production workers[8] in manufacturing and in 18 industries within manufacturing for the period from 1975 to 2007.[9]

BLS also publishes hourly compensation cost statistics for all employees in manufacturing, a category that includes production workers as well as all other employees in manufacturing establishments. The BLS all-employees series begins in 1996 and thus is less suitable for historical analysis. It should be noted that assessing data for all employees in manufacturing would result in higher compensation cost levels, since this worker group also includes salaried workers and managers, who tend to be paid higher wages. However, the distribution of compensation costs across industries and countries does not vary substantially by category of worker (all employees or production workers), so the use of the all-employees BLS series would result in similar conclusions with regard to industry rankings, dispersion, and the positioning of foreign industries relative to those of the United States.[10]

The economies included in this study are those of the United States, the remaining Group of Seven countries (Canada, Japan, France, Germany, Italy, and the United Kingdom), Mexico, the Republic of Korea (hereinafter South Korea), Taiwan, and Sweden. Although the BLS comparative series for production workers covers 34 economies, a subset of these economies is chosen to provide more in-depth analysis and because a variety of industry data are not available for all countries. In addition, most of the economies selected are those of countries exhibiting high trade levels with the United States, such as Canada and Mexico, and some economies were chosen to represent certain regions, such as Asia and Europe. South Korea and Taiwan are included specifically to represent the relatively quickly growing economies of East Asia. Sweden serves to represent the Scandinavian region, known for its relatively compressed wage distribution, which is due, in part, to high unionization rates.[11] China and India, both major trading partners with the United States, are conspicuously absent from this analysis. See the box on pages 43 and 44, which addresses the exclusion of China and India and provides some information on the dispersion of earnings and compensation costs among industries within manufacturing in those countries.

For each economy, compensation cost data are examined for the 18 industries within manufacturing listed in exhibit 1, as the industries are defined by the North American Industry Classification System (NAICS).[12] It should be noted that the quality of data at the industry level is often not as high as that at the sector level and may affect the comparability of industry compensation cost measures. Such quality issues include differences in industrial classification systems, gaps in source data sets, and source data derived from samples that are relatively small. Where possible, however, BLS makes adjustments and estimations to mitigate these issues and to enhance the comparability of compensation cost measures.[13] For example, for countries outside North America, data are adjusted to correspond with NAICS industry definitions.

For every country in this study, BLS produces compensation cost estimates for each manufacturing industry listed in exhibit 1; the estimates cover the years 1975 to 2007. There are some missing data, however. For Canada and Mexico, hourly compensation cost data series for manufacturing industries begin with 1983 and 1985, respec-

Exhibit 1. North American Industry Classification System (NAICS) manufacturing industries covered in this article

NAICS code(s)	Industry
31–33	(All) Manufacturing
311–312	Food, beverage, and tobacco product manufacturing
313–314	Textiles and textile product mills
315	Apparel manufacturing
316	Leather and allied product manufacturing
321	Wood product manufacturing
322	Paper manufacturing
325	Chemical manufacturing
326	Plastics and rubber products manufacturing
327	Nonmetallic mineral product manufacturing
331	Primary metal manufacturing
332	Fabricated metal product manufacturing
333	Machinery manufacturing
334	Computer and electronic product manufacturing
335	Electrical equipment, appliance, and component manufacturing
336	Transportation equipment manufacturing
3361–3363	Motor vehicle and parts manufacturing
3364	Aerospace product and parts manufacturing
337	Furniture and related product manufacturing

tively, because comparable source data for earlier years are unavailable. Sweden has the smallest industry data set of all countries included in this analysis. For Sweden, data are missing for all years for 8 of the 18 industries listed in exhibit 1, including the textiles and textile products (NAICS 313–314), apparel manufacturing (NAICS 315), leather and allied products (NAICS 316), motor vehicles and parts (NAICS 3361–3363), and aerospace products and parts (NAICS 3364) industries. However, data for the combined industry of textiles, apparel, and leather manufacturing (NAICS 313–316) and for transportation equipment manufacturing (NAICS 336) are reported for all years. Because these industries encompass some of the missing industries, and because they correspond to the low end and high end, respectively, of the compensation cost spectrum, the data on Sweden remain largely representative of the country's compensation costs.[14] For a number of other countries, there are gaps in data coverage that are less prevalent than the gaps for Canada, Mexico, and Sweden, and these gaps do not affect the overall comparability of the measures or the analysis in this article.

To make sound comparisons, national manufacturing data for all economies are adjusted to a common concept of compensation costs. Hourly compensation costs consist of direct payments made to workers (including base wages, overtime pay, bonuses, and pay for vacations, holidays, and other leave), employer expenditures for social insurance and other worker benefits, and taxes on payrolls or employment.[15] From the perspective of employers, assessing compensation costs instead of worker earnings or wages is more meaningful because it captures not only the take-home pay that employees receive but also all other labor costs that employers incur. For this reason, the terms "compensation cost" and "labor cost" are used interchangeably throughout the following discussion. Hourly compensation costs are computed in national currency units and are converted to U.S. dollars with the average daily exchange rate[16] for the reference year.[17]

This article aims to make relevant comparisons of compensation costs across countries and industries within the manufacturing sector. This study's findings are not transferable to other sectors of the economy, such as services and information technology. The manufacturing sector provides the most data for making hourly compensation cost comparisons, and the BLS compensation cost indicators presented in this article are adjusted to a common conceptual basis to facilitate these comparisons.

A brief literature review

This international analysis of hourly compensation costs in manufacturing industries builds upon a vast literature addressing interindustry wage differentials. Multicountry comparisons of distributions of wages by industry make up a much smaller portion of the literature, although such comparisons have been a topic of interest since the 1940s.[18] It should be noted that the terms "wages," "earnings," and "compensation" in the literature are often not explicitly defined and are frequently used interchangeably to denote worker pay. The BLS definition of "compensation" is a broader measure of worker pay, including both direct wage payments made to the worker and social benefits. In the majority of studies reviewed, analysis relates to wages as opposed to compensation costs.

In the earliest works, various authors reached similar findings relating to interindustry wage differentials. For instance, in 1944 Stanley Lebergott[19] found that, when ranked by average hourly earnings, manufacturing industries were placed in similar orders in the United States, Canada, the United Kingdom, Sweden, Switzerland, and even the Soviet Union to some degree. Using various data sets and analyzing different countries, relatively more recent studies, such as those of Alan B. Krueger and Lawrence H. Summers (1986),[20] Josef Zweimuller and Erling Barth (1992),[21] and Maury Gittleman and Edward N. Wolff (1993),[22] arrive at similar conclusions: that industry rankings according to earnings levels are similar across countries and have remained so over time. In line with

shared industry rankings, these sources also note that the lowest and highest wage industries tend to be the same in many countries.

In their article, Gittleman and Wolff also address changes in the degree of wage dispersion across manufacturing industries. They find that, although industry rankings according to earnings levels are similar from one country to another and have remained fairly stable, the degree of industry wage dispersion varies considerably across countries and has tended to expand and contract over time. Gittleman and Wolff also discuss the factors affecting levels of and trends in industrial wage differentials. They note that regression results pointing to causal factors are sensitive to the period covered, to the regression specification used, and to econometric problems (such as multicollinearity) that limit their interpretation. However, Gittleman and Wolff's findings suggest that higher capital intensity, greater openness to exporting, and growth in total factor productivity among industries significantly increase wage dispersion. Conversely, the researchers find that high levels of unionization within a country significantly decrease wage dispersion.

More recently, a 2003 study by the European Commission has investigated interindustry wage differentials in the European Union.[23] The study finds strong variation in wages both across countries and within sectors of the economy including manufacturing, mining and quarrying, energy and electricity, construction, and services. Among manufacturing industries, wages in the year 2000 are found to be generally above average in metals, tobacco, and fuel and petroleum, whereas wages in textiles and textile products and in wood products are found to be lower than average. That same year, among the E.U. member states or accession countries, the greatest interindustry wage differentials were found in the United Kingdom and France, and the lowest were found in Denmark and Slovenia.

Interindustry wage differentials and the related issues of rank and wage dispersion are investigated in this article as well, but in the broader context of hourly compensation costs. As is shown in the following sections, results based on data published by BLS are in line with findings in the larger economic literature. The data on compensation costs used in this study permit more meaningful comparisons of employers' labor costs across countries than data from studies based on employee earnings only. Further, BLS compensation cost data for all countries are adjusted to an hourly basis and adjusted to meet NAICS industry definitions. Together, the broad measure of hourly compensation costs and the adjustments to enhance multicountry comparability yield more reliable results.

Trends in all-manufacturing compensation costs

This section examines overall trends in manufacturing-sector mean hourly compensation costs in 11 economies for the period from 1975 to 2007. Trends at the sector level serve as a basis for more in-depth comparisons at the industry level. In this study, the manufacturing sector as a whole is referred to as "all manufacturing," and the divisions within manufacturing—which are 3- and 4-digit NAICS manufacturing industries, in some cases analyzed in combination with one another—generally are referred to as "industries."

Employers' compensation costs for production workers in manufacturing increased between 1975 and 2007 in all countries. (See tables 1 and 2.) Because the compensation cost measures discussed in this study are nominal—not adjusted for inflation—the steady increase over time is attributed primarily to a rise in the overall price level. Though nominal labor costs in U.S. dollars have risen across the board over the long term, trends in growth rates have varied considerably from country to country. According to the compensation cost levels in table 1 and the growth rates in table 2, the mean hourly compensation cost quadrupled in the United States, from $6.24 in 1975 to $25.27 in 2007, an average increase of 4.5 percent per year. South Korea showed the largest percentage change in hourly compensation costs, increasing from $0.31 in 1975 to $16.02 in 2007—an average increase of approximately 13 percent per year. Conversely, compensation cost growth in Mexico was sluggish over the long term; the mean cost increased from $1.43 in 1975 to only $2.92 just over 30 years later—an average annual increase of 2.3 percent.

Growth rate trends in other countries relative to the trend in the United States are illustrated in chart 1, in which the U.S. compensation cost level is set to 100 for all years. For any economy, a relatively flat line indicates that the growth rate of compensation costs was similar to that of the United States. A line sloping upward implies a larger increase or smaller decrease than that in the United States, and a line sloping downward indicates a smaller increase or larger decrease than that in the United States. Because of relatively high compensation cost growth rates in later years, labor costs in many of the European countries in chart 1 rose from relatively lower levels in the early-to-mid 1980s to levels higher than those in the United States during parts of the 1990s and 2000s. Compared with the growth of labor costs in the European economies covered, labor cost growth in Canada and Mexico more closely tracked that in the United States from 1975

Table 1. Mean hourly compensation costs for production workers in the manufacturing sector (in nominal U.S. dollars), and those costs as a percentage of corresponding costs in the United States, selected years, 1975–2007

Country	1975	1980	1985	1990	1995	2000	2005	2006	2007
United States	$6.24	$9.75	$12.87	$15.00	$17.39	$19.88	$23.81	$24.15	$25.27
	100	100	100	100	100	100	100	100	100
Canada	6.40	9.02	11.39	16.62	16.80	16.78	24.29	26.12	29.08
	102	92	89	111	97	84	102	108	115
Mexico	1.43	2.15	1.55	1.54	1.43	2.17	2.65	2.77	2.92
	23	22	12	10	8	11	11	11	12
Japan	2.95	5.43	6.24	12.52	23.34	21.69	21.31	19.99	19.75
	47	56	48	83	134	109	90	83	78
South Korea	.31	.93	1.20	3.59	7.14	8.08	12.48	14.48	16.02
	5	10	9	24	41	41	52	60	63
Taiwan	.39	1.05	1.51	3.91	5.99	6.19	6.42	6.56	6.58
	6	11	12	26	34	31	27	27	26
France	4.76	9.42	7.91	16.25	20.06	15.98	24.56	25.47	28.57
	76	97	62	108	115	80	103	105	113
Germany	5.28	10.26	7.98	18.32	26.29	19.80	29.00	30.06	33.26
	85	105	62	122	151	100	122	124	132
Italy	4.70	8.21	7.67	17.92	16.71	14.53	24.33	25.17	28.23
	75	84	60	120	96	73	102	104	112
Sweden	7.12	12.41	9.58	20.75	21.63	20.70	30.50	31.85	36.03
	114	127	74	138	124	104	128	132	143
United Kingdom	3.21	7.22	5.97	11.95	13.60	16.69	25.75	26.76	30.18
	51	74	46	80	78	84	108	111	119

SOURCES: "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and authors' calculations made by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

to 2007. Compensation cost growth in Japan and Taiwan was relatively high throughout most of the 1975–2007 period, but growth was slower in these economies than in the United States from the mid-1990s to 2007. During the 1975–2007 timespan, compensation costs in South Korea generally increased at a faster rate than they did in the United States.

In the 1975–2007 period, compensation costs for production workers in U.S. manufacturing generally were higher than costs for production workers in Canada and Mexico, East Asia, and parts of Europe. (See chart 1 and table 1). By contrast, manufacturing labor costs in the United States tended to be lower than those in Germany and Sweden. In the mid-to-late 1970s, compensation rates in the United States were among the highest internationally. Bolstered by a U.S. dollar that was strong relative to foreign currencies, this trend continued for the next few years, and by the mid-1980s the United States had the highest labor costs of all the countries covered for this article. During the 1985–90 period, however, compensation costs in the United States declined in relative terms because labor costs in almost all the economies in the study increased at a faster rate during that time. This was due, in part, to the depreciation of the dollar. From 1990 to 1995 U.S. compensation costs grew at an average annual rate of approximately 3.0 percent, somewhat lower than compensation costs in France (which grew at a rate of 4.3 percent per year) and substantially lower than costs in Germany (7.5 percent) and Japan (13.3 percent) during the same period. (See table 2). As a result, U.S. manufacturing firms compensated production workers at a lower cost during the mid-1990s in comparison with firms in Japan and most of the selected economies in Europe. By the year 2000 this trend had changed: compensation costs for U.S. production workers once again were more in line with those of their European counterparts. Since that

Table 2. Nominal mean annual growth rates of hourly compensation costs for production workers in manufacturing, selected periods, 1975–2007

[In percent, as calculated from costs in U.S. dollars]

Country	1975–2007	1975–80	1980–85	1985–90	1990–95	1995–2000	2000–07
United States	4.5	9.3	5.7	3.1	3.0	2.7	3.5
Canada	4.8	7.1	4.8	7.8	.2	.0	8.2
Mexico	2.3	8.5	–6.3	–0.2	–1.5	8.7	4.3
Japan	6.1	13.0	2.8	14.9	13.3	–1.5	–1.3
South Korea	13.1	24.3	5.2	24.6	14.7	2.5	10.3
Taiwan	9.2	21.8	7.7	21.0	8.9	.7	.9
France	5.2	14.6	–3.4	15.5	4.3	–4.4	8.7
Germany	5.9	14.2	–4.9	18.1	7.5	–5.5	7.7
Italy	5.8	11.8	–1.4	18.5	–1.4	–2.8	10.0
Sweden	5.2	11.8	–5.0	16.7	.8	–.9	8.2
United Kingdom	7.3	17.6	–3.7	14.9	2.6	4.2	8.8

SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

time, however, labor costs in U.S. manufacturing have decreased relative to costs in Europe, a phenomenon caused primarily by the appreciation of the euro in relation to the dollar.

Compensation cost levels in the East Asian economies of South Korea and Taiwan remained low relative to those in the United States throughout the entire 1975-to-2007 period. Nevertheless, the gap narrowed somewhat over time as labor costs for manufacturing production workers in these countries increased more rapidly than those in the United States. This is especially true for South Korea, where compensation costs grew at an average rate of 13.1 percent per year from 1975 to 2007, compared with 4.5 percent annually for the United States during the same timeframe. As a result, South Korea's mean compensation cost also increased from only 5 percent of the U.S. level in 1975 to 63 percent by 2007. Likewise, compensation costs in Taiwan grew from 6 percent to 26 percent of U.S. compensation costs between 1975 and 2007. As with South Korea, this can be attributed to Taiwan's much faster average annual rate of growth in hourly compensation costs relative to that of the United States (9.2 percent versus 4.5 percent annually from 1975 to 2007).

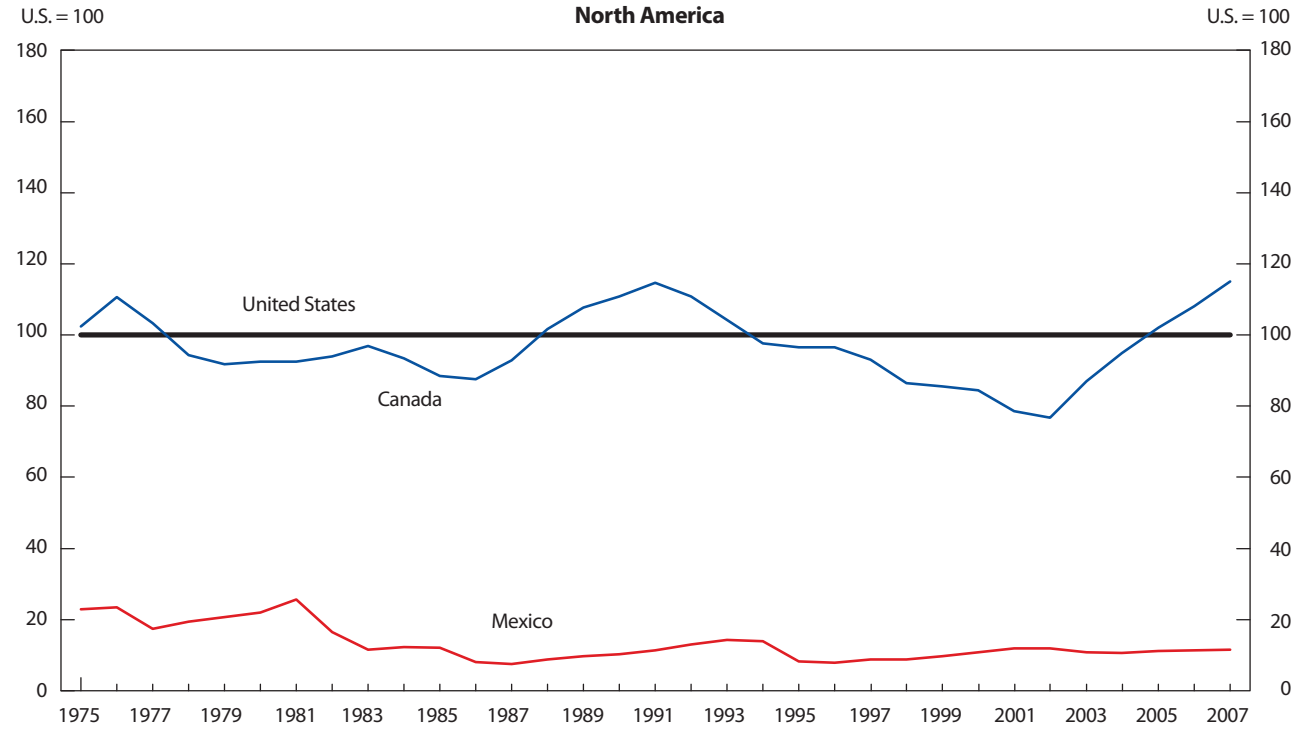
Trends in hourly compensation costs in Mexico, by contrast, were far removed from the trends shared by South Korea and Taiwan. Mexico's average annual rate of growth in compensation costs from 1975 to 2007 (2.3 percent) was by far the lowest of the rates of the countries addressed in this article and was approximately half that of the United States over the same period. As a result, Mexico's mean compensation cost decreased from 23 percent of the U.S. level in 1975 to 12 percent by 2007. The devaluation of the Mexican peso in December 1994 contributed to this drop in labor costs as measured in U.S. dollars. Canada's compensation cost growth (4.8 percent annually) tracked the U.S. growth fairly closely and consequently led to little relative change over time.

U.S. average annual growth rates in hourly compensation costs were highest in the earlier years of the 1975–2007 period, nearly reaching double digits during the late 1970s (see table 2), a period with high rates of inflation. Despite moderate slowing, annual growth—averaged over 5-year periods—in U.S. labor costs remained between 2.7 percent and 5.7 percent after the 1970s.

Compensation cost growth rates in all foreign economies fluctuated significantly across time, and most reached negative levels in at least one period. This was due in large part to cyclical exchange rate variations that occurred over time. For example, the average cost of hourly compensation in the United Kingdom grew at an average annual rate of 17.6 percent during the period from 1975 to 1980; during the early-to-mid 1980s, however, the situation changed dramatically and compensation costs actually declined at a rate of 3.7 percent. Such dramatic fluctuation in the level of compensation cost growth between these two periods was common among all European countries in the study: virtually all currencies across the continent weakened, to varying degrees, against the U.S. dollar during those years. Despite the drop in compensation costs as measured in U.S. dollars in the late 1970s and early 1980s, in local currency terms, costs grew steadily in Europe.

South Korea and Taiwan experienced strong positive growth in hourly compensation costs between 1975 and 1995, on some occasions reaching annual rates of increase of more than 20 percent. During the 1995–2000 period, however, compensation cost growth in these countries

Chart 1. **Hourly compensation costs for production workers in manufacturing, measured in U.S. dollars and indexed to the corresponding costs in the United States, by country, 1975–2007**



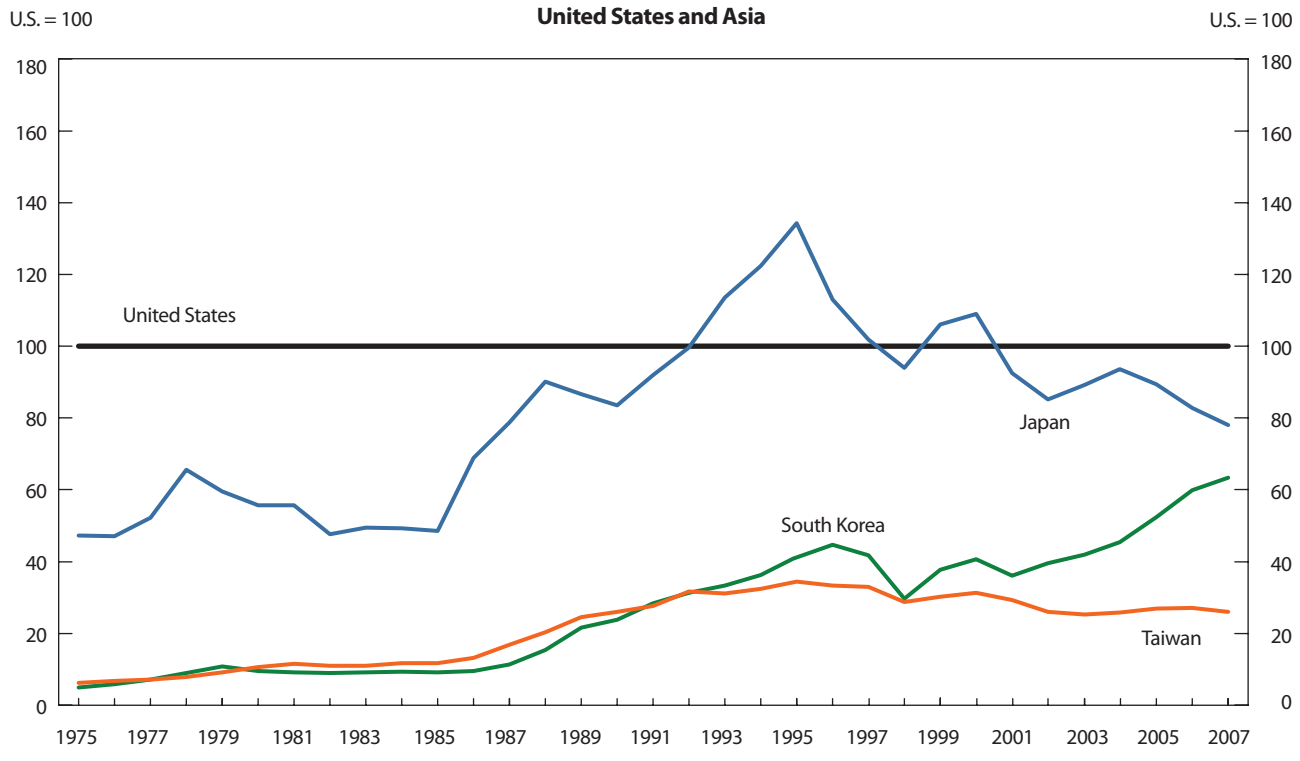
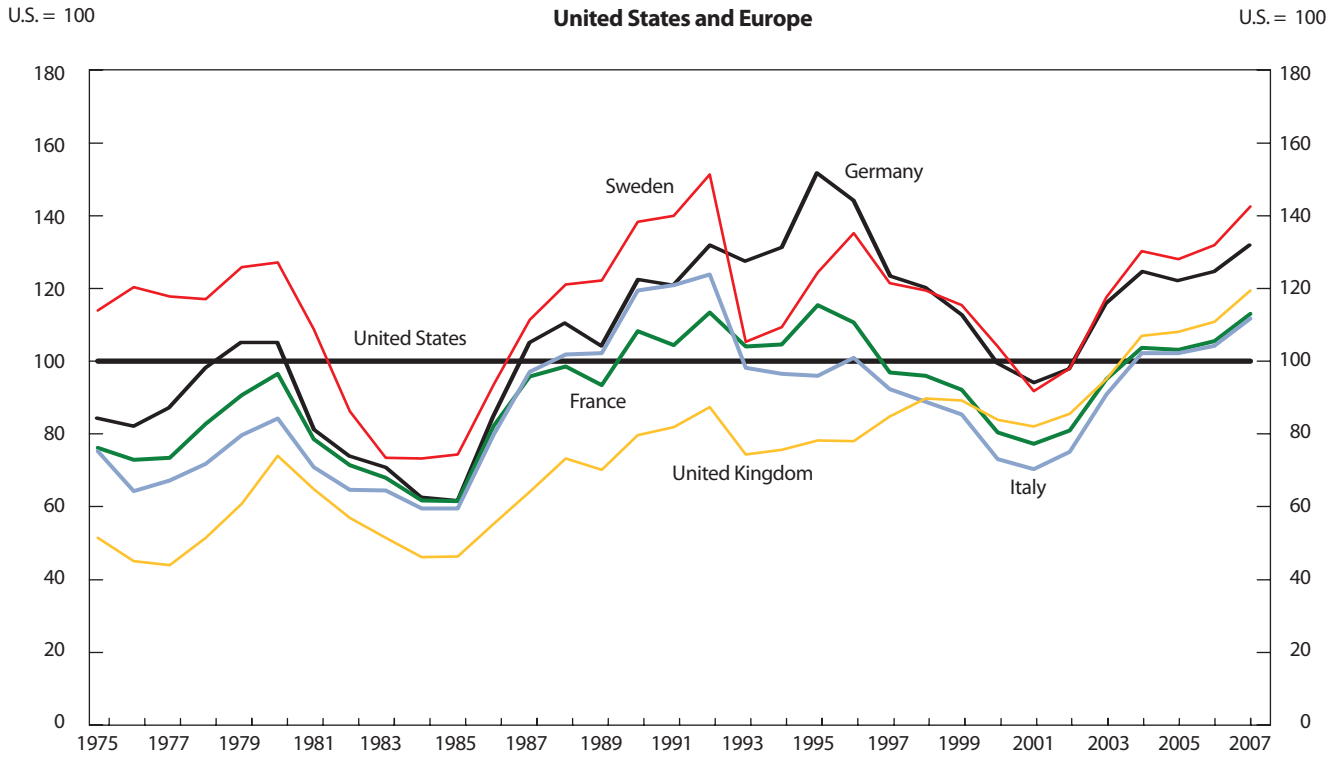


Chart 1. Continued—Hourly compensation costs for production workers in manufacturing, measured in U.S. dollars and indexed to the corresponding costs in the United States, by country, 1975–2007



SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

slowed significantly, as measured in U.S. dollars, with Taiwan even approaching zero percent growth in the late 1990s and early 2000s. For these two East Asian economies, the sluggish compensation cost growth rates can be attributed at least in part to significant changes in exchange rates between the currencies in South Korea and Taiwan and the U.S. dollar. For instance, Taiwan's compensation cost growth averaged 4.5 percent per year between 1995 and 2000 when measured in local currency. Compensation cost growth in U.S. dollars for Taiwan, however, was much slower (an average of 0.7 percent annually) during this period.

Trends in all-manufacturing compensation costs are instructive for assessing the sector as a whole, but, depending on the economy studied, they may or may not be generally representative of trends in industries within the sector. That is, compensation costs across industries within manufacturing can vary considerably. The following sections of the article take an in-depth look at hourly compensation cost levels across the industries listed in exhibit 1.

Industry rankings and groupings

General trends in labor costs for the whole manufacturing sector are important, but they sometimes mask significant differences in compensation at the industry level. This section highlights these differences by ranking industries within manufacturing and grouping them into general categories according to levels of compensation costs. This approach reveals the general distribution of manufacturing labor costs within countries.

Table 3 shows the three highest and three lowest ranked industries by labor costs in the United States, Japan, and Germany for the years 1975, 1985, 1995, and 2007. Data for these countries reveal not only the variation in compensation cost levels across industries (shown in U.S. dollars), but also that industry rankings within countries have remained fairly stable over time. In addition, the highest and lowest ranked industries tended to be the same from one country to another. Other data (not shown in table 3 but available upon request) indicate that this trend extends across all economies in the study.

Considering the United States, Japan, and Germany, a large degree of stability in compensation cost rankings was seen over the 1975–2007 period on both the high and low ends of the spectrum. Table 3 suggests that the chemicals, primary metals, transportation equipment, motor vehicles and parts, and aerospace products and parts industries were consistently among the most highly compensated in manufacturing. Apparel, leather and allied products, and textiles and textile products firms consistently incurred the lowest labor costs in the manufacturing sector.

For all countries in this study, certain industries were consistently ranked at or near the top or at or near the bottom in terms of compensation costs across the period from 1975 to 2007. In other words, the industrial spectrum of manufacturing compensation costs was largely stable throughout the past 30 or so years. This observation can be generalized—and quantified—for the 11 countries included in this study by classifying the manufacturing industries from exhibit 1 into four groups based on employers' costs for compensation: *low*, *medium–low*, *medium–high*, and *high*. These categories are relative to the national mean for the manufacturing sector. Industries with "low" levels of compensation costs are defined as those industries with labor costs generally 1 standard deviation[24] or more *below* the all-manufacturing average, whereas industries with "high" levels of compensation costs are those with labor costs generally 1 standard deviation or more *above* the mean for all of manufacturing. Industries in the medium–low and medium–high categories are more comparable to the all-manufacturing average, incurring labor costs within 1 standard deviation below the all-manufacturing benchmark and within 1 standard deviation above it, respectively. Using standard deviations in this way allows industries to be grouped into the four categories, by country, without disregarding national differences in the dispersion of compensation costs. Thus, for each country and year, the 18 industries are classified into these four categories.

The results of these groupings for 2007 are shown in exhibit 2. Each industry in the exhibit has a corresponding fraction in parentheses: the numerator represents the number of countries for which the industry fell into the category in question, and the denominator represents the total number of countries for which data for the industry are available. An industry's placement within this exhibit thus reflects the placement of that industry for a majority of the countries for which data are reported.[25] In 2007, for instance, the plastics and rubber products industry was classified as medium–low in 10 out of 10 economies that published data for that industry. Several other industries were grouped similarly across nearly all the economies, namely the following: apparel, as low; food, beverages, and tobacco, and fabricated metal products, as medium–low; machinery, and computer and electronic products, as medium–high; and aerospace products and parts, as high. Some industries, however, had greater variability across countries, such as furniture and related products, and paper. For most countries, furniture was classified primarily in the low category in 2007, but, in the United States, Mexico, and Japan, the industry had relatively higher compensation costs and was therefore placed in the medium–low category. In 2007, paper manufacturing had the most variability across countries: the industry was classified as medium–low in Mexico, South Korea, Taiwan, Germany, and the United Kingdom; as medium–high in the United States, Canada, Japan, France, and Italy; and as high in Sweden. Though exhibit 2 is a generalized representation of relative industry compensation for all covered economies in 2007, it can be said that, overall, the exhibit most closely corresponds to the 2007 distributions of compensation costs in France and the United Kingdom and is least representative of those in Mexico and Taiwan.

This snapshot of 2007 is compelling in that it is generally representative of the industrial spectrum of manufacturing labor costs for all economies in this study throughout the period from 1975 to 2007. The industries in exhibit 2 with a footnote are those which, in a majority of countries, remained, on average, in the compensation cost grouping in question for over 30 years. Such constancy in compensation costs was characteristic of 11 of the 18 industries in the exhibit. Apparel manufacturing was the most static industry in this sense. For all 10 countries in this study that reported data for apparel, the industry remained in the low compensation cost category for most years between 1975 and 2007. Other industries that were particularly consistent in their average grouping during the 1975–2007 period were plastics and rubber products, in medium–low; machinery, in medium–high; and aerospace products and parts, in high.

In contrast, some industries varied more over time in their categorization, including textiles and textile products, wood products, furniture and related products, and paper manufacturing. Paper was the most volatile industry, having moved across groupings over time for 6 out of 11 countries. In Mexico, for example, paper moved from being medium–high to being medium–low in the early 2000s, and it made the same move in the mid-2000s in South Korea. In Taiwan, paper was classified as having high compensation costs in the late 1970s and throughout the 1980s and as medium–high in the 1990s; it has been

Table 3. Manufacturing industries with the highest and lowest mean hourly compensation costs for production workers, selected countries and years

Country	1975			1985		
	Industry	Mean hourly compensation cost		Industry	Mean hourly compensation cost	
		In U.S. dollars	As a percent of the mean hourly compensation cost in all of manufacturing		In U.S. dollars	As a percent of the mean hourly compensation cost in all of manufacturing
Highest ranked industries						
United States	Motor vehicles and parts	9.69	155	Motor vehicles and parts	19.99	155
	Transportation equipment	8.78	141	Transportation equipment	18.73	146
	Primary metals	8.52	137	Aerospace products and parts	17.51	136
Japan	Primary metals	4.53	154	Chemicals	9.62	154
	Chemicals	4.08	138	Primary metals	9.47	152
	Transportation equipment	3.74	127	Transportation equipment	8.25	132
Germany	Motor vehicles and parts	6.18	117	Aerospace products and parts	9.74	122
	Aerospace products and parts	6.05	115	Motor vehicles and parts	9.48	119
	Transportation equipment	5.99	113	Transportation equipment	9.43	118
Lowest ranked industries						
United States	Textiles and textile products	4.23	68	Textiles and textile products	8.75	68
	Leather and allied products	4.13	66	Leather and allied products	8.07	63
	Apparel	3.67	59	Apparel	7.04	55
Japan	Wood	2.21	75	Textiles and textile products	4.65	75
	Textiles and textile products	2.12	72	Leather and allied products	4.61	74
	Apparel	1.57	53	Apparel	3.27	52
Germany	Textiles and textile products	3.88	73	Textiles and textile products	5.88	74
	Apparel	3.71	70	Leather and allied products	5.61	70
	Leather and allied products	3.67	69	Apparel	5.23	66
	1995			2007		
Highest ranked industries						
United States	Motor vehicles and parts	26.97	155	Aerospace products and parts	42.98	170
	Aerospace products and parts	26.07	150	Transportation equipment	34.86	138
	Transportation equipment	25.72	148	Motor vehicles and parts	33.23	131
Japan	Chemicals	35.51	152	Chemicals	29.15	148
	Primary metals	33.04	142	Primary metals	28.84	146
	Transportation equipment	29.80	128	Transportation equipment	24.95	126
Germany	Motor vehicles and parts	33.09	126	Motor vehicles and parts	42.75	129
	Transportation equipment	32.27	123	Transportation equipment	41.93	126
	Aerospace products and parts	31.51	120	Primary metals	36.78	111
Lowest ranked industries						
United States	Textiles and textile products	12.74	73	Textiles and textile products	18.58	74
	Leather and allied products	11.72	67	Leather and allied products	17.55	69
	Apparel	9.62	55	Apparel	15.29	61
Japan	Textiles	18.39	79	Food, beverages, tobacco	14.91	75
	Leather and allied products	16.70	72	Leather and allied products	14.26	72
	Apparel	12.02	51	Apparel	10.33	52
Germany	Textiles and textile products	19.48	74	Textiles and textile products	24.27	73
	Leather and allied products	17.23	66	Apparel	22.46	68
	Apparel	17.19	65	Leather and allied products	22.25	67

SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

classified as medium–low since the early 2000s. Wood products, and furniture and related products also saw similar movements across compensation cost groupings. Between 1975 and 2007, the compensation cost category changed in 5 of 10 countries for wood and in 5 of 7 for furniture.

Germany and Sweden had the fewest occurrences of industries switching from one compensation cost category to another, while South Korea, Taiwan, and France had the most. Put another way, relative compensation costs across industries were most stable in Germany and Sweden and least stable in South Korea, Taiwan, and France during the period from 1975 to 2007. For South Korea and Taiwan, shifts across compensation cost categories occurred for many industries during the period. For France, movements of industries across these categories during the early 2000s indicate a trend of industries returning to the relative positions seen in the 1980s and 1990s. Industry shifts in the United Kingdom also show a return to the distribution of compensation costs of earlier years, although not to the same degree as in France. In Canada, Italy, and Japan, changes in the industries' relative compensation costs occurred primarily during the 1990s; industry positions have been relatively steady since. Most industry movements in Mexico occurred during the late 1990s and early 2000s, with few changes in the most recent years. Finally, the U.S. distribution of compensation costs remained largely stable throughout the 1980s and 1990s, although the industries of nonmetallic mineral products and primary metals did change categories.

For all countries taken together, however, there were not many industry movements across compensation cost categories. Therefore, the 2007 groupings shown in exhibit 2 give a general characterization of the industrial spectrum of manufacturing labor costs since 1975 for a majority of the countries. The categorization of industries in exhibit 2 is especially close to the historical (1975–2007) categorization of industries in the United States, Canada, France, and the United Kingdom. The classification of industries by compensation costs as low, medium–low, medium–high, and high highlights not only the variety of labor costs within manufacturing, but also the stability of relative compensation costs in manufacturing over time: the industries with the very highest and lowest compensation costs have tended to be the same across countries and to remain in these positions across the period studied.

Range and dispersion of compensation costs

Despite the aforementioned stability across countries of industry rankings based on compensation costs, the overall range and dispersion of industries' labor costs can vary substantially from one country to another. The range of labor costs refers to the distance between the highest and lowest ranked industry compensation cost values, whereas dispersion—measured in this article by use of standard deviation—refers to the degree to which industry compensation costs are clustered about the mean for all manufacturing. Both the range and the dispersion of compensation costs provide additional insight into the distribution of labor costs across countries, and these topics are examined in the following sections.

Ranges of labor costs. One way to depict an intracountry

Exhibit 2. Industries within manufacturing grouped by their mean hourly compensation costs for production workers, 2007

Low	Medium–low	All-manufacturing average	Medium–high	High
313–314 Textiles and textile products (6/10)	311–312 Food, beverages, and tobacco (10/11)[1]		322 Paper (5/11)	325 Chemicals (7/11)[1]
315 Apparel (8/10)[1]	326 Plastics and rubber products (10/10)[1]		327 Nonmetallic mineral products (7/11)[1]	331 Primary metals (6/11)[1]
316 Leather allied products (6/10)	332 Fabricated metal products (10/11)[1]		333 Machinery (9/11)[1]	336 Transportation equipment (6/11)[1]
321 Wood products (6/10)	335 Electrical equipment, appliances, and components (6/10)[1]		334 Computers and electronic products (5/6)	3361–3363 Motor vehicles and parts (6/9)
337 Furniture and related products (4/7)				3364 Aerospace products and parts (5/6)[1]

[1] In the majority of countries, this industry has remained in this compensation group for over 30 years.

NOTE: The fraction given for each industry is the ratio of the number of countries for which the industry falls into the category in question to the total number of countries for which data for that industry are available.

SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**.

What about China and India?

China and India have emerged as important forces in the global market. In 2006, China replaced Mexico as the United States' second-largest trading partner, behind Canada.[1] In 2009, India garnered a spot on the list of the top 15 U.S. trading partners, and it climbed from the 14th position to the 11th by April 2010.[2] Acknowledging the importance of China and India, BLS has developed estimates of hourly compensation costs for workers in the Chinese[3] and Indian[4] manufacturing sectors. Published compensation costs for China and India, however, are not directly comparable with data for other countries covered by BLS and, therefore, are presented apart from the BLS all-manufacturing series.

Although this limitation precludes coverage of China and India in the multicountry analysis of this article, estimates of average earnings in industries within manufacturing are available from the Chinese and Indian statistical agencies. These estimates facilitate analysis of trends in the range and dispersion of earnings and compensation costs in each country. Industry earnings data for China are published by China's National Bureau of Statistics.[5] Unlike the BLS compensation measures presented for other countries in this article, industry earnings data from Chinese publications refer only to urban manufacturing units[6] and do not include required employer social insurance payments or other nonwage labor costs. It should be noted that workers in industries with high earnings may receive social insurance and other nonwage payments that are disproportionately large in relation to their earnings, such that the dispersion of earnings could understate the dispersion of employers' compensation costs. As for India, industry data on workers' wages and social insurance benefits are available from the country's Central Statistics Office.[7] The data refer to India's organized (or formal) manufacturing sector only, rather than to the whole manufacturing sector,[8] and include contract workers, who typically are not included in BLS estimates and who generally receive less compensation.[9]

Although these challenges and others limit the ability to compare manufacturing compensation costs in China with those costs in India—and the ability to compare China and India with other countries in the BLS series—the data nonetheless reveal trends in the range and dispersion of earnings and compensation costs in these countries. National Bureau of Statistics data indicate that both the range and dispersion of Chinese manufacturing earnings declined between 2002 and 2006. During this timespan, the dispersion of Chinese earnings across the spectrum of manufacturing industries was roughly comparable to the dispersion of compensation costs in the United States and Canada. Compared with compensation costs in other economies in Asia, Chinese earnings were more compressed than compensation costs in Japan but more dispersed than those in South Korea and Taiwan. For India, hourly compensation costs estimates were constructed for 1999–2005 with data primarily from the Central Statistics Office. Similar to the general trend seen in the United States, in India the range between the industry with the highest compensation costs and that with the lowest was larger in 2005 than in 1999, whereas dispersion decreased overall during that period. The overall increase in the range of compensation costs was driven primarily by the aerospace products and parts industry, in which the mean hourly compensation cost increased (nominally) by 61 percent, from $1.69 in 1999 to $2.72 in 2005. By contrast, the mean hourly compensation cost in wood product manufacturing, the industry with the lowest compensation costs throughout most of the 1999–2005 period, increased (nominally) by 26 percent, from $0.31 to $0.39. During this same timeframe, the dispersion of compensation costs in India decreased overall and was most comparable to, but generally greater than, that in Mexico. Although compensation costs in China and India cannot be *directly* compared because of certain data limitations,[10] both the range and dispersion of compensation costs in India are substantially greater than those in China. For additional information, see *Monthly Labor Review* articles on compensation costs in China and India.[11]

Notes

[1] For trade in goods only. See "Top Trading Partners - Total Trade, Exports, Imports, Year-to-Date December 2005" (U.S. Census Bureau, Foreign Trade Statistics), on the Internet at **www.census.gov/foreign-trade/statistics/highlights/top/top0512.html** (visited June 21, 2010) and "Top Trading Partners - Total Trade, Exports, Imports, Year-to-Date December 2006" (U.S. Census Bureau, Foreign Trade Statistics), on the Internet at **www.census.gov/foreign-trade/statistics/highlights/top/top0612.html** (visited June 21, 2010).

[2] For trade in goods only. See "Top Trading Partners - Total Trade, Exports, Imports, Year-to-Date December 2009" (U.S. Census Bureau, Foreign Trade Statistics), on the Internet at **www.census.gov/foreign-trade/statistics/highlights/top/top0912yr.html** (visited June 21, 2010) and "Top Trading Partners - Total Trade, Exports, Imports, For month of April 2010" (U.S. Census Bureau, Foreign Trade Statistics), on the Internet at **www.census.gov/foreign-trade/statistics/highlights/top/top1004cm.html** (visited June 21, 2010).

[3] *International Comparisons of Hourly Compensation Costs in Manufacturing, 2007*, USDL 09-0304 (Bureau of Labor Statistics), Mar. 26, 2009, on the Internet at **www.bls.gov/news.release/pdf/ichcc.pdf** (visited June 3, 2010). See the box titled "Compensation Costs for China" on page 6.

[4] Jessica R. Sincavage, "Labor costs in India's organized manufacturing sector," *Monthly Labor Review*, May 2010, pp. 3–22, on the Internet at **www.bls.gov/opub/mlr/2010/05/art1full.pdf** (visited June 21, 2010).

Continued—What about China and India?

[5] *China Labor Statistical Yearbook*, Beijing, China Statistics Press. Figures for 2002 are reproduced in Judith Banister, "Manufacturing earnings and compensation in China," *Monthly Labor Review*, August 2005, pp. 22–40, on the Internet at **www.bls.gov/opub/mlr/2005/08/art3full.pdf** (visited June 8, 2010); see table 2 on p. 26.

[6] In 2008, urban manufacturing employment constituted 35 percent of total manufacturing employment in China. Manufacturing activities are thus concentrated in rural areas where the average all-manufacturing hourly compensation cost is approximately one-third of that in urban centers. Earnings data for industries within rural manufacturing are currently not available, but the distinction between urban and rural manufacturing likely does not substantially affect conclusions about the range and dispersion of earnings in China.

[7] Data are from the Central Statistics Office's Annual Survey of Industries; some of the data are available on the Internet at **http://mospi.nic.in/mospi_asi.htm** (visited June 21, 2010).

[8] BLS hourly compensation costs for workers in Indian manufacturing refer to the organized (or formal) manufacturing sector only. Wage and benefit data on workers in the unorganized (or informal) manufacturing sector are not readily accessible. Unorganized-manufacturing workers account for approximately 80 percent of total manufacturing employment in India and earn substantially less than their organized-sector counterparts. For this reason, employers' average compensation costs for workers in organized manufacturing overstate average compensation costs for all Indian manufacturing workers, that is, those in the organized sector taken together with those in the unorganized sector. For further information on the procedures for estimating hourly compensation costs for India, and the associated data limitations, see Sincavage, "Labor costs in India's organized manufacturing sector."

[9] Typically, contract workers are excluded from BLS estimates of hourly compensation costs, but for India, contract workers are included in the compensation costs series because their wages are reported together with the earnings of other workers and cannot be separated. Because contract workers are included and because they receive fewer benefits than regular employees, hourly compensation costs for Indian manufacturing workers are likely lower than they otherwise would be. For further information on contract labor in India, see Sincavage, "Labor costs in India's organized manufacturing sector."

[10] For a discussion of the limitations associated with comparing compensation costs for China and India, see Sincavage, "Labor costs in India's organized manufacturing sector."

[11] For the most recent BLS work on China, see Erin Lett and Judith Banister, "China's manufacturing employment and compensation costs: 2002–06," *Monthly Labor Review*, April 2009, pp. 30–38, on the Internet at **www.bls.gov/opub/mlr/2009/04/art3full.pdf** (visited June 8, 2010). For the most recent BLS work on India, see Sincavage, "Labor costs in India's organized manufacturing sector."

range of manufacturing labor costs is to calculate the ratio of the mean hourly compensation cost in the highest ranked industry to that in the lowest ranked industry. (See table 4.)[26] In the United States, for example, the ratio of the highest ranked to lowest ranked industry ranged from 2.6 to 3.0 for the years between 1975 and 2007 for which data are displayed in table 4. In the most extreme case for the United States (1980), firms in the motor vehicle and parts industry experienced 3.0 times the labor costs of firms in the apparel industry. In table 4, countries are placed in descending order according to the 2007 ratio of compensation costs in the highest ranked industry to those in the lowest ranked industry. There is a clear break between the European countries in the bottom portion of the table with high-to-low ratios frequently under 2.0 and the North American and Asian economies with ratios well above this level. In 2007, for example, Mexican chemical manufacturers experienced 3.2 times the labor costs of Mexican employers in the wood products industry, whereas the compensation costs of Swedish chemical manufacturers were only 1.3 times the labor costs of Swedish firms in the apparel, textiles, and leather[27] industry. For select periods in Mexico, Japan, the United States, and Taiwan, firms in the highest ranked industry spent nearly 3 times or above 3 times the amount on compensation as firms in the lowest ranked industry. In contrast, for all European countries in this study, the highest ranked industry had compensation costs of less than twice as much as the lowest ranked industry for most years.

The relative distance between the industries with the highest compensation costs and those with the lowest compensation costs suggested by these ratios is further illustrated in chart 2. The range of compensation costs for each country in this study is shown for the years 1975, 1980, 1985, 1990, 1995, 2000, and 2007. (Data for Canada and Mexico are shown beginning in 1985.)[28] For each economy, average compensation costs for manufacturing as a whole are based to 100. Bold diamond markings denote the highest ranked industry in each country for a particular year, and bold circular markings represent the lowest ranked industry, with each notch along the connecting line representing an industry lying between the two extremes. Countries are ordered from left to right on the basis of the average difference between the industry with the lowest mean compensation cost and that with the highest during the period from 1975 to 2007. Thus, on average between 1975 and 2007, Taiwan exhibited the largest spread between the highest and lowest compensated industry, and Sweden had the smallest.

The chart demonstrates clearly that the overall range of labor costs in manufacturing varied greatly both within and across countries over time. For the European economies especially, the spread between the industry with the highest compensation costs and that with the lowest compensation costs was relatively small and stable. For others—such as Taiwan and Mexico, and to a lesser extent the

Table 4. Ratio of the mean hourly compensation cost in the industry within the manufacturing sector with the highest compensation costs to that with the lowest compensation costs, production workers, by country, selected years, 1975–2007

Country	1975	1980	1985	1990	1995	2000	2007
Mexico	—	—	2.1	2.7	3.1	3.5	3.2
Japan	2.9	2.8	2.9	3.1	3.0	2.7	2.8
United States	2.6	3.0	2.8	2.8	2.8	2.6	2.8
Canada	—	—	2.3	2.4	2.6	2.4	2.8
Taiwan	2.3	2.3	3.3	3.5	3.0	2.8	2.5
South Korea	2.3	2.2	2.3	2.4	2.2	2.8	2.1
United Kingdom	1.8	1.7	1.8	1.9	1.9	1.9	2.1
Germany	1.7	1.7	1.9	1.9	1.9	2.0	1.9
France	1.7	1.7	1.6	1.6	1.6	1.7	1.8
Italy	1.7	1.6	1.6	1.7	2.0	1.9	1.7
Sweden	1.4	1.3	1.3	1.3	1.4	1.4	1.3

NOTE: Dashes indicate data not available.

SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

United States and South Korea—the range of manufacturing labor costs was typically wider and contracted and expanded over time. Compared with these economies, the ranges of compensation costs in Japan and Canada were much less variable, although not as compressed as labor costs in Europe.

Despite these differences, some general trends in the range of labor costs are evident across economies. In Taiwan, Mexico, the United States, Canada, the United Kingdom, Germany, Italy, and France, the range of labor costs generally has widened over time; for these economies, the vertical distance between the highest and lowest compensated industry was larger in 2007 than in 1975.[29] Only in Japan, South Korea, and Sweden was the range of labor costs more compressed in 2007 than 32 years before. In most of the countries studied, fluctuations in the range of compensation costs were driven by movements in the highest ranked industries; the lower end of the spectrum of manufacturing compensation costs remained relatively stable over time, though there were some exceptions.

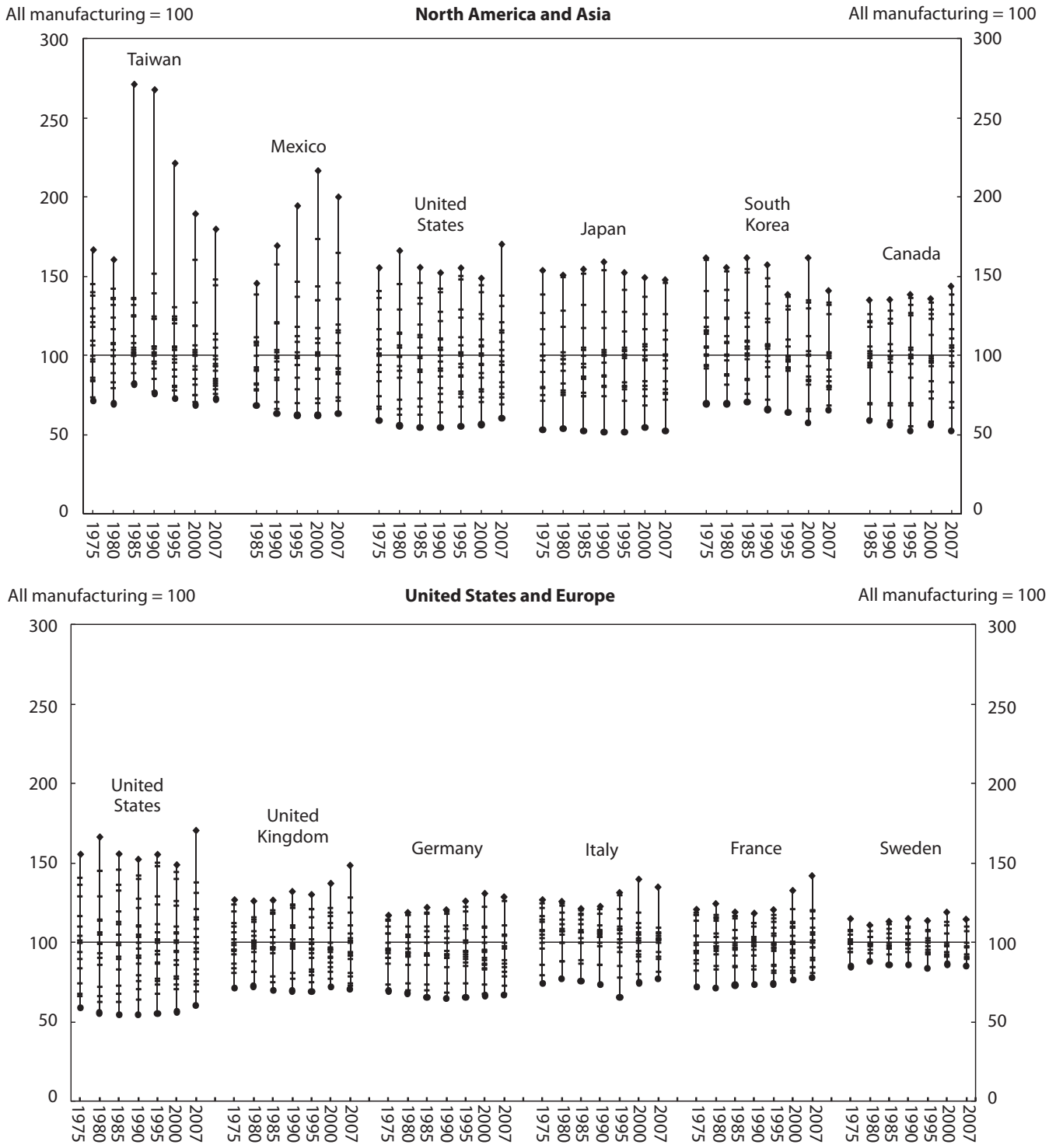
Dispersion of labor costs. Examining the notches along the connecting lines in chart 2 reveals differences among economies in the dispersion of compensation costs among industries. In Europe, and especially in Sweden, labor costs in the manufacturing industries covered in this study were closely clustered around the all-manufacturing average (100). For other economies, such as those of Taiwan and Mexico, compensation costs were very high in just a few industries—yielding a wide range of labor costs—while compensation costs in the remaining industries were relatively close to the manufacturing average. The dispersion of compensation costs in manufacturing thus varies across countries as well as over time.

To measure the dispersion of labor costs, this study uses the standard deviation of industries' compensation costs as determined by the variation of those costs from the manufacturing-sector average. In general, when industries' compensation costs are clustered tightly together, differentials are small and the standard deviation is small. Conversely, when industries' compensation costs are spread apart, the standard deviation is large. Chart 3 presents standard deviations as percentages of the all-manufacturing average (set at 100)[30] for each country and year from 1975 to 2007. In this chart, upward movements of a country's bars signify increases in that country's dispersion of labor costs, whereas downward movements denote a decrease.

Some trends in the dispersion of compensation costs are evident across countries. Dispersion generally increased between 1975 and 2007 in Mexico, Canada, Germany, the United Kingdom, and Sweden. Of these countries, Mexico exhibited the largest overall rise in dispersion, whereas in the other four countries dispersion reached its highest level during the mid-to-late 2000s. Conversely, in South Korea, the United States, Taiwan, and Italy, compensation cost differentials among industries on the whole decreased from 1975 to 2007. In both South Korea and Taiwan, dispersion levels were highest during the mid-1970s and declined overall in subsequent years. Only in Japan and in France were dispersion levels in 2007 relatively comparable to those seen over 30 years earlier.

All economies, however, experienced shorter term fluctuations in the dispersion of compensation costs throughout the period studied. In the United States, the standard deviation peaked during the early 1980s and mid-1990s

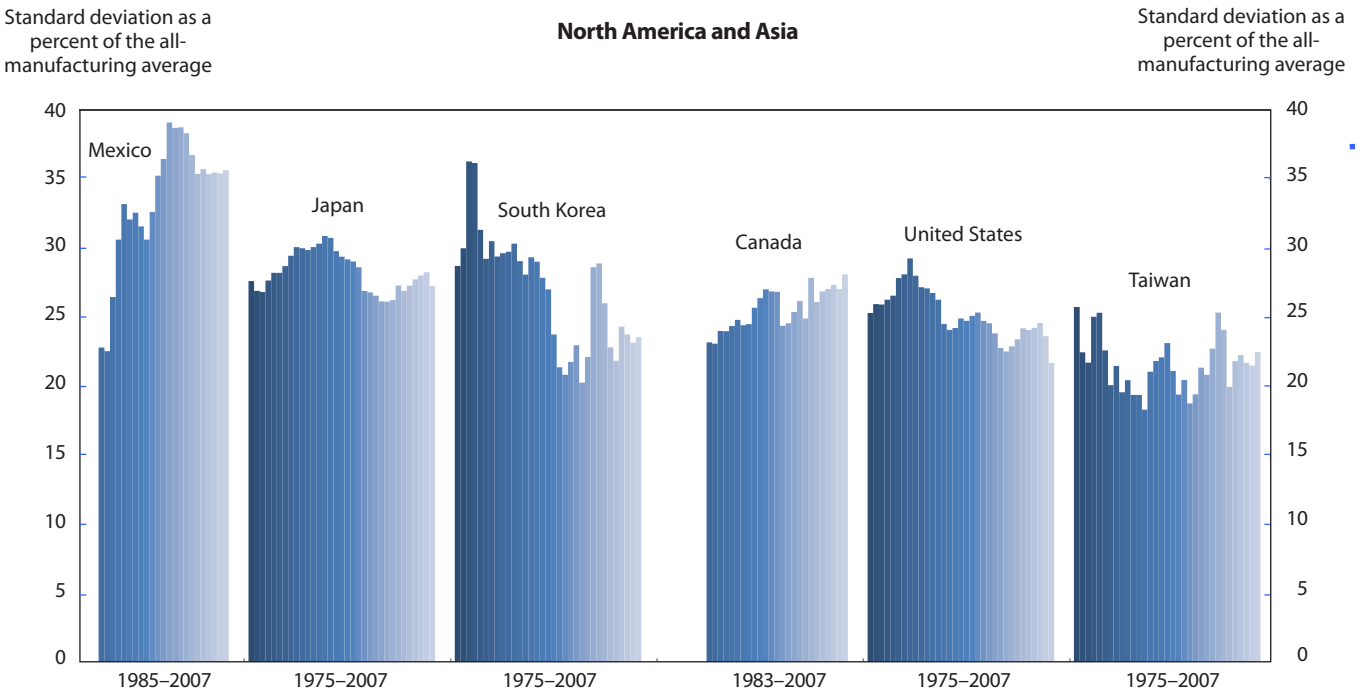
Chart 2. **Range and dispersion of mean hourly compensation costs across manufacturing industries, by country, selected years**

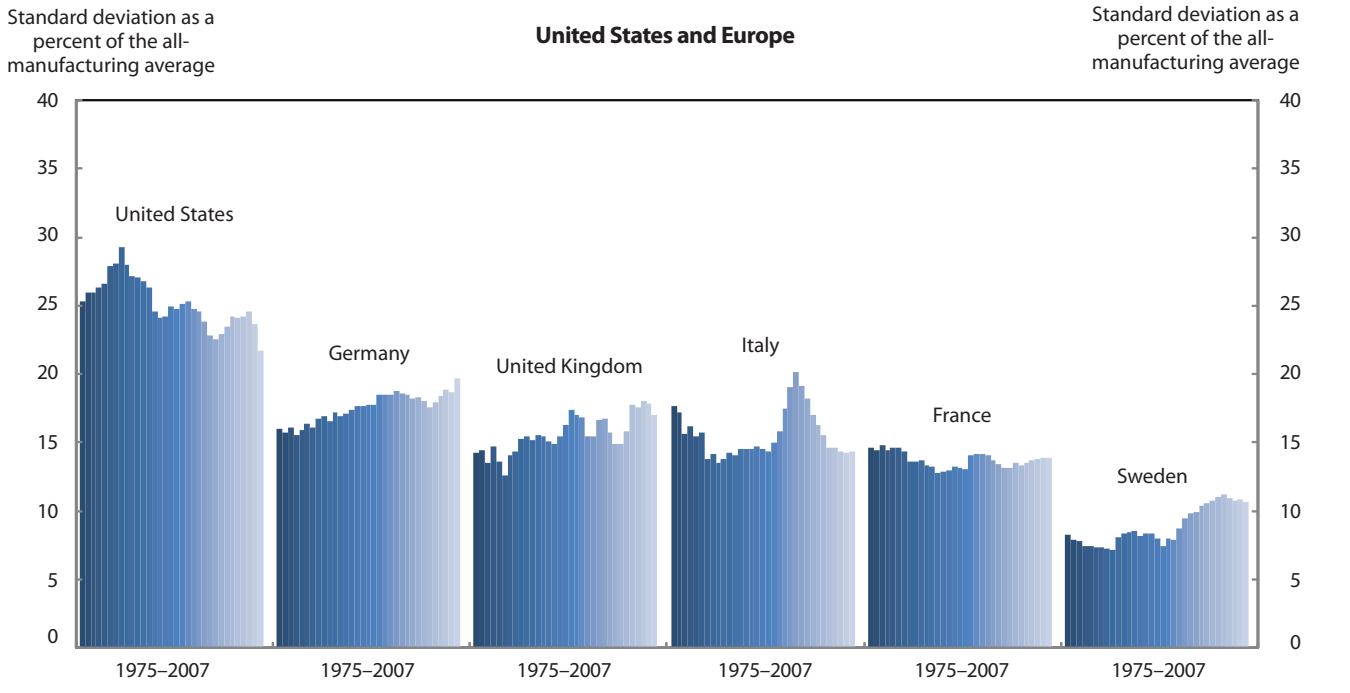


NOTE: Data are represented by notches along the lines in the chart. Thus, each notch represents one industry statistic (or multiple, overlapping statistics) for the economy in question. The U.S. Government does not recognize Taiwan as a country, but Taiwan is still regarded as an economy in this article.

SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

Chart 3. Dispersion of mean hourly compensation costs for production workers in manufacturing, selected years





SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**; and by use of "Hourly Compensation Costs for Production Workers in Manufacturing (SIC Basis), 30 Countries or Areas, 40 Manufacturing Industries, Selected Years, 1975-2002," on the Internet at **www.bls.gov/ilc/flshcindsic.htm**.

and reached lows during the late 1980s and late 1990s. In 2007, the United States exhibited the lowest dispersion in manufacturing compensation costs of the whole 1975–2007 period. As can be seen in chart 2, the volatility with regard to labor cost dispersion in the United States can be attributed mostly to changes in the higher cost industries—because lower cost industries have remained more stable over time relative to the all-manufacturing average. For example, the peak in dispersion in the early 1980s was due primarily to a significant rise in primary metal manufacturing labor costs relative to the all-manufacturing average, and the low seen in 2007 was due to the overall effect of relatively lower compensation costs in paper, chemical, primary metal, and transportation equipment manufacturing—all industries with medium–high or high compensation costs in the United States in 2007. Thus, despite an overall increase in the *range* of labor costs during the 1975–2007 period (as shown in chart 2), the *dispersion* of U.S. manufacturing compensation costs in the new millennium was at levels lower than those in the 1970s. That is, while the highest and lowest compensated industries in the United States generally spread further apart over time, labor costs in other manufacturing industries came closer together such that the overall degree of dispersion in recent years reached historic lows. As seen in charts 2 and 3, a similar phenomenon occurred in Taiwan: the range between the industry with the highest compensation costs and that with the lowest was larger in 2007 than in 1975, whereas dispersion decreased overall during that period. The opposite trend occurred in Sweden, where the range of labor costs decreased overall between 1975 and 2007 while the dispersion of compensation costs on the whole increased.

As seen in chart 3, dispersion levels and trends in Europe largely differed from those in North America and Asia. Overall, manufacturing labor cost differentials in

Table 5. Mean hourly compensation costs for production workers in industries within manufacturing, in U.S. dollars, 2007

NAICS code(s)	Industry	United States	Canada	Mexico	Japan	South Korea	Taiwan	France	Germany	Italy	Sweden	United Kingdom
31–33	(All) Manufacturing	25.27	29.08	2.92	19.75	16.02	6.58	28.57	33.26	28.23	36.03	30.18
311–312	Food, beverages, and tobacco	20.31	24.12	2.40	14.91	13.91	6.21	25.86	27.23	29.10	32.75	27.65
313–314	Textiles and textile products	18.58	19.54	2.58	16.52	10.51	5.51	23.00	24.27	26.46	—	24.48
315	Apparel	15.29	15.17	1.88	10.33	10.98	5.16	22.31	22.46	21.76	—	21.94
316	Leather and allied products	17.55	15.16	2.09	14.26	12.80	5.60	25.44	22.25	23.03	—	22.42
321	Wood products	19.20	27.16	1.85	15.59	12.61	4.97	24.22	26.18	—	32.57	21.36
322	Paper	27.50	33.87	2.61	19.92	14.62	5.95	31.13	32.03	29.84	41.17	27.75
325	Chemicals	29.21	30.54	5.84	29.15	21.43	9.49	34.28	34.64	38.02	41.28	33.51
326	Plastics and rubber products	22.59	—	2.68	19.10	13.45	5.42	27.61	28.02	25.34	33.42	28.40
327	Nonmetallic mineral products	24.33	30.99	3.14	19.83	16.38	6.15	30.03	28.93	28.62	35.09	31.11
331	Primary metals	28.92	41.74	4.25	28.84	20.16	9.75	34.24	36.78	30.81	39.78	30.53
332	Fabricated metal products	23.74	27.85	2.67	18.15	12.78	5.34	27.67	29.55	28.85	32.41	28.19
333	Machinery	26.10	32.21	3.38	22.89	16.20	6.42	30.31	34.82	30.02	34.81	31.82
334	Computer and electronic products	30.60	—	3.35	—	15.79	6.91	28.92	—	—	—	30.35
335	Electrical equipment, appliances, and components	23.80	29.78	3.50	21.70	12.94	6.14	28.91	32.48	25.75	—	27.09
336	Transportation equipment	34.86	38.42	3.95	24.95	22.54	7.23	34.28	41.93	29.46	38.48	38.68
3361–3363	Motor vehicles and parts	33.23	40.38	3.95	—	21.10	7.48	32.89	42.75	28.78	—	35.79
3364	Aerospace products and parts	42.98	36.64	4.82	—	—	11.82	40.50	—	—	—	44.74
337	Furniture and related products	20.90	20.44	2.14	15.06	—	4.77	24.23	—	—	—	23.72

NOTE: Dashes indicate data not available.
SOURCE: "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**.

Germany, the United Kingdom, Italy, France, and Sweden were lower and more stable than cost differentials in the North American and Asian economies. Germany displayed the overall highest degree of dispersion among the European economies in chart 3, and Sweden showed the lowest both among this group of countries and overall. For both Germany and Sweden, the overall rise in dispersion was mostly smooth and continuous throughout the period. Increasing labor costs (relative to labor costs in the national manufacturing sector) in transportation equipment manufacturing in Germany and in chemical product manufacturing in Sweden were the main contributors to this upward trend. Italy and the United Kingdom experienced the most variability in compensation cost differentials among the European countries. In Italy, the sharp rise in dispersion during the late 1990s was largely the result of labor cost increases in chemical manufacturing.

In South Korea and Taiwan, the degree of dispersion among industries was much more volatile than in any European country. In South Korea, for example, dispersion reached a low in 1997, then peaked only 3 years later. Sudden relative decreases and increases in primary metal and chemical manufacturing labor costs played a key role in this trend. Similarly, because of relatively increasing compensation costs in chemicals, differentials in Mexican manufacturing grew substantially throughout the 1980s and 1990s, reaching the highest levels of dispersion exhibited by any country in this study. For both Mexico and South Korea, however, high volatility was driven primarily by the Mexican peso crisis of the mid-1990s and the Asian financial crisis of the late 1990s.

Unlike industry rankings and groupings, which tend to be similar from one country to another, trends in the dispersion of compensation costs vary substantially across countries. The foreign economies studied here also differ in the degree to which the distributions of their compensation costs among industries are comparable to that of the United States, and these comparisons are the topic of the following section.

The industry–sector relationship

This article has discussed the intracountry relationships between manufacturing industries' compensation costs and the all-manufacturing average. It has also touched on the relationships between foreign manufacturing labor costs and U.S. manufacturing labor costs. Connecting all these relationships provides some clues as to whether the domestic positioning of industries in other countries is similar or dissimilar to that in the United States. Ultimately, structural similarities and dissimilarities can be identified and measured by addressing two basic questions.

First, in regard to hourly compensation costs, to what degree are the relationships between foreign manufacturing sectors and the U.S. sector indicative of the relationships between foreign manufacturing industries and the corresponding U.S. industries? For example, if all-manufacturing hourly compensation costs in Germany were 32 percent greater than those in the United States in 2007, does that mean that labor costs in each of Germany's manufacturing industries were around 32 percent greater than their U.S. counterparts? This can be determined by dividing the 2007 compensation cost levels for each foreign industry listed in table 5 by the corresponding industry in the United States. The resulting ratios are displayed in table 6, which shows how labor costs in foreign manufacturing industries compared with those in the same industries in the United States in 2007.

Second, to what extent is the industry-to-sector compensation cost relationship in other countries consistent with that of the United States? For example, if compensation costs in the U.S. chemicals industry were approximately 16 percent greater than the all-manufacturing average in 2007, was the corresponding ratio roughly equivalent in the other countries covered? Table 7 shows the compensation cost levels for each industry listed in table 5 divided by the all-manufacturing average in the country in question.

The degree of structural similarity with U.S. manufacturing across the countries covered can be gauged by dividing the foreign ratios from table 7 by the corresponding ratios in the United States. The resulting values are listed in table 8, which measures the magnitude of difference between foreign industry–sector relationships and the U.S. industry–sector relationship.[31]

For each datum, a value above 1.0 signifies that the ratio of the mean compensation cost in a particular industry to the all-manufacturing average is higher in the country in question than it is in the United States. A value below 1.0 means that the industry–sector compensation cost ratio is lower in the country in question than in the United States. A value close to 1.0 indicates a relationship between an industry and the manufacturing sector as a whole that is similar to the corresponding relationship in United States, whereas a value further away from 1.0 indicates relative positioning dissimilar to that of the United States.

Most of the ratios in table 8 cluster around the 1.0 benchmark in Germany, the United Kingdom, and South Korea, indicating that industries' labor costs relative to

Table 6. Mean hourly compensation costs for production workers in industries within manufacturing, measured in U.S. dollars and indexed to the corresponding mean cost in the United States, 2007

NAICS code(s)	Industry	United States	Canada	Mexico	Japan	South Korea	Taiwan	France	Germany	Italy	Sweden	United Kingdom
31–33	(All) Manufacturing	1.00	1.15	0.12	0.78	0.63	0.26	1.13	1.32	1.12	1.43	1.19
311–312	Food, beverages, and tobacco	1.00	1.19	.12	.73	.68	.31	1.27	1.34	1.43	1.61	1.36
313–314	Textiles and textile products	1.00	1.05	.14	.89	.57	.30	1.24	1.31	1.42	—	1.32
315	Apparel	1.00	.99	.12	.68	.72	.34	1.46	1.47	1.42	—	1.43
316	Leather and allied products	1.00	.86	.12	.81	.73	.32	1.45	1.27	1.31	—	1.28
321	Wood products	1.00	1.41	.10	.81	.66	.26	1.26	1.36	—	1.70	1.11
322	Paper	1.00	1.23	.09	.72	.53	.22	1.13	1.16	1.09	1.50	1.01
325	Chemicals	1.00	1.05	.20	1.00	.73	.32	1.17	1.19	1.30	1.41	1.15
326	Plastics and rubber products	1.00	—	.12	.85	.60	.24	1.22	1.24	1.12	1.48	1.26
327	Nonmetallic mineral products	1.00	1.27	.13	.82	.67	.25	1.23	1.19	1.18	1.44	1.28
331	Primary metals	1.00	1.44	.15	1.00	.70	.34	1.18	1.27	1.07	1.38	1.06
332	Fabricated metal products	1.00	1.17	.11	.76	.54	.22	1.17	1.24	1.22	1.37	1.19
333	Machinery	1.00	1.23	.13	.88	.62	.25	1.16	1.33	1.15	1.33	1.22
334	Computer and electronic products	1.00	—	.11	—	.52	.23	.95	—	—	—	.99
335	Electrical equipment, appliances, and components	1.00	1.25	.15	.91	.54	.26	1.21	1.36	1.08	—	1.14
336	Transportation equipment	1.00	1.10	.11	.72	.65	.21	.98	1.20	.85	1.10	1.11
3361–3363	Motor vehicles and parts	1.00	1.22	.12	—	.63	.23	.99	1.29	.87	—	1.08
3364	Aerospace products and parts	1.00	.85	.11	—	—	.28	.94	—	—	—	1.04
337	Furniture and related products	1.00	.98	.10	.72	—	.23	1.16	—	—	—	1.13

NOTE: Dashes indicate data not available.
SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm.**

labor costs in manufacturing as a whole in these countries are fairly closely aligned with corresponding data from the United States. For example, in Germany only one of the industries has a value greater than 1.1 and only one has a value less than 0.9. This means that most German industries have compensation costs that relate to costs in all of German manufacturing similarly to the way that U.S. industries' compensation costs relate to costs in all of U.S. manufacturing. Conversely, Mexico, Taiwan, and Italy each contain multiple industries with very high and low values, which suggests less similarity between these countries and the United States as regards the ratio in question.

Table 8 also provides some insight as to which foreign industries are most and least similar to their counterparts in the United States—in terms of how their compensation costs relate to the all-manufacturing average. The foreign industry–sector ratios for some industries, including plastics and rubber products, machinery, fabricated metal products, and nonmetallic mineral products, are consistently more similar to the corresponding ratios in the United States than those ratios are for most industries. This can be seen by the prevalence of values for these industries tightly clustered around the 1.0 benchmark in table 8. In contrast, foreign industries relatively less similar to their counterparts in the United States in this respect include chemicals, apparel, and primary metals, which is indicated by the greater number of relatively high and low values across these rows in table 8.

This analysis suggests that in comparing compensation costs internationally it is important to be aware that compensation costs relative to those in the United States can show considerable variation in certain countries and industries. All manufacturing is an excellent indicator of relative costs in manufacturing industries for Germany, the United Kingdom, and South Korea, but a poor in-

Table 7. Mean hourly compensation costs for production workers in industries within manufacturing, indexed to the mean cost in all manufacturing, 2007

NAICS code(s)	Industry	United States	Canada	Mexico	Japan	South Korea	Taiwan	France	Germany	Italy	Sweden	United Kingdom
31–33	(All) Manufacturing	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
311–312	Food, beverages, and tobacco	.80	.83	.82	.75	.87	.94	.91	.82	1.03	.91	.92
313–314	Textiles and textile products	.74	.67	.88	.84	.66	.84	.81	.73	.94	—	.81
315	Apparel	.61	.52	.64	.52	.69	.78	.78	.68	.77	—	.73
316	Leather and allied products	.69	.52	.72	.72	.80	.85	.89	.67	.82	—	.74
321	Wood products	.76	.93	.63	.79	.79	.76	.85	.79	—	.90	.71
322	Paper	1.09	1.16	.89	1.01	.91	.90	1.09	.96	1.06	1.14	.92
325	Chemicals	1.16	1.05	2.00	1.48	1.34	1.44	1.20	1.04	1.35	1.15	1.11
326	Plastics and rubber products	.89	—	.92	.97	.84	.82	.97	.84	.90	.93	.94
327	Nonmetallic mineral products	.96	1.07	1.08	1.00	1.02	.93	1.05	.87	1.01	.97	1.03
331	Primary metals	1.14	1.44	1.46	1.46	1.26	1.48	1.20	1.11	1.09	1.10	1.01
332	Fabricated metal products	.94	.96	.91	.92	.80	.81	.97	.89	1.02	.90	.93
333	Machinery	1.03	1.11	1.16	1.16	1.01	.98	1.06	1.05	1.06	.97	1.05
334	Computer and electronic products	1.21	—	1.15	—	.99	1.05	1.01	—	—	—	1.01
335	Electrical equipment, appliances, and components	.94	1.02	1.20	1.10	.81	.93	1.01	.98	.91	—	.90
336	Transportation equipment	1.38	1.32	1.35	1.26	1.41	1.10	1.20	1.26	1.04	1.07	1.28
3361–3363	Motor vehicles and parts	1.31	1.39	1.35	—	1.32	1.14	1.15	1.29	1.02	—	1.19
3364	Aerospace products and parts	1.70	1.26	1.65	—	—	1.80	1.42	—	—	—	1.48
337	Furniture and related products	.83	.70	.73	.76	—	.72	.85	—	—	—	.79

NOTE: Dashes indicate data not available.
SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**.

dicator for Mexico, Taiwan, and Italy. Also, it can be assumed that, for some industries, like plastics and rubber, the relationship between compensation costs in those industries in foreign countries and compensation costs in all manufacturing in those countries is similar to the corresponding relationship in the United States. However, more caution is necessary when one looks at other industries, such as chemicals and apparel.

MEASURED IN U.S. DOLLARS, GROWTH RATES of compensation costs in other countries fluctuated greatly over time—due in large part to exchange rate variations—but industries exhibited little movement from one category of hourly compensation costs to another, and thus, their relative rankings remained fairly stable from 1975 to 2007. Put another way, most of the industries within manufacturing with relatively very low compensation costs in 1975 still have relatively very low costs today. Some of the countries with the lowest compensation costs in manufacturing in 1975, however, have seen their relative position change significantly over time. These findings indicate that, although labor costs within countries have changed and the countries' relative international positions have shifted over time, the basic hierarchy of industries has remained fairly stable and has not tended to deviate much from country to country or from period to period. It is difficult, however, to predict future labor cost rankings by country with any confidence. The experience of South Korea and Mexico demonstrates this: aspects of manufacturing compensation costs have changed dramatically in these countries since the 1970s.

Employers' compensation costs for production workers

Table 8. Hourly compensation costs for production workers, industry-to-sector relationship in foreign economies relative to the United States, 2007

[Mean cost in each respective country's manufacturing sector = 1.00, and mean cost in each respective U.S. industry = 1.00]

NAICS code(s)	Industry	United States	Canada	Mexico	Japan	South Korea	Taiwan	France	Germany	Italy	Sweden	United Kingdom
31–33	(All) Manufacturing	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
311–312	Food, beverages, and tobacco	1.00	1.03	1.02	.94	1.08	1.17	1.02	1.02	1.28	1.13	1.14
313–314	Textiles and textile products	1.00	.91	1.20	1.14	.89	1.14	.99	.99	1.27	—	1.10
315	Apparel	1.00	.86	1.06	.86	1.13	1.30	1.12	1.12	1.27	—	1.20
316	Leather and allied products	1.00	.75	1.03	1.04	1.15	1.23	1.28	.96	1.17	—	1.07
321	Wood products	1.00	1.23	.83	1.04	1.04	.99	1.12	1.04	—	1.19	.93
322	Paper	1.00	1.07	.82	.93	.84	.83	1.00	.88	.97	1.05	.84
325	Chemicals	1.00	.91	1.73	1.28	1.16	1.25	1.04	.90	1.17	.99	.96
326	Plastics and rubber products	1.00	—	1.03	1.08	.94	.92	1.08	.94	1.00	1.04	1.05
327	Nonmetallic mineral products	1.00	1.11	1.12	1.04	1.06	.97	1.09	.90	1.05	1.01	1.07
331	Primary metals	1.00	1.25	1.27	1.28	1.10	1.29	1.05	.97	.95	.96	.88
332	Fabricated metal products	1.00	1.02	.97	.98	.85	.86	1.03	.95	1.09	.96	.99
333	Machinery	1.00	1.07	1.12	1.12	.98	.94	1.03	1.01	1.03	.94	1.02
334	Computer and electronic products	1.00	—	.95	—	.81	.87	.84	—	—	—	.83
335	Electrical equipment, appliances, and components	1.00	1.09	1.27	1.17	.86	.99	1.07	1.04	.97	—	.95
336	Transportation equipment	1.00	.96	.98	.92	1.02	.80	.87	.91	.76	.77	.93
3361–3363	Motor vehicles and parts	1.00	1.06	1.03	—	1.00	.86	.88	.98	.78	—	.90
3364	Aerospace products and parts	1.00	.74	.97	—	—	1.06	.83	—	—	—	.87
337	Furniture and related products	1.00	.85	.89	.92	—	.88	1.03	—	—	—	.95

NOTE: Dashes indicate data not available.
SOURCE: Authors' calculations made by use of "International Hourly Compensation Costs for Production Workers, by Sub-Manufacturing Industry, 1992-2007," on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm**.

in manufacturing are only one measure of international competitiveness in the global economy, but they serve as very useful data. Because the manufacture of goods can differ so much from one industry within manufacturing to another, focusing the analysis at the industry level helps to build a stronger understanding of relative costs and international competitiveness. With increasingly global labor markets and interconnected manufacturing operations, the task of understanding compensation costs becomes both more complex and more important over time. □

Notes

ACKNOWLEDGMENTS: The authors wish to thank Chris Sparks and Connie Sorrentino of BLS for their expertise, comments, and support throughout several drafts of this article; George Cook of BLS for his assistance in maintaining the extensive database and in updating tables and charts; and Robert Bednarzik of the Georgetown Public Policy Institute, Maury Gittleman and Peter Meyer of BLS, and Bernhard Weber of Switzerland's State Secretariat for Economic Affairs, for their helpful comments.

[1] See chart 3.6, "Manufacturing output as a percent of world manufacturing output, 2008," on p. 29 of *Charting International Labor Comparisons* (Bureau of Labor Statistics, 2010), on the Internet at **www.bls.gov/ilc/chartbook.htm** (visited June 3, 2010).

[2] About one-fourth of U.S. manufacturing productivity gains are due to increased importing of intermediate inputs (that is, increased offshoring). See Lucy P. Eldridge and Michael J. Harper, "Effects of

imported intermediate inputs on productivity," *Monthly Labor Review*, this issue, pp. 3–15.

[3] Recent declines in U.S. manufacturing employment are also the result of slowing growth in the demand for manufactured goods in the United States, weakened demand for U.S. goods in other countries' markets, and manufacturers' increasing use of contract or temporary workers, among other reasons. For further information, see *Factors Underlying the Decline in Manufacturing Employment Since 2000* (Congressional Budget Office, 2008), on the Internet at **http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1590&context=key_workplace** (visited June 3, 2010).

[4] In addition to employers' compensation costs, there are other important labor-related indicators of competitiveness, such as labor productivity and unit labor costs. Furthermore, businesses face non-labor related costs—such as the costs of materials, fuel, capital equipment, and transport of goods—that can be substantial factors in international competitiveness. For more information on international competitiveness, including comparisons of labor productivity and trends in unit labor costs, see section 3 in *Charting International Labor Comparisons.*

[5] The analysis in this article follows the North American Industry Classification System (NAICS). The United States, Canada, and Mexico report data for manufacturing and other sectors of the economy according to NAICS. Information about NAICS, including industry definitions and descriptions, is available on the Internet through the U.S. Bureau of Labor Statistics and the U.S. Census Bureau at **www.bls.gov/bls/naics.htm** and **www.census.gov/epcd/www/naics.html**, respectively. Most of the 18 industries analyzed in this article are NAICS subsectors. The article also analyzes the manufacturing sector as a whole.

[6] This article presents compensation cost differentials by industry but does not analyze the factors affecting them, though some causal factors that have emerged from other studies are mentioned in the literature review.

[7] See *International Comparisons of Hourly Compensation Costs in Manufacturing, 2007*, USDL 09-0304 (Bureau of Labor Statistics), Mar. 26, 2009, on the Internet at **www.bls.gov/news.release/pdf/ichcc.pdf** (visited June 3, 2010). BLS publishes comparative hourly compensation cost statistics for all employees and production workers in manufacturing for the United States and 35 foreign economies. Hourly compensation cost data are prepared by BLS in order to assess international differences in labor costs paid by employers. For several reasons, comparisons based on the more readily available average earnings statistics published by many countries can be misleading. For example, national definitions of average earnings differ considerably. In addition, average earnings do not include all components of labor compensation costs, and the omitted components of compensation costs frequently represent a large proportion of total compensation costs.

[8] Production workers generally include those employees who are engaged in fabricating, assembly, and related activities; material handling, warehousing, and shipping; maintenance and repair; janitorial and guard services; auxiliary production (for example, power plants); or other services closely related to the above activities. Working supervisors generally are included; apprentices and other trainees generally are excluded.

[9] Hourly compensation cost data for production workers by industry (within manufacturing) are available on the Internet at **www.bls.gov/ilc/flshcpwindnaics.htm** and **www.bls.gov/ilc/flshcindsic.htm** (both visited June 3, 2010).

[10] Hourly compensation cost data for all employees by industry (within manufacturing) are available on the Internet at **www.bls.gov/ilc/flshcaeindnaics.htm** (visited June 3, 2010).

[11] Jelle Visser, "Union membership statistics in 24 countries," *Monthly Labor Review,* January 2006, pp. 38–49, on the Internet at **www.bls.gov/opub/mlr/2006/01/art3full.pdf** (visited June 3, 2010).

[12] The petroleum and coal products manufacturing industry (NAICS 324) also is classified in the manufacturing sector under NAICS, but is not one of the 18 manufacturing industries evaluated in this article. This is because data for petroleum and coal are not available for all countries and because, in countries that do report data on this industry, it is a highly compensated outlier that significantly skews the distribution of industry compensation costs. Thus, removing petroleum and coal from consideration allows for a more meaningful and comparative analysis of compensation costs across countries.

[13] To address differences in industrial classification systems among countries, BLS uses published industry definitions to identify the specific manufacturing activities classified under a given industry. BLS then adjusts source data accordingly in order to construct compensation cost estimates for similar manufacturing activities. Also, industry data for specific components of labor costs often are not available for all years. To address this, BLS estimates missing labor cost components by use of data for similar industries or for the manufacturing sector as a whole. If source data for a particular industry are derived from a small sample size, unusual and unexpected events occurring at large companies within the industry can have an extremely large effect on the reported data. In some instances this has been addressed by calculating a moving average of compensation costs, thereby smoothing out trends to reduce the effects of statistical anomalies.

[14] For Sweden, the other missing industries are computers and electronic products (NAICS 334); electrical equipment, appliances, and components (NAICS 335); and furniture and related products (NAICS 337).

[15] More formally, hourly compensation costs comprise (1) hourly direct pay, (2) employer social insurance expenditures, and (3) other labor taxes. Hourly direct pay is defined as all payments made directly to the worker, before payroll deductions of any kind, consisting of (a) pay for time worked (basic wages; pay for piecework; overtime premiums; shift, holiday, or night work premiums; cost-of-living adjustments; and bonuses and premiums paid each pay period) and (b) other direct pay (pay for time not worked, comprising vacations, holidays, and other leave except sick leave; seasonal and irregular bonuses; allowances for family events, commuting expenses, etc.; the cash value of payments in kind; and severance pay, in cases in which it is explicitly not linked to a collective agreement). Social insurance expenditures refer to the value of social contributions incurred by employers in order to secure entitlement to social benefits for their employees; these contributions often provide delayed (future) income and benefits to employees. Social insurance expenditures comprise employer expenditures for legally required insurance programs and for contractual and private benefit plans. The category of other labor taxes refers to taxes on payrolls or employment (or reductions to reflect subsidies), even if they do not finance programs that directly benefit workers.

[16] The rates used are prevailing commercial market exchange rates as published by either the U.S. Federal Reserve Board or the International Monetary Fund.

[17] The compensation cost data published by BLS are not adjusted with purchasing power parity exchange-rate calculations because the

measures focus on employer costs, not worker welfare. The hourly compensation cost figures in U.S. dollars analyzed in this article allow for comparisons of employers' labor costs; they do not provide intercountry comparisons of the purchasing power of workers' incomes. Prices of goods and services vary greatly among countries, and the commercial market exchange rates used to compare employers' labor costs do not reliably indicate relative differences in prices. A purchasing power parity exchange rate, that is, the number of currency units from one country required to buy goods and services equivalent to what can be purchased with one unit of currency from another country, must be used for meaningful international comparisons of the relative purchasing power of worker incomes.

[18] For example, see Stanley Lebergott, "Wage Structures," *Review of Economics and Statistics*, November 1947, pp. 274–85. Also see J. T. Dunlop and M. Rothbaum, "International Comparisons of Wage Structures," *International Labour Review*, April 1955, pp. 347–63.

[19] *Ibid.*

[20] Alan B. Krueger and Lawrence H. Summers, *Reflections on the Inter-Industry Wage Structure* (Cambridge, Mass., National Bureau of Economic Research, June 1986), on the Internet at **www.nber.org/papers/W1968.pdf** (visited June 3, 2010).

[21] Josef Zweimüller and Erling Barth, *Bargaining Structure, Wage Determination, and Wage Dispersion in 6 OECD-Countries* (University of California, Berkeley, August 1992), on the Internet at **http://repositories.cdlib.org/iir/iirwps/iirwps-047-92/** (visited June 3, 2010).

[22] Maury Gittleman and Edward N. Wolff, "International Comparisons of Inter-Industry Wage Differentials," *Review of Income and Wealth*, September 1993, pp. 295–312, on the Internet at **www.roiw.org/1993/295.pdf** (visited June 3, 2010).

[23] *Employment in Europe 2003* (Brussels, Belgium, European Commission) on the Internet at **http://ec.europa.eu/social/main.jsp?catId=119&langId=en** (visited June 3, 2010).

[24] A standard deviation is understood as a measurement of the dispersion of a set of numbers around their arithmetic mean. The standard deviation measure used to determine the results in exhibit 2, however, is calculated on the basis of the average hourly compensation cost for all manufacturing, which is technically a weighted average, not the mean of all industries within manufacturing. The difference between the weighted average and the mean is negligible.

[25] The exception to this rule is paper manufacturing. As explained in greater detail later, in 2007 the industry was classified as medium–low in 5 of the 11 economies that reported data for paper, as medium–high in another 5 of the 11 economies, and as high in the remaining economy. Because of this one entry in the high category, paper is classified as medium–high in table 4 even though the industry was not placed in this compensation cost category for a majority of the economies.

[26] The analysis of the range—and later on of the dispersion—of compensation costs is greatly influenced by the specific set of industries covered for each country. There are gaps in the annual data coverage for certain countries and industries. Despite these exceptions, most comparisons are made for an identical set of industries for all countries, which allows the the presented compensation cost data to be relevant and meaningful.

[27] For Sweden, textiles and textile product mills (NAICS 313–314), apparel manufacturing (NAICS 315), and leather and allied products manufacturing (NAICS 316) are not reported separately but are combined into textiles, apparel, and leather manufacturing (NAICS 313–316).

[28] For Canada and Mexico, data are shown for the years 1985, 1990, 1995, 2000, and 2007 only. For these countries, source data on labor costs in industries within manufacturing are unavailable for the years 1975 and 1980.

[29] For Mexico, the overall increase in the range of compensation costs occurred between 1985 and 2007. Source data on manufacturing labor costs for the country are available starting with 1985.

[30] Technically, a standard deviation is defined as a measurement of the dispersion of a set of numbers around their arithmetic mean. In chart 3, however, the standard deviation measure is calculated around the all-manufacturing benchmark of 100—which is not an arithmetic mean—so it would be more accurately described as a square root of the sum of squares around 100. The term "standard deviation" is used as a substitute for this mathematical expression and is meant to convey a sense of the dispersion of these industry compensation costs.

[31] It is also possible to measure the degree of structural similarity between manufacturing in other countries and U.S. manufacturing—and arrive at the exact same values as those in table 8—by dividing the ratios for the industries within manufacturing in table 6 by the corresponding all-manufacturing ratio for each country.

CEOs' facial traits

Research in economics indicates that, on the whole, better looking workers earn more than workers who are less attractive. But what about CEOs? And what about facial characteristics other than beauty? John R. Graham, Campbell R. Harvey, and Manju Puri, all from Duke University's business school, attempt to answer these questions in a National Bureau of Economic Research paper titled "A Corporate Beauty Contest" (NBER Working paper No. 15906, April 2010).

Graham, Harvey, and Puri conducted a study in which participants viewed photographs and, using a one-to-five scale, rated people whom they had never seen on competence, trustworthiness, beauty, and likability. The participants also looked at pairs of photographs selected which person appeared more competent, more trustworthy, and so forth. When respondents were asked to choose which of two persons appeared more competent—one person being a CEO and the other not—they chose the CEO about 54 percent of the time. Participants in the study also viewed the CEOs as more attractive, less trustworthy, and less likable, although the differences for these other traits were not as sharp as that for competent looks.

Respondents also looked at photos of CEOs of large companies alongside photos of CEOs of small companies. People who headed big firms were judged to be more competent, less trustworthy, and less likable than those who headed small firms. However, it was the small-firm CEOs who were most often chosen as the more attractive. Again, the sharpest difference was for the competence rating.

The researchers also examined CEO pay as a function of facial features and found a statistically significant positive association between pay and "competent looks" but not between pay and any other facial features. Notably, the authors did not find a significant association between CEOs' performance and any facial features, including competent looks. Participants in the study also indicated whether they found the people in the pictures to appear "baby-faced" or "mature," and the researchers calculated bivariate correlations between "baby-facedness" and the four aforementioned facial traits. They found that baby-facedness was negatively and significantly correlated with competent looks and was positively and significantly correlated with the appearance of likability. No significant correlations were found for attractiveness or the appearance of trustworthiness. Graham, Harvey, and Puri conclude that, just as there is an apparently undeserved wage premium for beauty in many occupations, there appears to be an undeserved premium for competent looks among CEOs.

With no jobs, young people move home

In the current economic climate, graduation from high school or college no longer goes hand in hand with the traditional transition to independence: moving out on one's own. Young jobseekers are among the hardest hit by the recession, with 18- to 24-year-olds having the highest unemployment rates since the 1950s. As apartment rental costs increase and jobs remain scarce, many young people have been forced to move back to (or remain at) their parents' houses—an important way in which the family unit insures against labor market shocks.

As compared with youth in other countries, young people in the United States generally move out of their parents' homes at an early age, but they are thought to be more apt to move back repeatedly after they leave. Despite a large amount of anecdotal evidence supporting this claim, economist Greg Kaplan found that there are not many data on parent–youth living arrangements *after* young people leave home for the first time. Kaplan's study entitled "Boomerang Kids: Labor Market Dynamics and Moving Back Home" (Federal Reserve Bank of Minneapolis, Working Paper 675, October 2009) examines the relationship—and determines a link—between the living arrangements of young people who do not go to college and labor market outcomes in the United States.

Using data from the National Longitudinal Survey of Youth 1997, Kaplan draws two central conclusions from his study. His first conclusion is that moving back home is common for young people who do not attend college. In place of the once widespread one-way transition to independent living, young people today often take part in an extended transitional period, with multiple movements in and out of their parents' homes. Of those young people who move away from the parental home for at least 1 month, 51 percent of men and 49 percent of women move back home at least once by age 23.

Kaplan also concludes that these movements are closely related to labor market outcomes. A transition from employment to unemployment increases the "hazard" of moving back to the parental home by 64 percent for males and 72 percent for females. Kaplan acknowledges that other factors (such as marriage, childbirth, and parental circumstances) certainly have an influence on living-arrangement decisions, but in general the movements in and out of parental homes are closely related to labor market events. Employment is associated with a 24 percent reduction in the probability of moving back home for men and a 33 percent reduction in the probability for women. Kaplan's conclusions suggest that labor market factors in large part control the decisions that young people make about their living arrangements and that residing in parental homes may be a vital way to cushion families against labor market shocks.

Licensing Occupations: Ensuring Quality or Restricting Competition? Morris M. Kleiner, Kalamazoo, MI, W.E. Upjohn Institute for Employment Research, 2006. 195 pp., $18.00/paper.

According to author Morris Kleiner, if occupational licensure isn't already on your radar then it should be. Its effects reach beyond occupation to impact the quality and price consumers pay for all services rendered. Kleiner notes that occupational licensing is the fastest growing labor market institution. While the percentages of the labor force who are union members has declined from almost 35 percent to 12.5 percent since the 1950s, for example, the percentage of the labor force affected by licensure has more than quadrupled during that same time period, from 4.5 percent to more than 20 percent. This is due in part to the fast growth of the occupations that are licensed and, to a greater extent, because more and more occupations are now regulated.

Kleiner has published extensively on occupational licensure, despite the fact that data on the subject is limited because occupational regulations vary by jurisdiction. His expertise on the topic allows him to compose one of the most comprehensive texts on occupational licensing available today. Kleiner's analysis is creative and well thought out. An understanding of some basic economic theory and empirical methods is necessary to allow readers a complete picture of the analysis. However, any reader interested in occupational licensing should be able to grasp the concepts and conclusions of the book without knowledge of, for example, the Rasch index mentioned in chapter four. Kleiner also organizes each chapter with sub-headings, making it easy for readers to pass over complex methodology.

Kleiner first answers the question he poses in the book's title: how has licensing affected quality and competition in the service industry? The author concludes that there are no overall quality benefits to consumers from occupational licensure. That is, there are no observable quality increases after occupations become licensed. Consumers seem to be willing to pay higher prices for those licensed services, however, because of a perceived reduction in "downside risk."

The second half of the question addresses whether licensing restricts competition by limiting labor supply. Economic theory suggests that licensing occupations would restrict labor supply by regulating entry requirements, hence slowing growth. In fact, the author explains that licensed occupations have been growing fast; which is why he argues that licensing is such an important labor market institution.

To this reader, observed employment growth and economic theory seem to conflict here. If licensing reduces the supply of labor, then why are licensed occupations growing faster than other occupations? This question begged to be answered throughout the book. Could it be that these services have unique price elasticities such that their demand curves do not look like the typical downward sloping demand curve? Or, put another way, as the price for a product increases consumers typically respond by demanding less of it—but, as the price of licensed services increase, consumers may actually demand *more* of these services because of a perceived increase in quality.

Kleiner's evidence on consumers' response to price increase and risk aversion suggests that licensed services may indeed have nontraditional demand. In the concluding chapter the author briefly describes an empirical analysis that lead him to determine that licensing dampens employment growth and accelerates decline. The author believes this proves the impact of supply restriction is greater than possible increases in demand because of perceived quality. In this reviewer's opinion, Kleiner's conclusion may be true for the three occupations he analyzed but it could be very different given more occupational data. For that reason, I believe these effects deserve a more thorough analysis.

Overall, *Licensing Occupations* provides a wealth of knowledge on occupational licensing. Available literature on occupational licensing is scant and often focuses on only one or a few occupations. Kleiner's comprehensive approach answers the two primary questions people have about occupational licensing. Although I was left wanting more, that is no condemnation of Kleiner's analysis. I liken it to the cliffhanger in a work of fiction; it has made me eager for the next installment. *Licensing Occupations* is a superb seminal work on licensing that is sure to influence future research on the subject. □

—Alice Ramey
Economist
Bureau of Labor Statistics

Notes on Current Labor Statistics

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

General notes

The following notes apply to several tables in this section:

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

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

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

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

Sources of information

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

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

www.bls.gov/cps/

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

www.bls.gov/ces/

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

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

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

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

www.bls.gov/lpc/

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

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

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

Symbols

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

Comparative Indicators

(Tables 1–3)

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

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

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

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

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

Notes on the data

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

Employment and Unemployment Data

(Tables 1; 4–29)

Household survey data

Description of the series

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

Definitions

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

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

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

Notes on the data

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

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

At the beginning of each calendar year, historical seasonally adjusted data usually are revised, and projected seasonal adjustment factors are calculated for use during the January–June period. The historical seasonally adjusted data usually are revised for only the most recent 5 years. In July, new seasonal adjustment factors, which incorporate the experience through June, are produced for the July–December period, but no revisions are made in the historical data.

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

Establishment survey data

Description of the series

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

Definitions

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

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

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

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

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

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

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

Notes on the data

With the release of data for January 2010, the CES program introduced its annual revision of national estimates of employment, hours, and earnings from the monthly survey of nonfarm establishments. Each year, the CES survey realigns its sample-based estimates to incorporate universe counts of employment—a process known as benchmarking. Comprehensive counts of employment, or benchmarks, are derived primarily from unemployment insurance (UI) tax reports that nearly all employers are required to file with State Workforce Agencies. With the release in June 2003, CES completed the transition from its original quota sample design to a probability-based sample design. The industry-coding update included reconstruction of historical estimates in order to preserve time series for data users. Normally 5 years of seasonally adjusted data are revised with each benchmark revision. However, with this release, the entire new time series history for all CES data series were re-seasonally adjusted due to the NAICS conversion, which resulted in the revision of all CES time series.

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

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

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

In the establishment survey, estimates for the most recent 2 months are based on incomplete returns and are published as preliminary in the tables (12–17 in the *Review).* When all returns have been received, the estimates are revised and published as "final" (prior to any benchmark revisions) in the third month of their appearance. Thus, December data are published as preliminary in January and February and as final in March. For the same reasons, quarterly establishment data (table 1) are preliminary for the first 2 months of publication and final in the third month. Fourth-quarter data are 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 2007, publications presenting data from the Covered Employment and Wages program have

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

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

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

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

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

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

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

Job Openings and Labor Turnover Survey

Description of the series

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

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

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

Definitions

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

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

by 100.

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

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

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

Notes on the data

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

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

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

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

JOLTS hires and separations estimates cannot be used to exactly explain net changes in payroll employment. Some reasons why it is problematic to compare changes in payroll employment with JOLTS hires and separations, especially on a monthly basis, are: (1) the reference period for payroll employment is the pay period including the 12th of the month, while the reference period for hires and separations is the calendar month; and (2) payroll employment can vary from month to month simply because part-time and on-call workers may not always work during the pay period that includes the 12th of the month. Additionally, research has found that some reporters systematically underreport separations relative to hires due to a number of factors, including the nature of their payroll systems and practices. The shortfall appears to be about 2 percent or less over a 12-month period.

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

Compensation and Wage Data

(Tables 1–3; 30–37)

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

Employment Cost Index

Description of the series

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

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

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

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

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

Definitions

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

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

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

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

Notes on the data

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

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

ADDITIONAL INFORMATION on the Employment Cost Index is available at **www.bls.gov/ncs/ect/home.htm** or by telephone at (202) 691–6199.

National Compensation Survey Benefit Measures

Description of the series

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

Definitions

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

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

Employees in contributory plans are considered as **participating** in an insurance or retirement plan if they have paid required contributions and fulfilled any applicable service requirement. Employees in noncontributory plans are counted as participating regardless of whether they have fulfilled the service requirements.

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

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

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

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

Notes on the data

ADDITIONAL INFORMATION ON THE NCS benefit measures is available at **www.bls.gov/ncs/ebs/home.htm** or by telephone at (202) 691–6199.

Work stoppages

Description of the series

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

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

Definitions

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

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

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

in the stoppages.

Days of idleness as a percent of 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 stop-pages data is available at **www. bls. gov/cba/home.htm** or by telephone at (202) 691–6199.

Price Data

(Tables 2; 38–46)

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

Consumer Price Indexes

Description of the series

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

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

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

Notes on the data

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

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

Producer Price Indexes

Description of the series

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

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

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

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

Capital services are the flow of services from the capital stock used in production. It is developed from measures of the net stock of physical assets—equipment, structures, land, and inventories—weighted by rental prices for each type of asset.

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

Notes on the data

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

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

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

FOR ADDITIONAL INFORMATION on this

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

Industry productivity measures

Description of the series

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

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

Definitions

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

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

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

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

Notes on the data

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

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

International Comparisons

(Tables 51–53)

Labor force and unemployment

Description of the series

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

Definitions

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

Notes on the data

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

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

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

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

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

FOR ADDITIONAL INFORMATION on

this series, contact the Division of Foreign Labor Statistics: (202) 691–5654 or **flshelp@bls.gov.**

Manufacturing productivity and labor costs

Description of the series

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

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

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

Definitions

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

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

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

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

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

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

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

Notes on the data

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

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

Occupational Injury and Illness Data

(Tables 54–55)

Survey of Occupational Injuries and Illnesses

Description of the series

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

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

Definitions

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

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

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

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

days of restricted work activity, or both.

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

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

Notes on the data

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

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

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

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

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

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

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

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

Census of Fatal Occupational Injuries

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

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

Definition

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

Notes on the data

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

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

1. Labor market indicators

Selected indicators	2008	2009	2008				2009				2010
			I	II	III	IV	I	II	III	IV	I
Employment data											
Employment status of the civilian noninstitutional population (household survey):[1]											
Labor force participation rate	66.0	65.4	66.1	66.1	66.0	65.9	65.7	65.7	65.3	64.9	64.8
Employment-population ratio	62.2	59.3	62.8	62.6	62.0	61.3	60.3	59.7	59.0	58.4	58.5
Unemployment rate	5.8	9.3	5.0	5.3	6.0	6.9	8.2	9.3	9.7	10.0	9.7
Men	6.1	10.3	5.1	5.5	6.4	7.6	9.0	10.4	10.8	11.2	10.7
16 to 24 years	14.4	20.1	12.7	13.3	14.9	16.5	18.1	19.9	20.7	22.0	21.7
25 years and older	4.8	8.8	3.9	4.2	5.1	6.1	7.6	8.9	9.4	9.5	9.0
Women	5.4	8.1	4.8	5.1	5.6	6.2	7.3	8.0	8.3	8.7	8.5
16 to 24 years	11.2	14.9	10.2	11.0	11.7	11.7	13.2	14.6	15.6	15.9	15.5
25 years and older	4.4	6.9	3.9	4.1	4.5	5.3	6.2	6.9	7.1	7.5	7.4
Employment, nonfarm (payroll data), in thousands:[1]											
Total nonfarm	136,790	130,912	137,858	137,285	136,283	134,328	132,070	130,640	129,857	129,588	129,750
Total private	114,281	108,369	115,419	114,775	113,715	111,767	109,510	108,075	107,377	107,107	107,254
Goods-producing	21,334	18,620	21,815	21,511	21,092	20,294	19,233	18,503	18,124	17,906	17,870
Manufacturing	13,406	11,883	13,654	13,528	13,270	12,822	12,212	11,782	11,634	11,534	11,579
Service-providing	115,456	112,292	116,043	115,774	115,191	114,031	112,837	112,137	111,733	111,682	111,880
Average hours:											
Total private	33.6	33.1	33.8	33.7	33.5	33.3	33.1	33.0	33.1	33.2	33.3
Manufacturing	40.8	39.8	41.3	41.0	40.4	39.8	39.4	39.5	39.9	40.5	41.0
Overtime	3.7	2.9	4.1	3.9	3.5	2.9	2.6	2.8	3.0	3.4	3.7
Employment Cost Index[1, 2, 3]											
Total compensation:											
Civilian nonfarm[4]	2.6	1.5	.8	.7	.8	.3	.4	.4	.5	.3	.6
Private nonfarm	2.4	1.2	.9	.7	.6	.2	.4	.3	.4	.2	.8
Goods-producing[5]	2.4	1.0	1.0	.7	.4	.3	.4	.3	.2	.2	1.1
Service-providing[5]	2.5	1.3	.9	.7	.6	.3	.4	.3	.4	.3	.7
State and local government	3.0	2.4	.5	.5	1.7	.3	.6	.5	1.0	.3	.3
Workers by bargaining status (private nonfarm):											
Union	2.8	2.9	.8	.8	.7	.6	1.0	.6	.6	.5	1.5
Nonunion	2.4	.9	.9	.7	.6	.2	.3	.2	.3	.2	.7

[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	2008	2009	2008				2009				2010
			I	II	III	IV	I	II	III	IV	I
Compensation data[1, 2, 3]											
Employment Cost Index—compensation:											
Civilian nonfarm	2.6	1.5	0.8	0.7	0.8	0.3	0.4	0.4	0.5	0.3	0.6
Private nonfarm	2.4	1.2	.9	.7	.6	.2	.4	.3	.4	.2	.8
Employment Cost Index—wages and salaries:											
Civilian nonfarm	2.7	1.5	.8	.7	.8	.3	.4	.4	.5	.3	.4
Private nonfarm	2.6	1.4	.9	.7	.6	.3	.4	.3	.5	.3	.5
Price data[1]											
Consumer Price Index (All Urban Consumers): All Items	3.8	-.4	1.7	2.5	0	-3.9	1.2	1.4	.1	.0	.8
Producer Price Index:											
Finished goods	6.3	-2.5	2.8	4.2	-.1	-7.4	.2	3.1	-.6	1.7	1.7
Finished consumer goods	7.4	-3.8	3.4	5.2	-.4	-10.0	.3	4.3	-.7	2.1	2.3
Capital equipment	2.9	2.0	.7	.6	1.0	1.9	-.2	-.2	-.4	.8	.0
Intermediate materials, supplies, and components	10.3	-8.3	5.0	6.9	.7	-13.6	-2.1	2.8	1.2	1.1	2.4
Crude materials	21.6	-30.5	14.5	14.9	-15.6	-32.1	-7.2	12.3	-3.5	11.7	10.2
Productivity data[4]											
Output per hour of all persons:											
Business sector	2.1	3.8	-.2	2.9	1.4	2.1	.9	7.6	8.0	6.6	3.0
Nonfarm business sector	2.0	3.7	-.5	3.0	1.1	2.2	.9	7.6	7.8	6.3	3.6
Nonfinancial corporations[5]	2.2	1.9	-3.2	6.6	4.9	.2	-6.8	9.2	3.9	8.2	–

[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—				
	2009				2010	2009				2010
	I	II	III	IV	I	I	II	III	IV	I
Average hourly compensation:[1]										
All persons, business sector	-4.1	7.5	0.0	0.4	1.7	1.7	3.3	1.8	0.9	2.4
All persons, nonfarm business sector	-4.2	7.7	-.4	.4	1.9	1.8	3.4	1.8	.8	2.3
Employment Cost Index—compensation:[2]										
Civilian nonfarm[3]	.4	.4	.5	.3	.6	2.1	1.8	1.5	1.5	1.7
Private nonfarm	.4	.3	.4	.2	.8	1.9	1.5	1.2	1.2	1.6
Union	1.0	.6	.6	.5	1.5	3.0	2.9	2.9	2.9	3.4
Nonunion	.3	.2	.3	.2	.7	1.8	1.2	.9	.9	1.4
State and local government	.6	.5	1.0	.3	.3	3.1	3.2	2.4	2.4	2.0
Employment Cost Index—wages and salaries:[2]										
Civilian nonfarm[3]	.4	.4	.5	.3	.4	2.2	1.8	1.5	1.5	1.5
Private nonfarm	.4	.3	.5	.3	.5	2.0	1.6	1.4	1.4	1.5
Union	.6	.7	.5	.6	.5	3.1	2.7	2.6	2.6	2.5
Nonunion	.4	.2	.4	.3	.5	1.9	1.4	1.1	1.2	1.3
State and local government	.5	.5	.8	.2	.3	3.0	3.0	2.1	2.0	1.8

[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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
TOTAL															
Civilian noninstitutional population[1]	233,788	235,801	235,271	235,452	235,655	235,870	236,087	236,322	236,550	236,743	236,924	236,832	236,998	237,159	237,329
Civilian labor force	154,287	154,142	154,718	154,956	154,759	154,351	154,426	153,927	153,854	153,720	153,059	153,170	153,512	153,910	154,715
Participation rate	66.0	65.4	65.8	65.8	65.7	65.4	65.4	65.1	65.0	64.9	64.6	64.7	64.8	64.9	65.2
Employed	145,362	139,877	140,902	140,438	140,038	139,817	139,433	138,768	138,242	138,381	137,792	138,333	138,641	138,905	139,455
Employment-population ratio[2]	62.2	59.3	59.9	59.6	59.4	59.3	59.1	58.7	58.4	58.5	58.2	58.4	58.5	58.6	58.8
Unemployed	8,924	14,265	13,816	14,518	14,721	14,534	14,993	15,159	15,612	15,340	15,267	14,837	14,871	15,005	15,260
Unemployment rate	5.8	9.3	8.9	9.4	9.5	9.4	9.7	9.8	10.1	10.0	10.0	9.7	9.7	9.7	9.9
Not in the labor force	79,501	81,659	80,554	80,496	80,895	81,519	81,661	82,396	82,696	83,022	83,865	83,663	83,487	83,249	82,614
Men, 20 years and over															
Civilian noninstitutional population[1]	104,453	105,493	105,196	105,299	105,412	105,530	105,651	105,780	105,906	106,018	106,125	105,998	106,100	106,198	106,301
Civilian labor force	79,047	78,897	79,106	79,339	79,246	78,984	79,196	78,977	79,024	78,901	78,402	78,225	78,471	78,796	79,356
Participation rate	75.7	74.8	75.2	75.3	75.2	74.8	75.0	74.7	74.6	74.4	73.9	73.8	74.0	74.2	74.7
Employed	74,750	71,341	71,665	71,552	71,354	71,255	71,142	70,861	70,662	70,662	70,391	70,390	70,623	70,913	71,358
Employment-population ratio[2]	71.6	67.6	68.1	68.0	67.7	67.5	67.3	67.0	66.7	66.7	66.3	66.4	66.6	66.8	67.1
Unemployed	4,297	7,555	7,441	7,787	7,892	7,728	8,055	8,116	8,362	8,239	8,011	7,835	7,848	7,882	7,998
Unemployment rate	5.4	9.6	9.4	9.8	10.0	9.8	10.2	10.3	10.6	10.4	10.2	10.0	10.0	10.0	10.1
Not in the labor force	25,406	26,596	26,091	25,961	26,166	26,547	26,455	26,803	26,882	27,117	27,723	27,774	27,628	27,403	26,945
Women, 20 years and over															
Civilian noninstitutional population[1]	112,260	113,265	112,999	113,089	113,189	113,296	113,405	113,522	113,636	113,737	113,832	113,796	113,886	113,974	114,066
Civilian labor force	68,382	68,856	69,105	69,060	68,984	68,910	68,847	68,686	68,687	68,742	68,620	68,949	69,069	69,027	69,265
Participation rate	60.9	60.8	61.2	61.1	60.9	60.8	60.7	60.5	60.4	60.4	60.3	60.6	60.6	60.6	60.7
Employed	65,039	63,699	64,147	63,847	63,741	63,685	63,552	63,280	63,133	63,269	62,998	63,527	63,538	63,495	63,552
Employment-population ratio[2]	57.9	56.2	56.8	56.5	56.3	56.2	56.0	55.7	55.6	55.6	55.3	55.8	55.8	55.7	55.7
Unemployed	3,342	5,157	4,957	5,213	5,243	5,225	5,295	5,406	5,554	5,473	5,622	5,422	5,531	5,532	5,712
Unemployment rate	4.9	7.5	7.2	7.5	7.6	7.6	7.7	7.9	8.1	8.0	8.2	7.9	8.0	8.0	8.2
Not in the labor force	43,878	44,409	43,894	44,029	44,205	44,386	44,558	44,837	44,949	44,994	45,212	44,848	44,818	44,947	44,801
Both sexes, 16 to 19 years															
Civilian noninstitutional population[1]	17,075	17,043	17,076	17,064	17,053	17,044	17,031	17,020	17,008	16,988	16,967	17,038	17,012	16,987	16,962
Civilian labor force	6,858	6,390	6,507	6,557	6,529	6,457	6,383	6,264	6,143	6,077	6,037	5,996	5,972	6,087	6,094
Participation rate	40.2	37.5	38.1	38.4	38.3	37.9	37.5	36.8	36.1	35.8	35.6	35.2	35.1	35.8	35.9
Employed	5,573	4,837	5,089	5,039	4,943	4,877	4,740	4,627	4,448	4,450	4,403	4,416	4,480	4,496	4,544
Employment-population ratio[2]	32.6	28.4	29.8	29.5	29.0	28.6	27.8	27.2	26.1	26.2	25.9	25.9	26.3	26.5	26.8
Unemployed	1,285	1,552	1,418	1,518	1,586	1,581	1,643	1,637	1,696	1,627	1,634	1,580	1,491	1,591	1,550
Unemployment rate	18.7	24.3	21.8	23.2	24.3	24.5	25.7	26.1	27.6	26.8	27.1	26.4	25.0	26.1	25.4
Not in the labor force	10,218	10,654	10,569	10,507	10,525	10,586	10,648	10,756	10,865	10,911	10,930	11,041	11,041	10,899	10,867
White[3]															
Civilian noninstitutional population[1]	189,540	190,902	190,552	190,667	190,801	190,944	191,086	191,244	191,394	191,516	191,628	191,454	191,552	191,648	191,749
Civilian labor force	125,635	125,644	126,108	126,326	126,088	125,911	126,038	125,581	125,567	125,258	124,605	124,579	124,847	125,054	125,779
Participation rate	66.3	65.8	66.2	66.3	66.1	65.9	66.0	65.7	65.6	65.4	65.0	65.1	65.2	65.3	65.6
Employed	119,126	114,996	115,896	115,451	115,102	114,984	114,784	114,215	113,754	113,669	113,339	113,797	113,865	114,108	114,484
Employment-population ratio[2]	62.8	60.2	60.8	60.6	60.3	60.2	60.1	59.7	59.4	59.4	59.1	59.4	59.4	59.5	59.7
Unemployed	6,509	10,648	10,213	10,874	10,986	10,927	11,254	11,366	11,813	11,589	11,266	10,782	10,982	10,945	11,295
Unemployment rate	5.2	8.5	8.1	8.6	8.7	8.7	8.9	9.1	9.4	9.3	9.0	8.7	8.8	8.8	9.0
Not in the labor force	63,905	65,258	64,443	64,342	64,713	65,033	65,048	65,663	65,827	66,258	67,024	66,875	66,705	66,594	65,970
Black or African American[3]															
Civilian noninstitutional population[1]	27,843	28,241	28,153	28,184	28,217	28,252	28,290	28,330	28,369	28,404	28,437	28,526	28,559	28,591	28,624
Civilian labor force	17,740	17,632	17,795	17,716	17,665	17,651	17,596	17,455	17,516	17,660	17,600	17,749	17,748	17,871	17,951
Participation rate	63.7	62.4	63.2	62.9	62.6	62.5	62.2	61.6	61.7	62.2	61.9	62.2	62.1	62.5	62.7
Employed	15,953	15,025	15,119	15,066	15,048	15,050	14,914	14,754	14,763	14,904	14,758	14,820	14,936	14,920	14,985
Employment-population ratio[2]	57.3	53.2	53.7	53.5	53.3	53.3	52.7	52.1	52.0	52.5	51.9	52.0	52.3	52.2	52.4
Unemployed	1,788	2,606	2,676	2,650	2,617	2,600	2,682	2,701	2,754	2,757	2,843	2,929	2,812	2,951	2,966
Unemployment rate	10.1	14.8	15.0	15.0	14.8	14.7	15.2	15.5	15.7	15.6	16.2	16.5	15.8	16.5	16.5
Not in the labor force	10,103	10,609	10,358	10,467	10,552	10,601	10,694	10,875	10,853	10,744	10,837	10,777	10,811	10,720	10,673

See footnotes at end of table.

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

[Numbers in thousands]

Employment status	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Hispanic or Latino ethnicity															
Civilian noninstitutional population[1]	32,141	32,891	32,671	32,753	32,839	32,926	33,017	33,110	33,202	33,291	33,379	33,251	33,335	33,414	33,498
Civilian labor force	22,024	22,352	22,403	22,459	22,348	22,540	22,320	22,444	22,492	22,564	22,404	22,578	22,648	22,707	22,684
Participation rate	68.5	68.0	68.6	68.6	68.1	68.5	67.6	67.8	67.7	67.8	67.1	67.9	67.9	68.0	67.7
Employed	20,346	19,647	19,855	19,599	19,609	19,748	19,411	19,595	19,553	19,692	19,513	19,730	19,848	19,848	19,850
Employment-population ratio[2]	63.3	59.7	60.8	59.8	59.7	60.0	58.8	59.2	58.9	59.2	58.5	59.3	59.5	59.4	59.3
Unemployed	1,678	2,706	2,548	2,860	2,739	2,792	2,908	2,849	2,939	2,872	2,891	2,848	2,800	2,859	2,834
Unemployment rate	7.6	12.1	11.4	12.7	12.3	12.4	13.0	12.7	13.1	12.7	12.9	12.6	12.4	12.6	12.5
Not in the labor force	10,116	10,539	10,268	10,294	10,491	10,386	10,697	10,666	10,710	10,727	10,976	10,674	10,687	10,706	10,814

[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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Characteristic															
Employed, 16 years and older	145,362	139,877	140,902	140,438	140,038	139,817	139,433	138,768	138,242	138,381	137,792	138,333	138,641	138,905	139,455
Men	77,486	73,670	74,107	73,974	73,727	73,613	73,436	73,120	72,844	72,794	72,499	72,516	72,813	73,092	73,548
Women	67,876	66,208	66,794	66,463	66,311	66,205	65,997	65,648	65,398	65,587	65,293	65,817	65,828	65,813	65,907
Married men, spouse present	45,860	43,998	44,424	44,214	44,242	43,955	43,847	43,656	43,401	43,336	43,312	43,126	43,168	43,083	43,205
Married women, spouse present	35,869	35,207	35,438	35,347	35,402	35,321	35,151	34,891	34,736	34,867	35,004	35,073	35,248	34,887	34,643
Persons at work part time[1]															
All industries:															
Part time for economic reasons	5,875	8,913	8,888	9,048	8,962	8,808	9,077	9,158	9,240	9,225	9,165	8,316	8,791	9,054	9,152
Slack work or business conditions	4,169	6,648	6,699	6,788	6,779	6,831	6,895	6,815	6,882	6,684	6,453	5,873	6,185	6,177	6,268
Could only find part-time work	1,389	1,966	1,819	1,917	1,970	1,826	2,065	2,081	2,084	2,238	2,346	2,295	2,212	2,388	2,489
Part time for noneconomic reasons	19,343	18,710	18,976	18,848	18,715	18,993	18,768	18,590	18,632	18,354	18,364	18,563	18,360	18,379	18,140
Nonagricultural industries:															
Part time for economic reasons	5,773	8,791	8,795	8,894	8,825	8,664	8,946	8,983	9,158	9,137	9,055	8,193	8,651	8,946	9,049
Slack work or business conditions	4,097	6,556	6,634	6,670	6,685	6,713	6,797	6,695	6,797	6,616	6,378	5,792	6,079	6,099	6,213
Could only find part-time work	1,380	1,955	1,826	1,910	1,964	1,789	2,046	2,063	2,033	2,241	2,349	2,288	2,199	2,406	2,486
Part time for noneconomic reasons	19,005	18,372	18,595	18,478	18,358	18,610	18,383	18,251	18,317	18,066	18,056	18,218	18,043	18,066	17,798

[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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Characteristic															
Total, 16 years and older	5.8	9.3	8.9	9.4	9.5	9.4	9.7	9.8	10.1	10.0	10.0	9.7	9.7	9.7	9.9
Both sexes, 16 to 19 years	18.7	24.3	21.8	23.2	24.3	24.5	25.7	26.1	27.6	26.8	27.1	26.4	25.0	26.1	25.4
Men, 20 years and older	5.4	9.6	9.4	9.8	10.0	9.8	10.2	10.3	10.6	10.4	10.2	10.0	10.0	10.0	10.1
Women, 20 years and older	4.9	7.5	7.2	7.5	7.6	7.6	7.7	7.9	8.1	8.0	8.2	7.9	8.0	8.0	8.2
White, total [1]	5.2	8.5	8.1	8.6	8.7	8.7	8.9	9.1	9.4	9.3	9.0	8.7	8.8	8.8	9.0
Both sexes, 16 to 19 years	16.8	21.8	20.0	20.7	21.7	22.5	24.3	23.3	25.1	23.0	23.6	23.5	22.5	23.7	23.5
Men, 16 to 19 years	19.1	25.2	22.9	24.6	24.4	26.1	28.1	26.8	28.6	26.0	27.4	27.9	25.0	27.0	27.3
Women, 16 to 19 years	14.4	18.4	17.1	16.6	19.0	18.7	20.2	19.7	21.4	20.0	19.8	18.8	19.9	20.3	19.6
Men, 20 years and older	4.9	8.8	8.5	9.0	9.2	9.1	9.3	9.6	9.9	9.8	9.3	9.1	9.0	8.9	9.2
Women, 20 years and older	4.4	6.8	6.4	6.9	6.8	6.8	7.0	7.1	7.4	7.4	7.4	6.8	7.3	7.3	7.4
Black or African American, total [1]	10.1	14.8	15.0	15.0	14.8	14.7	15.2	15.5	15.7	15.6	16.2	16.5	15.8	16.5	16.5
Both sexes, 16 to 19 years	31.2	39.5	35.1	39.9	38.5	36.2	35.0	41.7	42.1	49.8	48.4	43.8	42.0	41.1	37.3
Men, 16 to 19 years	35.9	46.0	41.7	46.2	44.8	39.2	46.8	50.8	43.6	57.1	52.2	48.3	44.9	47.4	35.2
Women, 16 to 19 years	26.8	33.4	28.2	34.8	33.1	33.5	24.5	32.7	40.7	41.4	44.8	39.4	39.1	34.7	39.4
Men, 20 years and older	10.2	16.3	17.2	16.7	16.4	16.0	17.0	16.5	17.0	16.8	16.6	17.6	17.8	19.0	18.0
Women, 20 years and older	8.1	11.5	11.4	11.3	11.5	11.9	12.2	12.5	12.5	11.7	13.1	13.3	12.1	12.4	13.7
Hispanic or Latino ethnicity	7.6	12.1	11.4	12.7	12.3	12.4	13.0	12.7	13.1	12.7	12.9	12.6	12.4	12.6	12.5
Married men, spouse present	3.4	6.6	6.3	6.7	6.9	6.9	7.1	7.3	7.5	7.5	7.3	6.6	6.8	6.7	6.6
Married women, spouse present	3.6	5.5	5.5	5.6	5.6	5.5	5.5	5.8	5.9	5.7	5.8	5.8	6.1	6.0	6.3
Full-time workers	5.8	10.0	9.6	10.2	10.3	10.2	10.5	10.7	11.1	11.0	10.9	10.4	10.5	10.5	10.6
Part-time workers	5.5	6.0	6.0	6.1	6.0	6.0	6.3	6.4	6.1	5.6	6.0	6.4	6.2	6.7	6.5
Educational attainment [2]															
Less than a high school diploma	9.0	14.6	14.9	15.4	15.4	15.3	15.5	15.0	15.5	15.0	15.3	15.2	15.6	14.5	14.7
High school graduates, no college [3]	5.7	9.7	9.4	10.0	9.8	9.4	9.8	10.8	11.2	10.4	10.5	10.1	10.5	10.8	10.6
Some college or associate degree	4.6	8.0	7.5	7.8	8.0	8.0	8.2	8.6	9.0	9.0	9.0	8.5	8.0	8.2	8.3
Bachelor's degree and higher [4]	2.6	4.6	4.4	4.8	4.7	4.7	4.7	4.8	4.7	4.9	5.0	4.9	5.0	4.9	4.9

[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.

7. Duration of unemployment, monthly data seasonally adjusted

[Numbers in thousands]

Weeks of unemployment	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Less than 5 weeks	2,932	3,165	3,284	3,219	3,152	3,181	2,992	2,938	3,131	2,774	2,929	3,008	2,748	2,646	2,682
5 to 14 weeks	2,804	3,828	3,962	4,300	3,994	3,539	4,093	3,838	3,671	3,517	3,486	3,362	3,412	3,228	2,991
15 weeks and over	3,188	7,272	6,296	7,013	7,844	7,819	7,849	8,405	8,804	8,976	8,969	8,945	8,829	8,983	8,969
15 to 26 weeks	1,427	2,775	2,571	2,983	3,404	2,847	2,825	2,958	3,184	3,075	2,840	2,632	2,696	2,436	2,253
27 weeks and over	1,761	4,496	3,725	4,030	4,440	4,972	5,024	5,447	5,620	5,901	6,130	6,313	6,133	6,547	6,716
Mean duration, in weeks	17.9	24.4	21.8	22.9	24.4	25.3	25.2	26.5	27.2	28.6	29.1	30.2	29.7	31.2	33.0
Median duration, in weeks	9.4	15.1	13.1	14.9	18.2	15.9	15.5	17.8	19.0	20.2	20.5	19.9	19.4	20.0	21.6

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

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

[Numbers in thousands]

Reason for unemployment	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Job losers[1]	4,789	9,160	8,867	9,428	9,562	9,549	9,814	10,236	10,261	9,965	9,701	9,323	9,550	9,354	9,246
On temporary layoff	1,176	1,630	1,638	1,842	1,741	1,670	1,704	1,918	1,671	1,548	1,558	1,454	1,558	1,595	1,359
Not on temporary layoff	3,614	7,530	7,229	7,586	7,821	7,880	8,110	8,318	8,590	8,418	8,143	7,869	7,992	7,758	7,887
Job leavers	896	882	887	909	822	882	835	869	909	929	932	914	866	894	938
Reentrants	2,472	3,187	3,127	3,200	3,322	3,306	3,294	3,255	3,461	3,221	3,334	3,585	3,451	3,544	3,739
New entrants	766	1,035	919	977	969	994	1,096	1,134	1,114	1,270	1,270	1,235	1,238	1,197	1,231
Percent of unemployed															
Job losers[1]	53.7	64.2	64.3	65.0	65.2	64.8	65.3	66.1	65.2	64.8	63.7	61.9	63.2	62.4	61.0
On temporary layoff	13.2	11.4	11.9	12.7	11.9	11.3	11.3	12.4	10.6	10.1	10.2	9.7	10.3	10.6	9.0
Not on temporary layoff	40.5	52.8	52.4	52.3	53.3	53.5	53.9	53.7	54.6	54.7	53.4	52.3	52.9	51.8	52.0
Job leavers	10.0	6.2	6.4	6.3	5.6	6.0	5.6	5.6	5.8	6.0	6.1	6.1	5.7	6.0	6.2
Reentrants	27.7	22.3	22.7	22.0	22.6	22.4	21.9	21.0	22.0	20.9	21.9	23.8	22.8	23.6	24.7
New entrants	8.6	7.3	6.7	6.7	6.6	6.8	7.3	7.3	7.1	8.3	8.3	8.2	8.2	8.0	8.1
Percent of civilian labor force															
Job losers[1]	3.1	5.9	5.7	6.1	6.2	6.2	6.4	6.6	6.7	6.5	6.3	6.1	6.2	6.1	6.0
Job leavers	.6	.6	.6	.6	.5	.6	.5	.6	.6	.6	.6	.6	.6	.6	.6
Reentrants	1.6	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.3	2.2	2.3	2.4
New entrants	.5	.7	.6	.6	.6	.6	.7	.7	.7	.8	.8	.8	.8	.8	.8

[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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Total, 16 years and older	5.8	9.3	8.9	9.4	9.5	9.4	9.7	9.8	10.1	10.0	10.0	9.7	9.7	9.7	9.9
16 to 24 years	12.8	17.6	16.7	17.5	17.9	18.0	18.3	18.3	19.2	19.1	18.9	18.9	18.5	18.8	19.6
16 to 19 years	18.7	24.3	21.8	23.2	24.3	24.5	25.7	26.1	27.6	26.8	27.1	26.4	25.0	26.1	25.4
16 to 17 years	22.1	25.9	23.4	23.8	25.5	26.0	26.5	28.2	30.2	28.8	29.9	27.9	28.2	29.6	29.2
18 to 19 years	16.8	23.4	21.7	23.2	23.8	23.3	25.2	24.4	25.7	26.1	25.8	25.4	23.7	24.4	24.1
20 to 24 years	10.2	14.7	14.6	15.1	15.2	15.3	15.1	15.0	15.6	15.9	15.6	15.8	16.0	15.8	17.2
25 years and older	4.6	7.9	7.6	8.1	8.2	8.1	8.4	8.6	8.7	8.5	8.5	8.2	8.3	8.3	8.3
25 to 54 years	4.8	8.3	7.9	8.5	8.5	8.4	8.8	9.1	9.2	8.9	8.9	8.6	8.6	8.8	8.7
55 years and older	3.8	6.6	6.4	6.7	7.0	6.7	6.8	6.8	7.0	7.1	7.2	6.8	7.1	6.9	7.0
Men, 16 years and older	6.1	10.3	10.1	10.5	10.6	10.5	11.0	11.0	11.4	11.2	11.0	10.8	10.7	10.7	10.8
16 to 24 years	14.4	20.1	19.6	20.3	19.9	20.3	20.8	20.9	22.2	21.8	22.0	22.5	21.2	21.6	22.5
16 to 19 years	21.2	27.8	25.9	27.1	26.5	27.9	29.9	29.9	31.0	30.4	30.9	30.6	27.6	29.7	29.3
16 to 17 years	25.2	28.7	26.4	26.5	26.5	28.5	29.6	31.1	33.5	30.5	33.1	30.8	30.4	30.9	32.2
18 to 19 years	19.0	27.4	25.7	28.0	27.1	27.3	29.9	28.3	28.9	30.5	30.2	30.3	27.3	29.1	27.8
20 to 24 years	11.4	17.0	17.0	17.4	17.2	17.1	17.0	17.2	18.6	18.3	18.4	19.2	18.7	18.4	19.9
25 years and older	4.8	8.8	8.5	9.0	9.2	9.1	9.5	9.7	9.7	9.5	9.2	9.0	9.1	9.0	8.9
25 to 54 years	5.0	9.2	8.9	9.5	9.6	9.6	10.0	10.3	10.2	10.0	9.6	9.4	9.5	9.5	9.3
55 years and older	3.9	7.0	6.8	7.0	7.8	7.4	7.5	7.3	7.8	7.8	7.9	7.5	7.8	7.4	7.5
Women, 16 years and older	5.4	8.1	7.6	8.1	8.3	8.2	8.3	8.5	8.8	8.6	8.8	8.4	8.6	8.6	8.8
16 to 24 years	11.2	14.9	13.6	14.5	15.8	15.6	15.6	15.5	15.9	16.2	15.7	15.0	15.8	15.8	16.4
16 to 19 years	16.2	20.7	17.6	19.1	22.1	20.9	21.4	22.2	24.0	23.1	23.1	21.9	22.3	22.4	21.4
16 to 17 years	19.1	23.1	20.4	21.2	24.6	23.6	23.3	25.1	26.8	27.1	26.8	25.0	26.2	28.3	26.2
18 t0 19 years	14.3	19.4	17.5	18.0	20.3	19.2	20.2	20.2	22.4	21.5	21.3	20.1	19.9	19.5	20.2
20 to 24 years	8.8	12.3	11.8	12.5	12.9	13.2	13.1	12.7	12.4	13.3	12.5	12.2	13.1	13.0	14.3
25 years and older	4.4	6.9	6.6	7.0	7.0	7.0	7.1	7.3	7.6	7.3	7.6	7.3	7.4	7.5	7.6
25 to 54 years	4.6	7.2	6.8	7.2	7.2	7.2	7.3	7.7	8.0	7.5	8.1	7.7	7.7	7.9	7.9
55 years and older[1]	3.7	6.0	5.4	5.8	6.4	7.1	6.7	6.3	6.1	6.2	5.8	6.1	6.5	6.0	5.7

[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	Mar. 2009	Feb. 2010[p]	Mar. 2010[p]	State	Mar. 2009	Feb. 2010[p]	Mar. 2010[p]
Alabama	9.2	11.1	11.0	Missouri	8.8	9.4	9.5
Alaska	7.5	8.5	8.5	Montana	5.8	6.9	7.1
Arizona	8.7	9.5	9.6	Nebraska	4.5	4.8	5.0
Arkansas	7.0	7.7	7.8	Nevada	10.6	13.2	13.4
California	10.6	12.5	12.6	New Hampshire	5.8	7.1	7.0
Colorado	7.7	7.7	7.9	New Jersey	8.5	9.9	9.8
Connecticut	7.7	9.1	9.2	New Mexico	6.3	8.7	8.8
Delaware	7.6	9.2	9.2	New York	7.8	8.8	8.6
District of Columbia	9.1	11.9	11.5	North Carolina	10.3	11.2	11.1
Florida	9.6	12.2	12.3	North Dakota	4.4	4.1	4.0
Georgia	9.0	10.5	10.5	Ohio	9.6	10.9	11.0
Hawaii	6.6	6.9	6.9	Oklahoma	5.8	6.8	6.6
Idaho	7.2	9.5	9.4	Oregon	11.2	10.5	10.6
Illinois	9.2	11.4	11.5	Pennsylvania	7.5	8.9	9.0
Indiana	10.1	9.8	9.9	Rhode Island	10.2	12.7	12.6
Iowa	5.5	6.7	6.8	South Carolina	11.1	12.4	12.2
Kansas	6.4	6.5	6.5	South Dakota	4.8	4.8	4.8
Kentucky	10.1	10.9	10.7	Tennessee	10.1	10.7	10.6
Louisiana	6.2	7.3	6.9	Texas	7.0	8.2	8.2
Maine	8.0	8.3	8.2	Utah	6.4	7.1	7.2
Maryland	6.7	7.7	7.7	Vermont	7.0	6.6	6.6
Massachusetts	7.7	9.5	9.3	Virginia	6.4	7.2	7.3
Michigan	12.6	14.1	14.1	Washington	8.5	9.4	9.5
Minnesota	8.1	7.3	7.3	West Virginia	6.9	9.5	9.5
Mississippi	8.9	11.5	11.6	Wisconsin	8.2	8.7	8.8
				Wyoming	5.2	7.5	7.3

[p] = preliminary

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

State	Mar. 2009	Feb. 2010[p]	Mar. 2010[p]	State	Mar. 2009	Feb. 2010[p]	Mar. 2010[p]
Alabama	2,144,816	2,056,113	2,065,482	Missouri	3,054,059	2,991,506	2,987,803
Alaska	359,803	363,773	365,080	Montana	500,379	496,843	498,287
Arizona	3,145,671	3,149,642	3,160,748	Nebraska	986,275	985,999	988,043
Arkansas	1,369,605	1,377,122	1,370,062	Nevada	1,364,667	1,374,082	1,375,028
California	18,346,900	18,161,705	18,245,937	New Hampshire	742,631	746,463	748,137
Colorado	2,735,520	2,647,690	2,656,145	New Jersey	4,539,820	4,553,718	4,563,355
Connecticut	1,888,104	1,905,578	1,907,766	New Mexico	954,945	964,181	966,770
Delaware	439,506	427,906	427,411	New York	9,731,034	9,645,128	9,652,950
District of Columbia	331,511	336,407	336,966	North Carolina	4,573,660	4,549,039	4,564,936
Florida	9,193,588	9,254,495	9,271,042	North Dakota	365,878	366,534	367,829
Georgia	4,813,233	4,703,442	4,710,355	Ohio	6,007,658	5,928,409	5,947,813
Hawaii	640,597	635,148	636,591	Oklahoma	1,768,931	1,779,634	1,777,570
Idaho	749,313	755,517	757,642	Oregon	1,982,423	1,945,234	1,954,806
Illinois	6,613,287	6,640,974	6,668,894	Pennsylvania	6,438,837	6,451,557	6,458,026
Indiana	3,238,673	3,118,743	3,122,816	Rhode Island	562,620	578,042	578,424
Iowa	1,672,441	1,682,233	1,684,617	South Carolina	2,184,641	2,174,240	2,173,816
Kansas	1,515,473	1,516,629	1,514,001	South Dakota	447,305	444,577	444,355
Kentucky	2,085,057	2,078,579	2,082,643	Tennessee	3,041,711	3,000,621	3,010,002
Louisiana	2,069,022	2,081,332	2,084,512	Texas	11,845,893	12,131,502	12,160,023
Maine	704,888	705,848	705,221	Utah	1,377,558	1,342,774	1,345,874
Maryland	3,007,727	2,956,941	2,962,003	Vermont	361,332	361,376	362,397
Massachusetts	3,474,812	3,478,197	3,483,706	Virginia	4,192,234	4,163,844	4,180,450
Michigan	4,921,341	4,843,997	4,851,276	Washington	3,537,703	3,510,476	3,518,055
Minnesota	2,973,079	2,979,529	2,987,076	West Virginia	803,873	787,262	788,041
Mississippi	1,294,844	1,301,362	1,302,705	Wisconsin	3,114,597	3,039,902	3,046,655
				Wyoming	294,072	292,201	292,148

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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL NONFARM	136,790	130,920	131,542	131,155	130,640	130,294	130,082	129,857	129,633	129,697	129,588	129,602	129,641	129,871	130,161
TOTAL PRIVATE	114,281	108,371	108,861	108,527	108,075	107,778	107,563	107,377	107,115	107,190	107,107	107,123	107,185	107,359	107,590
GOODS-PRODUCING	21,334	18,620	18,956	18,731	18,503	18,375	18,245	18,124	17,993	17,960	17,906	17,876	17,848	17,903	17,968
Natural resources and mining	767	700	714	700	692	687	678	676	669	676	676	684	691	701	708
Logging	56.6	49.8	50.1	49.5	49.3	49.1	49.4	50.1	48.5	47.2	46.9	47.0	47.2	47.9	48.5
Mining	709.8	650.0	664.0	650.7	642.7	637.4	628.6	625.5	620.8	628.4	629.4	637.2	644.1	652.6	659.4
Oil and gas extraction	160.5	161.6	162.2	162.0	161.6	161.0	160.1	160.4	160.4	160.2	159.8	160.9	161.5	162.8	163.9
Mining, except oil and gas[1]	226.0	211.6	214.8	212.2	210.0	208.6	207.4	206.8	204.3	207.2	207.7	209.3	211.2	213.1	213.4
Coal mining	81.2	82.2	84.2	83.0	82.0	80.9	81.0	80.6	79.3	79.3	79.2	79.6	80.7	81.2	81.4
Support activities for mining	323.4	276.7	287.0	276.5	271.1	267.8	261.1	258.3	256.1	261.0	261.9	267.0	271.4	276.7	282.1
Construction	7,162	6,037	6,179	6,120	6,029	5,949	5,885	5,814	5,747	5,732	5,696	5,636	5,585	5,611	5,625
Construction of buildings	1,641.7	1,365.6	1,400.4	1,386.9	1,362.8	1,344.1	1,332.2	1,313.0	1,300.0	1,295.9	1,282.5	1,266.3	1,255.4	1,267.8	1,273.0
Heavy and civil engineering	964.5	846.9	866.7	856.8	841.3	834.6	830.5	817.8	804.6	808.7	797.9	800.8	793.4	802.1	811.3
Speciality trade contractors	4,555.8	3,824.4	3,911.9	3,876.5	3,824.9	3,770.7	3,722.3	3,682.9	3,642.8	3,627.6	3,615.1	3,568.4	3,535.7	3,541.0	3,540.3
Manufacturing	13,406	11,883	12,063	11,911	11,782	11,739	11,682	11,634	11,577	11,552	11,534	11,556	11,572	11,591	11,635
Production workers	9,629	8,350	8,478	8,349	8,244	8,230	8,192	8,166	8,124	8,108	8,089	8,113	8,118	8,129	8,157
Durable goods	8,463	7,309	7,450	7,326	7,222	7,197	7,151	7,112	7,070	7,047	7,036	7,062	7,071	7,094	7,124
Production workers	5,975	5,008	5,108	5,005	4,921	4,920	4,886	4,865	4,833	4,816	4,801	4,828	4,830	4,847	4,866
Wood products	456.0	360.7	370.5	361.9	355.1	352.4	350.2	349.2	348.4	348.6	348.9	348.3	348.9	350.6	353.6
Nonmetallic mineral products	465.0	397.7	405.1	399.7	394.1	393.5	391.6	389.5	382.2	382.6	383.9	382.2	383.1	381.7	382.2
Primary metals	442.0	364.7	371.7	363.4	355.2	353.8	353.9	351.3	350.1	350.8	351.8	353.5	358.9	363.2	367.2
Fabricated metal products	1,527.5	1,317.5	1,339.9	1,323.2	1,305.0	1,291.4	1,284.2	1,276.9	1,272.1	1,268.0	1,266.8	1,268.4	1,273.3	1,282.3	1,290.9
Machinery	1,187.6	1,029.3	1,057.5	1,038.7	1,022.7	1,008.6	1,002.9	993.8	983.8	975.9	973.2	975.6	979.8	985.7	993.1
Computer and electronic products[1]	1,244.2	1,136.3	1,160.2	1,144.0	1,131.0	1,122.8	1,113.3	1,107.5	1,101.5	1,097.9	1,093.3	1,091.6	1,091.9	1,092.7	1,092.8
Computer and peripheral equipment	183.2	166.0	169.1	164.9	163.7	163.2	161.2	160.8	159.6	159.5	158.3	158.2	158.2	158.0	158.3
Communications equipment	127.3	121.4	122.5	121.7	121.0	120.8	120.1	120.4	119.3	118.3	119.0	118.1	118.7	119.4	119.3
Semiconductors and electronic components	431.8	377.0	387.5	381.0	374.2	369.2	365.8	363.3	361.1	360.8	359.7	360.0	361.6	362.6	364.2
Electronic instruments	441.0	421.3	428.9	425.0	421.8	419.9	417.4	414.9	413.5	411.4	408.9	408.2	406.9	405.6	404.3
Electrical equipment and appliances	424.3	376.7	379.3	376.0	374.4	370.9	369.8	369.0	365.6	363.4	361.8	362.5	364.5	366.3	368.8
Transportation equipment	1,608.0	1,353.0	1,376.3	1,338.9	1,313.0	1,341.6	1,331.1	1,328.0	1,326.3	1,318.0	1,316.6	1,343.6	1,333.6	1,335.9	1,339.6
Furniture and related products	479.6	385.7	395.7	389.1	382.6	377.5	372.8	368.5	364.6	365.8	363.9	361.0	361.2	359.7	359.8
Miscellaneous manufacturing	628.9	587.0	593.6	591.3	588.4	584.5	581.5	578.2	575.6	576.1	575.6	575.1	575.5	575.5	575.9
Nondurable goods	4,943	4,574	4,613	4,585	4,560	4,542	4,531	4,522	4,507	4,505	4,498	4,494	4,501	4,497	4,511
Production workers	3,653	3,341	3,370	3,344	3,323	3,310	3,306	3,301	3,291	3,292	3,288	3,285	3,288	3,282	3,291
Food manufacturing	1,480.9	1,459.0	1,462.6	1,459.5	1,459.9	1,460.3	1,463.3	1,463.6	1,462.0	1,457.4	1,455.6	1,450.6	1,455.0	1,456.8	1,462.2
Beverages and tobacco products	198.4	187.7	188.6	188.2	187.6	186.8	187.2	187.2	187.8	185.3	183.6	182.3	184.1	184.9	185.2
Textile mills	151.2	125.6	127.7	126.3	124.6	122.8	122.1	120.9	119.9	122.5	124.2	121.1	123.5	123.0	123.8
Textile product mills	147.2	126.6	126.4	126.0	125.8	124.9	124.6	124.9	123.6	122.8	122.1	121.6	122.0	121.7	121.8
Apparel	199.0	169.6	171.8	171.6	165.6	168.2	166.8	165.2	163.5	164.0	166.0	168.9	167.9	165.6	165.7
Leather and allied products	33.1	29.4	30.2	29.8	29.4	29.0	29.1	28.6	28.1	28.4	28.4	28.5	28.6	28.4	27.4
Paper and paper products	444.9	407.4	412.1	407.5	406.2	403.9	402.7	402.2	399.3	398.5	397.6	397.2	398.8	397.3	399.5
Printing and related support activities	594.1	523.8	534.6	529.9	522.6	517.9	513.4	510.6	506.7	501.4	501.0	499.6	499.9	496.6	497.7
Petroleum and coal products	117.4	115.3	115.9	116.1	115.8	115.6	115.4	115.6	115.3	115.2	112.3	113.3	113.6	113.5	115.3
Chemicals	847.1	802.8	809.3	805.3	801.5	797.3	793.2	791.3	790.5	794.7	791.2	788.7	785.0	783.3	782.0
Plastics and rubber products	729.4	627.4	633.9	625.2	620.7	615.3	613.5	611.7	610.7	614.8	616.4	622.4	622.4	626.3	630.2
SERVICE-PROVIDING	115,456	112,300	112,586	112,424	112,137	111,919	111,837	111,733	111,640	111,737	111,682	111,726	111,793	111,968	112,193
PRIVATE SERVICE-PROVIDING	92,947	89,751	89,905	89,796	89,572	89,403	89,318	89,253	89,122	89,230	89,201	89,247	89,337	89,456	89,622
Trade, transportation, and utilities	26,293	24,949	25,052	24,997	24,943	24,845	24,819	24,754	24,670	24,678	24,653	24,666	24,667	24,700	24,697
Wholesale trade	5,942.7	5,625.3	5,641.7	5,625.9	5,612.7	5,596.9	5,588.2	5,579.9	5,574.5	5,568.3	5,564.0	5,556.3	5,559.5	5,569.0	5,573.0
Durable goods	3,052.0	2,827.0	2,845.6	2,831.8	2,819.6	2,808.0	2,799.3	2,792.1	2,787.0	2,775.0	2,766.7	2,761.9	2,764.3	2,763.3	2,765.6
Nondurable goods	2,047.7	1,980.0	1,981.0	1,979.5	1,977.3	1,975.6	1,972.8	1,969.9	1,968.7	1,975.4	1,974.3	1,975.1	1,971.8	1,979.2	1,979.1
Electronic markets and agents and brokers	842.9	818.4	815.1	814.6	815.8	813.3	816.1	817.9	818.8	817.9	823.0	819.3	823.4	826.5	828.3
Retail trade	15,283.1	14,527.8	14,592.4	14,570.2	14,545.8	14,492.3	14,477.0	14,428.7	14,365.7	14,374.5	14,360.0	14,409.1	14,416.2	14,431.3	14,443.7
Motor vehicles and parts dealers[1]	1,831.2	1,640.0	1,647.2	1,637.6	1,630.7	1,624.9	1,628.0	1,621.2	1,618.6	1,620.4	1,624.0	1,622.5	1,622.7	1,625.0	1,628.7
Automobile dealers	1,176.7	1,021.8	1,027.0	1,019.4	1,013.1	1,008.9	1,012.6	1,007.3	1,005.7	1,007.8	1,014.0	1,013.6	1,014.0	1,016.3	1,018.0
Furniture and home furnishings stores	531.1	450.0	455.0	449.0	447.1	445.9	441.2	439.6	437.3	438.6	439.0	439.8	440.6	441.3	438.6
Electronics and appliance stores	540.5	487.1	488.0	486.8	484.5	482.0	482.4	481.5	475.3	477.2	477.2	481.0	481.5	480.7	477.4

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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
Building material and garden supply stores	1,248.0	1,162.6	1,171.2	1,168.3	1,163.3	1,155.0	1,149.6	1,146.3	1,138.9	1,142.9	1,150.0	1,154.6	1,162.2	1,174.7	1,176.4
Food and beverage stores	2,862.0	2,829.0	2,839.0	2,838.4	2,839.8	2,834.4	2,832.3	2,825.4	2,823.5	2,808.5	2,799.8	2,813.3	2,804.7	2,803.6	2,807.5
Health and personal care stores	1,002.8	984.2	985.8	986.3	986.1	984.6	983.6	977.5	978.8	979.1	978.7	980.9	977.1	974.7	977.4
Gasoline stations	842.4	827.0	827.6	826.1	825.9	826.8	830.3	827.1	827.5	823.5	822.5	820.9	819.7	819.6	820.8
Clothing and clothing accessories stores	1,468.0	1,368.9	1,377.9	1,374.0	1,369.7	1,361.1	1,354.4	1,354.3	1,351.8	1,363.1	1,360.9	1,371.6	1,375.4	1,381.9	1,390.5
Sporting goods, hobby, book, and music stores	651.0	616.4	622.3	621.0	619.1	619.4	619.6	620.3	596.3	604.7	606.9	608.8	612.4	610.9	612.5
General merchandise stores[1]	3,025.6	2,956.1	2,968.8	2,970.9	2,970.8	2,956.9	2,955.2	2,944.3	2,930.4	2,928.1	2,911.8	2,927.8	2,930.3	2,927.6	2,921.7
Department stores	1,540.5	1,471.2	1,471.0	1,475.5	1,473.3	1,467.8	1,471.7	1,467.7	1,457.0	1,464.3	1,458.7	1,471.0	1,477.4	1,476.8	1,477.1
Miscellaneous store retailers	842.5	784.6	786.7	788.8	786.1	780.3	780.3	772.6	770.6	773.3	769.4	772.6	772.7	772.5	772.5
Nonstore retailers	438.0	421.8	422.9	423.0	422.7	421.0	420.1	418.6	416.7	415.1	419.8	415.3	416.9	418.8	419.7
Transportation and warehousing	4,508.3	4,235.3	4,255.8	4,239.9	4,223.2	4,195.9	4,194.8	4,184.4	4,168.6	4,175.8	4,171.8	4,142.5	4,133.5	4,141.4	4,121.9
Air transportation	490.7	459.7	458.0	459.9	457.8	457.0	457.6	456.8	457.1	454.7	453.8	454.1	454.5	452.4	451.7
Rail transportation	231.0	219.4	222.6	219.2	217.3	217.0	217.7	215.7	214.1	213.2	213.7	213.2	213.6	215.0	214.5
Water transportation	67.1	63.7	64.3	63.6	62.6	61.8	62.5	62.7	62.8	63.0	63.3	62.9	62.3	63.4	63.2
Truck transportation	1,389.0	1,265.9	1,274.2	1,267.9	1,260.0	1,254.5	1,251.0	1,249.6	1,240.8	1,243.3	1,231.3	1,232.1	1,227.9	1,225.5	1,226.5
Transit and ground passenger transportation	423.3	419.3	416.6	420.9	427.8	418.7	417.6	416.2	416.7	417.5	414.6	414.8	410.7	414.9	413.7
Pipeline transportation	41.7	41.7	42.0	41.6	41.3	40.9	41.4	42.2	42.3	41.6	40.7	41.0	40.8	39.8	39.7
Scenic and sightseeing transportation	28.0	27.8	27.7	28.3	27.9	28.3	28.0	28.0	27.3	27.7	28.1	27.5	28.4	28.4	29.9
Support activities for transportation	592.0	549.0	556.8	552.1	543.3	538.7	539.8	540.5	537.8	539.0	538.5	538.2	535.2	538.3	540.0
Couriers and messengers	573.4	547.1	548.1	542.8	543.1	539.6	540.6	537.1	538.6	542.7	553.6	523.8	521.7	520.9	499.9
Warehousing and storage	672.1	641.6	645.5	643.6	642.1	639.4	638.6	635.6	631.1	633.1	634.2	634.9	638.4	642.8	642.8
Utilities	558.9	561.1	562.1	560.9	561.2	559.8	559.3	560.6	561.0	559.8	557.2	558.5	558.2	558.1	558.6
Information	2,984	2,807	2,837	2,812	2,797	2,785	2,776	2,777	2,774	2,762	2,748	2,745	2,739	2,727	2,724
Publishing industries, except Internet	880.4	796.4	812.9	801.6	794.5	788.1	781.1	779.8	772.5	770.7	769.3	770.8	763.9	761.9	762.5
Motion picture and sound recording industries	371.3	350.4	355.3	347.3	345.7	345.6	347.6	349.6	353.8	350.6	341.7	341.9	347.4	344.3	345.7
Broadcasting, except Internet.	318.7	301.0	304.8	302.7	300.4	298.2	296.3	296.2	296.0	295.5	294.3	295.2	296.0	295.9	296.3
Internet publishing and broadcasting															
Telecommunications	1,019.4	974.8	979.9	977.3	972.4	968.9	966.8	966.7	967.0	961.4	956.9	951.9	945.4	941.2	934.5
ISPs, search portals, and data processing	260.3	250.0	251.0	249.3	249.5	249.3	251.1	250.1	248.8	248.3	250.2	249.7	249.8	247.5	247.8
Other information services	133.5	134.5	133.1	133.4	134.9	134.4	133.0	134.3	135.7	135.4	135.3	135.8	136.2	136.6	137.5
Financial activities	8,145	7,758	7,805	7,773	7,742	7,719	7,695	7,683	7,664	7,666	7,657	7,635	7,628	7,608	7,611
Finance and insurance	6,014.9	5,762.7	5,796.1	5,776.3	5,756.8	5,738.1	5,718.9	5,707.5	5,694.8	5,699.6	5,693.7	5,677.0	5,670.6	5,656.6	5,657.1
Monetary authorities—central bank	22.4	21.1	21.2	21.0	20.9	20.9	21.0	21.1	21.2	21.1	21.1	21.2	21.2	21.2	21.2
Credit intermediation and related activities[1]	2,732.7	2,597.3	2,608.8	2,600.8	2,592.0	2,587.3	2,578.6	2,571.3	2,565.6	2,573.1	2,570.9	2,565.5	2,567.9	2,564.9	2,564.5
Depository credit intermediation[1]	1,815.2	1,760.5	1,764.3	1,760.2	1,758.0	1,755.6	1,752.5	1,749.3	1,747.4	1,750.9	1,750.3	1,748.5	1,750.0	1,751.2	1,752.9
Commercial banking	1,357.5	1,318.8	1,321.9	1,319.8	1,316.3	1,315.3	1,311.9	1,309.5	1,308.4	1,311.4	1,310.8	1,310.1	1,311.4	1,311.6	1,313.6
Securities, commodity contracts, investments	864.2	809.7	816.3	811.3	805.4	800.6	798.6	796.3	795.5	795.1	795.9	792.6	793.0	790.3	797.4
Insurance carriers and related activities	2,305.2	2,246.7	2,261.5	2,255.1	2,250.1	2,241.9	2,233.4	2,231.9	2,225.4	2,223.7	2,219.6	2,212.1	2,203.5	2,195.6	2,189.7
Funds, trusts, and other financial vehicles	90.5	87.8	88.3	88.1	88.4	87.4	87.3	86.9	87.1	86.6	86.2	85.6	85.0	84.6	84.3
Real estate and rental and leasing	2,129.6	1,995.3	2,008.7	1,996.5	1,984.8	1,980.8	1,975.8	1,975.8	1,969.1	1,966.8	1,963.3	1,958.3	1,956.9	1,951.4	1,953.9
Real estate	1,485.0	1,416.7	1,422.0	1,414.0	1,406.2	1,404.7	1,402.8	1,407.5	1,403.8	1,405.6	1,403.5	1,399.4	1,397.9	1,390.2	1,392.7
Rental and leasing services	616.9	552.4	560.0	555.7	552.3	550.1	547.2	542.5	539.4	535.7	534.2	533.7	534.1	536.3	536.8
Lessors of nonfinancial intangible assets	27.7	26.3	26.7	26.8	26.3	26.0	25.8	25.8	25.9	25.5	25.6	25.2	24.9	24.9	24.4
Professional and business services	17,735	16,580	16,636	16,585	16,453	16,405	16,371	16,349	16,360	16,466	16,488	16,511	16,567	16,580	16,660
Professional and technical services[1]	7,799.4	7,508.5	7,557.8	7,526.0	7,481.6	7,464.9	7,450.6	7,444.6	7,434.1	7,433.3	7,431.5	7,417.7	7,416.7	7,407.0	7,419.2
Legal services	1,161.5	1,122.4	1,131.1	1,127.7	1,121.8	1,117.5	1,116.5	1,113.5	1,107.4	1,106.2	1,104.5	1,105.0	1,105.2	1,104.2	1,103.1
Accounting and bookkeeping services	951.0	920.4	925.0	924.8	918.8	921.0	921.3	916.6	919.4	918.4	915.8	919.0	917.4	911.1	912.2
Architectural and engineering services	1,439.4	1,324.6	1,344.6	1,332.1	1,318.9	1,305.7	1,301.6	1,299.9	1,292.3	1,289.6	1,291.7	1,283.7	1,279.9	1,278.4	1,274.9

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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
Computer systems design and related services	1,439.6	1,426.3	1,425.8	1,419.7	1,417.7	1,423.6	1,421.4	1,425.5	1,429.9	1,431.3	1,428.3	1,433.4	1,439.4	1,438.4	1,445.7
Management and technical consulting services	1,002.0	992.5	991.6	991.6	988.5	988.0	987.8	987.5	995.1	990.6	993.3	986.3	983.3	984.4	985.4
Management of companies and enterprises	1,904.5	1,856.0	1,873.9	1,864.3	1,854.5	1,849.0	1,845.1	1,837.4	1,830.0	1,824.9	1,819.8	1,819.2	1,822.6	1,825.4	1,832.0
Administrative and waste services	8,031.5	7,214.9	7,204.0	7,194.2	7,116.5	7,091.3	7,075.6	7,066.6	7,096.2	7,207.3	7,236.4	7,273.6	7,327.2	7,347.7	7,408.7
Administrative and support services[1]	7,674.7	6,864.3	6,854.7	6,844.4	6,767.3	6,741.0	6,725.1	6,714.2	6,744.0	6,856.5	6,888.7	6,927.0	6,980.2	7,000.0	7,060.7
Employment services[1]	3,133.0	2,497.6	2,477.8	2,460.8	2,421.7	2,398.7	2,381.7	2,375.0	2,408.6	2,515.8	2,575.0	2,629.3	2,666.1	2,704.5	2,734.4
Temporary help services	2,348.4	1,827.7	1,805.3	1,792.4	1,758.1	1,749.3	1,733.6	1,724.4	1,766.6	1,861.3	1,911.0	1,960.2	1,996.1	2,028.5	2,054.7
Business support services	832.3	816.8	820.2	815.6	808.7	809.4	809.1	810.8	811.2	813.4	805.3	801.5	798.3	795.0	797.4
Services to buildings and dwellings	1,839.8	1,748.5	1,755.6	1,766.8	1,743.3	1,738.6	1,735.0	1,730.4	1,727.1	1,726.8	1,725.9	1,710.9	1,725.8	1,710.8	1,734.2
Waste management and remediation services	356.8	350.7	349.3	349.8	349.2	350.3	350.5	352.4	352.2	350.8	347.7	346.6	347.0	347.7	348.0
Educational and health services	18,838	19,191	19,099	19,137	19,165	19,186	19,221	19,247	19,282	19,313	19,350	19,370	19,400	19,454	19,489
Educational services	3,039.7	3,089.9	3,079.0	3,081.5	3,091.7	3,085.8	3,088.7	3,080.4	3,087.7	3,092.7	3,107.3	3,111.5	3,121.2	3,132.5	3,141.4
Health care and social assistance	15,798.3	16,100.8	16,019.5	16,055.5	16,073.4	16,100.6	16,132.6	16,166.3	16,194.6	16,220.7	16,242.5	16,258.2	16,279.2	16,321.6	16,348.0
Ambulatory health care services[1]	5,646.6	5,777.3	5,741.2	5,757.1	5,769.9	5,779.3	5,789.0	5,804.9	5,813.8	5,830.3	5,847.2	5,855.0	5,864.1	5,885.1	5,894.5
Offices of physicians	2,252.6	2,279.8	2,266.4	2,268.7	2,273.5	2,280.0	2,283.8	2,287.9	2,287.6	2,298.1	2,306.5	2,309.7	2,310.8	2,312.2	2,311.9
Outpatient care centers	533.3	543.0	540.3	541.2	545.0	543.0	544.2	544.6	548.4	544.4	546.2	544.7	545.9	549.1	550.8
Home health care services	961.4	1,023.9	1,012.9	1,020.1	1,023.8	1,025.7	1,028.1	1,035.1	1,040.7	1,046.1	1,051.0	1,050.9	1,051.9	1,058.7	1,065.2
Hospitals	4,627.3	4,677.1	4,669.0	4,670.5	4,672.1	4,675.2	4,675.4	4,680.8	4,688.6	4,690.4	4,694.4	4,702.5	4,704.3	4,706.2	4,712.3
Nursing and residential care facilities[1]	3,016.1	3,081.2	3,066.5	3,072.3	3,077.8	3,086.3	3,094.2	3,096.1	3,103.2	3,102.2	3,099.0	3,096.5	3,099.6	3,109.6	3,114.2
Nursing care facilities	1,618.7	1,643.9	1,639.7	1,642.6	1,644.4	1,645.4	1,649.4	1,650.8	1,652.9	1,649.7	1,648.2	1,644.9	1,646.7	1,651.1	1,653.4
Social assistance[1]	2,508.4	2,565.2	2,542.8	2,555.6	2,553.6	2,559.8	2,574.0	2,584.5	2,589.0	2,597.8	2,601.9	2,604.2	2,611.2	2,620.7	2,627.0
Child day care services	859.4	857.0	854.9	860.6	851.3	849.4	855.7	857.4	855.0	859.6	858.9	859.8	861.7	864.9	867.1
Leisure and hospitality	13,436	13,102	13,103	13,126	13,105	13,101	13,083	13,099	13,045	13,024	12,991	13,003	13,026	13,067	13,112
Arts, entertainment, and recreation	1,970.1	1,914.5	1,908.8	1,910.9	1,896.4	1,905.9	1,901.9	1,938.7	1,904.7	1,895.7	1,886.5	1,884.8	1,893.1	1,897.4	1,912.3
Performing arts and spectator sports	405.7	397.2	394.2	397.7	396.1	401.9	398.6	401.3	400.0	393.2	391.8	390.1	396.0	394.6	395.1
Museums, historical sites, zoos, and parks	131.6	129.9	129.4	130.1	130.1	129.8	129.9	130.5	130.5	129.1	129.0	128.2	128.9	130.0	129.6
Amusements, gambling, and recreation	1,432.8	1,387.4	1,385.2	1,383.1	1,370.2	1,374.2	1,373.4	1,406.9	1,374.2	1,373.4	1,365.7	1,366.5	1,368.2	1,372.8	1,387.6
Accommodations and food services	11,466.3	11,187.5	11,194.2	11,215.0	11,208.7	11,195.4	11,180.9	11,160.4	11,140.3	11,128.2	11,104.5	11,117.7	11,133.3	11,169.9	11,199.3
Accommodations	1,868.7	1,759.7	1,762.1	1,764.3	1,759.0	1,755.4	1,754.0	1,748.4	1,741.3	1,735.0	1,733.1	1,726.1	1,728.4	1,735.4	1,743.8
Food services and drinking places	9,597.5	9,427.8	9,432.1	9,450.7	9,449.7	9,440.0	9,426.9	9,412.0	9,399.0	9,393.2	9,371.4	9,391.6	9,404.9	9,434.5	9,455.5
Other services	5,515	5,364	5,373	5,366	5,367	5,362	5,353	5,344	5,327	5,321	5,314	5,317	5,310	5,320	5,329
Repair and maintenance	1,227.0	1,153.7	1,158.7	1,153.0	1,150.4	1,149.1	1,148.0	1,141.2	1,138.2	1,141.3	1,139.8	1,138.5	1,136.1	1,140.9	1,143.3
Personal and laundry services	1,322.6	1,282.3	1,283.2	1,277.9	1,282.3	1,280.2	1,278.5	1,274.5	1,269.7	1,270.8	1,269.6	1,268.4	1,271.5	1,271.7	1,271.6
Membership associations and organizations	2,965.7	2,927.6	2,931.1	2,935.3	2,934.5	2,932.2	2,926.6	2,927.8	2,918.8	2,908.7	2,904.4	2,910.5	2,902.1	2,907.1	2,914.0
Government	22,509	22,549	22,681	22,628	22,565	22,516	22,519	22,480	22,518	22,507	22,481	22,479	22,456	22,512	22,571
Federal	2,762	2,828	2,919	2,865	2,810	2,816	2,815	2,818	2,836	2,833	2,824	2,857	2,860	2,914	2,979
Federal, except U.S. Postal Service	2,014.4	2,124.2	2,201.9	2,156.0	2,106.3	2,113.9	2,120.4	2,127.3	2,147.4	2,150.4	2,160.1	2,181.4	2,192.9	2,251.3	2,320.4
U.S. Postal Service	747.4	703.2	716.6	708.8	703.9	701.7	694.4	690.5	688.6	682.8	663.7	675.9	666.6	662.9	658.9
State	5,177	5,180	5,184	5,189	5,177	5,154	5,172	5,173	5,182	5,172	5,178	5,169	5,175	5,176	5,171
Education	2,354.4	2,370.5	2,367.9	2,372.8	2,366.1	2,351.5	2,367.4	2,365.5	2,378.5	2,378.0	2,383.7	2,383.2	2,392.5	2,392.9	2,392.2
Other State government	2,822.5	2,809.2	2,816.2	2,816.6	2,810.7	2,802.0	2,804.7	2,807.0	2,803.4	2,793.6	2,794.5	2,785.8	2,782.7	2,783.2	2,778.8
Local	14,571	14,542	14,578	14,574	14,578	14,546	14,532	14,489	14,500	14,502	14,479	14,453	14,421	14,422	14,421
Education	8,083.9	8,062.1	8,093.9	8,086.9	8,094.1	8,048.9	8,034.0	8,013.0	8,041.0	8,054.1	8,040.0	8,025.1	8,000.7	8,006.1	8,004.7
Other local government	6,486.5	6,479.8	6,484.4	6,486.9	6,483.6	6,497.5	6,497.9	6,476.1	6,459.0	6,448.0	6,438.9	6,427.9	6,419.8	6,415.4	6,415.9

[1] Includes other industries not shown separately.

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

p = preliminary.

13. Average weekly hours of production or nonsupervisory workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE	33.6	33.1	33.1	33.1	33.0	33.1	33.1	33.1	33.0	33.2	33.2	33.3	33.2	33.3	33.4
GOODS-PRODUCING	40.2	39.2	39.0	39.0	39.0	39.3	39.4	39.2	39.1	39.7	39.6	40.0	39.4	40.1	40.6
Natural resources and mining	45.1	43.3	43.1	43.3	43.2	42.9	43.3	43.1	42.8	43.0	43.4	44.2	43.6	44.2	44.8
Construction	38.5	37.6	37.5	37.6	37.5	37.8	38.0	37.4	36.9	37.8	37.5	37.9	37.0	37.8	38.8
Manufacturing	40.8	39.8	39.6	39.5	39.5	39.9	40.0	39.9	40.0	40.5	40.5	40.9	40.5	41.0	41.2
Overtime hours	3.7	2.9	2.8	2.8	2.8	3.0	3.0	3.0	3.2	3.4	3.4	3.6	3.5	3.7	3.9
Durable goods	41.1	39.9	39.6	39.4	39.5	39.9	40.0	40.0	40.1	40.6	40.6	40.9	40.6	41.2	41.4
Overtime hours	3.7	2.7	2.5	2.6	2.6	2.8	2.8	2.8	3.0	3.2	3.3	3.5	3.4	3.7	3.9
Wood products	38.6	37.4	37.0	37.0	37.5	37.7	37.7	37.8	37.6	38.2	38.2	39.2	38.3	39.3	39.8
Nonmetallic mineral products	42.1	40.9	40.4	40.6	40.8	41.5	41.3	40.9	40.8	41.9	40.2	41.4	40.0	41.3	42.1
Primary metals	42.2	40.7	40.1	40.1	39.8	40.2	40.8	40.7	41.0	42.4	42.7	42.9	42.9	43.1	43.9
Fabricated metal products	41.3	39.4	39.3	39.2	39.3	39.4	39.5	39.4	39.5	39.9	40.1	40.5	40.4	41.0	41.2
Machinery	42.3	40.1	40.2	39.9	39.8	39.9	39.9	39.7	40.0	40.6	41.0	41.2	41.0	41.8	42.1
Computer and electronic products	41.0	40.4	40.2	40.0	40.0	40.2	40.5	40.4	40.5	41.0	40.8	41.1	41.0	41.2	41.1
Electrical equipment and appliances	40.9	39.3	39.6	39.4	38.8	39.0	39.1	39.3	39.4	40.0	40.5	40.8	39.7	40.8	41.0
Transportation equipment	41.9	41.2	40.8	40.0	40.4	41.9	41.6	41.9	41.9	42.4	42.5	42.5	42.4	42.8	42.8
Furniture and related products	38.1	37.7	37.6	37.8	37.8	37.9	37.5	38.0	38.2	37.9	37.8	37.8	37.5	38.5	38.3
Miscellaneous manufacturing	38.9	38.5	38.3	38.1	38.0	38.4	38.6	38.6	38.7	39.3	38.9	38.8	38.7	38.7	38.9
Nondurable goods	40.4	39.8	39.6	39.6	39.6	39.8	39.9	39.9	40.0	40.3	40.4	40.8	40.2	40.7	40.9
Overtime hours	3.7	3.2	3.2	3.2	3.2	3.3	3.3	3.2	3.4	3.6	3.6	3.7	3.6	3.7	3.9
Food manufacturing	40.5	40.0	40.1	40.1	39.9	39.7	40.1	39.8	40.0	40.5	40.5	40.9	40.4	40.8	40.8
Beverage and tobacco products	38.8	35.7	35.8	36.6	35.3	35.1	35.4	35.8	36.1	34.6	34.7	35.4	35.0	35.8	35.1
Textile mills	38.7	37.7	36.9	36.8	37.9	37.8	37.9	38.0	38.8	40.1	39.4	40.5	39.7	41.4	42.5
Textile product mills	38.6	37.9	37.6	38.3	37.9	38.3	38.1	38.3	38.3	37.6	38.9	39.8	39.2	39.5	39.1
Apparel	36.4	36.0	36.0	36.1	35.7	36.2	35.6	36.0	36.0	36.3	36.2	36.7	36.1	36.4	36.2
Leather and allied products	37.6	33.6	32.5	31.9	32.0	33.6	33.8	33.7	35.0	35.6	36.2	38.3	37.9	38.2	38.4
Paper and paper products	42.9	41.8	41.5	41.2	41.9	42.2	42.0	42.3	42.2	42.4	42.1	42.9	42.1	42.5	42.8
Printing and related support activities	38.3	38.0	37.7	37.6	38.1	38.4	38.7	38.3	38.2	38.3	38.2	38.2	38.0	38.1	38.5
Petroleum and coal products	44.6	43.4	43.7	43.4	43.3	43.1	44.1	43.3	42.2	41.7	42.7	42.4	42.0	43.1	44.6
Chemicals	41.5	41.4	41.0	41.1	41.2	41.5	41.5	41.4	41.7	42.1	42.7	42.8	41.8	42.2	42.2
Plastics and rubber products	41.0	40.2	39.9	39.8	39.8	40.5	40.3	40.6	40.7	41.0	41.4	41.5	41.4	42.1	42.7
PRIVATE SERVICE-PROVIDING	32.3	32.1	32.0	32.0	31.9	32.0	32.0	32.0	32.0	32.1	32.1	32.2	32.1	32.2	32.2
Trade, transportation, and utilities	33.2	32.9	32.8	32.9	32.8	32.9	32.8	32.8	32.9	33.0	32.9	33.1	33.0	33.1	33.3
Wholesale trade	38.2	37.6	37.7	37.6	37.6	37.4	37.5	37.4	37.4	37.6	37.6	37.7	37.7	37.8	37.9
Retail trade	30.0	29.9	29.8	29.9	29.8	29.9	29.8	29.8	29.9	30.0	30.0	30.1	30.0	30.1	30.2
Transportation and warehousing	36.4	36.0	35.9	35.9	35.8	36.2	36.1	36.4	36.3	36.4	36.2	36.4	36.2	36.8	37.1
Utilities	42.7	42.1	42.3	42.1	41.9	41.9	41.9	41.5	41.7	41.6	41.4	41.4	41.6	41.7	41.9
Information	36.7	36.6	36.5	36.6	36.5	36.5	36.5	36.4	36.4	36.7	36.5	36.6	36.5	36.5	36.5
Financial activities	35.8	36.1	36.0	36.0	35.9	35.9	36.1	36.0	36.0	36.1	35.9	36.1	36.0	36.1	36.2
Professional and business services	34.8	34.7	34.7	34.7	34.6	34.6	34.7	34.7	34.6	34.8	34.8	34.9	34.8	34.9	34.9
Education and health services	32.5	32.3	32.3	32.3	32.2	32.2	32.2	32.2	32.2	32.2	32.3	32.3	32.2	32.1	32.2
Leisure and hospitality	25.2	24.8	24.8	24.8	24.7	24.7	24.7	24.8	24.6	24.9	24.8	24.8	24.8	25.0	24.8
Other services	30.8	30.5	30.5	30.5	30.4	30.4	30.5	30.5	30.5	30.5	30.5	30.7	30.6	30.7	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 workers[1] on private nonfarm payrolls, by industry, monthly data seasonally adjusted

Industry	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE															
Current dollars	$18.08	$18.62	$18.53	$18.55	$18.57	$18.62	$18.69	$18.71	$18.78	$18.80	$18.85	$18.90	$18.92	$18.91	$18.96
Constant (1982) dollars	8.57	8.88	8.93	8.93	8.86	8.87	8.86	8.85	8.86	8.85	8.85	8.85	8.86	8.85	8.88
GOODS-PRODUCING	19.33	19.90	19.83	19.85	19.86	19.92	19.95	19.92	20.04	20.02	20.04	20.10	20.14	20.18	20.20
Natural resources and mining	22.50	23.29	23.34	23.33	23.33	23.31	23.27	23.29	23.45	23.28	23.47	23.29	23.71	23.91	23.94
Construction	21.87	22.67	22.58	22.63	22.62	22.69	22.70	22.54	22.91	22.89	22.95	23.08	23.13	23.14	23.10
Manufacturing	17.75	18.23	18.15	18.15	18.17	18.26	18.31	18.39	18.41	18.38	18.38	18.42	18.47	18.49	18.51
Excluding overtime	16.97	17.58	17.53	17.53	17.55	17.60	17.65	17.72	17.70	17.64	17.64	17.64	17.70	17.69	17.67
Durable goods	18.70	19.35	19.24	19.27	19.27	19.40	19.45	19.53	19.55	19.55	19.57	19.63	19.69	19.67	19.68
Nondurable goods	16.15	16.56	16.49	16.47	16.55	16.56	16.63	16.70	16.72	16.66	16.64	16.64	16.66	16.72	16.75
PRIVATE SERVICE-PRIVATE SERVICE-PROVIDING	17.77	18.35	18.25	18.27	18.29	18.34	18.42	18.46	18.51	18.54	18.60	18.64	18.66	18.64	18.69
Trade,transportation, and utilities	16.16	16.50	16.42	16.45	16.41	16.44	16.54	16.56	16.59	16.65	16.73	16.78	16.78	16.76	16.82
Wholesale trade	20.13	20.85	20.70	20.86	20.78	20.86	20.98	21.03	21.08	21.16	21.35	21.49	21.42	21.38	21.52
Retail trade	12.87	13.02	12.95	12.96	12.96	12.96	13.04	13.07	13.05	13.12	13.16	13.18	13.20	13.18	13.20
Transportation and warehousing	18.41	18.80	18.77	18.77	18.67	18.75	18.82	18.77	18.91	18.94	19.00	19.14	19.10	19.13	19.19
Utilities	28.83	29.56	29.31	29.42	29.38	29.45	29.71	29.64	29.69	29.92	29.91	29.79	29.88	29.88	29.93
Information	24.78	25.45	25.30	25.45	25.48	25.48	25.67	25.54	25.69	25.68	25.64	25.58	25.63	25.64	25.67
Financial activities	20.28	20.83	20.66	20.79	20.83	20.79	20.90	20.94	21.03	21.07	21.11	21.37	21.27	21.36	21.45
Professional and business services	21.18	22.35	22.24	22.23	22.30	22.39	22.45	22.53	22.52	22.50	22.58	22.62	22.66	22.65	22.69
Education and health services	18.87	19.49	19.39	19.40	19.45	19.51	19.55	19.61	19.70	19.73	19.76	19.76	19.83	19.79	19.85
Leisure and hospitality	10.84	11.11	11.01	11.01	11.07	11.12	11.16	11.24	11.23	11.28	11.27	11.28	11.30	11.31	11.31
Other services	16.09	16.59	16.45	16.50	16.51	16.57	16.65	16.71	16.78	16.81	16.85	16.85	16.87	16.80	16.80

[1] Data relate to production workers in natural resources and mining and manufacturing, construction workers in construction, and nonsupervisory workers in the service-providing industries.

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

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

Industry	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE	$18.08	$18.62	$18.55	$18.50	$18.45	$18.51	$18.63	$18.73	$18.76	$18.88	$18.85	$18.98	$18.98	$18.92	$18.98
Seasonally adjusted	–	–	18.53	18.55	18.57	18.62	18.69	18.71	18.78	18.80	18.85	18.90	18.92	18.91	18.96
GOODS-PRODUCING	19.33	19.90	19.79	19.84	19.84	19.98	20.01	20.04	20.08	20.06	20.08	20.02	20.00	20.07	20.15
Natural resources and mining	22.50	23.29	23.45	23.15	22.99	23.15	23.13	23.26	23.29	23.27	23.73	23.43	23.74	24.14	24.08
Construction	21.87	22.67	22.48	22.59	22.52	22.74	22.79	22.74	23.07	22.94	23.03	23.00	23.03	23.05	22.98
Manufacturing	17.75	18.23	18.16	18.12	18.15	18.21	18.26	18.43	18.33	18.39	18.46	18.47	18.47	18.46	18.51
Durable goods	18.70	19.35	19.24	19.24	19.25	19.36	19.43	19.60	19.51	19.56	19.67	19.64	19.70	19.65	19.66
Wood products	14.19	14.93	14.70	14.89	14.83	15.02	15.09	15.08	15.09	15.18	15.16	14.97	14.79	14.80	14.89
Nonmetallic mineral products	16.90	17.28	17.36	17.24	17.38	17.42	17.43	17.46	17.34	17.45	17.25	17.28	17.21	17.30	17.50
Primary metals	20.19	20.08	20.01	19.83	19.94	20.23	20.28	20.57	20.42	20.29	20.19	20.06	20.08	20.13	20.11
Fabricated metal products	16.99	17.49	17.42	17.40	17.45	17.48	17.52	17.65	17.61	17.66	17.87	17.79	17.84	17.91	17.90
Machinery	17.97	18.38	18.20	18.35	18.24	18.36	18.36	18.62	18.55	18.70	18.76	18.81	18.71	18.59	18.72
Computer and electronic products	21.04	21.88	21.74	21.71	21.67	21.86	22.08	22.00	22.05	22.40	22.42	22.52	22.87	22.46	22.58
Electrical equipment and appliances	15.78	16.27	15.99	16.15	16.23	16.39	16.58	16.61	16.48	16.55	16.65	16.76	16.69	16.70	16.65
Transportation equipment	23.85	24.93	24.85	24.94	25.05	25.10	24.92	25.18	24.98	24.82	24.96	24.89	24.85	25.00	25.00
Furniture and related products	14.54	15.04	14.97	15.00	15.09	15.20	15.12	15.28	14.98	14.98	15.05	15.04	14.95	14.92	15.01
Miscellaneous manufacturing	15.20	16.13	16.09	16.21	16.10	16.21	16.20	16.21	16.23	16.27	16.30	16.22	16.45	16.42	16.45
Nondurable goods	16.15	16.56	16.52	16.45	16.52	16.52	16.54	16.74	16.60	16.67	16.67	16.72	16.63	16.68	16.77
Food manufacturing	14.01	14.40	14.29	14.27	14.35	14.35	14.44	14.66	14.51	14.49	14.46	14.41	14.30	14.37	14.40
Beverages and tobacco products	19.35	20.49	20.25	20.38	20.20	20.15	20.27	20.29	20.60	21.34	21.71	22.12	21.99	22.13	22.32
Textile mills	13.58	13.71	13.79	13.64	13.63	13.50	13.78	13.77	13.62	13.62	13.64	13.50	13.57	13.50	13.60
Textile product mills	11.73	11.44	11.34	11.35	11.56	11.18	11.34	11.29	11.41	11.61	11.72	11.95	11.67	11.59	11.74
Apparel	11.40	11.37	11.44	11.28	11.38	11.38	11.30	11.53	11.15	11.35	11.55	11.28	11.36	11.34	11.33
Leather and allied products	12.96	13.90	14.34	13.85	14.06	13.69	13.59	13.46	13.83	13.93	13.49	13.56	13.37	13.19	13.27
Paper and paper products	18.89	19.28	19.32	19.12	19.32	19.48	19.12	19.53	19.21	19.43	19.55	19.60	19.55	19.90	20.27
Printing and related support activities	16.75	16.75	16.76	16.61	16.56	16.54	16.76	16.87	16.79	16.88	16.93	17.01	17.08	17.08	16.88
Petroleum and coal products	27.41	29.63	29.06	28.99	29.23	29.48	29.41	29.72	30.35	30.61	30.81	31.49	31.30	31.63	31.34
Chemicals	19.50	20.30	20.05	20.19	20.21	20.38	20.41	20.61	20.60	20.61	20.68	20.62	20.61	20.55	20.75
Plastics and rubber products	15.85	16.01	16.19	16.09	16.05	15.82	15.90	16.05	15.78	15.83	15.72	15.90	15.68	15.65	15.66
PRIVATE SERVICE-PROVIDING	17.77	18.35	18.28	18.21	18.14	18.19	18.32	18.44	18.48	18.63	18.59	18.76	18.78	18.68	18.73
Trade, transportation, and utilities	16.16	16.50	16.45	16.42	16.37	16.42	16.58	16.62	16.59	16.63	16.57	16.83	16.85	16.76	16.85
Wholesale trade	20.13	20.85	20.67	20.75	20.64	20.81	21.00	21.01	21.05	21.25	21.40	21.55	21.46	21.27	21.50
Retail trade	12.87	13.02	12.99	12.97	12.94	12.97	13.10	13.20	13.05	13.05	12.99	13.20	13.23	13.18	13.23
Transportation and warehousing	18.41	18.80	18.73	18.69	18.69	18.80	18.89	18.77	18.89	18.97	18.98	19.14	19.15	19.10	19.15
Utilities	28.83	29.56	29.45	29.45	29.23	29.29	29.47	29.71	29.79	29.97	30.09	29.80	29.91	29.98	30.03
Information	24.78	25.45	25.29	25.45	25.31	25.35	25.73	25.65	25.77	25.76	25.50	25.60	25.59	25.52	25.62
Financial activities	20.28	20.83	20.69	20.76	20.71	20.69	20.92	20.94	21.01	21.19	21.08	21.35	21.27	21.35	21.47
Professional and business services	21.18	22.35	22.25	22.11	22.08	22.22	22.37	22.40	22.33	22.69	22.63	22.76	22.87	22.68	22.70
Education and health services	18.87	19.49	19.41	19.37	19.39	19.54	19.49	19.65	19.67	19.72	19.79	19.83	19.83	19.79	19.87
Leisure and hospitality	10.84	11.11	11.01	11.00	10.99	10.98	11.04	11.23	11.24	11.34	11.41	11.34	11.39	11.33	11.30
Other services	16.09	16.59	16.55	16.57	16.45	16.45	16.59	16.72	16.73	16.80	16.85	16.86	16.90	16.88	16.86

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

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

Industry	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]	Apr.[p]
TOTAL PRIVATE	$607.95	$617.11	$608.44	$610.50	$610.70	$614.53	$625.97	$618.09	$620.96	$632.48	$623.94	$626.34	$622.54	$625.92	$631.37
Seasonally adjusted	–	–	613.34	614.01	612.81	616.32	618.64	619.30	619.74	624.16	625.82	629.37	628.14	629.37	632.93
GOODS-PRODUCING	776.66	779.83	759.94	773.76	781.70	789.21	798.40	781.56	791.15	800.39	799.18	794.79	776.00	800.00	813.25
Natural resources and mining	1014.69	1007.85	998.97	993.14	1002.36	990.82	1020.03	1002.51	1003.80	1014.57	1027.51	1026.23	1020.82	1050.76	1064.09
CONSTRUCTION	842.61	852.45	831.76	858.42	860.26	882.31	888.81	832.28	860.51	871.72	849.81	855.60	822.17	861.70	890.85
Manufacturing	724.46	725.87	706.42	712.12	720.56	721.12	734.05	737.20	740.53	750.31	758.71	749.88	738.80	752.35	759.94
Durable goods	767.95	771.03	748.44	756.13	764.23	766.66	781.09	784.00	790.16	800.00	812.37	799.35	791.94	806.79	811.55
Wood products	547.53	559.05	533.61	552.42	572.44	576.77	582.47	574.55	573.42	581.39	580.63	571.85	551.67	572.76	588.85
Nonmetallic mineral products	711.11	706.16	696.14	699.94	721.27	742.09	744.26	735.07	721.34	741.63	686.55	691.20	650.54	698.92	732.75
Primary metals	851.29	816.93	784.39	789.23	797.60	803.13	833.51	835.14	843.35	868.41	878.27	862.58	853.40	870.76	881.69
Fabricated metal products	701.57	689.35	668.93	678.60	685.79	683.47	695.54	691.88	704.40	709.93	727.31	716.94	713.60	731.14	736.92
Machinery	759.94	737.88	720.72	726.66	724.13	723.38	727.06	731.77	749.42	766.70	782.29	776.85	765.24	775.81	786.88
Computer and electronic products	861.58	883.07	860.90	864.06	873.30	870.03	889.82	886.60	897.44	931.84	932.67	921.07	935.38	924.94	922.90
Electrical equipment and appliances	645.60	639.50	615.62	633.08	631.35	631.02	646.62	652.77	657.55	668.62	695.97	685.48	650.91	685.52	692.22
Transportation equipment	1000.67	1026.61	991.52	995.11	1019.54	1024.08	1046.64	1062.60	1059.15	1054.85	1085.76	1055.34	1048.67	1064.94	1063.23
Furniture and related products	553.93	566.48	550.90	565.50	576.44	579.12	576.07	571.47	570.74	564.75	577.92	559.49	548.67	571.78	574.46
Miscellaneous manufacturing	591.95	620.78	611.42	615.98	613.41	619.22	635.04	624.09	628.10	642.67	640.59	629.34	626.75	633.91	637.96
Nondurable goods	652.22	658.36	640.98	648.13	657.50	655.84	661.60	669.60	668.98	676.80	681.80	677.16	661.87	674.33	680.91
Food manufacturing	566.91	575.89	555.88	570.80	574.00	569.70	581.93	587.87	587.66	592.64	592.86	585.05	569.14	579.74	578.08
Beverages and tobacco products	750.25	731.37	706.73	754.06	719.12	705.25	725.67	734.50	741.60	744.77	744.65	774.20	763.05	787.83	795.75
Textile mills	525.00	517.15	496.44	497.86	520.67	507.60	525.02	521.88	533.90	555.70	541.51	544.05	529.23	556.20	567.51
Textile product mills	453.10	433.13	417.31	432.44	448.53	429.31	435.46	434.67	433.58	436.54	461.77	467.25	455.13	459.76	457.85
Apparel	415.14	408.92	409.55	408.34	407.40	414.23	403.41	405.86	403.63	416.55	420.42	410.59	405.55	412.05	415.84
Leather and allied products	486.58	466.73	457.45	445.97	451.33	451.77	462.06	438.80	495.11	497.30	499.13	517.99	504.05	509.13	516.36
Paper and paper products	809.57	805.86	794.05	782.01	807.58	818.16	801.13	835.88	814.50	831.60	836.74	836.92	813.28	836.69	867.13
Printing and related support activities	642.50	635.72	625.15	617.89	625.97	628.52	646.94	649.50	649.77	653.26	656.88	644.68	638.79	647.52	643.58
Petroleum and coal products	1222.07	1285.64	1249.58	1246.57	1280.27	1300.07	1299.92	1289.85	1302.02	1291.74	1303.26	1332.03	1302.08	1338.14	1350.92
Chemicals	809.29	841.33	818.04	821.73	836.69	845.77	847.02	857.38	859.02	873.86	889.24	880.47	861.50	865.16	869.01
Plastics and rubber products	648.98	643.81	633.03	635.56	643.61	632.80	643.95	653.24	646.98	653.78	660.24	658.26	641.31	655.74	667.83
PRIVATE SERVICE-PROVIDING	574.35	588.07	581.30	580.90	578.67	583.90	595.40	588.24	589.51	603.61	594.88	596.57	597.20	597.76	600.91
Trade, transportation, and utilities	536.06	542.36	536.27	538.58	536.94	543.50	552.11	548.46	545.81	550.45	546.81	548.66	547.63	551.40	558.07
Wholesale trade	769.62	784.75	775.13	778.13	776.06	776.21	795.90	779.47	787.27	809.63	802.50	805.97	800.46	797.25	812.70
Retail trade	386.21	388.72	384.50	387.80	386.91	392.99	396.93	397.32	390.20	390.20	392.30	389.40	390.29	392.76	395.88
Transportation and warehousing	670.37	677.44	661.17	665.36	667.23	682.44	695.15	685.11	685.71	698.10	690.87	689.04	681.74	696.33	704.35
Utilities	1230.69	1243.76	1248.68	1239.85	1224.74	1221.39	1234.79	1238.91	1245.22	1258.74	1245.73	1224.78	1247.25	1242.83	1264.62
Information	908.99	931.93	915.50	918.75	916.22	925.28	952.01	936.23	938.03	958.27	930.75	931.84	928.92	923.82	924.91
Financial activities	727.07	751.21	740.70	741.13	739.35	738.63	767.76	747.56	750.06	777.67	754.66	766.47	761.47	764.33	768.96
Professional and business services	737.70	775.81	765.40	765.01	766.18	766.59	789.66	768.32	774.85	800.96	783.00	785.22	789.02	788.57	793.45
Education and health services	613.73	628.56	623.06	621.78	622.42	631.14	631.48	632.73	631.41	640.90	637.24	638.53	634.56	633.60	636.80
Leisure and hospitality	273.39	275.80	270.85	272.80	274.75	277.79	283.73	277.38	275.38	282.37	278.40	272.16	277.92	279.85	279.11
Other services	495.57	506.28	503.12	503.73	500.08	501.73	512.63	508.29	510.27	515.76	512.24	514.23	513.76	516.22	516.68

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:												
2006	65.1	66.9	66.0	61.0	49.6	53.0	56.5	54.3	52.0	52.4	55.8	58.2
2007	58.4	59.1	55.4	51.5	56.7	49.1	49.1	43.1	52.4	52.2	53.7	50.6
2008	48.9	48.9	51.1	44.1	38.8	33.3	35.1	32.3	27.3	30.7	22.3	18.2
2009	19.7	17.1	16.5	20.6	27.3	23.0	26.4	32.9	32.9	31.0	46.8	39.6
2010	48.9	57.4	60.4	66.7								
Over 3-month span:												
2006	67.7	67.8	69.0	69.5	62.5	60.6	55.0	57.4	52.6	49.3	54.8	58.0
2007	60.2	59.7	62.8	58.7	57.1	52.2	53.7	45.5	49.6	49.1	53.5	54.6
2008	56.3	48.1	48.5	46.3	39.6	33.1	31.6	29.0	27.1	26.8	20.8	18.8
2009	17.7	12.3	12.6	10.8	14.9	20.8	21.6	21.7	28.4	27.3	33.8	36.1
2010	42.4	40.9	57.6	64.1								
Over 6-month span:												
2006	64.1	65.1	66.7	67.3	66.9	69.1	62.5	60.8	58.2	57.2	58.2	55.2
2007	58.6	57.1	62.5	61.9	59.5	59.1	56.7	54.8	56.3	51.5	53.5	51.3
2008	49.1	50.6	51.7	49.6	43.9	39.2	36.1	31.6	28.1	26.4	23.0	21.4
2009	17.5	13.2	12.1	11.9	12.5	13.4	13.2	15.8	20.4	20.4	21.0	24.7
2010	31.6	31.8	41.8	53.5								
Over 12-month span:												
2006	67.7	66.0	66.4	63.4	65.6	67.3	64.9	64.5	66.7	65.8	65.1	66.0
2007	63.4	59.5	61.2	59.7	59.3	58.4	57.2	57.4	59.9	59.3	58.6	60.0
2008	54.8	56.5	53.0	47.4	48.1	44.2	41.1	39.8	36.4	33.1	29.0	26.8
2009	24.9	17.7	15.4	15.1	15.1	13.8	12.6	11.5	14.1	13.0	13.4	13.0
2010	14.5	16.5	23.4	27.5								
	Manufacturing payrolls, 84 industries											
Over 1-month span:												
2006	59.1	56.1	55.5	50.0	39.6	51.8	48.8	40.9	34.1	39.0	36.0	41.5
2007	55.5	45.7	31.7	28.7	42.7	36.0	40.2	22.6	32.3	37.2	51.8	42.1
2008	40.9	39.6	45.1	37.2	42.7	23.2	21.3	21.3	16.5	20.1	12.8	4.9
2009	4.9	10.4	9.1	16.5	11.0	11.0	19.5	26.2	20.1	18.9	45.7	41.5
2010	42.7	67.1	60.4	64.0								
Over 3-month span:												
2006	54.9	58.5	54.9	54.3	48.8	53.7	43.9	41.5	33.5	28.0	29.3	27.4
2007	39.6	40.2	45.7	32.3	31.7	34.1	31.7	25.0	24.4	25.0	32.9	39.0
2008	48.2	36.6	35.4	38.4	39.6	30.5	20.1	9.8	14.0	17.1	13.4	6.1
2009	4.9	2.4	2.4	7.3	8.5	11.0	7.3	10.4	17.7	17.7	21.3	29.9
2010	37.2	42.7	55.5	65.9								
Over 6-month span:												
2006	43.3	47.6	48.2	51.2	53.0	52.4	47.0	48.8	43.9	39.6	34.1	29.9
2007	34.8	31.7	32.3	32.9	35.4	39.0	34.1	27.4	28.7	24.4	30.5	25.6
2008	27.4	29.9	42.1	38.4	38.4	31.7	26.2	20.1	13.4	12.2	13.4	12.2
2009	7.3	4.9	2.4	6.1	2.4	6.1	7.3	6.1	7.3	8.5	8.5	15.2
2010	24.4	26.2	33.5	51.8								
Over 12-month span:												
2006	44.5	41.5	41.5	40.2	40.2	45.7	42.7	43.3	47.6	48.8	46.3	43.9
2007	40.2	37.2	37.8	31.1	29.3	29.9	31.1	29.3	33.5	29.3	34.8	36.0
2008	28.0	29.3	26.2	25.6	31.1	26.8	23.2	19.5	24.4	20.1	16.5	14.6
2009	7.9	3.7	4.9	6.7	3.7	4.9	6.1	4.9	5.5	4.9	4.9	4.9
2010	6.1	6.1	7.3	12.8								

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

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

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						
	2009			2010				2009			2010			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.[p]
Total[2]	2,546	2,456	2,531	2,854	2,647	2,785	3,078	1.9	1.9	1.9	2.2	2.0	2.1	2.3
Industry														
Total private[2]	2,164	2,113	2,130	2,471	2,266	2,363	2,693	2.0	1.9	2.0	2.3	2.1	2.2	2.4
Construction	65	71	67	62	65	83	102	1.1	1.2	1.2	1.1	1.2	1.5	1.8
Manufacturing	141	155	171	154	167	180	189	1.2	1.3	1.5	1.3	1.4	1.5	1.6
Trade, transportation, and utilities	363	334	378	395	453	470	470	1.4	1.3	1.5	1.6	1.8	1.9	1.9
Professional and business services	436	425	404	424	409	423	523	2.6	2.5	2.4	2.5	2.4	2.5	3.0
Education and health services	529	537	545	624	502	536	573	2.7	2.7	2.7	3.1	2.5	2.7	2.9
Leisure and hospitality	268	236	227	268	285	257	300	2.0	1.8	1.7	2.0	2.1	1.9	2.2
Government	382	343	401	383	381	421	385	1.7	1.5	1.8	1.7	1.7	1.8	1.7
Region[3]														
Northeast	532	482	547	585	542	599	696	2.1	1.9	2.2	2.3	2.2	2.4	2.7
South	915	859	943	986	916	945	1,005	1.9	1.8	2.0	2.1	1.9	2.0	2.1
Midwest	566	553	495	613	566	573	642	1.9	1.8	1.7	2.0	1.9	1.9	2.1
West	605	586	603	648	682	707	820	2.1	2.0	2.1	2.2	2.3	2.4	2.8

[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 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						
	2009			2010				2009			2010			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.[p]
Total[2]	4,001	4,160	3,997	4,087	4,011	4,331	4,304	3.1	3.2	3.1	3.2	3.1	3.3	3.3
Industry														
Total private[2]	3,689	3,878	3,715	3,790	3,710	3,970	3,946	3.4	3.6	3.5	3.5	3.5	3.7	3.7
Construction	325	329	335	312	306	400	355	5.7	5.7	5.9	5.6	5.5	7.1	6.3
Manufacturing	243	259	244	289	267	279	300	2.1	2.2	2.1	2.5	2.3	2.4	2.6
Trade, transportation, and utilities	772	847	849	822	821	897	867	3.1	3.4	3.4	3.3	3.3	3.6	3.5
Professional and business services	709	808	652	729	767	744	757	4.3	4.9	4.0	4.4	4.6	4.5	4.5
Education and health services	522	512	496	487	470	503	508	2.7	2.7	2.6	2.5	2.4	2.6	2.6
Leisure and hospitality	663	693	657	715	652	712	720	5.1	5.3	5.1	5.5	5.0	5.5	5.5
Government	312	282	282	297	301	360	358	1.4	1.3	1.3	1.3	1.3	1.6	1.6
Region[3]														
Northeast	805	758	746	836	733	837	775	3.3	3.1	3.0	3.4	3.0	3.4	3.1
South	1,420	1,555	1,463	1,449	1,381	1,618	1,662	3.0	3.3	3.1	3.1	2.9	3.4	3.5
Midwest	949	896	900	936	965	1,073	1,093	3.2	3.0	3.1	3.2	3.3	3.6	3.7
West	933	970	879	922	861	1,025	958	3.2	3.4	3.1	3.2	3.0	3.6	3.3

[1] Detail will not necessarily add to totals because of the independent seasonal adjustment of the various series.
[2] Includes natural resources and mining, information, financial activities, and other services, not shown separately.
[3] **Northeast**: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont; **South:** Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia; **Midwest:** Illinois, Indiana, 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						
	2009			2010				2009			2010			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.[p]
Total[2]	4,171	4,130	4,195	4,155	3,969	4,048	4,000	3.2	3.2	3.2	3.2	3.1	3.1	3.1
Industry														
Total private[2]	3,901	3,846	3,884	3,858	3,663	3,743	3,706	3.6	3.6	3.6	3.6	3.4	3.5	3.4
Construction	381	347	382	405	362	365	347	6.6	6.1	6.7	7.2	6.5	6.5	6.2
Manufacturing	293	285	273	276	260	245	245	2.5	2.5	2.4	2.4	2.3	2.1	2.1
Trade, transportation, and utilities	844	853	901	856	806	866	818	3.4	3.5	3.7	3.5	3.3	3.5	3.3
Professional and business services	717	706	649	698	716	699	697	4.4	4.3	3.9	4.2	4.3	4.2	4.2
Education and health services	473	486	486	457	440	455	478	2.5	2.5	2.5	2.4	2.3	2.3	2.5
Leisure and hospitality	707	716	688	709	621	677	687	5.4	5.5	5.3	5.5	4.8	5.2	5.2
Government	269	284	311	296	306	305	294	1.2	1.3	1.4	1.3	1.4	1.4	1.3
Region[3]														
Northeast	727	728	817	789	730	821	702	3.0	3.0	3.3	3.2	3.0	3.3	2.8
South	1,544	1,531	1,499	1,561	1,459	1,423	1,434	3.3	3.3	3.2	3.3	3.1	3.0	3.0
Midwest	920	752	1,016	988	858	895	911	3.1	2.6	3.5	3.4	2.9	3.0	3.1
West	939	894	1,061	1,034	954	920	971	3.3	3.1	3.7	3.6	3.3	3.2	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						
	2009			2010				2009			2010			
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[p]	Oct.	Nov.	Dec.	Jan	Feb.	Mar.	Apr.[p]
Total[2]	1,723	1,837	1,753	1,772	1,851	1,918	1,984	1.3	1.4	1.4	1.4	1.4	1.5	1.5
Industry														
Total private[2]	1,620	1,731	1,639	1,661	1,719	1,802	1,882	1.5	1.6	1.5	1.6	1.6	1.7	1.7
Construction	62	92	76	99	84	83	69	1.1	1.6	1.3	1.8	1.5	1.5	1.2
Manufacturing	80	75	75	85	97	89	94	.7	.6	.7	.7	.8	.8	.8
Trade, transportation, and utilities	382	413	392	368	432	424	457	1.6	1.7	1.6	1.5	1.8	1.7	1.8
Professional and business services	277	264	248	259	300	315	330	1.7	1.6	1.5	1.6	1.8	1.9	2.0
Education and health services	267	262	271	248	237	253	298	1.4	1.4	1.4	1.3	1.2	1.3	1.5
Leisure and hospitality	356	397	375	401	393	406	417	2.7	3.0	2.9	3.1	3.0	3.1	3.2
Government	102	106	114	112	132	117	101	.5	.5	.5	.5	.6	.5	.4
Region[3]														
Northeast	300	276	280	268	320	325	333	1.2	1.1	1.1	1.1	1.3	1.3	1.3
South	677	757	722	736	755	750	761	1.4	1.6	1.5	1.6	1.6	1.6	1.6
Midwest	382	377	391	380	421	438	449	1.3	1.3	1.3	1.3	1.4	1.5	1.5
West	388	446	382	362	434	406	420	1.3	1.6	1.3	1.3	1.5	1.4	1.5

[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, first quarter 2009.

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

See footnotes at end of table.

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

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

[1] Average weekly wages were calculated using unrounded data.

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

[3] Totals for the United States do not include data for Puerto Rico or the Virgin Islands.

[4] Data do not meet BLS or State agency disclosure standards.

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

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

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

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

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

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

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

[1] Includes establishments that reported no workers in March 2008.

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

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

26. Average annual wages for 2007 and 2008 for all covered workers[1] by metropolitan area

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

See footnotes at end of table.

26. Continued — Average annual wages for 2007 and 2008 for all covered workers[1] by metropolitan area

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

See footnotes at end of table.

26. Continued — Average annual wages for 2007 and 2008 for all covered workers[1] by metropolitan area

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

See footnotes at end of table.

26. Continued — Average annual wages for 2007 and 2008 for all covered workers[1] by metropolitan area

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

See footnotes at end of table.

26. Continued — Average annual wages for 2007 and 2008 for all covered workers[1] by metropolitan area

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

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

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

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

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

27. Annual data: Employment status of the population

[Numbers in thousands]

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

[1] Not strictly comparable with prior years.

28. Annual data: Employment levels by industry

[In thousands]

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

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

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

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

30. Employment Cost Index, compensation,[1] by occupation and industry group

[December 2005 = 100]

Series	2008				2009				2010	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2010	
Civilian workers[2]	107.6	108.3	109.2	109.5	109.9	110.3	110.8	111.1	111.8	0.6	1.7
Workers by occupational group											
Management, professional, and related	108.3	109.0	110.1	110.4	110.9	111.1	111.5	111.7	112.5	.7	1.4
Management, business, and financial	108.2	108.9	109.7	109.8	110.0	110.1	110.2	110.4	111.7	1.2	1.5
Professional and related	108.4	109.0	110.4	110.7	111.3	111.6	112.2	112.4	112.9	.4	1.4
Sales and office	106.8	107.7	108.2	108.3	108.4	108.7	109.4	109.7	110.3	.5	1.8
Sales and related	105.0	106.1	106.0	105.5	104.3	104.5	105.4	105.8	105.9	.1	1.5
Office and administrative support	108.0	108.6	109.5	110.0	110.8	111.3	111.8	112.1	113.0	.8	2.0
Natural resources, construction, and maintenance	107.7	108.4	109.3	109.8	110.1	110.7	111.2	111.6	112.5	.8	2.2
Construction and extraction	108.5	109.6	110.3	110.8	111.0	111.6	112.2	112.5	113.2	.6	2.0
Installation, maintenance, and repair	106.7	107.0	108.0	108.6	109.1	109.5	110.0	110.4	111.6	1.1	2.3
Production, transportation, and material moving	105.6	106.2	106.9	107.2	108.0	108.5	109.1	109.3	110.3	.9	2.1
Production	104.8	105.3	105.9	106.2	107.2	107.7	108.1	108.4	109.6	1.1	2.2
Transportation and material moving	106.6	107.3	108.1	108.4	108.9	109.5	110.2	110.4	111.2	.7	2.1
Service occupations	108.4	109.1	110.2	110.6	111.5	111.9	112.6	113.0	113.5	.4	1.8
Workers by industry											
Goods-producing	106.1	106.8	107.3	107.5	108.0	108.2	108.5	108.7	109.8	1.0	1.7
Manufacturing	104.7	105.1	105.6	105.9	106.5	106.7	106.8	107.0	108.4	1.3	1.8
Service-providing	107.8	108.5	109.5	109.8	110.3	110.6	111.3	111.5	112.2	.6	1.7
Education and health services	108.6	109.2	110.8	111.1	111.7	112.2	113.2	113.4	113.7	.3	1.8
Health care and social assistance	108.9	109.6	110.4	110.8	111.7	112.2	112.8	113.2	113.7	.4	1.8
Hospitals	108.4	109.2	110.2	110.8	111.7	112.3	112.9	113.4	114.1	.6	2.1
Nursing and residential care facilities	107.3	108.2	109.0	109.6	110.3	110.8	111.3	111.5	112.1	.5	1.6
Education services	108.3	108.9	111.1	111.3	111.8	112.1	113.5	113.6	113.7	.1	1.7
Elementary and secondary schools	108.2	108.8	111.1	111.4	111.9	112.1	113.9	114.0	114.1	.1	2.0
Public administration [3]	109.7	110.1	111.6	112.0	113.0	113.8	114.5	115.1	115.6	.4	2.3
Private industry workers	107.3	108.0	108.7	108.9	109.3	109.6	110.0	110.2	111.1	.8	1.6
Workers by occupational group											
Management, professional, and related	108.1	108.9	109.6	109.9	110.4	110.5	110.6	110.7	111.8	1.0	1.3
Management, business, and financial	108.0	108.7	109.3	109.5	109.6	109.7	109.7	109.9	111.3	1.3	1.6
Professional and related	108.3	109.0	109.9	110.3	111.0	111.1	111.4	111.4	112.2	.7	1.1
Sales and office	106.6	107.5	107.9	107.9	107.9	108.3	108.8	109.2	109.8	.5	1.8
Sales and related	105.0	106.2	106.0	105.5	104.3	104.5	105.3	105.8	105.8	.0	1.4
Office and administrative support	107.8	108.5	109.2	109.6	110.5	110.9	111.3	111.6	112.6	.9	1.9
Natural resources, construction, and maintenance	107.6	108.3	109.0	109.6	109.9	110.3	110.9	111.2	112.2	.9	2.1
Construction and extraction	108.6	109.7	110.3	110.8	110.9	111.5	112.0	112.4	113.1	.6	2.0
Installation, maintenance, and repair	106.3	106.6	107.4	108.1	108.6	108.9	109.4	109.8	111.1	1.2	2.3
Production, transportation, and material moving	105.5	106.0	106.6	106.9	107.7	108.1	108.6	108.9	109.9	.9	2.0
Production	104.8	105.2	105.8	106.1	107.1	107.6	108.0	108.3	109.5	1.1	2.2
Transportation and material moving	106.4	107.2	107.7	107.9	108.4	108.9	109.6	109.7	110.5	.7	1.9
Service occupations	107.8	108.7	109.4	109.8	110.7	110.9	111.7	111.8	112.4	.5	1.5
Workers by industry and occupational group											
Goods-producing industries	106.1	106.8	107.2	107.5	107.9	108.2	108.4	108.6	109.8	1.1	1.8
Management, professional, and related	106.1	106.6	106.7	106.6	106.8	106.7	106.5	106.4	108.0	1.5	1.1
Sales and office	105.1	106.3	106.7	107.1	107.3	107.4	107.5	107.8	108.2	.4	.8
Natural resources, construction, and maintenance	108.1	109.0	109.8	110.4	110.4	110.9	111.3	111.7	112.6	.8	2.0
Production, transportation, and material moving	104.8	105.3	105.8	106.2	107.0	107.5	107.8	108.0	109.3	1.2	2.1
Construction	108.9	110.1	110.6	110.9	110.9	111.2	111.5	111.7	112.1	.4	1.1
Manufacturing	104.7	105.1	105.6	105.9	106.5	106.7	106.8	107.0	108.4	1.3	1.8
Management, professional, and related	104.9	105.2	105.4	105.4	105.7	105.7	105.4	105.5	107.2	1.6	1.4
Sales and office	105.0	106.1	106.7	107.0	107.3	107.1	107.2	107.5	108.2	.7	.8
Natural resources, construction, and maintenance	104.6	104.5	105.3	106.0	106.6	107.1	107.4	107.7	109.5	1.7	2.7
Production, transportation, and material moving	104.5	105.0	105.5	105.8	106.7	107.2	107.5	107.8	109.1	1.2	2.2
Service-providing industries	107.7	108.5	109.1	109.4	109.8	110.1	110.5	110.8	111.6	.7	1.6
Management, professional, and related	108.5	109.3	110.2	110.6	111.1	111.2	111.4	111.6	112.5	.8	1.3
Sales and office	106.8	107.7	108.0	108.0	108.0	108.4	109.0	109.4	110.0	.5	1.9
Natural resources, construction, and maintenance	106.7	107.3	107.8	108.4	109.0	109.5	110.1	110.4	111.7	1.2	2.5
Production, transportation, and material moving	106.4	107.0	107.6	107.8	108.5	109.0	109.7	109.9	110.6	.6	1.9
Service occupations	107.9	108.7	109.5	109.8	110.7	111.0	111.7	111.9	112.4	.4	1.5
Trade, transportation, and utilities	106.1	107.3	107.6	107.5	107.8	108.1	108.6	108.8	109.9	1.0	1.9

See footnotes at end of table.

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

[December 2005 = 100]

Series	2008				2009				2010	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2010	
Wholesale trade	105.7	107.2	107.1	106.8	107.1	106.9	106.8	107.0	108.0	0.9	0.8
Retail trade	106.6	107.6	108.2	108.1	108.3	108.8	109.7	110.0	110.9	.8	2.4
Transportation and warehousing	105.6	106.4	106.8	106.9	107.4	107.9	108.3	108.2	109.0	.7	1.5
Utilities	106.5	108.1	108.1	108.9	109.6	110.9	111.2	112.0	115.4	3.0	5.3
Information	106.1	106.2	107.2	107.4	107.7	107.5	108.0	108.3	109.0	.6	1.2
Financial activities	106.8	107.3	107.4	107.1	106.8	107.9	108.3	108.6	109.8	1.1	2.8
Finance and insurance	107.0	107.7	107.6	107.2	106.9	108.1	108.6	108.8	110.0	1.1	2.9
Real estate and rental and leasing	105.5	105.7	106.4	106.6	106.6	106.9	107.4	107.7	109.0	1.2	2.3
Professional and business services	109.0	109.9	110.8	111.6	111.9	111.9	112.1	112.4	113.0	.5	1.0
Education and health services	108.6	109.4	110.3	110.6	111.5	111.9	112.6	112.8	113.3	.4	1.6
Education services	108.1	109.1	111.4	111.3	111.9	112.0	113.2	113.2	113.2	.0	1.2
Health care and social assistance	108.8	109.4	110.1	110.5	111.5	111.9	112.5	112.8	113.3	.4	1.6
Hospitals	108.2	109.1	110.1	110.7	111.5	112.0	112.6	113.2	113.9	.6	2.2
Leisure and hospitality	109.0	109.3	110.6	111.4	112.2	112.0	112.7	112.7	113.5	.7	1.2
Accommodation and food services	109.5	110.0	111.4	112.1	113.0	112.6	113.4	113.5	114.0	.4	.9
Other services, except public administration	108.7	109.4	109.9	109.9	110.8	110.8	111.8	111.5	112.2	.6	1.3
State and local government workers	108.9	109.4	111.3	111.6	112.3	112.9	114.0	114.3	114.6	.3	2.0
Workers by occupational group											
Management, professional, and related	108.8	109.3	111.3	111.6	112.0	112.6	113.7	113.9	114.1	.2	1.9
Professional and related	108.6	109.1	111.1	111.4	111.9	112.4	113.7	114.0	114.0	.0	1.9
Sales and office	108.8	109.3	111.0	111.3	112.4	113.0	114.3	114.7	115.3	.5	2.6
Office and administrative support	109.3	109.8	111.4	111.8	112.8	113.3	114.7	115.0	115.6	.5	2.5
Service occupations	109.7	110.0	111.9	112.4	113.4	114.0	114.9	115.6	116.1	.4	2.4
Workers by industry											
Education and health services	108.6	109.1	111.2	111.5	111.9	112.4	113.7	114.0	114.1	.1	2.0
Education services	108.4	108.8	111.0	111.2	111.8	112.1	113.5	113.7	113.8	.1	1.8
Schools	108.4	108.8	111.0	111.2	111.8	112.1	113.5	113.7	113.8	.1	1.8
Elementary and secondary schools	108.3	108.8	111.1	111.4	112.0	112.2	114.0	114.1	114.1	.0	1.9
Health care and social assistance	110.1	111.1	112.7	113.2	113.3	114.8	115.3	115.8	116.2	.3	2.6
Hospitals	109.2	109.7	110.8	111.3	112.4	113.5	114.0	114.5	115.2	.6	2.5
Public administration [3]	109.7	110.1	111.6	112.0	113.0	113.8	114.5	115.1	115.6	.4	2.3

[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	2008				2009				2010	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2010	
Civilian workers[1]	107.6	108.4	109.3	109.6	110.0	110.4	110.9	111.2	111.7	0.4	1.5
Workers by occupational group											
Management, professional, and related	108.2	109.0	110.1	110.5	111.0	111.2	111.5	111.8	112.5	.6	1.4
Management, business, and financial	108.2	109.0	109.8	110.1	110.4	110.5	110.6	110.9	112.1	1.1	1.5
Professional and related	108.3	109.0	110.3	110.7	111.2	111.5	112.1	112.2	112.7	.4	1.3
Sales and office	106.7	107.7	108.1	108.1	108.1	108.6	109.2	109.7	109.9	.2	1.7
Sales and related	105.2	106.6	106.3	105.6	104.3	104.7	105.7	106.2	106.2	.0	1.8
Office and administrative support	107.8	108.5	109.3	109.8	110.6	111.2	111.6	111.9	112.3	.4	1.5
Natural resources, construction, and maintenance	108.1	109.0	109.9	110.6	110.7	111.2	111.7	112.1	112.6	.4	1.7
Construction and extraction	109.0	109.9	110.7	111.3	111.4	111.8	112.3	112.7	112.8	.1	1.3
Installation, maintenance, and repair	107.0	107.8	108.8	109.6	110.0	110.5	111.1	111.5	112.3	.7	2.1
Production, transportation, and material moving	106.1	106.9	107.7	108.0	108.5	109.0	109.6	109.9	110.1	.2	1.5
Production	105.7	106.5	107.2	107.5	108.2	108.7	109.2	109.4	109.8	.4	1.5
Transportation and material moving	106.6	107.3	108.2	108.5	108.8	109.5	110.2	110.4	110.6	.2	1.7
Service occupations	108.0	108.7	109.9	110.3	111.2	111.6	112.4	112.7	113.0	.3	1.6
Workers by industry											
Goods-producing	107.1	108.0	108.6	109.0	109.2	109.5	109.8	110.1	110.5	.4	1.2
Manufacturing	105.9	106.7	107.4	107.7	108.1	108.4	108.6	108.9	109.4	.5	1.2
Service-providing	107.7	108.5	109.4	109.7	110.2	110.5	111.1	111.4	111.9	.4	1.5
Education and health services	108.0	108.7	110.2	110.5	111.0	111.4	112.3	112.6	112.8	.2	1.6
Health care and social assistance	108.9	109.6	110.4	110.9	111.7	112.2	112.8	113.2	113.6	.4	1.7
Hospitals	108.4	109.4	110.5	111.3	112.0	112.6	113.2	113.7	114.0	.3	1.8
Nursing and residential care facilities	107.4	108.1	109.1	109.7	110.3	110.9	111.4	111.7	112.1	.4	1.6
Education services	107.3	107.9	110.0	110.2	110.5	110.7	111.8	112.0	112.2	.2	1.5
Elementary and secondary schools	107.0	107.5	109.9	110.1	110.4	110.5	112.0	112.1	112.3	.2	1.7
Public administration[2]	108.2	108.6	109.9	110.4	111.3	112.3	112.8	113.3	113.7	.4	2.2
Private industry workers	107.6	108.4	109.1	109.4	109.8	110.1	110.6	110.9	111.4	.5	1.5
Workers by occupational group											
Management, professional, and related	108.5	109.3	110.1	110.5	111.1	111.1	111.3	111.5	112.5	.9	1.3
Management, business, and financial	108.2	109.0	109.7	110.0	110.3	110.3	110.4	110.8	112.0	1.1	1.5
Professional and related	108.7	109.5	110.4	110.9	111.6	111.8	112.1	112.1	112.8	.6	1.1
Sales and office	106.7	107.7	108.0	108.0	107.9	108.3	109.0	109.4	109.6	.2	1.6
Sales and related	105.3	106.6	106.4	105.7	104.3	104.7	105.7	106.2	106.2	.0	1.8
Office and administrative support	107.7	108.5	109.2	109.7	110.6	111.1	111.4	111.8	112.2	.4	1.4
Natural resources, construction, and maintenance	108.1	109.0	109.8	110.5	110.6	111.0	111.6	112.0	112.5	.4	1.7
Construction and extraction	109.2	110.1	110.8	111.5	111.4	111.7	112.3	112.7	112.9	.2	1.3
Installation, maintenance, and repair	106.8	107.6	108.5	109.3	109.7	110.2	110.7	111.2	112.1	.8	2.2
Production, transportation, and material moving	106.0	106.8	107.5	107.8	108.3	108.8	109.4	109.6	109.8	.2	1.4
Production	105.6	106.4	107.2	107.4	108.1	108.5	109.0	109.3	109.6	.3	1.4
Transportation and material moving	106.5	107.4	108.0	108.3	108.5	109.2	109.9	110.1	110.2	.1	1.6
Service occupations	107.9	108.8	109.7	110.1	111.0	111.2	112.1	112.3	112.6	.3	1.4
Workers by industry and occupational group											
Goods-producing industries	107.1	108.0	108.6	109.0	109.2	109.5	109.8	110.0	110.5	.5	1.2
Management, professional, and related	107.7	108.4	108.7	108.8	109.3	109.3	109.4	109.4	110.5	1.0	1.1
Sales and office	105.8	107.2	107.6	107.9	108.1	108.3	108.4	108.8	108.4	-.4	.3
Natural resources, construction, and maintenance	108.8	109.6	110.5	111.3	111.1	111.4	111.9	112.3	112.6	.3	1.4
Production, transportation, and material moving	105.7	106.6	107.3	107.6	108.0	108.5	108.9	109.1	109.4	.3	1.3
Construction	109.0	110.0	110.6	111.1	111.2	111.4	111.7	111.9	112.1	.2	.8
Manufacturing	105.9	106.7	107.4	107.7	108.1	108.4	108.6	108.9	109.4	.5	1.2
Management, professional, and related	106.7	107.2	107.6	107.8	108.4	108.5	108.6	108.7	110.0	1.2	1.5
Sales and office	105.5	106.9	107.6	108.1	108.2	108.2	108.3	108.7	108.3	-.4	.1
Natural resources, construction, and maintenance	106.8	107.1	108.1	109.0	108.8	109.2	109.7	109.9	110.4	.5	1.5
Production, transportation, and material moving	105.4	106.3	107.1	107.3	107.7	108.2	108.6	108.9	109.2	.3	1.4
Service-providing industries	107.7	108.6	109.3	109.6	110.0	110.3	110.8	111.1	111.7	.5	1.5
Management, professional, and related	108.6	109.4	110.3	110.8	111.4	111.5	111.7	111.9	112.8	.8	1.3
Sales and office	106.8	107.7	108.0	108.0	107.9	108.3	109.0	109.5	109.8	.3	1.8
Natural resources, construction, and maintenance	106.9	108.0	108.6	109.3	109.9	110.5	111.2	111.6	112.5	.8	2.4
Production, transportation, and material moving	106.3	107.1	107.8	108.1	108.6	109.3	110.0	110.2	110.4	.2	1.7
Service occupations	108.0	108.8	109.7	110.1	111.0	111.3	112.2	112.3	112.6	.3	1.4
Trade, transportation, and utilities	105.9	107.2	107.5	107.4	107.8	108.2	108.7	108.9	109.5	.6	1.6

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

[December 2005 = 100]

Series	2008				2009				2010	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2010	
Wholesale trade	105.2	107.2	106.8	106.4	106.8	106.5	106.2	106.4	107.1	0.7	0.3
Retail trade	106.4	107.6	108.1	108.1	108.3	108.9	110.0	110.4	111.0	.5	2.5
Transportation and warehousing	105.0	106.0	106.7	106.9	107.2	107.9	108.3	108.3	108.7	.4	1.4
Utilities	108.0	109.3	109.3	109.6	111.0	112.0	112.2	113.3	113.9	.5	2.6
Information	105.3	106.3	107.3	107.5	107.8	108.1	108.7	109.1	109.6	.5	1.7
Financial activities	107.2	107.7	107.7	107.2	106.8	107.9	108.5	108.9	109.8	.8	2.8
Finance and insurance	107.9	108.4	108.2	107.6	107.1	108.5	109.0	109.4	110.2	.7	2.9
Real estate and rental and leasing	104.5	104.7	105.3	105.7	105.6	105.8	106.3	106.8	107.9	1.0	2.2
Professional and business services	109.1	110.0	111.0	111.9	112.3	112.2	112.3	112.7	113.3	.5	.9
Education and health services	108.6	109.2	110.2	110.6	111.4	111.8	112.5	112.8	113.2	.4	1.6
Education services	107.9	108.6	110.8	110.8	111.1	111.2	112.2	112.6	112.5	-.1	1.3
Health care and social assistance	108.7	109.4	110.1	110.6	111.5	111.9	112.5	112.8	113.3	.4	1.6
Hospitals	108.2	109.2	110.3	111.1	111.8	112.3	112.9	113.4	113.7	.3	1.7
Leisure and hospitality	109.7	109.9	111.4	112.3	113.1	112.8	113.7	113.8	114.5	.6	1.2
Accommodation and food services	110.0	110.4	111.9	112.8	113.7	113.2	114.2	114.3	114.7	.3	.9
Other services, except public administration	109.2	109.9	110.4	110.4	111.4	111.4	112.5	112.1	112.3	.2	.8
State and local government workers	107.7	108.2	110.1	110.4	110.9	111.5	112.4	112.6	112.9	.3	1.8
Workers by occupational group											
Management, professional, and related	107.6	108.2	110.1	110.4	110.7	111.2	112.1	112.3	112.5	.2	1.6
Professional and related	107.5	108.1	110.1	110.3	110.6	111.1	112.1	112.3	112.5	.2	1.7
Sales and office	107.4	107.9	109.3	109.7	110.5	111.2	112.1	112.4	112.9	.4	2.2
Office and administrative support	107.8	108.3	109.7	110.1	111.0	111.6	112.6	112.9	113.3	.4	2.1
Service occupations	108.3	108.6	110.4	110.9	112.0	112.7	113.3	113.8	114.3	.4	2.1
Workers by industry											
Education and health services	107.5	108.1	110.2	110.5	110.7	111.1	112.1	112.3	112.5	.2	1.6
Education services	107.2	107.7	109.9	110.1	110.4	110.7	111.7	111.9	112.1	.2	1.5
Schools	107.2	107.7	109.9	110.1	110.4	110.7	111.7	111.9	112.1	.2	1.5
Elementary and secondary schools	106.9	107.5	109.8	110.1	110.3	110.5	112.0	112.1	112.3	.2	1.8
Health care and social assistance	110.1	111.0	112.8	113.4	113.1	114.8	115.2	115.6	115.9	.3	2.5
Hospitals	109.8	110.3	111.4	112.1	112.8	114.0	114.4	114.9	115.4	.4	2.3
Public administration [2]	108.2	108.6	109.9	110.4	111.3	112.3	112.8	113.3	113.7	.4	2.2

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

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

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

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

[December 2005 = 100]

Series	2008				2009				2010	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2010	
Civilian workers	107.6	108.1	108.9	109.1	109.7	110.0	110.6	110.7	112.1	1.3	2.2
Private industry workers	106.5	107.0	107.5	107.7	108.2	108.4	108.7	108.8	110.4	1.5	2.0
Workers by occupational group											
Management, professional, and related	107.3	107.9	108.5	108.5	108.8	108.8	108.9	108.8	110.2	1.3	1.3
Sales and office	106.5	107.0	107.6	107.8	108.0	108.1	108.5	108.7	110.2	1.4	2.0
Natural resources, construction, and maintenance	106.5	107.0	107.5	107.7	108.2	108.8	109.3	109.5	111.6	1.9	3.1
Production, transportation, and material moving	104.4	104.5	104.8	105.1	106.4	106.8	107.1	107.4	110.0	2.4	3.4
Service occupations	107.6	108.5	108.7	108.8	109.7	110.0	110.4	110.5	111.7	1.1	1.8
Workers by industry											
Goods-producing	104.0	104.4	104.6	104.7	105.4	105.7	105.7	105.8	108.4	2.5	2.8
Manufacturing	102.3	102.2	102.3	102.5	103.5	103.6	103.4	103.6	106.6	2.9	3.0
Service-providing	107.6	108.1	108.7	108.9	109.3	109.5	109.9	109.9	111.3	1.3	1.8
State and local government workers	111.4	111.8	113.9	114.2	115.2	115.8	117.5	117.9	118.3	.3	2.7

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

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

[December 2005 = 100]

Series	2008				2009				2010	Percent change	
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	3 months ended	12 months ended
										Mar. 2010	
COMPENSATION											
Workers by bargaining status[1]											
Union	105.9	106.7	107.4	108.0	109.1	109.8	110.5	111.1	112.8	1.5	3.4
Goods-producing	104.6	105.6	106.2	106.9	108.0	108.9	109.5	110.0	112.0	1.8	3.7
Manufacturing	101.4	101.7	102.1	102.8	104.4	104.8	105.4	105.8	108.6	2.6	4.0
Service-providing	107.0	107.5	108.3	108.8	109.9	110.6	111.3	111.9	113.5	1.4	3.3
Nonunion	107.5	108.3	108.9	109.1	109.4	109.6	109.9	110.1	110.9	.7	1.4
Goods-producing	106.5	107.1	107.6	107.7	107.9	108.0	108.0	108.2	109.1	.8	1.1
Manufacturing	105.6	106.2	106.6	106.8	107.1	107.3	107.3	107.5	108.5	.9	1.3
Service-providing	107.7	108.6	109.2	109.4	109.8	110.0	110.4	110.6	111.3	.6	1.4
Workers by region[1]											
Northeast	107.4	108.1	108.7	109.5	109.8	110.2	110.7	111.0	111.8	.7	1.8
South	107.8	108.5	109.1	109.3	109.8	110.1	110.6	110.7	111.5	.7	1.5
Midwest	106.0	107.0	107.4	107.6	107.9	108.1	108.4	108.6	109.9	1.2	1.9
West	107.8	108.4	109.3	109.4	109.9	110.1	110.3	110.7	111.4	.6	1.4
WAGES AND SALARIES											
Workers by bargaining status[1]											
Union	105.5	106.7	107.4	108.1	108.8	109.6	110.2	110.9	111.5	.5	2.5
Goods-producing	105.2	106.4	107.1	107.7	108.2	108.8	109.5	109.8	110.2	.4	1.8
Manufacturing	103.4	104.4	104.9	105.5	106.0	106.4	107.0	107.3	107.8	.5	1.7
Service-providing	105.8	106.9	107.7	108.3	109.2	110.1	110.8	111.6	112.4	.7	2.9
Nonunion	107.9	108.7	109.4	109.6	110.0	110.2	110.6	110.9	111.4	.5	1.3
Goods-producing	107.7	108.4	109.0	109.3	109.5	109.7	109.9	110.1	110.6	.5	1.0
Manufacturing	106.6	107.3	108.0	108.2	108.6	108.9	109.1	109.3	109.8	.5	1.1
Service-providing	107.9	108.8	109.4	109.7	110.1	110.3	110.8	111.0	111.6	.5	1.4
Workers by region[1]											
Northeast	107.5	108.2	108.7	109.6	109.9	110.3	110.8	111.1	111.7	.5	1.6
South	108.1	109.1	109.8	110.0	110.4	110.7	111.3	111.5	111.9	.4	1.4
Midwest	106.3	107.5	107.9	108.0	108.4	108.6	108.9	109.2	109.9	.6	1.4
West	108.3	108.9	109.9	110.1	110.5	110.8	111.2	111.6	112.1	.4	1.4

[1] The indexes are calculated differently from those for the occupation and industry groups. For a detailed description of the index calculation, see the Monthly Labor Review Technical Note, "Estimation procedures for the Employment Cost Index," May 1982.

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

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

Series	Year				
	2003	2004	2005	2006	2007 [1]
All retirement					
Percentage of workers with access					
All workers	57	59	60	60	61
White-collar occupations [2]	67	69	70	69	-
Management, professional, and related	-	-	-	-	76
Sales and office	-	-	-	-	64
Blue-collar occupations [2]	59	59	60	62	-
Natural resources, construction, and maintenance	-	-	-	-	61
Production, transportation, and material moving	-	-	-	-	65
Service occupations	28	31	32	34	36
Full-time	67	68	69	69	70
Part-time	24	27	27	29	31
Union	86	84	88	84	84
Non-union	54	56	56	57	58
Average wage less than $15 per hour	45	46	46	47	47
Average wage $15 per hour or higher	76	77	78	77	76
Goods-producing industries	70	70	71	73	70
Service-providing industries	53	55	56	56	58
Establishments with 1-99 workers	42	44	44	44	45
Establishments with 100 or more workers	75	77	78	78	78
Percentage of workers participating					
All workers	49	50	50	51	51
White-collar occupations [2]	59	61	61	60	-
Management, professional, and related	-	-	-	-	69
Sales and office	-	-	-	-	54
Blue-collar occupations [2]	50	50	51	52	-
Natural resources, construction, and maintenance	-	-	-	-	51
Production, transportation, and material moving	-	-	-	-	54
Service occupations	21	22	22	24	25
Full-time	58	60	60	60	60
Part-time	18	20	19	21	23
Union	83	81	85	80	81
Non-union	45	47	46	47	47
Average wage less than $15 per hour	35	36	35	36	36
Average wage $15 per hour or higher	70	71	71	70	69
Goods-producing industries	63	63	64	64	61
Service-providing industries	45	47	47	47	48
Establishments with 1-99 workers	35	37	37	37	37
Establishments with 100 or more workers	65	67	67	67	66
Take-up rate (all workers) [3]	-	-	85	85	84
Defined Benefit					
Percentage of workers with access					
All workers	20	21	22	21	21
White-collar occupations [2]	23	24	25	23	-
Management, professional, and related	-	-	-	-	29
Sales and office	-	-	-	-	19
Blue-collar occupations [2]	24	26	26	25	-
Natural resources, construction, and maintenance	-	-	-	-	26
Production, transportation, and material moving	-	-	-	-	26
Service occupations	8	6	7	8	8
Full-time	24	25	25	24	24
Part-time	8	9	10	9	10
Union	74	70	73	70	69
Non-union	15	16	16	15	15
Average wage less than $15 per hour	12	11	12	11	11
Average wage $15 per hour or higher	34	35	35	34	33
Goods-producing industries	31	32	33	32	29
Service-providing industries	17	18	19	18	19
Establishments with 1-99 workers	9	9	10	9	9
Establishments with 100 or more workers	34	35	37	35	34

See footnotes at end of table.

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

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

See footnotes at end of table.

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

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

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

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

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

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

35. National Compensation Survey: Health insurance benefits in private industry by access, participation, and selected series, 2003-2007

Series	Year				
	2003	2004	2005	2006	2007 [1]
Medical insurance					
Percentage of workers with access					
All workers	60	69	70	71	71
White-collar occupations [2]	65	76	77	77	-
Management, professional, and related	-	-	-	-	85
Sales and office	-	-	-	-	71
Blue-collar occupations [2]	64	76	77	77	-
Natural resources, construction, and maintenance	-	-	-	-	76
Production, transportation, and material moving	-	-	-	-	78
Service occupations	38	42	44	45	46
Full-time	73	84	85	85	85
Part-time	17	20	22	22	24
Union	67	89	92	89	88
Non-union	59	67	68	68	69
Average wage less than $15 per hour	51	57	58	57	57
Average wage $15 per hour or higher	74	86	87	88	87
Goods-producing industries	68	83	85	86	85
Service-providing industries	57	65	66	66	67
Establishments with 1-99 workers	49	58	59	59	59
Establishments with 100 or more workers	72	82	84	84	84
Percentage of workers participating					
All workers	45	53	53	52	52
White-collar occupations [2]	50	59	58	57	-
Management, professional, and related	-	-	-	-	67
Sales and office	-	-	-	-	48
Blue-collar occupations [2]	51	60	61	60	-
Natural resources, construction, and maintenance	-	-	-	-	61
Production, transportation, and material moving	-	-	-	-	60
Service occupations	22	24	27	27	28
Full-time	56	66	66	64	64
Part-time	9	11	12	13	12
Union	60	81	83	80	78
Non-union	44	50	49	49	49
Average wage less than $15 per hour	35	40	39	38	37
Average wage $15 per hour or higher	61	71	72	71	70
Goods-producing industries	57	69	70	70	68
Service-providing industries	42	48	48	47	47
Establishments with 1-99 workers	36	43	43	43	42
Establishments with 100 or more workers	55	64	65	63	62
Take-up rate (all workers) [3]	-	-	75	74	73
Dental					
Percentage of workers with access					
All workers	40	46	46	46	46
White-collar occupations [2]	47	53	54	53	-
Management, professional, and related	-	-	-	-	62
Sales and office	-	-	-	-	47
Blue-collar occupations [2]	40	47	47	46	-
Natural resources, construction, and maintenance	-	-	-	-	43
Production, transportation, and material moving	-	-	-	-	49
Service occupations	22	25	25	27	28
Full-time	49	56	56	55	56
Part-time	9	13	14	15	16
Union	57	73	73	69	68
Non-union	38	43	43	43	44
Average wage less than $15 per hour	30	34	34	34	34
Average wage $15 per hour or higher	55	63	62	62	61
Goods-producing industries	48	56	56	56	54
Service-providing industries	37	43	43	43	44
Establishments with 1-99 workers	27	31	31	31	30
Establishments with 100 or more workers	55	64	65	64	64

See footnotes at end of table.

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

Series	Year				
	2003	2004	2005	2006	2007 [1]
Percentage of workers participating					
All workers	32	37	36	36	36
White-collar occupations[2]	37	43	42	41	-
Management, professional, and related	-	-	-	-	51
Sales and office	-	-	-	-	33
Blue-collar occupations[2]	33	40	39	38	-
Natural resources, construction, and maintenance	-	-	-	-	36
Production, transportation, and material moving	-	-	-	-	38
Service occupations	15	16	17	18	20
Full-time	40	46	45	44	44
Part-time	6	8	9	10	9
Union	51	68	67	63	62
Non-union	30	33	33	33	33
Average wage less than $15 per hour	22	26	24	23	23
Average wage $15 per hour or higher	47	53	52	52	51
Goods-producing industries	42	49	49	49	45
Service-providing industries	29	33	33	32	33
Establishments with 1-99 workers	21	24	24	24	24
Establishments with 100 or more workers	44	52	51	50	49
Take-up rate (all workers)[3]	-	-	78	78	77
Vision care					
Percentage of workers with access	25	29	29	29	29
Percentage of workers participating	19	22	22	22	22
Outpatient Prescription drug coverage					
Percentage of workers with access	-	-	64	67	68
Percentage of workers participating	-	-	48	49	49
Percent of estalishments offering healthcare benefits	58	61	63	62	60
Percentage of medical premium paid by Employer and Employee					
Single coverage					
Employer share	82	82	82	82	81
Employee share	18	18	18	18	19
Family coverage					
Employer share	70	69	71	70	71
Employee share	30	31	29	30	29

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

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

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

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

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

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

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

37. Work stoppages involving 1,000 workers or more

Measure	Annual average		2009										2010		
	2008	2009	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
Number of stoppages:															
Beginning in period	15	5	0	0	0	1	1	1	0	0	2	0	0	0	1
In effect during period	16	5	0	0	0	1	2	1	1	0	2	0	0	0	1
Workers involved:															
Beginning in period (in thousands)	72.2	12.5	0.0	0.0	0.0	2.5	1.5	1.9	0.0	0.0	6.6	0.0	0.0	0.0	1.5
In effect during period (in thousands)	136.8	16.9	0.0	0.0	0.0	2.5	4.0	1.9	1.9	0.0	6.6	0.0	0.0	0.0	1.5
Days idle:															
Number (in thousands)	1954.1	124.1	0.0	0.0	0.0	30.0	43.5	5.7	15.2	0.0	29.7	0.0	0.0	0.0	1.5
Percent of estimated working time [1]	0.01	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0

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

NOTE: p = preliminary.

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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS															
All items	215.303	214.537	213.240	213.856	215.693	215.351	215.834	215.969	216.177	216.330	215.949	216.687	216.741	217.631	218.009
All items (1967 = 100)	644.951	642.658	638.771	640.616	646.121	645.096	646.544	646.948	647.570	648.028	646.887	649.098	649.259	651.925	653.059
Food and beverages	214.225	218.249	218.364	218.076	218.030	217.608	217.701	217.617	217.957	217.733	218.049	219.223	219.140	219.378	219.536
Food	214.106	217.955	218.162	217.826	217.740	217.257	217.350	217.218	217.526	217.265	217.637	218.874	218.778	219.032	219.218
Food at home	214.125	215.124	215.783	215.088	214.824	213.815	213.722	213.227	213.605	212.816	213.359	215.404	215.118	215.623	215.737
Cereals and bakery products	244.853	252.567	252.709	252.714	253.008	253.391	252.382	251.231	251.421	250.600	251.019	250.725	251.361	250.930	250.425
Meats, poultry, fish, and eggs	204.653	203.805	205.699	203.789	204.031	201.743	202.911	201.755	200.597	201.202	201.003	201.870	202.343	202.812	205.178
Dairy and related products[1]	210.396	197.013	197.124	196.055	194.197	193.118	192.381	193.353	195.360	193.914	194.792	198.949	198.800	198.814	197.308
Fruits and vegetables	278.932	272.945	274.297	274.006	272.608	270.940	267.309	267.609	269.467	269.832	273.189	279.119	274.963	280.431	279.272
Nonalcoholic beverages and beverage materials	160.045	163.034	162.889	162.803	162.571	162.069	162.953	162.911	162.885	161.358	161.216	163.684	162.775	162.666	162.128
Other foods at home	184.166	191.220	191.352	191.144	191.328	190.967	191.317	190.571	191.266	189.640	189.921	190.994	191.572	190.991	191.017
Sugar and sweets	186.577	196.933	197.301	196.403	197.009	195.126	195.430	196.998	196.747	198.227	198.712	199.777	201.942	199.917	200.775
Fats and oils	196.751	201.224	200.464	200.679	201.127	201.031	200.578	200.009	199.916	196.473	197.391	200.220	200.919	198.567	197.749
Other foods	198.103	205.497	205.734	205.587	205.654	205.544	206.064	204.728	205.814	203.671	203.832	204.719	205.008	204.952	204.947
Other miscellaneous foods[1,2]	119.924	122.393	122.883	122.838	122.224	121.990	121.892	122.099	122.112	121.263	122.422	121.564	121.172	122.318	122.298
Food away from home[1]	215.769	223.272	222.905	223.023	223.163	223.345	223.675	224.003	224.224	224.633	224.789	224.916	225.081	224.991	225.276
Other food away from home[1,2]	150.640	155.852	155.099	155.099	155.841	156.570	156.697	157.302	157.056	157.027	156.990	157.517	158.569	158.657	158.738
Alcoholic beverages	214.484	220.751	219.671	220.005	220.477	220.850	220.946	221.474	222.232	222.485	222.082	222.401	222.496	222.521	222.299
Housing	216.264	217.057	217.126	216.971	218.071	218.085	217.827	217.178	216.612	215.808	215.523	215.925	215.841	216.023	215.798
Shelter	246.666	249.354	249.855	249.779	250.243	250.310	250.248	249.501	249.474	248.211	247.863	247.950	248.001	248.052	248.031
Rent of primary residence	243.271	248.812	248.899	249.069	249.092	248.994	249.029	248.965	248.888	248.886	248.999	249.144	249.017	249.089	249.012
Lodging away from home	143.664	134.243	137.700	135.680	138.318	139.424	137.454	133.706	133.485	125.426	122.638	125.778	128.991	133.075	134.331
Owners' equivalent rent of primary residence[3]	252.426	256.610	256.622	256.875	256.981	256.872	257.155	256.865	256.890	256.731	256.727	256.591	256.483	256.272	256.170
Tenants' and household insurance[1,2]	118.843	121.487	120.675	120.728	121.083	121.298	121.830	122.170	122.184	122.243	123.812	124.360	124.439	124.416	124.879
Fuels and utilities	220.018	210.696	207.175	206.358	212.677	212.961	212.661	211.618	207.937	208.955	208.760	211.381	210.819	212.295	211.726
Fuels	200.808	188.113	184.903	183.783	190.647	190.534	189.735	188.509	184.146	185.165	184.886	187.330	186.345	187.864	187.054
Fuel oil and other fuels	334.405	239.778	228.107	225.164	232.638	230.192	237.521	236.616	243.936	260.250	262.649	280.850	277.284	276.027	278.080
Gas (piped) and electricity	202.212	193.563	190.686	189.619	196.754	196.767	195.475	194.176	188.963	189.166	188.724	190.439	189.549	191.280	190.284
Household furnishings and operations	127.800	128.701	129.654	129.644	129.623	129.267	128.304	128.201	127.740	127.265	127.119	127.209	126.945	126.750	125.997
Apparel	118.907	120.078	123.208	121.751	118.799	115.620	117.130	122.476	123.998	122.465	119.357	116.678	118.869	122.073	122.143
Men's and boys' apparel	113.032	113.628	117.195	117.146	112.849	109.744	110.835	112.933	114.818	113.636	110.633	109.762	111.351	113.104	113.692
Women's and girls' apparel	107.460	108.091	111.871	109.460	106.455	101.688	103.991	112.535	113.838	111.460	108.304	103.353	106.818	111.730	110.816
Infants' and toddlers' apparel[1]	113.762	114.489	117.084	114.142	113.915	111.022	113.673	116.309	117.300	116.312	112.695	113.248	114.318	115.920	116.469
Footwear	124.157	126.854	128.057	127.519	125.515	124.405	125.292	128.670	130.333	130.594	128.492	127.205	127.737	128.525	129.432
Transportation	195.549	179.252	171.987	175.997	183.735	182.798	184.386	183.932	185.362	188.587	188.318	190.512	189.577	192.130	193.994
Private transportation	191.039	174.762	167.516	171.757	179.649	178.330	179.987	179.466	180.896	184.099	183.766	186.308	185.274	187.796	189.503
New and used motor vehicles[2]	93.291	93.486	92.381	92.701	93.020	93.413	93.126	93.440	95.131	96.039	96.421	96.660	97.020	97.032	96.815
New vehicles	134.194	135.623	134.863	135.162	135.719	136.055	134.080	134.576	137.268	138.831	138.857	138.743	138.851	138.600	138.174
Used cars and trucks[1]	133.951	126.973	121.213	122.650	124.323	125.061	128.028	129.369	132.689	134.173	137.406	139.174	140.218	140.797	141.315
Motor fuel	279.652	201.978	177.272	193.609	225.021	217.860	225.089	220.690	219.015	228.050	224.730	234.106	227.674	237.671	244.801
Gasoline (all types)	277.457	201.555	176.704	193.727	225.526	217.945	225.179	220.542	218.683	227.665	224.260	233.727	227.198	237.356	244.347
Motor vehicle parts and equipment	128.747	134.050	134.640	134.347	134.270	133.729	133.531	133.406	133.650	134.234	134.781	135.277	135.649	135.523	135.701
Motor vehicle maintenance and repair	233.859	243.337	242.649	242.488	242.683	243.031	243.494	244.493	245.393	245.511	245.417	245.567	245.969	246.624	247.355
Public transportation	250.549	236.348	229.827	228.878	232.540	238.932	238.997	239.855	241.060	244.226	245.203	241.058	241.967	244.766	249.135
Medical care	364.065	375.613	374.170	375.026	375.093	375.739	376.537	377.727	378.552	379.575	379.516	382.688	385.907	387.142	387.703
Medical care commodities	296.045	305.108	303.979	304.697	304.683	304.229	305.797	307.671	308.379	308.546	308.221	310.494	312.864	314.023	314.535
Medical care services	384.943	397.299	395.753	396.648	396.750	397.868	398.303	399.160	400.015	401.392	401.452	404.937	408.447	409.687	410.256
Professional services	310.968	319.372	317.661	319.333	319.652	320.076	320.252	320.756	321.381	321.473	321.827	324.397	325.969	326.206	327.015
Hospital and related services	533.953	567.879	564.785	564.112	564.406	568.315	570.150	572.991	575.540	581.603	581.968	588.631	598.549	603.850	604.756
Recreation[2]	113.254	114.272	114.261	114.264	114.643	114.619	114.755	114.629	114.157	113.820	113.212	113.310	113.345	113.339	113.781
Video and audio[1,2]	102.632	101.276	102.300	101.947	101.871	101.614	101.474	100.801	100.178	100.199	99.873	99.940	99.532	99.915	100.074
Education and communication[2]	123.631	127.393	126.273	126.467	126.519	126.914	128.128	129.035	129.128	128.845	128.883	129.072	129.105	129.236	129.344
Education[2]	181.277	190.857	187.416	187.853	188.179	189.184	193.161	195.595	195.849	195.649	195.672	195.850	196.137	196.470	196.798
Educational books and supplies	450.187	482.072	472.507	472.588	476.974	481.768	490.102	493.636	494.435	495.660	496.580	500.551	502.812	502.273	501.170
Tuition, other school fees, and child care	522.098	548.971	539.149	540.498	541.119	543.810	555.402	562.635	563.352	562.623	562.610	562.841	563.544	564.613	565.709
Communication[1,2]	84.185	84.954	84.985	85.049	84.975	85.056	84.913	85.044	85.055	84.768	84.809	84.974	84.905	84.940	84.947
Information and information processing[1,2]	81.352	81.944	82.090	82.038	81.909	81.991	81.835	81.969	81.978	81.688	81.728	81.817	81.743	81.776	81.784
Telephone services[1,2]	100.451	102.392	102.072	102.267	102.182	102.643	102.674	102.968	102.891	102.528	102.707	102.729	102.288	102.298	102.394
Information and information processing other than telephone services[1,4]	10.061	9.672	9.881	9.775	9.731	9.604	9.499	9.467	9.501	9.467	9.423	9.457	9.540	9.552	9.530
Personal computers and peripheral equipment[1,2]	94.944	82.304	85.714	84.366	83.476	80.838	78.576	77.997	78.213	78.077	77.960	78.323	77.961	78.385	78.234
Other goods and services	345.381	368.586	370.606	369.901	370.595	372.894	372.699	374.219	375.444	376.702	377.330	377.652	377.992	378.808	378.911
Tobacco and smoking products	588.682	730.316	742.443	740.311	746.283	762.907	763.634	771.089	773.758	781.538	783.794	786.857	785.714	787.268	788.066
Personal care[1]	201.279	204.587	204.896	204.578	204.503	204.571	204.352	204.751	205.406	205.575	205.823	205.789	206.137	206.594	206.599
Personal care products[1]	159.290	162.578	163.777	163.051	162.301	162.887	162.476	162.372	162.257	161.753	162.275	161.627	162.029	162.367	161.601
Personal care services[1]	223.669	227.588	227.913	227.607	227.572	227.325	227.580	228.286	228.465	228.358	228.343	228.629	228.107	228.429	229.635

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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Miscellaneous personal services	338.921	344.469	342.641	343.051	344.232	344.367	345.137	345.515	347.834	348.792	348.697	349.605	350.780	352.028	352.779
Commodity and service group:															
Commodities	174.764	169.698	167.816	169.060	171.593	170.483	171.081	171.559	172.252	173.061	172.572	173.646	173.419	174.798	175.333
Food and beverages	214.225	218.249	218.364	218.076	218.030	217.608	217.701	217.617	217.957	217.733	218.049	219.223	219.140	219.378	219.536
Commodities less food and beverages	153.034	144.395	141.753	143.587	147.099	145.742	146.528	147.222	148.037	149.245	148.441	149.439	149.162	150.953	151.621
Nondurables less food and beverages	196.192	178.959	173.855	177.480	184.581	181.755	184.366	185.544	185.759	187.776	185.689	187.484	186.882	190.674	192.335
Apparel	118.907	120.078	123.208	121.751	118.799	115.620	117.130	122.476	123.998	122.465	119.357	116.678	118.869	122.073	122.143
Non durables less food, beverages, and apparel	248.809	219.592	209.177	216.090	229.692	227.038	230.396	228.954	228.344	232.649	231.169	235.821	233.447	237.683	240.381
Durables	110.877	109.859	109.404	109.650	109.983	109.924	109.129	109.387	110.684	111.159	111.477	111.731	111.753	111.694	111.450
Services	255.498	259.154	258.466	258.433	259.544	259.992	260.355	260.136	259.844	259.323	259.055	259.459	259.792	260.196	260.420
Rent of shelter [3]	257.152	259.924	260.469	260.388	260.869	260.935	260.858	260.064	260.035	258.704	258.303	258.382	258.435	258.489	258.457
Transportation services	244.074	251.031	248.696	248.628	249.194	251.184	252.234	253.001	254.449	255.935	256.014	255.216	256.365	257.337	258.384
Other services	295.780	303.992	301.668	302.132	303.000	303.761	305.890	307.161	307.011	306.740	306.436	306.916	307.171	307.451	308.493
Special indexes:															
All items less food	215.528	214.008	212.464	213.236	215.389	215.069	215.617	215.795	215.986	216.207	215.703	216.362	216.440	217.430	217.839
All items less shelter	205.453	203.301	201.271	202.171	204.578	204.069	204.776	205.263	205.567	206.286	205.888	206.892	206.948	208.181	208.722
All items less medical care	207.777	206.555	205.275	205.876	207.764	207.388	207.855	207.949	208.131	208.250	207.860	208.499	208.432	209.301	209.669
Commodities less food	155.310	147.071	144.464	146.261	149.697	148.386	149.155	149.846	150.663	151.847	151.052	152.035	151.767	153.516	154.163
Nondurables less food	197.297	181.453	176.587	180.017	186.726	184.090	186.552	187.691	187.939	189.852	187.864	189.578	189.015	192.601	194.159
Nondurables less food and apparel	244.443	218.687	209.195	215.459	227.768	225.410	228.446	227.195	226.717	230.622	229.250	233.498	231.353	235.198	237.626
Nondurables	205.901	198.548	195.864	197.673	201.461	199.746	201.191	201.783	202.058	203.035	202.064	203.588	203.219	205.409	206.393
Services less rent of shelter [3]	273.000	278.064	275.752	275.777	277.777	278.747	279.697	280.194	279.545	280.014	279.896	280.730	281.432	282.297	282.851
Services less medical care services	244.987	248.122	247.490	247.406	248.557	248.963	249.316	249.043	248.692	248.075	247.793	248.023	248.178	248.531	248.733
Energy	236.666	193.126	179.704	186.909	205.408	201.938	204.971	202.243	199.198	204.026	202.301	208.026	204.455	209.999	212.977
All items less energy	214.751	218.433	218.388	218.323	218.440	218.421	218.642	219.076	219.624	219.291	219.048	219.287	219.708	220.133	220.252
All items less food and energy	215.572	219.235	219.143	219.128	219.283	219.350	219.596	220.137	220.731	220.384	220.025	220.086	220.602	221.059	221.166
Commodities less food and energy	140.246	142.041	142.489	142.360	141.990	141.463	141.310	142.729	143.857	143.871	143.383	143.125	143.711	144.399	144.169
Energy commodities	284.352	205.281	181.102	196.528	226.881	219.922	227.204	222.961	221.749	231.226	228.186	238.069	231.735	241.239	248.165
Services less energy	261.017	265.875	265.399	265.466	265.993	266.484	267.008	266.894	267.081	266.488	266.237	266.519	266.967	267.248	267.587
CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS															
All items	211.053	209.630	207.925	208.774	210.972	210.526	211.156	211.322	211.549	212.003	211.703	212.568	212.544	213.525	213.958
All items (1967 = 100)	628.661	624.423	619.344	621.875	628.422	627.093	628.970	629.462	630.140	631.491	630.600	633.176	633.105	636.025	637.316
Food and beverages	213.546	217.480	217.653	217.308	217.258	216.805	216.957	216.734	217.123	216.853	217.186	218.354	218.299	218.502	218.730
Food	213.376	217.118	217.376	216.975	216.890	216.384	216.539	216.313	216.654	216.305	216.679	217.900	217.837	218.066	218.319
Food at home	213.017	213.908	214.654	213.876	213.657	212.628	212.623	212.010	212.396	211.488	212.041	214.049	213.839	214.291	214.498
Cereals and bakery products	245.472	253.214	253.556	253.430	253.701	253.969	252.932	251.754	252.049	251.376	251.570	251.195	251.757	251.493	251.031
Meats, poultry, fish, and eggs	204.255	203.394	205.527	203.409	203.503	201.261	202.483	201.087	200.210	200.709	200.623	201.411	202.139	202.540	204.878
Dairy and related products [1]	209.773	195.679	195.714	194.694	192.898	191.783	191.048	192.048	194.120	192.695	193.546	197.663	197.583	197.370	195.958
Fruits and vegetables	276.759	270.562	271.771	271.530	270.653	269.316	265.730	265.810	267.084	267.049	270.279	276.025	271.974	277.347	276.727
Nonalcoholic beverages and beverage materials	159.324	162.598	162.464	162.468	162.167	161.650	162.433	162.396	162.456	160.619	160.745	163.439	162.524	162.499	161.721
Other foods at home	183.637	190.519	190.650	190.401	190.657	190.235	190.704	189.892	190.630	188.868	189.197	190.354	190.831	190.232	190.299
Sugar and sweets	185.494	195.702	195.858	194.928	195.773	194.005	194.511	196.027	195.752	197.031	197.258	198.694	200.880	198.720	199.665
Fats and oils	197.512	202.003	201.474	201.470	202.004	201.666	201.199	200.621	200.759	197.400	198.165	200.741	201.356	198.808	198.454
Other foods	198.303	205.573	205.820	205.641	205.759	205.549	206.210	204.823	205.929	203.664	203.972	204.957	205.117	205.081	205.048
Other miscellaneous foods [1,2]	120.348	122.753	123.112	123.126	122.537	122.119	122.217	122.496	122.676	121.647	122.796	122.051	121.482	122.543	122.712
Food away from home [1]	215.613	223.383	222.957	223.082	223.186	223.408	223.789	224.102	224.382	224.815	224.940	225.015	225.168	225.072	225.395
Other food away from home [1,2]	149.731	155.607	154.414	154.409	155.091	156.904	156.769	157.132	156.909	156.853	156.830	157.670	158.826	159.023	159.088
Alcoholic beverages	214.579	221.325	220.243	220.729	221.179	221.517	221.618	221.454	222.555	223.445	223.168	223.565	223.621	223.452	223.305
Housing	211.839	213.144	212.885	212.881	214.034	214.029	213.824	213.391	212.734	212.327	212.142	212.529	212.401	212.604	212.368
Shelter	239.128	242.637	242.857	242.941	243.238	243.248	243.279	242.816	242.804	242.159	241.991	242.019	242.002	242.019	241.987
Rent of primary residence	242.196	247.401	247.517	247.710	247.691	247.573	247.601	247.500	247.422	247.361	247.465	247.574	247.448	247.555	247.474
Lodging away from home [2]	143.164	135.163	138.008	136.113	139.246	140.873	138.543	134.803	134.586	127.061	124.222	127.150	130.571	134.632	135.793
Owners' equivalent rent of primary residence [3]	228.758	232.499	232.503	232.739	232.837	232.723	232.977	232.731	232.761	232.635	232.603	232.463	232.354	232.179	232.108
Tenants' and household insurance [1,2]	119.136	121.935	121.084	121.160	121.529	121.765	122.254	122.644	122.761	122.830	124.415	125.299	125.367	125.374	125.872
Fuels and utilities	217.883	209.595	205.840	205.270	211.929	212.276	211.808	210.796	206.732	207.530	207.329	209.691	209.171	210.775	210.326
Fuels	197.537	186.229	182.795	181.977	189.108	189.082	188.125	186.967	182.227	182.994	182.701	184.843	183.918	185.557	184.918
Fuel oil and other fuels	331.784	243.003	232.068	229.019	235.869	233.018	239.435	238.006	246.153	262.340	265.130	284.061	281.157	279.384	280.770
Gas (piped) and electricity	200.265	191.981	188.735	187.982	195.445	195.547	194.211	193.013	187.473	187.572	187.125	188.607	187.730	189.595	188.837
Household furnishings and operations	123.635	124.632	125.458	125.589	125.526	125.160	124.219	124.351	123.995	123.448	123.187	123.339	123.097	122.859	121.979
Apparel	118.735	119.847	122.709	121.364	118.547	115.516	117.095	122.176	123.642	122.228	118.984	116.310	118.607	121.347	121.293
Men's and boys' apparel	113.490	114.340	117.834	117.687	113.416	110.558	111.629	113.682	115.381	114.091	110.856	109.893	111.575	113.032	113.538
Women's and girls' apparel	107.489	107.602	110.990	108.637	105.676	101.289	103.727	112.086	113.290	111.039	107.819	102.860	106.496	110.885	109.783
Infants' and toddlers' apparel [1]	116.266	117.202	119.873	116.912	116.645	113.744	116.482	119.075	119.949	119.272	115.754	117.028	117.789	119.644	120.106
Footwear	124.102	127.183	128.312	127.802	126.150	125.046	125.880	128.988	130.596	130.682	128.637	127.267	127.843	128.172	129.112
Transportation	195.692	176.729	168.539	173.055	181.730	180.419	182.541	182.024	183.506	186.928	186.839	189.544	188.406	191.294	193.320
Private transportation	192.492	173.491	165.299	169.957	178.734	177.197	179.368	178.801	180.271	183.680	183.565	186.457	185.268	188.146	190.106
New and used motor vehicles [2]	92.146	91.308	89.620	90.039	90.588	90.973	91.129	91.599	93.414	94.338	95.072	95.464	95.819	95.900	95.780

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		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
New vehicles	135.338	136.711	135.911	136.113	136.800	137.082	135.130	135.672	138.422	139.952	139.962	139.857	139.905	139.653	139.192
Used cars and trucks [1]	134.731	127.687	121.850	123.339	125.056	125.817	128.781	130.122	133.458	134.977	138.242	140.023	141.079	141.657	142.173
Motor fuel	280.817	202.695	177.982	194.339	225.876	218.560	225.797	221.241	219.733	228.871	225.584	235.083	228.569	238.769	245.949
Gasoline (all types)	278.728	202.375	177.510	194.569	226.515	218.757	226.007	221.197	219.509	228.598	225.223	234.825	228.207	238.583	245.626
Motor vehicle parts and equipment	128.776	134.133	134.614	134.439	134.273	133.787	133.587	133.504	133.764	134.346	134.892	135.383	135.694	135.573	135.914
Motor vehicle maintenance and repair	236.353	245.795	245.180	245.036	245.129	245.421	245.871	246.850	247.811	247.972	247.812	247.975	248.479	249.127	249.873
Public transportation	247.865	234.661	228.525	227.522	230.926	236.963	237.029	238.225	239.729	242.698	243.453	239.739	240.418	242.942	246.535
Medical care	364.208	376.064	374.599	375.420	375.479	376.161	377.007	378.263	379.072	380.295	380.302	383.443	386.919	388.330	389.050
Medical care commodities	287.970	296.724	295.699	296.431	296.369	295.871	297.379	299.098	299.742	299.972	299.777	301.890	304.320	305.532	306.117
Medical care services	386.317	399.165	397.553	398.387	398.497	399.677	400.204	401.217	402.075	403.695	403.791	407.286	411.114	412.568	413.325
Professional services	313.446	322.127	320.407	322.043	322.346	322.759	322.964	323.577	324.284	324.382	324.763	327.439	329.020	329.294	330.228
Hospital and related services	530.193	565.029	561.516	560.906	561.337	565.448	567.545	570.697	573.069	580.048	580.567	587.101	598.149	604.070	605.497
Recreation [2]	110.143	111.015	111.182	111.152	111.471	111.416	111.453	111.205	110.724	110.401	109.851	109.964	110.076	110.073	110.342
Video and audio [1,2]	102.654	101.602	102.516	102.214	102.193	101.982	101.867	101.228	100.639	100.681	100.400	100.473	100.084	100.547	100.568
Education and communication [2]	119.827	123.017	122.152	122.293	122.333	122.699	123.579	124.322	124.362	124.100	124.156	124.293	124.334	124.455	124.559
Education [2]	178.892	188.143	184.892	185.291	185.626	186.596	190.222	192.552	192.774	192.776	192.760	193.049	193.641	193.965	194.275
Educational books and supplies	452.880	485.025	474.950	475.213	480.024	485.218	493.615	496.691	497.534	498.627	499.478	503.416	505.356	505.642	504.436
Tuition, other school fees, and child care	504.163	529.316	520.348	521.550	522.076	524.523	534.825	541.688	542.284	542.174	542.036	542.531	544.155	545.120	546.192
Communication [1,2]	86.807	87.662	87.671	87.712	87.652	87.780	87.667	87.810	87.786	87.468	87.541	87.617	87.501	87.548	87.581
Information and information processing [1,2]	84.828	85.571	85.655	85.624	85.524	85.653	85.532	85.676	85.651	85.331	85.404	85.433	85.314	85.362	85.394
Telephone services [1,2]	100.502	102.341	102.048	102.231	102.153	102.587	102.613	102.896	102.818	102.413	102.585	102.504	102.038	102.048	102.132
Information and information processing other than telephone services [1,4]	10.567	10.178	10.385	10.271	10.238	10.113	10.012	9.975	9.995	9.969	9.935	9.978	10.077	10.099	10.087
Personal computers and peripheral equipment [1,2]	94.863	82.104	85.406	84.017	83.278	80.736	78.480	77.835	77.939	77.926	77.821	78.278	77.939	78.474	78.420
Other goods and services	357.906	391.628	394.902	394.061	395.052	398.448	398.228	400.245	401.390	403.178	403.970	404.632	404.722	405.641	405.786
Tobacco and smoking products	591.100	735.056	747.906	746.009	752.078	768.005	768.483	776.198	778.650	786.541	789.173	791.959	790.710	792.452	793.243
Personal care [1]	199.170	202.490	203.010	202.631	202.406	202.490	202.221	202.576	203.115	203.245	203.454	203.575	203.824	204.294	204.294
Personal care products [1]	159.410	162.557	163.911	163.119	162.165	162.767	162.415	162.312	162.242	161.784	162.231	161.689	162.073	162.417	161.604
Personal care services [1]	223.978	227.804	228.119	227.829	227.800	227.512	227.751	228.480	228.683	228.614	228.614	228.793	228.169	228.500	229.857
Miscellaneous personal services	340.533	346.500	345.016	345.326	346.411	346.525	347.402	347.658	349.283	350.046	349.851	351.329	352.366	353.667	354.593
Commodity and service group:															
Commodities	177.618	171.452	169.005	170.532	173.662	172.493	173.379	173.777	174.550	175.563	175.127	176.413	176.118	177.591	178.269
Food and beverages	213.546	217.480	217.653	217.308	217.258	216.805	216.957	216.734	217.123	216.853	217.186	218.354	218.299	218.502	218.730
Commodities less food and beverages	157.481	147.327	143.871	146.125	150.477	149.046	150.209	150.851	151.760	153.273	152.532	153.834	153.444	155.417	156.268
Nondurables less food and beverages	205.279	185.579	179.415	183.813	192.478	189.436	192.365	193.225	193.394	195.926	193.667	195.981	195.059	199.133	201.091
Apparel	118.735	119.847	122.709	121.364	118.547	115.516	117.095	122.176	123.642	122.228	118.984	116.310	118.607	121.347	121.293
Nondurables less food, beverages, and apparel	263.756	230.503	218.502	226.621	242.726	239.626	243.461	241.657	241.005	246.085	244.413	249.801	246.914	251.912	255.140
Durables	111.217	109.610	108.596	108.933	109.430	109.432	109.039	109.470	110.988	111.575	112.165	112.511	112.618	112.618	112.432
Services	250.272	254.267	253.403	253.482	254.624	255.003	255.342	255.244	254.847	254.663	254.519	254.918	255.199	255.634	255.796
Rent of shelter [3]	230.555	233.917	234.148	234.229	234.511	234.515	234.537	234.079	234.064	233.436	233.241	233.252	233.234	233.250	233.210
Transporatation services	242.563	250.960	248.809	248.795	249.312	250.811	251.880	252.805	254.408	255.871	256.007	255.577	256.809	257.728	258.501
Other services	284.319	291.572	289.738	290.116	290.845	291.573	293.266	294.190	293.938	293.624	293.470	293.972	294.230	294.564	295.327
Special indexes:															
All items less food	210.452	208.128	206.081	207.148	209.744	209.308	210.021	210.255	210.462	211.055	210.639	211.440	211.423	212.535	213.000
All items less shelter	203.102	199.860	197.432	198.571	201.488	200.871	201.726	202.123	202.441	203.301	202.951	204.128	204.101	205.441	206.048
All items less medical care	204.626	202.810	201.112	201.955	204.200	203.723	204.341	204.472	204.680	205.106	204.800	205.589	205.461	206.420	206.841
Commodities less food	159.538	149.780	146.371	148.589	152.856	151.466	152.606	153.229	154.147	155.650	154.918	156.200	155.820	157.742	158.569
Nondurables less food	206.047	187.718	181.815	186.012	194.254	191.387	194.170	194.978	195.196	197.644	195.487	197.701	196.831	200.682	202.529
Nondurables less food and apparel	258.423	228.679	217.649	225.091	239.808	237.011	240.515	238.857	238.355	243.061	241.513	246.455	243.829	248.369	251.298
Nondurables	210.333	201.628	198.408	200.601	205.219	203.377	205.017	205.374	205.647	206.876	205.823	207.611	207.092	209.370	210.526
Services less rent of shelter [3]	241.567	245.814	243.718	243.784	245.833	246.622	247.308	247.664	246.851	247.237	247.174	247.985	248.586	249.464	249.847
Services less medical care services	240.275	243.796	242.980	243.022	244.196	244.531	244.857	244.707	244.258	243.991	243.838	244.090	244.205	244.586	244.719
Energy	237.414	192.594	178.485	186.321	205.662	201.967	205.144	202.287	199.223	204.196	202.398	208.222	204.494	210.425	213.728
All items less energy	208.719	212.652	212.472	212.462	212.552	212.505	212.823	213.363	213.998	213.895	213.780	214.048	214.472	214.857	214.945
All items less food and energy	208.147	212.126	211.857	211.926	212.051	212.097	212.449	213.144	213.840	213.787	213.572	213.647	214.172	214.589	214.643
Commodities less food and energy	141.084	143.099	143.237	143.170	142.943	142.526	142.634	144.148	145.439	145.595	145.253	145.065	145.722	146.319	146.094
Energy commodities	284.270	205.325	181.021	196.706	227.444	220.264	227.506	223.048	221.910	231.371	228.303	238.217	231.808	241.599	248.594
Services less energy	255.598	261.022	260.439	260.615	261.014	261.425	261.960	261.990	262.196	261.979	261.871	262.146	262.559	262.830	263.097

[1] Not seasonally adjusted.
[2] Indexes on a December 1997 = 100 base.
[3] Indexes on a December 1982 = 100 base.
[4] Indexes on a December 1988 = 100 base.

NOTE: Index applied to a month as a whole, not to any specific date.

39. Consumer Price Index: U.S. city average and available local area data: all items

[1982–84 = 100, unless otherwise indicated]

	Pricing schedule[1]	All Urban Consumers						Urban Wage Earners					
		2009		2010				2009		2010			
		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
U.S. city average	M	216.330	215.949	216.687	216.741	217.631	218.009	212.003	211.703	212.568	212.544	213.525	213.958
Region and area size[2]													
Northeast urban	M	231.708	231.462	232.294	232.382	233.188	233.615	229.048	228.794	229.744	229.874	230.622	231.109
Size A—More than 1,500,000	M	233.785	233.475	234.109	234.183	235.060	235.496	229.541	229.180	229.919	230.099	230.819	231.338
Size B/C—50,000 to 1,500,000[3]	M	137.646	137.597	138.416	138.491	138.871	139.115	138.527	138.522	139.364	139.379	139.869	140.126
Midwest urban[4]	M	206.247	205.613	206.564	206.563	207.359	207.777	201.553	200.999	202.180	202.044	202.966	203.426
Size A—More than 1,500,000	M	207.277	206.399	207.325	207.329	207.975	208.308	201.626	200.820	201.957	201.758	202.639	203.056
Size B/C—50,000 to 1,500,000[3]	M	131.952	131.742	132.417	132.451	133.096	133.510	131.823	131.639	132.502	132.507	133.140	133.540
Size D—Nonmetropolitan (less than 50,000)	M	203.047	202.738	203.490	203.274	204.204	204.326	200.748	200.471	201.414	201.118	202.072	202.263
South urban	M	209.738	209.476	210.056	210.020	211.216	211.528	206.859	206.716	207.405	207.325	208.621	209.017
Size A—More than 1,500,000	M	211.424	210.971	211.762	211.503	212.692	213.052	209.161	208.788	209.619	209.288	210.613	211.068
Size B/C—50,000 to 1,500,000[3]	M	133.342	133.252	133.517	133.575	134.363	134.606	132.129	132.136	132.508	132.528	133.388	133.695
Size D—Nonmetropolitan (less than 50,000)	M	213.372	213.159	213.873	214.007	215.026	214.714	213.396	213.184	213.984	214.172	215.205	215.006
West urban	M	219.728	219.307	219.989	220.179	220.809	221.202	214.228	213.919	214.664	214.710	215.457	215.873
Size A—More than 1,500,000	M	223.489	223.058	223.852	223.989	224.636	225.040	216.286	215.988	216.905	216.850	217.700	218.103
Size B/C—50,000 to 1,500,000[3]	M	133.335	133.132	133.366	133.513	133.863	134.133	133.149	132.983	133.238	133.325	133.675	133.993
Size classes:													
A[5]	M	197.697	197.246	197.948	197.949	198.695	199.043	196.187	195.779	196.606	196.516	197.377	197.786
B/C[3]	M	133.663	133.535	133.954	134.028	134.639	134.920	133.139	133.072	133.589	133.619	134.274	134.594
D	M	209.567	209.192	209.984	210.098	211.011	210.968	207.739	207.417	208.297	208.368	209.326	209.327
Selected local areas[6]													
Chicago–Gary–Kenosha, IL–IN–WI	M	212.206	211.185	212.104	212.456	212.952	212.929	205.136	204.196	205.529	205.627	206.381	206.466
Los Angeles–Riverside–Orange County, CA	M	224.317	223.643	224.610	224.620	225.483	225.916	216.618	216.233	217.290	217.090	218.157	218.475
New York, NY–Northern NJ–Long Island, NY–NJ–CT–PA	M	238.777	238.427	238.970	238.862	240.101	240.529	233.893	233.448	234.067	234.153	235.240	235.750
Boston–Brockton–Nashua, MA–NH–ME–CT	1	236.589	–	237.266	–	237.986	–	236.859	–	237.999	–	238.388	–
Cleveland–Akron, OH	1	201.471	–	203.037	–	203.577	–	192.871	–	194.529	–	194.852	–
Dallas–Ft Worth, TX	1	201.958	–	202.106	–	201.982	–	205.297	–	205.456	–	205.351	–
Washington–Baltimore, DC–MD–VA–WV[7]	1	140.718	–	141.124	–	141.741	–	140.608	–	141.155	–	141.782	–
Atlanta, GA	2	–	200.456	–	202.646	–	204.014	–	199.331	–	201.407	–	203.095
Detroit–Ann Arbor–Flint, MI	2	–	203.880	–	203.380	–	205.248	–	199.614	–	198.913	–	201.003
Houston–Galveston–Brazoria, TX	2	–	190.932	–	192.412	–	194.037	–	188.842	–	190.351	–	192.447
Miami–Ft. Lauderdale, FL	2	–	222.943	–	222.505	–	222.625	–	221.067	–	221.074	–	220.633
Philadelphia–Wilmington–Atlantic City, PA–NJ–DE–MD	2	–	224.800	–	226.529	–	227.432	–	224.732	–	226.539	–	227.325
San Francisco–Oakland–San Jose, CA	2	–	224.239	–	226.145	–	227.697	–	220.121	–	222.049	–	223.821
Seattle–Tacoma–Bremerton, WA	2	–	225.596	–	226.085	–	226.513	–	220.905	–	221.215	–	222.309

[1] Foods, fuels, and several other items priced every month in all areas; most other goods and services priced as indicated:
M—Every month.
1—January, March, May, July, September, and November.
2—February, April, June, August, October, and December.

[2] Regions defined as the four Census regions.

[3] Indexes on a December 1996 = 100 base.

[4] The "North Central" region has been renamed the "Midwest" region by the Census Bureau. It is composed of the same geographic entities.

[5] Indexes on a December 1986 = 100 base.

[6] In addition, the following metropolitan areas are published semiannually and appear in tables 34 and 39 of the January and July issues of the *CPI Detailed Report*: Anchorage, AK; Cincinnatti, OH–KY–IN; Kansas City, MO–KS; Milwaukee–Racine, WI; Minneapolis–St. Paul, MN–WI; Pittsburgh, PA; Port-land–Salem, OR–WA; St Louis, MO–IL; San Diego, CA; Tampa–St. Petersburg–Clearwater, FL.

[7] Indexes on a November 1996 = 100 base.

NOTE: Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size and is, therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Therefore, the Bureau of Labor Statistics strongly urges users to consider adopting the national average CPI for use in their escalator clauses. Index applies to a month as a whole, not to any specific date. Dash indicates data not available.

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

[1982–84 = 100]

Series	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consumer Price Index for All Urban Consumers:											
All items:											
Index	166.6	172.2	177.1	179.9	184.0	188.9	195.3	201.6	207.342	215.303	214.537
Percent change	2.2	3.4	2.8	1.6	2.3	2.7	3.4	3.2	2.8	3.8	-0.4
Food and beverages:											
Index	164.6	168.4	173.6	176.8	180.5	186.6	191.2	195.7	203.300	214.225	218.249
Percent change	2.2	2.3	3.1	1.8	2.1	3.3	2.5	2.4	3.9	5.4	1.9
Housing:											
Index	163.9	169.6	176.4	180.3	184.8	189.5	195.7	203.2	209.586	216.264	217.057
Percent change	2.2	3.5	4.0	2.2	2.5	2.5	3.3	3.8	3.1	3.2	0.4
Apparel:											
Index	131.3	129.6	127.3	124.0	120.9	120.4	119.5	119.5	118.998	118.907	120.078
Percent change	–1.3	–1.3	–1.8	–2.6	–2.5	–.4	–.7	.0	-0.4	-0.1	1.0
Transportation:											
Index	144.4	153.3	154.3	152.9	157.6	163.1	173.9	180.9	184.682	195.549	179.252
Percent change	2.0	6.2	0.7	–.9	3.1	3.5	6.6	4.0	2.1	5.9	-8.3
Medical care:											
Index	250.6	260.8	272.8	285.6	297.1	310.1	323.2	336.2	351.054	364.065	375.613
Percent change	3.5	4.1	4.6	4.7	4.0	4.4	4.2	4.0	4.4	3.7	3.2
Other goods and services:											
Index	258.3	271.1	282.6	293.2	298.7	304.7	313.4	321.7	333.328	345.381	368.586
Percent change	8.7	5.0	4.2	3.8	1.9	2.0	2.9	2.6	3.6	3.6	6.7
Consumer Price Index for Urban Wage Earners and Clerical Workers:											
All items:											
Index	163.2	168.9	173.5	175.9	179.8	184.5	191.0	197.1	202.767	211.053	209.630
Percent change	2.2	3.5	2.7	1.4	2.2	5.1	1.1	3.2	2.9	4.1	-0.7

41. Producer Price Indexes, by stage of processing

[1982 = 100]

Grouping	Annual average		2009									2010			
	2008	2009	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]	Feb.[p]	Mar.[p]	Apr.[p]
Finished goods	177.1	172.5	170.3	171.1	174.3	172.4	174.2	173.2	173.8	175.7	176.0	178.0	177.3	179.2	179.6
Finished consumer goods	186.3	179.1	176.0	177.3	181.7	179.2	181.6	180.4	180.8	183.3	183.8	186.5	185.6	188.4	188.9
Finished consumer foods	178.3	175.5	175.9	174.0	176.1	173.5	173.9	173.9	175.6	176.9	179.8	180.1	181.0	185.6	184.6
Finished consumer goods excluding foods	189.1	179.4	175.2	177.5	182.7	180.2	183.3	181.6	181.6	184.6	184.2	187.7	186.1	188.3	189.4
Nondurable goods less food	210.5	194.1	187.7	191.2	198.7	195.7	200.1	198.1	197.1	201.2	200.9	205.9	203.6	207.0	208.6
Durable goods	141.2	144.3	144.4	144.2	144.7	143.3	143.8	142.9	144.8	145.4	144.9	145.4	145.4	145.0	145.0
Capital equipment	153.8	156.7	156.8	156.3	156.6	155.9	156.4	155.9	157.0	157.5	157.1	157.5	157.4	157.2	157.3
Intermediate materials, supplies, and components	188.3	172.5	168.6	170.2	172.7	172.3	174.8	174.7	174.5	176.0	176.6	179.4	179.2	181.0	183.1
Materials and components for manufacturing	177.2	162.7	158.9	160.1	160.9	161.6	163.8	164.9	165.2	166.1	167.5	169.4	170.8	172.5	175.0
Materials for food manufacturing	180.4	165.1	164.2	166.2	166.0	163.7	164.1	164.3	164.0	165.7	168.5	168.9	169.8	170.4	173.1
Materials for nondurable manufacturing	214.3	191.6	182.6	187.4	190.1	192.0	196.6	197.1	196.7	199.8	202.9	207.3	211.0	214.7	218.3
Materials for durable manufacturing	203.3	168.9	163.2	162.1	162.7	164.5	168.9	173.2	174.6	174.6	176.5	179.4	180.4	183.1	189.2
Components for manufacturing	140.3	141.0	140.8	140.8	140.7	140.7	140.8	140.9	141.1	141.1	141.0	141.1	141.4	141.7	141.8
Materials and components for construction	205.4	202.9	203.2	202.8	202.0	201.9	201.5	202.0	201.9	201.7	202.0	202.3	203.5	204.8	206.0
Processed fuels and lubricants	206.2	161.9	151.4	156.5	167.0	164.1	172.2	169.0	167.9	172.6	171.4	180.2	175.1	179.3	182.5
Containers	191.8	195.8	197.6	196.1	195.4	194.3	193.5	193.7	193.3	193.2	193.2	194.2	197.3	198.3	199.7
Supplies	173.8	172.2	172.0	172.3	172.8	172.2	171.9	172.0	171.7	172.0	172.5	172.9	173.0	173.4	173.8
Crude materials for further processing	251.8	175.2	163.9	171.5	179.8	172.9	178.4	173.5	184.0	192.1	195.5	212.8	206.6	213.6	211.1
Foodstuffs and feedstuffs	163.4	134.5	136.5	140.5	141.0	133.2	130.2	127.6	132.0	134.0	138.9	142.0	142.3	147.4	148.7
Crude nonfood materials	313.9	197.5	174.6	184.7	199.8	194.5	207.5	201.0	216.2	229.4	231.2	260.3	248.7	256.7	250.8
Special groupings:															
Finished goods, excluding foods	176.6	171.1	168.3	169.7	173.1	171.3	173.4	172.2	172.6	174.7	174.3	176.7	175.6	176.9	177.7
Finished energy goods	178.7	146.9	137.2	142.9	154.4	149.6	156.1	152.8	151.2	156.8	156.0	162.7	158.9	163.7	165.8
Finished goods less energy	169.8	172.3	172.4	171.7	172.4	171.4	171.8	171.5	172.8	173.5	174.0	174.6	174.8	175.8	175.7
Finished consumer goods less energy	176.9	179.2	179.2	178.5	179.4	178.2	178.6	178.4	179.7	180.6	181.6	182.3	182.7	184.3	184.2
Finished goods less food and energy	167.2	171.5	171.4	171.1	171.4	170.8	171.2	170.8	172.0	172.6	172.4	173.0	173.0	172.9	173.1
Finished consumer goods less food and energy	176.4	181.6	181.5	181.3	181.7	181.1	181.5	181.2	182.3	183.1	183.0	183.9	184.0	184.0	184.3
Consumer nondurable goods less food and energy	206.8	214.3	213.8	213.7	213.9	214.4	214.5	214.9	215.1	215.9	216.4	217.6	218.0	218.5	219.0
Intermediate materials less foods and feeds	188.7	173.0	168.9	170.4	172.9	172.7	175.5	175.4	175.3	176.8	177.2	180.2	180.0	182.1	184.3
Intermediate foods and feeds	181.6	166.0	164.5	167.3	169.3	166.5	166.1	165.8	164.5	165.7	168.0	168.7	168.4	167.8	168.7
Intermediate energy goods	208.1	162.5	149.5	157.2	167.8	165.3	174.5	171.0	169.8	175.2	173.8	183.2	177.6	182.3	185.2
Intermediate goods less energy	180.9	172.8	171.2	171.3	171.8	171.9	172.7	173.5	173.6	174.0	175.0	176.2	177.4	178.5	180.3
Intermediate materials less foods and energy	180.9	173.4	171.8	171.6	171.9	172.3	173.3	174.2	174.4	174.8	175.7	176.8	178.2	179.5	181.4
Crude energy materials	309.4	176.8	155.0	164.2	181.2	173.0	184.1	173.5	193.1	211.0	208.6	241.5	226.1	229.4	215.9
Crude materials less energy	205.4	164.8	161.2	166.9	168.9	163.4	164.5	163.3	167.6	169.2	176.3	183.0	183.1	191.4	195.2
Crude nonfood materials less energy	324.4	248.4	224.4	234.9	242.6	247.1	263.6	267.9	270.9	270.9	285.3	304.0	303.4	322.2	335.4

p = preliminary.

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

[December 2003 = 100, unless otherwise indicated]

NAICS	Industry	2009									2010			
		Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]	Feb.[p]	Mar.[p]	Apr.[p]
	Total mining industries (December 1984=100)	160.5	166.0	180.2	173.0	182.8	177.2	192.3	206.7	208.4	231.3	224.3	223.4	217.1
211	Oil and gas extraction (December 1985=100)	157.0	168.6	192.2	179.9	194.8	186.6	210.8	233.5	235.5	271.6	261.6	258.2	245.6
212	Mining, except oil and gas	187.9	185.0	185.9	186.2	189.3	188.6	189.7	191.6	194.2	196.9	193.4	196.8	202.9
213	Mining support activities	105.6	101.3	100.0	101.2	100.4	98.7	99.1	99.1	99.1	99.3	100.3	100.6	102.0
	Total manufacturing industries (December 1984=100)	164.2	165.8	168.4	167.1	169.4	168.6	168.9	170.7	170.8	173.1	172.1	173.9	175.2
311	Food manufacturing (December 1984=100)	168.6	170.5	171.4	169.7	169.7	169.5	168.3	169.1	171.2	172.2	172.3	172.5	173.9
312	Beverage and tobacco manufacturing	119.6	119.2	119.4	119.4	119.5	119.9	120.6	121.3	121.3	121.8	121.9	122.4	122.4
313	Textile mills	112.1	111.8	112.1	111.9	111.8	112.0	112.1	112.4	112.4	112.6	112.9	114.4	114.6
315	Apparel manufacturing	103.5	103.3	103.3	103.2	103.3	103.5	103.7	103.6	103.6	103.5	103.5	103.4	103.5
316	Leather and allied product manufacturing (December 1984=100)	153.9	153.9	153.6	153.2	154.0	154.0	153.3	152.9	152.8	153.1	153.5	154.1	155.1
321	Wood products manufacturing	102.8	102.4	102.3	103.2	103.2	103.7	102.7	103.0	103.5	103.6	105.4	107.0	109.7
322	Paper manufacturing	124.5	123.1	122.5	121.8	121.7	121.7	121.7	122.0	122.0	121.9	122.7	124.3	124.9
323	Printing and related support activities	109.4	109.2	109.0	109.0	108.8	109.0	109.2	109.3	109.4	109.2	109.4	109.3	109.4
324	Petroleum and coal products manufacturing (December 1984=100)	186.2	206.5	238.1	225.9	251.6	241.5	240.8	258.4	254.3	275.6	260.7	278.1	287.2
325	Chemical manufacturing (December 1984=100)	223.6	222.8	222.4	224.1	224.0	225.1	225.0	225.4	227.3	228.7	231.7	232.3	235.6
326	Plastics and rubber products manufacturing (December 1984=100)	160.9	160.6	160.3	160.3	160.4	161.3	161.5	161.9	162.0	162.3	162.9	164.5	165.7
331	Primary metal manufacturing (December 1984=100)	164.7	162.8	163.8	165.4	172.5	177.8	180.7	179.9	182.2	186.5	187.4	190.6	198.4
332	Fabricated metal product manufacturing (December 1984=100)	175.5	175.0	174.4	173.9	173.8	174.0	174.1	174.1	174.2	174.4	175.3	175.3	176.3
333	Machinery manufacturing	120.3	120.2	120.2	120.3	120.2	120.3	120.1	120.2	120.3	120.2	120.4	120.3	120.6
334	Computer and electronic products manufacturing	92.3	92.3	92.1	92.2	92.2	91.9	91.9	91.8	91.7	91.5	91.4	91.7	91.2
335	Electrical equipment, appliance, and components manufacturing	127.9	128.5	128.3	128.5	129.2	129.4	129.7	130.1	130.5	130.7	130.8	131.2	131.7
336	Transportation equipment manufacturing	109.3	108.9	109.5	108.5	109.1	108.5	110.2	110.6	110.2	110.8	110.8	110.4	110.3
337	Furniture and related product manufacturing (December 1984=100)	176.7	176.9	176.8	177.0	176.2	176.6	176.7	176.4	176.4	176.2	175.9	176.2	176.9
339	Miscellaneous manufacturing	111.7	111.3	111.4	111.2	111.3	111.4	111.6	111.8	112.0	112.1	112.2	112.5	112.5
	Retail trade													
441	Motor vehicle and parts dealers	119.0	118.1	118.4	118.8	122.9	123.0	122.1	122.4	121.5	123.9	120.7	124.7	124.6
442	Furniture and home furnishings stores	121.4	123.0	122.6	121.5	120.5	121.6	121.8	121.5	121.1	120.0	120.6	120.8	123.0
443	Electronics and appliance stores	104.9	104.2	104.8	105.7	106.6	103.7	106.0	109.0	92.3	103.2	101.7	95.6	95.3
446	Health and personal care stores	138.7	138.1	137.2	138.6	137.1	139.0	138.7	140.0	139.0	138.7	141.7	142.2	143.2
447	Gasoline stations (June 2001=100)	59.7	59.4	69.5	75.9	63.5	68.3	61.9	77.8	82.9	74.1	74.1	64.9	77.7
454	Nonstore retailers	148.0	142.2	143.6	152.4	145.5	147.6	144.1	143.4	145.0	142.9	154.2	142.7	142.8
	Transportation and warehousing													
481	Air transportation (December 1992=100)	187.2	179.5	182.2	185.5	189.6	184.5	188.5	193.3	194.7	199.6	195.1	200.7	204.0
483	Water transportation	115.2	111.3	111.9	113.3	114.0	115.7	116.8	118.3	118.3	120.0	121.1	120.3	121.8
491	Postal service (June 1989=100)	181.6	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	187.7	187.7	187.7	187.7
	Utilities													
221	Utilities	128.1	128.0	129.0	130.9	131.8	130.0	128.8	128.9	129.4	132.2	133.4	131.7	131.1
	Health care and social assistance													
6211	Office of physicians (December 1996=100)	125.9	126.3	126.5	126.8	126.8	126.8	127.4	127.5	127.6	128.5	128.5	128.4	128.9
6215	Medical and diagnostic laboratories	108.8	108.6	108.4	108.4	108.4	108.4	108.3	108.0	108.0	108.3	107.6	107.7	108.2
6216	Home health care services (December 1996=100)	127.7	127.7	127.5	127.9	128.2	128.4	128.8	128.8	128.8	129.2	129.4	129.3	129.2
622	Hospitals (December 1992=100)	166.9	167.2	167.3	167.5	168.4	168.3	171.2	171.3	171.5	172.4	172.5	173.0	173.1
6231	Nursing care facilities	122.6	122.6	122.7	123.8	124.3	123.8	123.8	124.1	124.4	125.3	125.3	125.6	125.6
62321	Residential mental retardation facilities	121.4	122.3	122.4	122.3	122.8	125.4	125.6	125.6	127.1	128.1	124.9	124.9	126.7
	Other services industries													
511	Publishing industries, except Internet	111.7	111.7	111.8	111.4	111.7	111.1	111.4	109.8	109.7	110.3	110.1	110.2	110.2
515	Broadcasting, except Internet	105.5	107.4	106.4	102.5	102.1	103.6	103.5	104.9	104.6	105.0	103.8	105.1	106.3
517	Telecommunications	100.8	101.1	101.1	101.2	101.7	101.3	101.1	100.8	100.9	100.8	100.4	100.5	100.3
5182	Data processing and related services	100.9	101.0	101.0	101.0	100.9	100.9	101.0	100.6	100.6	100.7	100.7	100.7	100.7
523	Security, commodity contracts, and like activity	109.1	109.2	108.8	111.3	112.0	112.6	116.4	116.0	116.5	117.2	116.7	116.9	118.1
53112	Lessors or nonresidental buildings (except miniwarehouse)	108.8	108.8	108.8	109.4	109.1	109.7	109.5	109.3	109.9	109.5	109.8	109.2	108.3
5312	Offices of real estate agents and brokers	101.9	102.1	102.2	102.0	102.0	102.0	102.0	102.0	101.9	101.7	102.0	100.8	100.1
5313	Real estate support activities	109.2	109.7	107.3	107.6	108.2	108.2	107.4	107.3	109.3	108.1	107.5	107.1	107.9
5321	Automotive equipment rental and leasing (June 2001=100)	135.1	134.0	137.6	141.1	142.0	140.5	135.8	132.3	129.8	130.2	134.7	131.9	133.2
5411	Legal services (December 1996=100)	166.2	166.3	166.3	166.4	166.5	166.6	166.6	166.6	166.8	169.6	168.7	169.6	170.6
541211	Offices of certified public accountants	115.3	115.3	114.3	114.5	114.6	115.1	114.7	115.4	114.0	113.6	114.3	113.5	112.6
5413	Architectural, engineering, and related services (December 1996=100)	143.0	143.0	143.0	143.0	142.9	142.9	142.8	142.8	143.0	142.9	143.2	143.8	143.8
54181	Advertising agencies	105.3	105.4	105.4	105.4	104.9	104.7	104.6	104.7	104.7	104.8	104.7	104.7	104.7
5613	Employment services (December 1996=100)	123.9	123.5	123.6	123.7	123.6	123.3	123.2	122.8	122.8	123.9	124.2	123.8	124.2
56151	Travel agencies	100.2	100.2	98.6	98.9	98.5	98.5	98.5	98.1	98.1	98.1	100.7	100.6	100.3
56172	Janitorial services	109.7	109.7	109.7	110.1	110.1	110.5	110.3	110.5	110.5	110.6	110.5	110.3	110.6
5621	Waste collection	115.0	115.6	114.9	116.3	116.7	117.0	116.9	117.1	116.1	116.0	115.4	117.3	118.3
721	Accommodation (December 1996=100)	141.5	141.0	143.7	146.0	144.9	140.9	141.8	139.8	137.2	139.3	138.2	137.0	139.9

p = preliminary.

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

[1982 = 100]

Index	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Finished goods											
Total	133.0	138.0	140.7	138.9	143.3	148.5	155.7	160.4	166.6	177.1	172.5
Foods	135.1	137.2	141.3	140.1	145.9	152.7	155.7	156.7	167.0	178.3	175.5
Energy	78.8	94.1	96.7	88.8	102.0	113.0	132.6	145.9	156.3	178.7	146.9
Other	146.1	148.0	150.0	150.2	150.5	152.7	156.4	158.7	161.7	167.2	171.5
Intermediate materials, supplies, and components											
Total	123.2	129.2	129.7	127.8	133.7	142.6	154.0	164.0	170.7	188.3	172.5
Foods	120.8	119.2	124.3	123.2	134.4	145.0	146.0	146.2	161.4	180.4	165.1
Energy	84.3	101.7	104.1	95.9	111.9	123.2	149.2	162.8	174.6	208.1	162.5
Other	133.1	136.6	136.4	135.8	138.5	146.5	154.6	163.8	168.4	180.9	173.4
Crude materials for further processing											
Total	98.2	120.6	121.0	108.1	135.3	159.0	182.2	184.8	207.1	251.8	175.2
Foods	98.7	100.2	106.1	99.5	113.5	127.0	122.7	119.3	146.7	163.4	134.5
Energy	78.5	122.1	122.3	102.0	147.2	174.6	234.0	226.9	232.8	309.4	176.8
Other	91.1	118.0	101.5	101.0	116.9	149.2	176.7	210.0	238.7	308.5	211.1

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

[2000 = 100]

Category	2009									2010			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
ALL COMMODITIES	116.1	116.6	117.8	117.4	118.1	117.9	117.9	118.9	119.7	120.7	120.3	121.2	122.6
Foods, feeds, and beverages	162.8	167.3	174.8	164.9	164.5	158.2	156.5	162.0	165.1	167.6	160.8	163.5	162.6
Agricultural foods, feeds, and beverages	165.0	170.3	178.6	167.6	167.3	160.7	159.0	164.6	167.9	170.6	162.9	165.7	164.6
Nonagricultural (fish, beverages) food products	145.3	141.4	141.5	142.2	140.8	137.3	135.0	139.9	140.9	140.9	144.8	145.9	147.8
Industrial supplies and materials	136.9	137.7	140.4	140.6	143.6	143.9	144.9	147.5	150.1	152.8	152.6	155.0	159.8
Agricultural industrial supplies and materials	123.6	130.2	131.0	134.9	138.0	142.2	143.9	151.8	152.5	152.1	150.4	155.7	157.2
Fuels and lubricants	156.9	160.2	175.2	166.0	181.6	171.9	175.5	184.6	189.6	200.0	190.4	196.4	206.8
Nonagricultural supplies and materials, excluding fuel and building materials	137.1	137.3	138.5	139.8	141.1	142.7	143.3	144.8	147.3	148.9	150.5	152.2	156.4
Selected building materials	113.5	112.5	113.0	112.8	113.7	114.0	112.5	113.0	113.5	114.8	115.8	116.0	117.8
Capital goods	102.8	103.0	103.1	103.2	103.4	103.5	103.2	103.3	103.3	103.6	103.6	103.9	104.2
Electric and electrical generating equipment	106.8	107.0	107.2	107.0	107.3	107.4	107.9	108.9	109.3	109.9	110.0	109.8	109.9
Nonelectrical machinery	94.3	94.4	94.4	94.5	94.7	94.9	94.4	94.6	94.5	94.5	94.5	94.8	95.2
Automotive vehicles, parts, and engines	108.1	108.1	108.0	107.9	107.9	108.0	108.1	108.2	108.2	108.5	108.7	108.6	108.5
Consumer goods, excluding automotive	107.5	107.9	108.4	108.9	109.1	109.2	109.3	109.4	109.4	109.5	110.0	110.2	111.3
Nondurables, manufactured	107.2	107.8	108.5	108.7	109.0	109.4	109.3	109.8	110.0	110.9	111.9	111.9	112.5
Durables, manufactured	107.6	107.9	108.1	109.5	109.6	109.5	109.6	109.4	109.2	107.8	107.5	107.6	108.8
Agricultural commodities	157.2	162.8	169.7	161.3	161.6	156.9	155.8	161.8	164.7	166.8	160.2	163.3	162.6
Nonagricultural commodities	113.1	113.4	114.1	114.2	115.0	115.1	115.2	115.8	116.5	117.3	117.4	118.2	119.7

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

[2000 = 100]

Category	2009									2010			
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
ALL COMMODITIES	114.8	116.8	120.0	119.3	121.1	121.3	122.3	124.1	124.4	125.9	125.8	126.3	127.7
Foods, feeds, and beverages	138.9	139.2	139.8	138.2	140.0	140.6	141.2	142.6	143.7	145.6	145.3	147.4	149.0
Agricultural foods, feeds, and beverages	154.3	155.0	155.5	153.2	155.7	156.8	157.3	159.5	160.8	163.9	163.1	165.9	167.5
Nonagricultural (fish, beverages) food products	104.1	103.6	104.4	104.2	104.5	104.1	104.9	104.5	104.9	104.2	104.7	105.6	107.1
Industrial supplies and materials	154.3	163.0	177.3	174.4	182.4	183.0	187.2	195.0	196.2	202.7	202.8	205.1	210.9
Fuels and lubricants	174.4	191.5	222.1	216.3	231.4	228.5	235.3	250.1	249.7	260.6	258.8	262.5	269.6
Petroleum and petroleum products	185.5	206.1	241.5	235.8	253.7	252.2	258.3	272.2	269.3	279.6	277.4	284.3	294.8
Paper and paper base stocks	104.6	103.3	101.8	99.1	98.4	99.1	100.5	102.4	103.1	104.3	106.4	107.6	109.5
Materials associated with nondurable supplies and materials	135.3	139.2	137.5	132.3	133.3	134.8	137.7	139.4	140.6	142.6	142.9	144.6	148.0
Selected building materials	115.2	114.5	116.0	118.0	119.2	118.9	118.6	118.5	120.9	122.5	124.7	127.6	130.2
Unfinished metals associated with durable goods	171.1	172.8	178.3	184.8	190.6	204.0	208.0	212.9	221.5	227.8	233.7	233.2	246.8
Nonmetals associated with durable goods	104.3	103.4	103.0	102.8	103.5	104.3	104.8	105.2	105.4	106.0	106.7	107.1	107.3
Capital goods	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.9	91.7	91.4	91.5
Electric and electrical generating equipment	109.1	109.8	110.0	110.2	110.3	110.3	110.8	111.0	111.3	111.7	111.8	111.0	111.3
Nonelectrical machinery	86.8	86.7	86.5	86.5	86.5	86.5	86.4	86.4	86.4	86.2	86.1	86.0	86.0
Automotive vehicles, parts, and engines	107.7	107.9	108.0	108.2	108.4	108.6	108.8	108.9	108.8	108.4	108.3	108.2	108.3
Consumer goods, excluding automotive	104.1	104.2	104.3	104.1	104.1	104.1	104.3	104.3	104.3	104.4	104.3	104.5	104.5
Nondurables, manufactured	108.3	108.1	108.1	107.8	107.8	107.8	107.8	107.9	107.9	108.5	108.5	109.0	109.0
Durables, manufactured	100.0	100.5	100.6	100.6	100.6	100.7	100.9	100.9	100.8	100.5	100.3	100.3	100.3
Nonmanufactured consumer goods	102.7	101.3	101.4	101.3	100.8	101.2	101.6	101.1	102.1	102.1	102.4	102.5	102.0

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

[2000 = 100, unless indicated otherwise]

Category	2008				2009				2010
	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.
Import air freight	144.4	158.7	157.1	138.5	132.9	132.8	134.8	163.9	156.6
Export air freight	132.0	140.8	144.3	135.0	124.1	117.4	121.6	122.9	124.3
Import air passenger fares (Dec. 2006 = 100)	131.3	171.6	161.3	157.3	134.9	147.3	137.9	152.3	149.8
Export air passenger fares (Dec. 2006 = 100)	156.4	171.4	171.9	164.6	141.7	138.2	141.3	156.1	160.1

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

[1992 = 100]

Item	2007				2008				2009				2010
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Business													
Output per hour of all persons	139.0	140.0	142.0	142.8	142.8	143.8	144.3	145.0	145.3	148.0	150.9	153.4	154.2
Compensation per hour	175.2	176.3	177.7	179.9	180.3	181.0	183.6	185.4	183.5	186.8	186.8	185.9	186.5
Real compensation per hour	122.8	122.1	122.4	122.5	121.3	120.2	120.1	124.3	123.6	125.4	124.2	122.8	122.7
Unit labor costs	126.0	125.9	125.1	126.0	126.3	125.8	127.2	127.8	126.2	126.2	123.8	121.2	120.9
Unit nonlabor payments	136.7	139.4	141.9	141.9	141.7	143.8	145.3	143.4	148.0	147.7	151.9	156.5	157.9
Implicit price deflator	130.0	130.9	131.4	131.9	132.1	132.5	134.0	133.6	134.3	134.2	134.3	134.4	134.7
Nonfarm business													
Output per hour of all persons	138.3	139.0	141.0	142.0	141.8	142.8	143.2	144.0	144.3	147.0	149.8	152.1	153.2
Compensation per hour	174.3	174.9	176.2	178.8	179.3	179.7	182.4	184.4	182.5	185.9	185.7	184.8	185.5
Real compensation per hour	122.2	121.2	121.4	121.7	120.6	119.4	119.3	123.6	123.0	124.7	123.5	122.0	122.0
Unit labor costs	126.0	125.8	125.0	125.9	126.4	125.9	127.4	128.1	126.4	126.4	124.0	121.5	121.1
Unit nonlabor payments	138.2	141.0	143.3	142.9	142.5	144.9	146.5	145.1	150.3	150.0	154.6	158.8	160.3
Implicit price deflator	130.5	131.4	131.7	132.2	132.3	132.9	134.4	134.3	135.2	135.1	135.2	135.2	135.5
Nonfinancial corporations													
Output per hour of all employees	143.6	144.3	144.0	146.2	145.0	147.3	149.1	149.2	146.6	149.9	151.3	153.9	–
Compensation per hour	164.3	165.0	166.1	168.6	168.7	169.7	172.4	175.0	173.2	175.4	175.9	175.2	–
Real compensation per hour	115.2	114.3	114.4	114.8	113.5	112.7	112.8	117.3	116.7	117.7	116.9	115.7	–
Total unit costs	116.8	117.2	118.6	118.7	119.8	118.9	119.4	121.8	123.8	122.7	121.5	119.5	–
Unit labor costs	114.4	114.4	115.3	115.3	116.3	115.1	115.6	117.3	118.1	117.1	116.3	113.9	–
Unit nonlabor costs	123.1	124.9	127.4	127.9	129.1	129.2	129.8	134.1	139.1	138.0	135.7	134.8	–
Unit profits	171.2	171.8	155.6	149.9	133.0	134.7	145.3	129.5	127.5	133.8	140.0	149.5	–
Unit nonlabor payments	136.2	137.7	135.1	133.9	130.2	130.7	134.0	132.8	135.9	136.8	136.8	138.8	–
Implicit price deflator	121.8	122.2	122.0	121.6	121.0	120.4	121.8	122.5	124.1	123.7	123.2	122.2	–
Manufacturing													
Output per hour of all persons	176.6	177.6	180.2	182.5	182.9	181.1	181.0	179.7	178.4	181.3	187.6	190.6	191.3
Compensation per hour	172.7	172.2	172.9	176.3	175.6	176.1	179.2	185.4	185.0	187.8	187.4	188.3	188.3
Real compensation per hour	121.1	119.4	119.1	120.0	118.1	117.0	117.3	124.2	124.7	126.0	124.6	124.4	123.9
Unit labor costs	97.8	97.0	95.9	96.6	96.0	97.3	99.1	103.1	103.7	103.6	99.9	98.8	98.4

NOTE: Dash indicates data not available.

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

[2000 = 100, unless otherwise indicated]

Item	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Private business													
Productivity:													
Output per hour of all persons	90.0	91.7	94.3	97.2	100.0	102.8	107.1	111.2	114.5	116.6	117.6	119.5	122.7
Output per unit of capital services	105.3	105.3	103.8	102.3	100.0	96.0	94.7	95.5	97.2	98.1	98.4	97.7	95.6
Multifactor productivity	95.3	96.2	97.4	98.8	100.0	100.4	102.5	105.4	108.2	109.7	110.3	110.7	112.0
Output	82.8	87.2	91.5	96.2	100.0	100.5	102.0	105.2	109.7	113.6	117.1	119.5	120.4
Inputs:													
Labor input	90.8	94.4	96.5	98.8	100.0	98.2	96.2	95.8	96.9	98.8	101.2	102.3	100.3
Capital services	78.7	82.9	88.2	94.1	100.0	104.6	107.7	110.2	112.9	115.8	119.1	122.3	125.9
Combined units of labor and capital input	86.9	90.7	93.9	97.4	100.0	100.0	99.5	99.9	101.4	103.6	106.2	108.0	107.6
Capital per hour of all persons	85.5	87.1	90.9	95.0	100.0	107.0	113.1	116.5	117.8	118.9	119.6	122.3	128.3
Private nonfarm business													
Productivity:													
Output per hour of all persons	90.5	92.0	94.5	97.3	100.0	102.7	107.1	111.1	114.2	116.1	117.2	118.9	122.3
Output per unit of capital services	106.1	105.8	104.2	102.6	100.0	96.0	94.5	95.2	96.9	97.7	97.9	97.0	95.1
Multifactor productivity	95.8	96.5	97.7	99.0	100.0	100.4	102.5	105.2	108.0	109.3	109.9	110.1	111.4
Output	82.8	87.2	91.5	96.3	100.0	100.5	102.1	105.2	109.6	113.5	117.1	119.4	120.4
Inputs:													
Labor input	90.4	94.0	96.3	98.8	100.0	98.4	96.4	96.0	97.1	99.1	101.6	102.8	100.9
Capital services	78.1	82.4	87.8	93.9	100.0	104.7	107.9	110.5	113.1	116.1	119.6	123.1	126.7
Combined units of labor and capital input	86.5	90.4	93.7	97.3	100.0	100.2	99.6	100.0	101.5	103.8	106.6	108.4	108.1
Capital per hour of all persons	85.3	86.9	90.7	94.8	100.0	107.0	113.2	116.7	117.8	118.9	119.7	122.6	128.8
Manufacturing [1996 = 100]													
Productivity:													
Output per hour of all persons	82.7	87.2	91.9	96.1	100.0	101.6	108.6	115.4	118.0	123.6	124.6	128.8	–
Output per unit of capital services	97.9	100.5	100.7	100.4	100.0	93.5	92.4	93.3	95.5	98.9	100.0	101.1	–
Multifactor productivity	91.2	93.8	95.9	96.6	100.0	98.7	102.4	105.3	108.1	108.1	110.8	116.0	–
Output	83.0	89.2	93.8	97.3	100.0	94.9	94.3	95.3	97.0	100.4	102.0	103.6	–
Inputs:													–
Hours of all persons	100.4	102.3	102.0	101.3	100.0	93.5	86.8	82.6	82.2	81.3	81.9	80.4	–
Capital services	84.8	88.7	93.2	97.0	100.0	101.5	102.1	102.1	101.6	101.5	102.0	102.5	–
Energy	110.4	108.2	105.4	105.5	100.0	90.6	89.3	84.4	84.0	92.5	86.3	84.0	–
Nonenergy materials	85.9	92.8	97.7	102.6	100.0	93.3	88.4	87.7	87.3	92.7	90.4	83.1	–
Purchased business services	88.4	92.0	95.0	100.0	100.0	100.7	98.3	99.1	97.0	105.2	103.9	103.5	–
Combined units of all factor inputs	91.1	95.1	97.8	100.7	100.0	96.2	92.1	90.5	89.7	92.9	92.0	89.3	–

NOTE: Dash indicates data not available.

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

[1992 = 100]

Item	1964	1974	1984	1994	2001	2002	2003	2004	2005	2006	2007	2008	2009
Business													
Output per hour of all persons	57.0	72.5	85.5	101.4	120.7	126.2	131.0	134.9	137.2	138.5	141.0	144.0	149.4
Compensation per hour	16.2	31.8	68.9	103.8	140.9	145.3	152.3	157.6	163.8	170.1	177.3	182.5	186.0
Real compensation per hour	68.4	84.1	90.5	99.2	114.0	115.6	118.6	119.5	120.2	120.8	122.4	121.4	124.2
Unit labor costs	28.5	43.8	80.6	102.3	116.7	115.1	116.2	116.9	119.5	122.8	125.7	126.8	124.5
Unit nonlabor payments	27.2	39.7	80.4	106.1	111.0	116.1	118.7	125.8	131.9	135.9	140.0	143.6	150.8
Implicit price deflator	28.0	42.3	80.5	103.7	114.6	115.5	117.1	120.2	124.1	127.7	131.0	133.0	134.3
Nonfarm business													
Output per hour of all persons	59.8	74.5	86.4	101.6	120.2	125.7	130.3	134.0	136.2	137.5	140.1	142.9	148.3
Compensation per hour	16.6	31.9	69.2	103.8	140.1	144.5	151.4	156.6	162.8	169.0	176.1	181.4	185.0
Real compensation per hour	70.0	84.6	90.9	99.2	113.3	115.0	117.9	118.7	119.4	120.0	121.6	120.7	123.5
Unit labor costs	27.8	42.9	80.1	102.2	116.5	115.0	116.2	116.8	119.5	122.9	125.7	126.9	124.7
Unit nonlabor payments	27.1	37.9	79.5	106.6	112.6	118.1	120.1	126.7	133.6	138.0	141.4	144.7	153.2
Implicit price deflator	27.5	41.0	79.9	103.8	115.1	116.1	117.6	120.4	124.7	128.5	131.5	133.5	135.2
Nonfinancial corporations													
Output per hour of all employees	62.6	73.0	87.4	102.3	123.5	127.9	133.0	137.5	141.0	143.1	144.5	147.6	150.5
Compensation per hour	18.2	34.0	71.6	103.6	137.3	140.9	147.3	150.9	155.7	160.2	166.0	171.4	175.1
Real compensation per hour	76.9	90.0	94.0	99.0	111.0	112.2	114.7	114.4	114.2	113.8	114.6	114.0	116.9
Total unit costs	27.7	45.1	81.8	100.9	111.5	110.9	111.3	110.1	111.8	113.8	117.8	120.0	121.9
Unit labor costs	29.2	46.5	82.0	101.3	111.2	110.2	110.8	109.7	110.4	112.0	114.9	116.1	116.4
Unit nonlabor costs	23.9	41.3	81.4	99.6	112.3	112.9	112.7	111.3	115.4	118.9	125.8	130.5	136.8
Unit profits	58.6	47.5	106.4	134.0	84.0	96.6	107.3	142.7	161.1	179.9	162.1	135.7	137.6
Unit nonlabor payments	33.3	42.9	88.2	109.0	104.6	108.5	111.2	119.8	127.8	135.5	135.7	131.9	137.0
Implicit price deflator	30.6	45.3	84.1	103.9	109.0	109.6	110.9	113.1	116.3	119.9	121.9	121.4	123.3
Manufacturing													
Output per hour of all persons	–	–	–	106.2	141.4	151.1	160.6	164.3	172.0	173.4	179.2	181.2	184.4
Compensation per hour	–	–	–	104.8	137.5	145.1	156.7	157.9	163.2	166.4	173.5	179.0	186.9
Real compensation per hour	–	–	–	100.1	111.2	115.5	122.0	119.7	119.7	118.2	119.9	119.0	124.8
Unit labor costs	–	–	–	98.7	97.3	96.0	97.6	96.1	94.9	96.0	96.8	98.8	101.3
Unit nonlabor payments	–	–	–	102.8	102.2	101.2	103.4	111.3	122.6	128.1	130.8	–	–
Implicit price deflator	–	–	–	101.5	100.6	99.5	101.5	106.3	113.5	117.6	119.7	–	–

Dash indicates data not available.

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

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
	Mining												
21	Mining	75.0	83.4	88.3	97.8	94.9	100.0	102.8	94.0	85.0	77.0	71.2	69.0
211	Oil and gas extraction	64.9	65.9	81.0	96.7	96.6	100.0	105.9	90.0	86.6	80.9	78.7	71.6
2111	Oil and gas extraction	64.9	65.9	81.0	96.7	96.6	100.0	105.9	90.0	86.6	80.9	78.7	71.6
212	Mining, except oil and gas	62.3	78.2	90.2	95.3	98.5	100.0	102.8	104.9	104.3	101.1	94.4	93.7
2121	Coal mining	51.7	67.3	89.7	103.9	102.4	100.0	101.7	101.6	96.7	89.5	90.6	85.4
2122	Metal ore mining	50.5	65.5	72.1	85.7	93.8	100.0	103.3	101.5	97.2	90.7	77.0	74.4
2123	Nonmetallic mineral mining and quarrying	84.3	92.6	96.0	92.1	96.5	100.0	104.3	109.4	115.2	116.8	103.8	103.9
213	Support activities for mining	76.1	86.0	97.0	99.7	104.5	100.0	121.9	141.6	104.1	87.1	117.7	145.7
2131	Support activities for mining	76.1	86.0	97.0	99.7	104.5	100.0	121.9	141.6	104.1	87.1	117.7	145.7
	Utilities												
2211	Power generation and supply	63.7	72.4	97.2	103.9	103.4	100.0	102.1	104.4	111.1	112.1	110.1	105.6
2212	Natural gas distribution	58.7	66.0	86.6	98.1	95.4	100.0	98.9	102.5	105.9	103.2	103.8	104.6
	Manufacturing												
311	Food	81.0	85.0	86.9	93.5	95.4	100.0	101.5	101.0	106.2	104.1	101.9	101.4
3111	Animal food	58.6	63.6	70.4	77.0	92.0	100.0	117.7	104.6	119.5	108.2	110.2	103.5
3112	Grain and oilseed milling	66.0	74.2	80.8	91.7	97.3	100.0	100.5	104.9	106.6	102.3	105.6	101.8
3113	Sugar and confectionery products	80.4	81.9	92.5	102.3	100.3	100.0	100.4	107.3	120.4	113.5	103.4	95.5
3114	Fruit and vegetable preserving and specialty	73.1	72.3	78.7	88.7	95.7	100.0	97.2	99.5	103.3	98.0	105.5	103.1
3115	Dairy products	77.4	89.2	94.4	89.6	92.2	100.0	104.0	101.8	101.8	100.7	100.6	108.6
3116	Animal slaughtering and processing	90.1	94.4	93.0	95.7	96.0	100.0	99.9	100.4	109.7	109.4	106.3	109.0
3117	Seafood product preparation and packaging	72.5	69.4	58.9	82.7	89.8	100.0	101.8	96.5	110.5	122.0	100.7	87.8
3118	Bakeries and tortilla manufacturing	85.5	86.2	87.5	96.6	98.4	100.0	97.9	100.1	104.3	103.8	101.4	93.8
3119	Other food products	87.5	87.5	89.7	100.8	94.5	100.0	104.8	106.1	102.9	102.8	95.1	96.4
312	Beverages and tobacco products	94.3	110.5	121.1	106.7	108.3	100.0	111.4	114.7	120.8	113.1	110.1	107.4
3121	Beverages	77.2	95.3	100.5	91.1	93.1	100.0	110.8	115.4	120.9	112.6	113.4	113.6
3122	Tobacco and tobacco products	107.2	116.0	149.3	143.0	146.6	100.0	116.7	121.5	136.5	138.1	137.7	119.8
313	Textile mills	59.8	66.6	81.3	86.3	89.4	100.0	111.1	113.0	122.9	122.2	126.0	124.0
3131	Fiber, yarn, and thread mills	50.0	60.2	75.2	75.6	82.5	100.0	112.1	116.7	108.8	105.5	116.4	117.9
3132	Fabric mills	56.0	67.2	82.5	90.2	91.4	100.0	114.0	115.3	133.0	140.7	143.2	150.8
3133	Textile and fabric finishing mills	76.5	69.9	83.6	87.2	91.0	100.0	104.1	104.5	113.3	102.4	101.2	86.4
314	Textile product mills	82.0	81.9	91.3	101.2	97.7	100.0	102.8	115.1	121.3	111.2	100.3	97.2
3141	Textile furnishings mills	85.7	87.1	94.1	100.2	97.9	100.0	105.7	115.3	119.1	108.4	101.9	99.2
3149	Other textile product mills	78.8	79.1	93.2	105.9	99.0	100.0	98.1	116.4	128.3	120.9	104.9	104.5
315	Apparel	73.1	77.8	100.3	116.9	117.2	100.0	106.7	94.2	94.4	86.0	56.5	55.4
3151	Apparel knitting mills	71.3	86.9	92.8	100.4	97.3	100.0	93.2	83.7	97.8	97.7	65.1	62.9
3152	Cut and sew apparel	70.4	73.1	99.6	119.2	119.7	100.0	109.7	96.4	91.9	82.4	52.9	52.1
3159	Accessories and other apparel	129.9	129.8	132.2	129.8	137.4	100.0	105.8	95.8	109.8	96.3	74.0	74.0
316	Leather and allied products	83.9	93.5	119.1	133.8	138.5	100.0	104.8	128.4	129.4	133.7	128.8	133.4
3161	Leather and hide tanning and finishing	138.4	131.6	153.7	135.8	140.1	100.0	103.1	135.7	142.4	127.8	165.0	160.6
3162	Footwear	77.3	83.3	99.3	123.8	132.9	100.0	105.9	110.0	115.9	122.4	110.7	130.8
3169	Other leather products	116.7	127.7	134.7	142.6	140.2	100.0	109.2	163.7	160.8	182.3	166.6	158.6
321	Wood products	83.1	86.8	87.5	90.2	91.7	100.0	101.6	102.2	107.6	110.9	111.9	109.5
3211	Sawmills and wood preservation	67.3	74.1	86.9	90.9	90.6	100.0	108.3	103.9	108.3	113.4	108.4	112.2
3212	Plywood and engineered wood products	90.3	103.4	90.4	89.6	95.1	100.0	96.7	92.3	99.6	105.5	109.0	104.7
3219	Other wood products	89.9	87.8	87.3	90.4	90.9	100.0	100.7	106.5	111.5	113.2	116.5	112.3
322	Paper and paper products	75.5	79.7	87.9	93.5	93.8	100.0	104.4	108.1	108.6	109.9	114.0	113.4
3221	Pulp, paper, and paperboard mills	61.9	66.4	75.6	88.2	90.4	100.0	106.2	110.4	110.2	110.9	114.0	114.6
3222	Converted paper products	84.4	89.3	94.8	96.0	95.3	100.0	104.0	107.5	108.8	110.5	115.7	114.3
323	Printing and related support activities	87.6	91.1	88.8	94.8	95.1	100.0	100.3	103.7	109.1	111.7	117.4	119.1
3231	Printing and related support activities	87.6	91.1	88.8	94.8	95.1	100.0	100.3	103.7	109.1	111.7	117.4	119.1
324	Petroleum and coal products	60.8	67.0	85.6	96.8	94.9	100.0	102.0	105.9	106.2	104.3	106.3	103.2
3241	Petroleum and coal products	60.8	67.0	85.6	96.8	94.9	100.0	102.0	105.9	106.2	104.3	106.3	103.2
325	Chemicals	75.0	75.9	87.4	92.9	91.9	100.0	101.3	105.3	109.4	109.1	116.3	108.5
3251	Basic chemicals	76.1	72.4	80.2	94.6	87.6	100.0	108.5	121.8	129.6	134.1	156.0	132.4
3252	Resin, rubber, and artificial fibers	62.9	65.4	81.2	89.0	86.3	100.0	97.7	97.3	103.4	105.5	108.1	98.9
3253	Agricultural chemicals	80.8	82.5	100.6	92.8	89.9	100.0	110.4	121.0	139.2	134.7	140.0	138.5
3254	Pharmaceuticals and medicines	89.6	89.7	102.8	98.3	101.8	100.0	103.0	103.6	107.0	107.5	104.2	102.8
3255	Paints, coatings, and adhesives	81.6	81.6	91.4	90.5	97.3	100.0	106.1	109.7	111.2	106.7	105.5	101.3
3256	Soap, cleaning compounds, and toiletries	68.2	68.8	80.4	82.3	84.6	100.0	92.8	102.6	110.2	111.5	135.2	127.7
3259	Other chemical products and preparations	62.3	70.7	82.6	98.1	90.9	100.0	98.6	96.2	96.0	91.5	102.3	103.1
326	Plastics and rubber products	67.3	73.8	82.7	91.1	92.8	100.0	103.8	105.9	108.7	108.6	107.9	102.2
3261	Plastics products	67.3	73.2	80.8	90.7	92.4	100.0	103.9	105.8	108.5	106.8	105.1	100.0
3262	Rubber products	71.3	79.3	93.2	94.8	95.5	100.0	103.5	106.4	109.4	114.2	118.8	109.8
327	Nonmetallic mineral products	83.6	86.4	95.1	98.6	95.6	100.0	107.1	105.3	111.6	110.7	112.7	107.6
3271	Clay products and refractories	90.6	92.7	102.7	108.5	99.1	100.0	109.5	116.0	122.0	122.2	119.9	118.2

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

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
3272	Glass and glass products	75.6	77.6	91.1	100.2	94.1	100.0	106.7	105.7	111.8	119.2	119.0	114.2
3273	Cement and concrete products	90.5	93.3	97.0	99.3	95.5	100.0	106.3	101.0	104.6	101.6	106.5	99.0
3274	Lime and gypsum products	89.3	90.3	101.2	99.8	103.1	100.0	109.3	107.2	121.9	119.3	112.6	110.6
3279	Other nonmetallic mineral products	79.4	85.6	94.9	90.3	95.2	100.0	105.7	106.8	118.5	112.8	111.8	113.2
331	Primary metals	70.4	76.7	86.9	88.0	87.6	100.0	101.5	113.3	114.3	112.5	116.2	121.9
3311	Iron and steel mills and ferroalloy production	51.9	59.9	80.1	84.6	83.6	100.0	106.1	136.5	134.1	138.0	139.1	151.0
3312	Steel products from purchased steel	81.9	92.5	102.9	99.1	101.3	100.0	91.2	81.5	76.1	68.0	70.7	67.4
3313	Alumina and aluminum production	72.7	76.9	80.3	77.5	77.2	100.0	101.8	110.5	125.3	123.2	123.9	122.0
3314	Other nonferrous metal production	90.8	93.3	93.7	96.2	93.4	100.0	108.7	109.4	105.7	94.8	117.7	123.1
3315	Foundries	69.4	73.7	85.5	88.7	91.2	100.0	100.4	106.8	111.4	114.1	112.3	104.3
332	Fabricated metal products	78.3	82.3	90.1	94.7	94.5	100.0	102.7	101.4	104.3	106.2	108.8	110.3
3321	Forging and stamping	68.8	74.2	80.4	97.8	97.3	100.0	106.6	112.3	116.2	118.1	124.2	124.4
3322	Cutlery and handtools	76.1	76.8	88.1	93.4	97.3	100.0	99.2	90.9	95.4	97.2	105.4	102.0
3323	Architectural and structural metals	83.5	87.3	94.0	95.6	95.5	100.0	103.4	98.7	103.5	106.5	107.0	106.1
3324	Boilers, tanks, and shipping containers	86.7	96.2	100.6	95.2	95.0	100.0	103.7	96.0	99.3	101.0	104.7	102.5
3325	Hardware	77.0	75.8	86.8	99.4	98.4	100.0	105.7	104.4	106.7	107.1	93.0	100.2
3326	Spring and wire products	65.4	72.2	79.6	89.7	89.0	100.0	106.0	104.4	111.0	110.7	111.5	116.3
3327	Machine shops and threaded products	65.2	73.4	87.2	94.9	95.3	100.0	100.4	101.6	100.9	102.0	105.3	109.2
3328	Coating, engraving, and heat treating metals	64.1	73.8	85.7	89.4	92.5	100.0	100.2	105.9	117.6	115.2	117.9	119.3
3329	Other fabricated metal products	85.5	84.9	93.9	93.9	90.6	100.0	104.5	104.8	106.5	111.1	116.7	121.5
333	Machinery	70.0	74.0	85.8	95.7	93.7	100.0	107.7	108.7	114.7	117.9	119.8	118.4
3331	Agriculture, construction, and mining machinery	69.1	74.7	96.1	96.1	95.3	100.0	112.3	120.8	124.0	125.1	125.6	129.8
3332	Industrial machinery	63.4	67.3	84.8	109.9	89.6	100.0	98.9	107.3	105.3	116.3	117.0	105.7
3333	Commercial and service industry machinery	88.9	102.5	102.1	102.9	97.1	100.0	107.5	109.6	118.4	127.4	115.7	122.9
3334	HVAC and commercial refrigeration equipment	70.6	76.8	84.1	90.8	93.3	100.0	109.6	112.0	116.1	113.1	109.8	109.2
3335	Metalworking machinery	75.8	79.8	89.6	96.2	94.2	100.0	103.9	102.9	110.9	111.8	118.2	118.3
3336	Turbine and power transmission equipment	61.5	61.9	76.6	88.1	97.3	100.0	110.5	96.6	101.0	96.9	96.7	94.0
3339	Other general purpose machinery	70.5	72.0	84.7	96.1	93.5	100.0	108.2	107.6	117.7	122.2	127.4	121.9
334	Computer and electronic products	15.1	23.0	53.0	96.2	96.3	100.0	114.0	127.3	133.9	144.7	159.9	170.6
3341	Computer and peripheral equipment	3.7	7.2	33.5	78.4	84.4	100.0	121.5	133.9	172.7	233.1	292.4	388.4
3342	Communications equipment	31.2	47.5	78.2	128.4	120.1	100.0	113.4	122.0	118.5	146.3	146.2	139.3
3343	Audio and video equipment	41.6	63.1	67.0	84.9	86.7	100.0	112.6	155.8	149.2	147.1	110.8	93.5
3344	Semiconductors and electronic components	6.4	11.3	37.8	87.5	87.1	100.0	121.0	133.8	140.7	137.7	160.1	167.1
3345	Electronic instruments	59.3	72.7	84.4	98.4	100.4	100.0	106.1	122.4	124.4	128.8	142.9	146.1
3346	Magnetic media manufacturing and reproduction	77.0	81.3	89.7	93.3	88.7	100.0	114.5	128.8	129.7	124.9	132.7	158.3
335	Electrical equipment and appliances	66.0	72.5	88.1	98.3	98.2	100.0	103.5	109.2	114.3	114.7	118.3	115.0
3351	Electric lighting equipment	80.6	83.4	88.6	90.2	94.3	100.0	98.5	108.1	112.7	121.6	122.5	125.0
3352	Household appliances	53.5	62.4	76.0	89.3	94.9	100.0	111.6	121.2	124.6	129.7	126.8	121.9
3353	Electrical equipment	67.3	77.5	98.1	97.5	98.9	100.0	102.1	110.7	117.9	119.7	126.0	120.7
3359	Other electrical equipment and components	68.7	71.8	87.3	104.7	99.0	100.0	102.0	101.8	106.3	101.5	107.3	104.8
336	Transportation equipment	65.5	70.5	78.7	85.7	89.2	100.0	109.0	108.3	113.8	114.8	125.5	118.6
3361	Motor vehicles	60.4	72.4	79.5	87.1	87.3	100.0	112.0	113.2	118.5	130.6	135.1	122.5
3362	Motor vehicle bodies and trailers	81.0	83.0	95.2	93.7	84.2	100.0	103.8	104.8	107.8	103.3	111.7	105.3
3363	Motor vehicle parts	60.3	63.1	76.9	86.1	88.1	100.0	104.8	105.5	109.8	108.4	114.3	108.9
3364	Aerospace products and parts	73.5	81.3	84.2	86.9	97.4	100.0	99.2	93.9	102.6	97.3	115.2	104.7
3365	Railroad rolling stock	38.0	55.9	68.5	81.1	86.3	100.0	94.1	87.2	88.4	95.2	94.9	110.7
3366	Ship and boat building	73.3	76.1	76.6	94.4	93.3	100.0	103.7	106.8	102.4	97.8	101.7	114.8
3369	Other transportation equipment	48.7	59.3	65.5	83.3	83.4	100.0	110.0	110.4	112.8	122.9	187.0	194.1
337	Furniture and related products	75.9	78.4	88.7	91.3	92.0	100.0	102.0	103.3	107.5	109.2	108.2	112.3
3371	Household and institutional furniture	77.3	81.4	89.3	92.7	94.7	100.0	101.1	100.8	105.9	109.7	108.2	113.3
3372	Office furniture and fixtures	74.0	74.0	86.3	86.9	84.7	100.0	106.3	110.4	112.4	107.2	105.7	106.6
3379	Other furniture related products	77.4	78.0	89.6	90.2	94.8	100.0	99.4	109.4	115.5	120.5	121.4	124.4
339	Miscellaneous manufacturing	64.5	71.1	79.3	92.6	94.0	100.0	106.9	106.4	114.8	118.4	117.4	119.3
3391	Medical equipment and supplies	57.7	68.5	76.6	90.3	93.8	100.0	107.6	108.6	116.2	117.8	118.3	121.5
3399	Other miscellaneous manufacturing	71.8	74.5	83.1	96.0	94.7	100.0	105.8	104.6	113.0	117.8	114.7	114.0
	Wholesale trade												
42	Wholesale trade	59.5	70.3	81.2	94.5	95.5	100.0	103.5	109.0	109.4	110.9	110.8	110.5
423	Durable goods	44.5	53.9	71.5	89.2	92.0	100.0	104.6	115.1	118.9	122.9	121.9	122.3
4231	Motor vehicles and parts	55.9	63.1	75.0	87.5	90.0	100.0	103.2	107.6	110.0	119.5	114.1	105.3
4232	Furniture and furnishings	69.5	82.4	86.3	97.0	95.5	100.0	106.9	112.2	109.6	113.0	105.2	88.4
4233	Lumber and construction supplies	88.0	89.1	80.7	86.9	94.1	100.0	107.4	112.4	113.0	108.9	103.4	102.2
4234	Commercial equipment	10.6	17.8	37.8	68.7	82.3	100.0	112.9	133.2	151.1	167.1	180.4	197.0
4235	Metals and minerals	105.6	112.3	103.9	97.5	98.0	100.0	101.2	110.4	107.5	103.0	95.1	87.1
4236	Electric goods	26.8	35.1	62.7	95.8	92.5	100.0	103.9	121.7	127.3	137.3	144.2	148.0
4237	Hardware and plumbing	80.2	91.9	97.6	101.1	98.0	100.0	101.3	104.5	101.0	101.4	96.5	89.5
4238	Machinery and supplies	74.0	80.5	99.8	105.2	102.6	100.0	103.1	112.0	117.0	119.8	115.5	123.0

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

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
4239	Miscellaneous durable goods	72.0	87.0	80.2	91.7	93.8	100.0	96.0	107.7	107.0	96.7	93.8	96.5
424	Nondurable goods	86.1	96.3	94.6	99.4	99.3	100.0	104.4	107.4	107.7	105.8	105.0	104.5
4241	Paper and paper products	73.5	82.8	85.9	86.6	89.7	100.0	102.7	112.2	121.5	117.2	124.4	113.8
4242	Druggists' goods	78.8	98.7	111.5	95.7	94.6	100.0	111.6	117.9	124.8	121.7	113.3	121.2
4243	Apparel and piece goods	70.3	78.3	81.5	88.7	93.9	100.0	102.6	106.7	114.8	115.0	113.5	118.8
4244	Grocery and related products	89.3	106.1	101.5	103.9	103.3	100.0	106.4	105.6	104.7	104.5	107.3	103.5
4245	Farm product raw materials	83.1	84.8	101.8	107.2	104.1	100.0	100.1	111.3	113.4	120.4	119.9	122.0
4246	Chemicals	101.5	118.1	112.3	98.7	95.8	100.0	103.5	102.4	97.5	93.0	92.6	93.4
4247	Petroleum	54.9	73.9	65.1	89.9	91.5	100.0	98.4	106.2	98.6	95.8	92.0	93.5
4248	Alcoholic beverages	92.9	97.5	93.6	101.5	99.6	100.0	101.1	96.6	97.4	100.7	100.8	96.6
4249	Miscellaneous nondurable goods	104.9	92.5	94.3	108.1	105.3	100.0	103.5	113.5	116.4	113.4	109.0	101.5
425	Electronic markets and agents and brokers	58.6	77.0	91.1	109.4	100.9	100.0	95.3	89.4	79.6	84.2	91.4	89.0
4251	Electronic markets and agents and brokers	58.6	77.0	91.1	109.4	100.9	100.0	95.3	89.4	79.6	84.2	91.4	89.0
	Retail trade												
44-45	Retail trade	63.1	67.9	79.6	92.5	95.6	100.0	104.8	109.8	112.5	116.8	120.0	117.9
441	Motor vehicle and parts dealers	65.4	73.4	83.4	95.3	96.7	100.0	103.6	106.2	105.6	107.5	109.0	99.3
4411	Automobile dealers	67.6	76.4	85.3	97.0	98.5	100.0	101.9	106.4	105.4	106.9	109.2	99.1
4412	Other motor vehicle dealers	55.4	63.5	74.8	86.2	93.2	100.0	100.1	107.2	100.8	106.9	108.3	110.1
4413	Auto parts, accessories, and tire stores	66.7	76.9	92.9	100.7	94.1	100.0	106.9	102.3	107.3	108.2	105.6	101.4
442	Furniture and home furnishings stores	58.1	66.8	77.4	89.7	94.7	100.0	104.1	113.5	116.4	121.1	128.1	128.5
4421	Furniture stores	61.8	72.8	79.9	89.5	95.6	100.0	102.9	111.2	113.7	119.8	123.2	121.6
4422	Home furnishings stores	53.0	59.0	74.1	89.7	93.5	100.0	105.7	116.3	119.5	123.0	133.9	136.5
443	Electronics and appliance stores	16.3	24.1	42.8	74.4	84.2	100.0	125.3	143.1	158.1	177.3	201.1	232.9
4431	Electronics and appliance stores	16.3	24.1	42.8	74.4	84.2	100.0	125.3	143.1	158.1	177.3	201.1	232.9
444	Building material and garden supply stores	62.8	67.5	82.8	93.7	96.7	100.0	105.2	111.3	111.4	113.9	116.8	117.8
4441	Building material and supplies dealers	64.0	68.3	82.5	94.9	96.2	100.0	105.0	110.4	111.3	113.5	114.5	112.1
4442	Lawn and garden equipment and supplies stores	56.5	63.5	84.6	87.2	100.1	100.0	106.3	118.4	111.8	116.7	136.1	164.4
445	Food and beverage stores	105.9	101.8	95.5	96.5	99.1	100.0	102.3	107.8	112.6	115.2	118.2	116.0
4451	Grocery stores	106.1	102.1	95.5	96.5	98.6	100.0	101.9	107.1	111.5	112.9	115.1	113.5
4452	Specialty food stores	131.5	106.1	95.0	93.6	102.8	100.0	106.5	114.3	118.8	131.2	140.1	128.7
4453	Beer, wine, and liquor stores	85.0	85.8	90.8	96.0	97.2	100.0	106.3	116.0	127.0	132.5	141.1	134.1
446	Health and personal care stores	68.4	73.1	81.3	91.3	94.5	100.0	105.3	109.2	108.8	113.0	112.1	112.5
4461	Health and personal care stores	68.4	73.1	81.3	91.3	94.5	100.0	105.3	109.2	108.8	113.0	112.1	112.5
447	Gasoline stations	67.1	70.2	79.9	86.1	90.2	100.0	95.8	97.7	99.4	98.9	101.4	100.8
4471	Gasoline stations	67.1	70.2	79.9	86.1	90.2	100.0	95.8	97.7	99.4	98.9	101.4	100.8
448	Clothing and clothing accessories stores	50.5	57.6	76.2	94.1	96.3	100.0	105.8	106.0	112.4	122.8	132.4	136.7
4481	Clothing stores	49.4	58.0	73.6	91.9	95.8	100.0	104.3	103.6	112.4	123.4	135.0	144.3
4482	Shoe stores	52.2	59.9	79.9	87.9	89.0	100.0	105.8	99.7	105.5	116.2	113.7	112.3
4483	Jewelry, luggage, and leather goods stores	54.4	53.2	84.3	110.0	104.4	100.0	111.9	121.6	117.0	124.2	134.2	122.0
451	Sporting goods, hobby, book, and music stores	58.7	67.7	78.4	94.9	99.6	100.0	103.1	118.4	128.2	133.3	131.2	135.4
4511	Sporting goods and musical instrument stores	53.8	63.4	73.5	95.1	98.9	100.0	103.7	122.0	132.0	140.1	137.0	141.7
4512	Book, periodical, and music stores	70.7	77.5	89.6	94.7	101.2	100.0	101.8	110.7	120.1	118.5	118.7	121.7
452	General merchandise stores	56.9	64.3	77.5	93.1	96.7	100.0	106.0	109.0	112.4	116.1	116.7	115.8
4521	Department stores	85.7	89.6	97.9	103.8	101.5	100.0	104.3	107.5	108.9	111.3	104.2	97.3
4529	Other general merchandise stores	30.5	38.9	55.8	82.4	92.2	100.0	105.8	107.1	110.7	113.9	120.3	123.2
453	Miscellaneous store retailers	54.7	61.9	84.0	95.8	94.6	100.0	105.9	109.8	116.7	128.4	133.8	136.8
4531	Florists	68.2	73.6	87.9	101.3	90.3	100.0	95.7	90.9	108.5	125.5	118.2	140.6
4532	Office supplies, stationery and gift stores	43.4	52.6	70.7	89.9	93.5	100.0	108.8	122.1	128.9	143.1	151.8	147.4
4533	Used merchandise stores	45.4	57.6	70.4	82.0	85.8	100.0	105.4	107.4	110.4	117.6	131.9	148.6
4539	Other miscellaneous store retailers	72.4	75.5	106.0	110.6	102.7	100.0	105.8	102.7	107.4	119.0	123.1	121.3
454	Nonstore retailers	27.9	33.5	54.9	83.6	89.9	100.0	107.4	118.4	121.3	140.4	152.4	154.8
4541	Electronic shopping and mail-order houses	18.5	23.6	47.0	75.3	84.4	100.0	114.5	128.3	136.4	160.6	176.6	170.5
4542	Vending machine operators	104.6	101.6	109.6	121.7	104.9	100.0	112.1	121.1	125.7	139.7	142.3	160.9
4543	Direct selling establishments	52.4	58.4	74.0	90.7	94.7	100.0	94.1	96.5	88.9	95.8	99.9	99.4
	Transportation and warehousing												
481	Air transportation	76.7	80.0	98.3	96.0	91.0	100.0	110.2	124.2	133.6	140.5	142.3	140.4
482111	Line-haul railroads	44.7	62.3	75.8	86.6	92.4	100.0	105.0	107.2	103.3	109.3	104.4	103.3
4841	General freight trucking	-	-	89.9	95.7	97.3	100.0	103.3	101.8	103.6	104.5	104.9	105.2
48411	General freight trucking, local	-	-	74.7	96.2	99.4	100.0	105.7	100.4	103.3	108.9	105.7	105.6
48412	General freight trucking, long-distance	80.1	91.4	93.5	95.3	96.4	100.0	102.8	102.0	103.7	102.9	104.4	104.2
48421	Used household and office goods moving	130.9	137.9	122.6	116.2	102.9	100.0	104.7	106.5	105.4	105.0	108.2	115.2
491	U.S. Postal service	85.4	89.4	93.9	99.1	99.8	100.0	101.3	103.4	104.5	104.5	105.3	103.8
4911	U.S. Postal service	85.4	89.4	93.9	99.1	99.8	100.0	101.3	103.4	104.5	104.5	105.3	103.8
492	Couriers and messengers	103.6	108.8	69.8	90.0	92.6	100.0	102.9	97.9	97.0	100.2	95.6	100.2
493	Warehousing and storage	-	62.4	81.9	89.5	94.4	100.0	103.0	101.6	101.1	97.6	95.2	95.4
4931	Warehousing and storage	-	62.4	81.9	89.5	94.4	100.0	103.0	101.6	101.1	97.6	95.2	95.4

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

[2002=100]

NAICS	Industry	1987	1992	1997	2000	2001	2002	2003	2004	2005	2006	2007	2008
49311	General warehousing and storage	-	44.9	73.5	85.1	92.8	100.0	104.0	99.8	101.3	100.6	98.0	98.2
49312	Refrigerated warehousing and storage	-	106.7	114.7	109.4	98.0	100.0	106.1	114.5	102.6	93.1	99.4	102.4
	Information												
511	Publishing industries, except internet	54.7	62.5	85.3	99.9	99.5	100.0	106.6	107.2	109.5	114.4	117.0	119.0
5111	Newspaper, book, and directory publishers	100.3	91.8	95.6	102.9	101.1	100.0	104.2	98.0	97.6	101.3	102.2	100.1
5112	Software publishers	8.3	35.3	81.9	97.7	96.2	100.0	110.9	126.4	132.3	134.0	135.1	141.0
51213	Motion picture and video exhibition	90.9	104.2	100.2	106.7	101.8	100.0	102.5	107.6	108.2	115.2	121.0	117.0
515	Broadcasting, except internet	95.7	99.0	96.2	99.6	95.5	100.0	103.3	108.1	112.4	119.8	130.0	133.1
5151	Radio and television broadcasting	103.2	109.7	105.2	96.9	94.2	100.0	98.9	100.5	102.4	109.7	112.8	112.8
5152	Cable and other subscription programming	81.3	74.2	77.0	108.7	98.7	100.0	112.1	123.9	131.0	137.9	160.8	170.9
5171	Wired telecommunications carriers	51.8	63.9	84.5	94.9	92.0	100.0	105.7	110.4	112.3	116.6	122.8	126.7
5172	Wireless telecommunications carriers	34.7	34.1	45.9	70.1	88.0	100.0	110.5	132.3	171.7	185.1	195.1	231.9
	Finance and insurance												
52211	Commercial banking	54.2	78.8	96.9	99.4	97.8	100.0	101.8	105.9	105.9	109.8	110.5	110.7
	Real estate and rental and leasing												
532111	Passenger car rental	80.9	91.4	87.3	98.0	97.0	100.0	105.3	102.5	94.8	95.8	111.7	117.1
53212	Truck, trailer, and RV rental and leasing	52.9	58.7	87.7	106.8	99.6	100.0	98.1	111.3	114.0	124.2	119.9	114.3
53223	Video tape and disc rental	59.1	78.5	76.7	103.5	102.3	100.0	112.6	115.1	104.6	123.6	151.3	140.9
	Professional and technical services												
541213	Tax preparation services	74.4	78.5	89.8	90.6	84.8	100.0	95.8	84.3	84.7	81.4	89.9	86.9
54131	Architectural services	83.7	93.5	92.9	100.0	103.2	100.0	103.6	108.3	108.3	106.2	109.9	114.9
54133	Engineering services	89.8	96.8	99.5	101.5	99.6	100.0	101.9	111.3	118.1	120.9	119.5	130.7
54181	Advertising agencies	84.8	99.7	88.5	95.1	94.5	100.0	106.9	117.5	116.8	117.6	122.2	127.8
541921	Photography studios, portrait	100.5	98.7	102.4	111.6	104.7	100.0	105.0	92.3	91.2	94.6	100.7	104.1
	Administrative and waste services												
561311	Employment placement agencies	-	-	85.6	76.9	85.2	100.0	109.4	124.7	131.5	152.5	180.6	210.8
56151	Travel agencies	70.0	72.4	78.4	93.6	90.3	100.0	130.8	162.3	190.2	206.7	244.8	248.1
56172	Janitorial services	71.1	87.2	94.7	95.7	96.7	100.0	110.8	107.0	108.9	103.1	108.8	111.6
	Health care and social assistance												
6215	Medical and diagnostic laboratories	-	-	72.7	95.9	98.3	100.0	104.0	105.6	105.0	108.2	106.8	119.3
621511	Medical laboratories	-	-	81.2	103.5	103.7	100.0	105.8	108.8	106.0	108.6	112.0	122.6
621512	Diagnostic imaging centers	-	-	61.2	85.7	90.8	100.0	100.1	98.2	100.6	104.5	94.2	108.8
	Arts, entertainment, and recreation												
71311	Amusement and theme parks	105.4	90.1	94.1	99.5	87.4	100.0	108.3	99.0	109.3	99.0	106.4	107.1
71395	Bowling centers	110.0	108.5	103.8	96.9	97.9	100.0	104.6	108.4	105.3	99.7	117.3	119.1
	Accommodation and food services												
72	Accommodation and food services	88.1	93.2	94.6	100.1	99.1	100.0	102.5	105.2	105.8	106.9	107.0	106.1
721	Accommodation	76.6	81.0	89.3	98.5	96.4	100.0	103.6	111.6	109.7	109.2	109.7	108.7
7211	Traveler accommodation	75.6	80.4	89.2	99.2	96.6	100.0	103.5	111.7	110.2	109.3	109.7	108.7
722	Food services and drinking places	91.9	96.9	95.8	99.1	99.4	100.0	102.2	103.3	104.5	106.1	106.0	105.2
7221	Full-service restaurants	88.3	93.5	95.8	98.7	99.2	100.0	100.5	101.6	102.6	103.6	102.8	100.9
7222	Limited-service eating places	94.0	100.2	97.4	99.4	99.8	100.0	102.6	104.1	104.7	106.4	106.7	107.1
7223	Special food services	78.2	87.7	87.0	100.1	100.3	100.0	104.5	107.1	110.1	110.8	113.1	112.2
7224	Drinking places, alcoholic beverages	132.8	115.8	97.2	97.8	94.8	100.0	113.9	106.3	112.4	122.5	123.3	120.9
	Other services												
8111	Automotive repair and maintenance	82.8	86.9	96.4	105.5	105.0	100.0	99.6	106.3	105.6	104.0	102.4	101.9
81142	Reupholstery and furniture repair	103.3	105.3	98.0	103.4	102.9	100.0	95.3	97.8	99.3	98.0	102.8	99.2
81211	Hair, nail, and skin care services	75.7	78.4	90.6	98.0	103.8	100.0	108.0	112.4	116.2	115.5	119.5	122.2
81221	Funeral homes and funeral services	109.7	112.2	105.8	100.3	97.1	100.0	101.3	98.4	98.6	105.2	102.9	97.7
8123	Drycleaning and laundry services	86.3	85.1	88.9	95.7	98.6	100.0	92.9	99.6	109.8	109.1	104.5	105.1
81231	Coin-operated laundries and drycleaners	58.6	59.0	73.8	88.0	95.5	100.0	82.6	94.6	115.2	99.1	91.0	87.0
81232	Drycleaning and laundry services	90.7	85.7	86.3	96.7	97.8	100.0	90.1	95.7	104.2	103.3	101.5	103.6
81233	Linen and uniform supply	102.4	106.1	102.8	98.8	101.1	100.0	99.3	104.9	112.9	117.4	110.1	110.1
81292	Photofinishing	95.3	111.2	99.5	73.4	80.8	100.0	98.8	99.2	108.1	105.9	102.7	109.8

NOTE: Dash indicates data are not available.

51. Unemployment rates adjusted to U.S. concepts, 10 countries, seasonally adjusted

[Percent]

Country	2008	2009	2008				2009				2010
			I	II	III	IV	I	II	III	IV	I
United States	5.8	9.3	5.0	5.3	6.0	6.9	8.2	9.3	9.7	10.0	9.7
Canada	5.3	7.3	5.2	5.3	5.2	5.7	6.9	7.5	7.6	7.5	7.4
Australia	4.2	5.6	4.1	4.2	4.2	4.5	5.3	5.7	5.8	5.6	5.3
Japan	3.7	4.8	3.6	3.7	3.7	3.8	4.2	4.8	5.1	4.9	4.6
France	7.4	9.1	7.1	7.2	7.4	7.8	8.6	9.1	9.1	9.6	9.7
Germany	7.5	7.8	7.8	7.6	7.4	7.4	7.5	7.9	7.9	7.8	7.7
Italy	6.8	7.9	6.6	6.8	6.8	7.1	7.5	7.6	7.9	8.3	8.7
Netherlands	2.8	3.4	2.9	2.8	2.6	2.8	3.0	3.3	3.5	4.0	4.1
Sweden	6.0	8.2	5.7	5.7	6.0	6.6	7.4	8.3	8.4	8.6	8.8
United Kingdom	5.7	7.7	5.3	5.3	5.9	6.4	7.1	7.8	7.9	7.9	-

Dash indicates data are not available. Quarterly figures for France, Germany, Italy, and the Netherlands are calculated by applying annual adjustment factors to current published data and therefore should be viewed as less precise indicators of unemployment under U.S. concepts than the annual figures. For further qualifications and historical annual

For monthly unemployment rates, as well as the quarterly and annual rates published in this table, see the BLS report *International Unemployment Rates and Employment Indexes, Seasonally Adjusted* (on the Internet at **http://www.bls.gov/ilc/intl_unemployment_rates_monthly.htm**).

Unemployment rates may differ between the two reports mentioned

52. Annual data: employment status of the working-age population, adjusted to U.S. concepts, 10 countries

[Numbers in thousands]

Employment status and country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Civilian labor force											
United States	139,368	142,583	143,734	144,863	146,510	147,401	149,320	151,428	153,124	154,287	154,142
Canada	15,403	15,637	15,891	16,366	16,733	16,955	17,108	17,351	17,696	17,987	18,098
Australia	9,414	9,590	9,746	9,901	10,085	10,213	10,529	10,771	11,021	11,254	11,448
Japan	66,730	66,710	66,480	65,866	65,495	65,366	65,386	65,556	65,909	65,660	65,362
France	26,342	26,591	26,867	27,113	27,285	27,424	27,616	27,881	28,028	28,021	28,331
Germany	39,375	39,302	39,459	39,413	39,276	39,711	40,760	41,250	41,416	41,542	41,545
Italy	23,176	23,361	23,524	23,728	24,020	24,084	24,179	24,395	24,459	24,836	24,710
Netherlands	7,881	8,052	8,199	8,345	8,379	8,439	8,459	8,541	8,686	8,780	8,846
Sweden	4,429	4,490	4,530	4,545	4,565	4,579	4,693	4,746	4,822	4,875	4,888
United Kingdom	28,786	28,962	29,092	29,343	29,565	29,802	30,137	30,599	30,780	31,126	31,274
Participation rate[1]											
United States	67.1	67.1	66.8	66.6	66.2	66.0	66.0	66.2	66.0	66.0	65.4
Canada	65.9	66.0	66.1	67.1	67.7	67.7	67.4	67.4	67.7	67.9	67.3
Australia	64.0	64.4	64.4	64.3	64.6	64.6	65.4	65.8	66.2	66.6	66.5
Japan	62.0	61.7	61.2	60.4	59.9	59.6	59.5	59.6	59.8	59.5	59.3
France	57.4	57.6	57.7	57.8	57.7	57.5	57.4	57.5	57.4	57.1	57.3
Germany	56.9	56.7	56.7	56.4	56.0	56.4	57.6	58.2	58.4	58.5	58.6
Italy	47.9	48.1	48.3	48.5	49.1	49.1	48.7	48.9	48.6	49.0	48.4
Netherlands	62.5	63.4	64.0	64.7	64.6	64.8	64.7	65.1	65.9	66.2	66.4
Sweden	62.7	63.7	63.7	63.9	63.9	63.6	64.8	64.9	65.3	65.3	64.6
United Kingdom	62.8	62.8	62.7	62.9	62.9	63.0	63.1	63.5	63.3	63.5	63.3
Employed											
United States	133,488	136,891	136,933	136,485	137,736	139,252	141,730	144,427	146,047	145,362	139,877
Canada	14,331	14,681	14,866	15,223	15,586	15,861	16,080	16,393	16,767	17,025	16,769
Australia	8,762	8,989	9,088	9,271	9,485	9,662	9,998	10,255	10,539	10,777	10,809
Japan	63,920	63,790	63,460	62,650	62,510	62,640	62,910	63,210	63,509	63,250	62,242
France	23,712	24,326	24,792	24,976	24,990	25,016	25,187	25,446	25,806	25,951	25,755
Germany	36,042	36,236	36,350	36,018	35,615	35,604	36,185	36,978	37,815	38,406	38,324
Italy	20,617	20,973	21,359	21,666	21,972	22,124	22,290	22,721	22,953	23,144	22,765
Netherlands	7,605	7,813	8,014	8,114	8,069	8,052	8,056	8,205	8,408	8,537	8,542
Sweden	4,116	4,230	4,303	4,311	4,301	4,279	4,334	4,416	4,530	4,581	4,486
United Kingdom	27,058	27,375	27,604	27,815	28,077	28,380	28,674	28,929	29,129	29,346	28,880
Employment-population ratio[2]											
United States	64.3	64.4	63.7	62.7	62.3	62.3	62.7	63.1	63.0	62.2	59.3
Canada	61.3	62.0	61.9	62.4	63.1	63.3	63.4	63.6	64.2	64.2	62.3
Australia	59.6	60.3	60.0	60.2	60.8	61.1	62.1	62.6	63.3	63.8	62.8
Japan	59.4	59.0	58.4	57.5	57.1	57.1	57.3	57.5	57.6	57.4	56.4
France	51.7	52.7	53.3	53.2	52.8	52.5	52.3	52.5	52.9	52.8	52.1
Germany	52.1	52.2	52.2	51.5	50.8	50.6	51.2	52.2	53.3	54.1	54.0
Italy	42.6	43.2	43.8	44.3	44.9	45.1	44.9	45.5	45.6	45.6	44.6
Netherlands	60.3	61.5	62.6	62.9	62.2	61.8	61.6	62.5	63.7	64.3	64.1
Sweden	58.3	60.1	60.5	60.6	60.2	59.5	59.9	60.4	61.3	61.4	59.3
United Kingdom	59.0	59.4	59.5	59.6	59.8	60.0	60.0	60.0	59.9	59.9	58.5
Unemployed											
United States	5,880	5,692	6,801	8,378	8,774	8,149	7,591	7,001	7,078	8,924	14,265
Canada	1,072	956	1,026	1,143	1,147	1,093	1,028	958	929	962	1,329
Australia	652	602	658	630	599	551	531	516	482	477	638
Japan	2,810	2,920	3,020	3,216	2,985	2,726	2,476	2,346	2,400	2,410	3,120
France	2,630	2,265	2,075	2,137	2,295	2,408	2,429	2,435	2,222	2,070	2,576
Germany	3,333	3,065	3,110	3,396	3,661	4,107	4,575	4,272	3,601	3,136	3,222
Italy	2,559	2,388	2,164	2,062	2,048	1,960	1,889	1,673	1,506	1,692	1,945
Netherlands	277	239	186	231	310	387	402	336	278	243	304
Sweden	313	260	227	234	264	300	360	330	292	294	401
United Kingdom	1,728	1,587	1,489	1,528	1,488	1,423	1,463	1,670	1,652	1,780	2,395
Unemployment rate[3]											
United States	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3
Canada	7.0	6.1	6.5	7.0	6.9	6.4	6.0	5.5	5.3	5.3	7.3
Australia	6.9	6.3	6.8	6.4	5.9	5.4	5.0	4.8	4.4	4.2	5.6
Japan	4.2	4.4	4.5	4.9	4.6	4.2	3.8	3.6	3.6	3.7	4.8
France	10.0	8.5	7.7	7.9	8.4	8.8	8.8	8.7	7.9	7.4	9.1
Germany	8.5	7.8	7.9	8.6	9.3	10.3	11.2	10.4	8.7	7.5	7.8
Italy	11.0	10.2	9.2	8.7	8.5	8.1	7.8	6.9	6.2	6.8	7.9
Netherlands	3.5	3.0	2.3	2.8	3.7	4.6	4.8	3.9	3.2	2.8	3.4
Sweden	7.1	5.8	5.0	5.1	5.8	6.6	7.7	7.0	6.1	6.0	8.2
United Kingdom	6.0	5.5	5.1	5.2	5.0	4.8	4.9	5.5	5.4	5.7	7.7

[1] Labor force as a percent of the working-age population.
[2] Employment as a percent of the working-age population.
[3] Unemployment as a percent of the labor force.

NOTE: There are breaks in series for the United States (2000, 2003, 2004), Australia (2001), Germany (2005), the Netherlands (2000, 2003), and Sweden (2005). For further qualifications and historical annual data, see the BLS report *International Comparisons of Annual Labor Force Statistics, Adjusted to U.S. Concepts*, 10 Countries (on the internet at **http://www.bls.gov/ilc/flscomparelf.htm).** Unemployment rates may differ from those in the BLS report *International Unemployment Rates and Employment Indexes, Seasonally Adjusted* (on the Internet at **http://www.bls.gov/ilc/intl_unemployment_rates_monthly.htm**), because the former is updated annually, whereas the latter is updated monthly and reflects the most recent revisions in source data.

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

[2002 = 100]

Measure and economy	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2003	2004	2005	2006	2007	2008
Output per hour																
United States	41.6	56.9	65.8	68.3	71.0	74.0	79.1	83.1	89.5	90.4	106.4	112.9	115.1	120.5	126.2	127.8
Canada	55.2	70.7	82.4	83.3	83.0	86.7	90.9	94.8	100.5	98.4	100.4	101.6	105.0	107.3	110.2	107.3
Australia	59.0	74.1	80.0	79.0	81.3	83.0	87.0	88.3	93.6	95.9	101.8	103.1	103.8	104.8	106.8	105.9
Japan	47.9	70.9	78.2	83.4	87.2	90.3	91.2	93.6	98.5	96.5	106.8	114.3	121.7	122.9	127.2	127.0
Korea, Rep. of	–	34.6	49.4	54.3	59.7	67.3	75.0	83.5	90.6	90.1	106.8	117.8	130.8	146.8	157.9	159.9
Singapore	–	51.0	66.9	71.3	74.7	77.1	83.1	91.5	97.7	91.8	103.7	110.0	112.0	114.7	110.3	103.1
Taiwan	29.3	53.6	62.8	67.4	72.5	75.5	79.1	84.0	88.3	92.2	102.6	107.1	114.8	122.5	133.5	132.8
Belgium	49.9	73.9	82.3	86.0	87.3	92.7	93.9	93.3	96.8	97.0	102.9	108.1	111.0	115.1	120.2	120.8
Denmark	66.1	79.3	90.8	90.8	87.8	94.8	94.3	95.8	99.2	99.4	104.2	110.2	113.7	119.0	119.4	114.1
France	42.9	63.6	72.4	75.2	75.5	79.9	84.1	87.8	94.0	95.9	104.5	107.3	112.3	114.9	116.3	115.4
Germany	54.5	69.8	79.3	80.6	82.9	87.7	88.1	90.2	96.5	99.0	103.6	107.5	113.5	123.1	129.3	129.2
Italy	56.8	78.1	89.8	94.2	94.6	96.5	95.2	95.9	100.9	101.2	97.9	99.3	100.8	102.6	103.1	99.6
Netherlands	48.0	68.3	79.0	82.1	83.9	84.1	86.6	90.1	96.6	97.1	102.1	109.0	113.9	118.2	121.4	119.7
Norway	70.1	87.8	89.2	88.1	90.8	91.0	88.7	91.7	94.6	97.2	108.7	115.1	119.1	116.7	116.4	117.2
Spain	57.9	80.0	90.2	93.3	92.2	93.1	94.7	96.4	97.4	99.6	102.5	104.4	106.4	108.5	111.1	110.1
Sweden	41.3	50.9	62.7	66.6	68.8	75.1	79.6	86.9	92.8	90.1	108.1	119.7	127.1	139.0	139.7	134.6
United Kingdom	46.3	72.8	83.5	82.1	81.4	82.9	83.7	87.8	93.7	97.0	104.2	110.8	115.5	119.8	123.8	124.2
Output																
United States	49.6	66.2	75.7	79.1	82.1	87.1	92.9	96.9	103.0	97.3	101.1	106.8	107.7	113.6	116.9	113.7
Canada	55.2	68.7	73.1	76.5	77.5	82.3	86.5	93.7	103.2	99.2	99.4	101.4	103.0	102.6	101.6	95.9
Australia	70.3	81.5	85.4	84.9	87.6	89.6	92.1	91.9	96.3	95.4	101.7	101.8	101.4	100.5	103.7	105.4
Japan	61.9	98.9	97.5	101.7	105.6	108.2	102.5	102.1	107.4	101.6	105.3	111.4	117.2	121.3	125.7	121.4
Korea, Rep. of	13.4	41.3	54.9	61.3	65.3	68.4	63.0	76.8	89.8	92.0	105.4	115.9	123.1	133.0	142.5	146.9
Singapore	–	51.2	68.5	75.4	77.4	80.8	80.2	90.6	104.4	92.2	102.9	117.2	128.3	143.6	152.2	145.9
Taiwan	30.2	60.5	71.1	75.0	78.9	83.5	86.1	92.4	99.2	91.8	105.3	115.6	123.6	132.5	146.3	144.7
Belgium	67.5	87.2	87.5	89.9	90.2	94.5	96.1	96.4	100.7	100.8	98.6	102.2	102.0	104.9	107.6	107.1
Denmark	77.3	85.5	90.3	94.7	90.3	97.7	98.5	99.4	102.9	103.0	97.2	98.8	99.3	103.4	107.2	105.2
France	69.5	81.5	80.9	83.8	83.6	87.5	91.7	94.8	99.1	100.1	101.9	102.8	105.2	104.9	105.7	103.2
Germany	81.3	94.5	90.9	90.1	88.2	92.0	93.1	94.0	100.4	102.1	100.7	104.3	107.8	115.6	122.7	123.5
Italy	71.1	88.2	91.4	95.7	95.2	96.6	97.5	97.3	101.4	101.1	97.3	98.0	97.8	101.1	103.1	98.4
Netherlands	59.3	77.0	82.0	85.1	86.3	87.5	90.5	93.8	100.1	99.9	98.9	102.3	104.3	107.9	111.3	110.6
Norway	95.1	91.4	94.1	94.6	98.4	102.7	101.9	101.8	101.3	100.5	103.3	109.2	114.1	117.5	123.6	127.3
Spain	58.8	73.7	73.2	76.0	77.9	82.9	87.9	92.9	97.0	100.1	101.2	101.9	103.1	105.0	106.0	103.8
Sweden	46.8	56.1	59.7	67.5	69.7	75.1	81.3	89.0	96.3	94.1	104.9	114.5	119.8	129.2	132.2	127.6
United Kingdom	78.5	94.9	95.6	97.1	97.9	99.6	100.3	101.3	103.6	102.2	99.7	101.9	101.7	103.4	104.0	101.0
Total hours																
United States	119.4	116.5	115.1	115.9	115.7	117.7	117.4	116.6	115.1	107.6	95.1	94.6	93.6	94.3	92.6	89.0
Canada	100.0	97.2	88.8	91.8	93.4	94.9	95.2	98.9	102.7	100.8	99.0	99.8	98.1	95.6	92.2	89.3
Australia	119.1	110.0	106.7	107.4	107.7	108.0	105.9	104.1	102.9	99.5	99.9	98.7	97.7	95.9	97.1	99.6
Japan	129.3	139.6	124.7	122.0	121.0	119.9	112.5	109.1	109.0	105.3	98.6	97.5	96.3	98.6	98.8	95.7
Korea, Rep. of	–	119.2	111.1	113.0	109.3	101.7	84.0	92.0	99.1	102.0	98.7	98.3	94.1	90.6	90.2	91.9
Singapore	–	100.5	102.4	105.7	103.7	104.8	96.5	99.0	106.8	100.5	99.3	106.5	114.6	125.2	137.9	141.5
Taiwan	102.9	113.0	113.3	111.2	108.9	110.6	108.8	110.1	112.4	99.6	102.7	107.9	107.7	108.2	109.6	109.0
Belgium	135.3	117.9	106.3	104.5	103.4	101.9	102.3	103.4	104.0	104.0	95.8	94.5	91.9	91.1	89.5	88.6
Denmark	117.0	107.8	99.5	104.3	102.9	103.1	104.5	103.7	103.7	103.7	93.3	89.6	87.3	86.9	89.8	92.2
France	161.9	128.2	111.8	111.3	110.7	109.4	109.0	108.0	105.4	104.4	97.5	95.8	93.7	91.3	90.8	89.4
Germany	149.3	135.3	114.5	111.7	106.4	104.9	105.8	104.2	104.0	103.1	97.3	97.1	95.0	93.9	94.9	95.6
Italy	125.1	113.0	101.8	101.6	100.7	100.1	102.5	101.5	100.5	99.9	99.4	98.7	97.0	98.6	100.0	98.9
Netherlands	123.6	112.7	103.9	103.7	102.9	104.0	104.5	104.1	103.6	103.0	96.8	93.9	91.6	91.3	91.7	92.4
Norway	135.6	104.1	105.5	107.3	108.4	112.8	115.0	111.0	107.1	103.4	95.1	94.9	95.8	100.7	106.2	108.6
Spain	101.6	92.1	81.1	81.4	84.5	89.0	92.8	96.4	99.7	100.5	98.8	97.6	96.8	96.8	95.4	94.3
Sweden	113.2	110.2	95.1	101.3	101.3	100.1	102.2	102.4	103.8	104.3	97.0	95.7	94.2	93.0	94.6	94.8
United Kingdom	169.8	130.4	114.5	118.2	120.3	120.1	119.8	115.4	110.6	105.4	95.7	92.0	88.1	86.3	84.0	81.3
Hourly compensation (national currency basis)																
United States	38.2	62.1	72.2	73.4	74.6	76.5	81.2	84.8	91.3	94.8	108.0	108.9	112.5	114.7	119.6	123.2
Canada	36.3	68.3	79.8	81.7	82.9	84.9	89.3	91.2	94.2	96.8	104.0	107.7	112.4	115.8	119.9	122.5
Australia	–	61.7	69.8	74.1	77.5	79.6	82.9	86.2	90.0	95.7	103.9	109.4	116.3	124.2	130.7	134.2
Japan	50.4	77.4	89.4	92.4	93.2	96.4	98.8	98.6	98.0	99.3	97.8	98.8	99.6	98.5	98.3	100.1
Korea, Rep. of	–	23.7	46.5	56.4	65.7	71.4	77.7	78.2	85.2	89.0	105.5	120.6	139.7	153.9	163.8	167.1
Singapore	–	56.2	77.5	81.0	87.0	90.9	96.1	87.9	90.2	97.3	100.6	97.9	96.8	95.0	94.3	94.7
Taiwan	20.4	58.6	76.4	82.7	88.2	90.8	94.2	95.9	97.6	103.7	101.0	102.1	105.7	108.9	112.4	113.8
Belgium	40.2	69.0	80.9	83.2	84.7	87.9	89.2	90.4	92.0	95.9	103.4	106.2	109.4	113.3	119.3	122.8
Denmark	32.6	68.6	77.7	79.3	82.5	85.4	87.6	89.8	91.6	95.9	106.8	110.9	117.2	122.9	126.1	130.5
France	28.2	64.2	77.6	79.9	81.4	83.8	84.4	87.1	91.8	94.2	102.3	105.5	109.4	113.7	116.8	120.3
Germany	35.8	59.7	77.1	81.2	85.1	86.7	88.0	90.0	94.7	97.6	102.2	102.8	104.1	108.4	110.3	113.0
Italy	19.6	61.3	78.0	82.5	87.0	91.1	89.4	91.7	94.1	97.2	103.8	107.4	110.8	113.0	115.5	118.5
Netherlands	41.1	61.9	75.0	77.0	78.4	80.5	83.9	86.7	90.9	94.8	104.0	108.4	110.0	113.1	116.7	120.5
Norway	24.7	58.5	66.2	69.2	72.1	75.3	79.7	84.2	89.0	94.4	104.1	107.5	112.6	119.5	125.2	132.2
Spain	20.7	59.0	83.8	87.4	89.5	91.6	92.3	92.1	93.5	97.2	105.0	108.7	113.9	118.9	124.8	130.8
Sweden	25.4	59.9	68.0	71.7	77.3	81.4	84.6	87.2	90.6	94.9	104.5	107.3	111.0	114.2	119.7	123.3
United Kingdom	24.5	60.6	70.9	72.1	71.9	75.1	80.7	85.4	90.6	94.7	104.9	109.6	115.9	121.7	125.7	128.8

See notes at end of table.

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

Measure and economy	1980	1990	1994	1995	1996	1997	1998	1999	2000	2001	2003	2004	2005	2006	2007	2008
Unit labor costs (national currency basis)																
United States	92.0	109.3	109.8	107.5	105.2	103.4	102.6	102.0	102.1	104.8	101.5	96.4	97.7	95.1	94.8	96.4
Canada	65.8	96.7	96.8	98.0	100.0	97.9	98.3	96.2	93.7	98.4	103.6	106.1	107.0	108.0	108.9	114.1
Australia	–	83.2	87.2	93.7	95.3	96.0	95.3	97.6	96.2	99.8	102.1	106.0	112.1	118.5	122.3	126.7
Japan	105.4	109.2	114.3	110.8	106.9	106.8	108.3	105.4	99.5	102.9	91.6	86.4	81.8	80.1	77.3	78.8
Korea, Rep. of	37.0	68.5	94.1	104.0	110.0	106.1	103.6	93.7	94.1	98.8	98.8	102.3	106.8	104.8	103.7	104.5
Singapore	–	110.3	115.9	113.6	116.5	117.9	115.7	96.0	92.3	106.0	97.1	88.9	86.5	82.8	85.5	91.9
Taiwan	69.5	109.3	121.6	122.7	121.6	120.4	119.1	114.2	110.5	112.4	98.5	95.3	92.0	88.9	84.2	85.7
Belgium	80.6	93.3	98.2	96.7	97.1	94.8	95.0	97.0	95.1	98.9	100.5	98.2	98.6	98.5	99.3	101.7
Denmark	49.4	86.4	85.6	87.3	94.0	90.0	92.9	93.7	92.3	96.5	102.5	100.6	103.0	103.3	105.6	114.4
France	65.6	101.0	107.1	106.1	107.8	104.8	100.4	99.3	97.6	98.3	97.9	98.3	97.4	98.9	100.4	104.3
Germany	65.7	85.5	97.2	100.8	102.7	98.9	99.9	99.7	98.1	98.6	98.7	95.7	91.7	88.0	85.3	87.5
Italy	34.5	78.6	86.8	87.7	92.0	94.4	94.0	95.6	93.2	96.1	106.0	108.1	110.0	110.2	112.1	119.0
Netherlands	85.6	90.5	95.0	93.8	93.5	95.7	96.9	96.2	94.1	97.7	101.8	99.5	96.6	95.7	96.2	100.7
Norway	35.3	66.6	74.2	78.5	79.4	82.7	89.9	91.8	94.1	97.0	95.8	93.4	94.5	102.4	107.5	112.8
Spain	35.7	73.7	92.8	93.6	97.0	98.4	97.4	95.6	96.0	97.6	102.5	104.1	107.0	109.5	112.3	118.8
Sweden	61.6	117.7	108.4	107.6	112.3	108.4	106.3	100.4	97.6	105.3	96.7	89.7	87.3	82.2	85.6	91.6
United Kingdom	52.9	83.3	84.9	87.9	88.3	90.5	96.4	97.3	96.7	97.6	100.7	98.9	100.4	101.6	101.5	103.7
Unit labor costs (U.S. dollar basis)																
United States	92.0	109.3	109.8	107.5	105.2	103.4	102.6	102.0	102.1	104.8	101.5	96.4	97.7	95.1	94.8	96.4
Canada	88.4	130.1	111.3	112.1	115.1	111.1	104.0	101.7	99.1	99.8	116.1	128.0	138.7	149.5	159.3	168.1
Australia	–	119.5	117.3	127.7	137.2	131.3	110.2	115.9	102.9	94.9	122.5	143.6	157.2	164.2	188.8	199.0
Japan	58.2	94.3	140.1	147.7	123.0	110.4	103.6	116.1	115.6	106.0	98.9	100.1	93.0	86.3	82.2	95.5
Korea, Rep. of	76.2	120.5	145.7	168.2	170.9	139.9	92.5	98.4	104.0	95.6	103.6	111.7	130.4	137.3	139.6	119.0
Singapore	–	109.0	135.9	143.5	147.9	142.1	123.9	101.5	95.9	105.9	99.7	94.2	93.1	93.4	101.6	116.4
Taiwan	66.6	140.3	158.7	159.9	152.9	144.5	122.6	122.1	122.1	114.8	98.9	98.6	98.9	94.4	88.5	93.9
Belgium	117.6	119.2	125.4	140.1	133.8	112.9	111.6	109.3	92.8	93.7	120.3	129.2	129.8	130.8	144.0	158.4
Denmark	69.1	110.1	106.2	123.0	127.8	107.4	109.3	105.8	89.9	91.4	122.9	132.5	135.5	137.1	153.1	177.3
France	107.8	128.7	134.1	147.7	146.2	124.5	118.0	111.9	95.3	93.1	117.2	129.4	128.3	131.5	145.6	162.4
Germany	74.7	109.4	124.0	145.6	141.2	117.9	117.4	112.4	95.8	93.3	118.2	125.9	120.8	117.0	123.7	136.3
Italy	82.6	134.3	110.4	110.2	122.1	113.5	110.8	107.7	91.0	91.0	126.9	142.2	144.8	146.5	162.5	185.4
Netherlands	100.4	115.9	121.7	136.3	129.3	114.2	113.8	108.4	91.9	92.5	121.9	130.8	127.2	127.2	139.5	156.8
Norway	57.0	85.0	83.9	98.9	98.1	93.2	95.0	93.9	85.2	86.1	108.0	110.6	117.2	127.6	146.6	159.8
Spain	87.6	127.3	122.1	132.2	134.8	118.1	114.8	107.7	93.8	92.4	122.7	136.9	140.9	145.6	162.9	185.1
Sweden	141.5	193.1	136.7	146.5	162.8	137.9	130.0	117.9	103.5	99.0	116.3	118.7	113.7	108.4	123.3	135.2
United Kingdom	81.9	98.9	86.5	92.3	91.8	98.6	106.4	104.7	97.6	93.5	109.5	120.6	121.6	124.6	135.2	128.0

NOTE: Data for Germany for years before 1993 are for the former West Germany. Data for 1993 onward are for unified Germany. Dash indicates data not available.

54. Occupational injury and illness rates by industry,[1] United States

Industry and type of case[2]	Incidence rates per 100 full-time workers[3]												
	1989[1]	1990	1991	1992	1993[4]	1994[4]	1995[4]	1996[4]	1997[4]	1998[4]	1999[4]	2000[4]	2001[4]
PRIVATE SECTOR[5]													
Total cases	8.6	8.8	8.4	8.9	8.5	8.4	8.1	7.4	7.1	6.7	6.3	6.1	5.7
Lost workday cases	4.0	4.1	3.9	3.9	3.8	3.8	3.6	3.4	3.3	3.1	3.0	3.0	2.8
Lost workdays	78.7	84.0	86.5	93.8	–	–	–	–	–	–	–	–	–
Agriculture, forestry, and fishing[5]													
Total cases	10.9	11.6	10.8	11.6	11.2	10.0	9.7	8.7	8.4	7.9	7.3	7.1	7.3
Lost workday cases	5.7	5.9	5.4	5.4	5.0	4.7	4.3	3.9	4.1	3.9	3.4	3.6	3.6
Lost workdays	100.9	112.2	108.3	126.9	–	–	–	–	–	–	–	–	–
Mining													
Total cases	8.5	8.3	7.4	7.3	6.8	6.3	6.2	5.4	5.9	4.9	4.4	4.7	4.0
Lost workday cases	4.8	5.0	4.5	4.1	3.9	3.9	3.9	3.2	3.7	2.9	2.7	3.0	2.4
Lost workdays	137.2	119.5	129.6	204.7	–	–	–	–	–	–	–	–	–
Construction													
Total cases	14.3	14.2	13.0	13.1	12.2	11.8	10.6	9.9	9.5	8.8	8.6	8.3	7.9
Lost workday cases	6.8	6.7	6.1	5.8	5.5	5.5	4.9	4.5	4.4	4.0	4.2	4.1	4.0
Lost workdays	143.3	147.9	148.1	161.9	–	–	–	–	–	–	–	–	–
General building contractors:													
Total cases	13.9	13.4	12.0	12.2	11.5	10.9	9.8	9.0	8.5	8.4	8.0	7.8	6.9
Lost workday cases	6.5	6.4	5.5	5.4	5.1	5.1	4.4	4.0	3.7	3.9	3.7	3.9	3.5
Lost workdays	137.3	137.6	132.0	142.7	–	–	–	–	–	–	–	–	–
Heavy construction, except building:													
Total cases	13.8	13.8	12.8	12.1	11.1	10.2	9.9	9.0	8.7	8.2	7.8	7.6	7.8
Lost workday cases	6.5	6.3	6.0	5.4	5.1	5.0	4.8	4.3	4.3	4.1	3.8	3.7	4.0
Lost workdays	147.1	144.6	160.1	165.8	–	–	–	–	–	–	–	–	–
Special trades contractors:													
Total cases	14.6	14.7	13.5	13.8	12.8	12.5	11.1	10.4	10.0	9.1	8.9	8.6	8.2
Lost workday cases	6.9	6.9	6.3	6.1	5.8	5.8	5.0	4.8	4.7	4.1	4.4	4.3	4.1
Lost workdays	144.9	153.1	151.3	168.3	–	–	–	–	–	–	–	–	–
Manufacturing													
Total cases	13.1	13.2	12.7	12.5	12.1	12.2	11.6	10.6	10.3	9.7	9.2	9.0	8.1
Lost workday cases	5.8	5.8	5.6	5.4	5.3	5.5	5.3	4.9	4.8	4.7	4.6	4.5	4.1
Lost workdays	113.0	120.7	121.5	124.6	–	–	–	–	–	–	–	–	–
Durable goods:													
Total cases	14.1	14.2	13.6	13.4	13.1	13.5	12.8	11.6	11.3	10.7	10.1	–	8.8
Lost workday cases	6.0	6.0	5.7	5.5	5.4	5.7	5.6	5.1	5.1	5.0	4.8	–	4.3
Lost workdays	116.5	123.3	122.9	126.7	–	–	–	–	–	–	–	–	–
Lumber and wood products:													
Total cases	18.4	18.1	16.8	16.3	15.9	15.7	14.9	14.2	13.5	13.2	13.0	12.1	10.6
Lost workday cases	9.4	8.8	8.3	7.6	7.6	7.7	7.0	6.8	6.5	6.8	6.7	6.1	5.5
Lost workdays	177.5	172.5	172.0	165.8	–	–	–	–	–	–	–	–	–
Furniture and fixtures:													
Total cases	16.1	16.9	15.9	14.8	14.6	15.0	13.9	12.2	12.0	11.4	11.5	11.2	11.0
Lost workday cases	7.2	7.8	7.2	6.6	6.5	7.0	6.4	5.4	5.8	5.7	5.9	5.9	5.7
Lost workdays	–	–	–	128.4	–	–	–	–	–	–	–	–	–
Stone, clay, and glass products:													
Total cases	15.5	15.4	14.8	13.6	13.8	13.2	12.3	12.4	11.8	11.8	10.7	10.4	10.1
Lost workday cases	7.4	7.3	6.8	6.1	6.3	6.5	5.7	6.0	5.7	6.0	5.4	5.5	5.1
Lost workdays	149.8	160.5	156.0	152.2	–	–	–	–	–	–	–	–	–
Primary metal industries:													
Total cases	18.7	19.0	17.7	17.5	17.0	16.8	16.5	15.0	15.0	14.0	12.9	12.6	10.7
Lost workday cases	8.1	8.1	7.4	7.1	7.3	7.2	7.2	6.8	7.2	7.0	6.3	6.3	5.3
Lost workdays	168.3	180.2	169.1	175.5	–	–	–	–	–	–	–	–	11.1
Fabricated metal products:													
Total cases	18.5	18.7	17.4	16.8	16.2	16.4	15.8	14.4	14.2	13.9	12.6	11.9	11.1
Lost workday cases	7.9	7.9	7.1	6.6	6.7	6.7	6.9	6.2	6.4	6.5	6.0	5.5	5.3
Lost workdays	147.6	155.7	146.6	144.0	–	–	–	–	–	–	–	–	–
Industrial machinery and equipment:													
Total cases	12.1	12.0	11.2	11.1	11.1	11.6	11.2	9.9	10.0	9.5	8.5	8.2	11.0
Lost workday cases	4.8	4.7	4.4	4.2	4.2	4.4	4.4	4.0	4.1	4.0	3.7	3.6	6.0
Lost workdays	86.8	88.9	86.6	87.7	–	–	–	–	–	–	–	–	–
Electronic and other electrical equipment:													
Total cases	9.1	9.1	8.6	8.4	8.3	8.3	7.6	6.8	6.6	5.9	5.7	5.7	5.0
Lost workday cases	3.9	3.8	3.7	3.6	3.5	3.6	3.3	3.1	3.1	2.8	2.8	2.9	2.5
Lost workdays	77.5	79.4	83.0	81.2	–	–	–	–	–	–	–	–	–
Transportation equipment:													
Total cases	17.7	17.8	18.3	18.7	18.5	19.6	18.6	16.3	15.4	14.6	13.7	13.7	12.6
Lost workday cases	6.8	6.9	7.0	7.1	7.1	7.8	7.9	7.0	6.6	6.6	6.4	6.3	6.0
Lost workdays	138.6	153.7	166.1	186.6	–	–	–	–	–	–	–	–	–
Instruments and related products:													
Total cases	5.6	5.9	6.0	5.9	5.6	5.9	5.3	5.1	4.8	4.0	4.0	4.5	4.0
Lost workday cases	2.5	2.7	2.7	2.7	2.5	2.7	2.4	2.3	2.3	1.9	1.8	2.2	2.0
Lost workdays	55.4	57.8	64.4	65.3	–	–	–	–	–	–	–	–	–
Miscellaneous manufacturing industries:													
Total cases	11.1	11.3	11.3	10.7	10.0	9.9	9.1	9.5	8.9	8.1	8.4	7.2	6.4
Lost workday cases	5.1	5.1	5.1	5.0	4.6	4.5	4.3	4.4	4.2	3.9	4.0	3.6	3.2
Lost workdays	97.6	113.1	104.0	108.2	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

54. Continued—Occupational injury and illness rates by industry,[1] United States

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

[1] Data for 1989 and subsequent years are based on the *Standard Industrial Classification Manual*, 1987 Edition. For this reason, they are not strictly comparable with data for the years 1985–88, which were based on the *Standard Industrial Classification Manual*, 1972 Edition, 1977 Supplement.

[2] Beginning with the 1992 survey, the annual survey measures only nonfatal injuries and illnesses, while past surveys covered both fatal and nonfatal incidents. To better address fatalities, a basic element of workplace safety, BLS implemented the Census of Fatal Occupational Injuries.

[3] The incidence rates represent the number of injuries and illnesses or lost workdays per 100 full-time workers and were calculated as (N/EH) X 200,000, where:
N = number of injuries and illnesses or lost workdays;
EH = total hours worked by all employees during the calendar year; and
200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

[4] Beginning with the 1993 survey, lost workday estimates will not be generated. As of 1992, BLS began generating percent distributions and the median number of days away from work by industry and for groups of workers sustaining similar work disabilities.

[5] Excludes farms with fewer than 11 employees since 1976.

NOTE: Dash indicates data not available.

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

Event or exposure[1]	1996-2000 (average)	2001-2005 (average)[2]	2005[3]	
			Number	Percent
All events	6,094	5,704	5,734	100
Transportation incidents	2,608	2,451	2,493	43
Highway	1,408	1,394	1,437	25
Collision between vehicles, mobile equipment	685	686	718	13
Moving in same direction	117	151	175	3
Moving in opposite directions, oncoming	247	254	265	5
Moving in intersection	151	137	134	2
Vehicle struck stationary object or equipment on side of road	264	310	345	6
Noncollision	372	335	318	6
Jack-knifed or overturned--no collision	298	274	273	5
Nonhighway (farm, industrial premises)	378	335	340	6
Noncollision accident	321	277	281	5
Overturned	212	175	182	3
Worker struck by vehicle, mobile equipment	376	369	391	7
Worker struck by vehicle, mobile equipment in roadway	129	136	140	2
Worker struck by vehicle, mobile equipment in parking lot or non-road area	171	166	176	3
Water vehicle	105	82	88	2
Aircraft	263	206	149	3
Assaults and violent acts	1,015	850	792	14
Homicides	766	602	567	10
Shooting	617	465	441	8
Suicide, self-inflicted injury	216	207	180	3
Contact with objects and equipment	1,005	952	1,005	18
Struck by object	567	560	607	11
Struck by falling object	364	345	385	7
Struck by rolling, sliding objects on floor or ground level	77	89	94	2
Caught in or compressed by equipment or objects	293	256	278	5
Caught in running equipment or machinery	157	128	121	2
Caught in or crushed in collapsing materials	128	118	109	2
Falls	714	763	770	13
Fall to lower level	636	669	664	12
Fall from ladder	106	125	129	2
Fall from roof	153	154	160	3
Fall to lower level, n.e.c.	117	123	117	2
Exposure to harmful substances or environments	535	498	501	9
Contact with electric current	290	265	251	4
Contact with overhead power lines	132	118	112	2
Exposure to caustic, noxious, or allergenic substances	112	114	136	2
Oxygen deficiency	92	74	59	1
Fires and explosions	196	174	159	3
Fires--unintended or uncontrolled	103	95	93	2
Explosion	92	78	65	1

[1] Based on the 1992 BLS Occupational Injury and Illness Classification Manual.
[2] Excludes fatalities from the Sept. 11, 2001, terrorist attacks.
[3] The BLS news release of August 10, 2006, reported a total of 5,702 fatal work injuries for calendar year 2005. Since then, an additional 32 job-related fatalities were identified, bringing the total job-related fatality count for 2005 to 5,734.

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

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

National Labor Relations Board (NLRB) Union Representation Elections, 1997-2009

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Bureau of Labor Statistics

Originally Posted: June 30, 2010

One of the principal functions of the National Labor Relations Board (NLRB) is to determine, through secret-ballot elections, whether employees wish to be represented by a union in dealing with their employers, and if so, by which union. This article summarizes Union Representation Elections (UREs) involving the NLRB over the 13-year period from 1997 to 2009.

Table 1 shows that the total number of elections declined 60 percent over the 1997-2009 period, from 3,261 to 1,304. The number of elections won in favor of union representation during that time declined 48 percent, from 1,656 to 864. This is a slower rate than the decline in the total number of elections, resulting in an overall *increase* in the percent of elections won in favor of union representation, from 51 percent in 1997 to 66 percent in 2009.

Table 1. National Labor Relations Board (NLRB) Union Representation Elections, 1997-2009

Year	Total number of elections for union representation	Number of elections won in favor of union representation	Percent of elections won in favor of union representation	Total number of employees eligible to vote for union representation	Number of employees involved in elections won by unions
1997	3,261	1,656	50.8	224,262	90,333
1998	3,296	1,711	51.9	227,116	97,661
1999	3,012	1,576	52.3	234,182	108,420
2000	2,896	1,513	52.2	210,757	87,907
2001	2,571	1,395	54.3	203,616	77,884
2002	2,675	1,506	56.3	175,885	79,065
2003	2,352	1,340	57.0	155,070	75,661
2004	2,293	1,312	57.2	159,461	77,450
2005	2,099	1,248	59.5	141,467	68,638
2006	1,650	988	59.9	113,480	60,137
2007	1,510	890	58.9	95,916	52,365
2008	1,588	1,028	64.7	110,903	71,791
2009	1,304	864	66.3	69,832	44,033
Total, 1997 to 2009	30,507	17,027	N/A	2,121,947	991,345
Total change from 1997 to 2009	-1957	-792	N/A	-154,430	-46,300

Note: These data represent closed cases resulting from petitions filed by a union or employees seeking an election to determine a collective bargaining representative, or petitions from employers seeking an election to determine a collective bargaining representative. Data are presented by calendar year. The number of elections and the number of employees is without regard to AFL-CIO affiliation.

Source: National Labor Relations Board.

Year	Total number of elections for union representation	Number of elections won in favor of union representation	Percent of elections won in favor of union representation	Total number of employees eligible to vote for union representation	Number of employees involved in elections won by unions
Percent change from 1997 to 2009	60.0	47.8	N/A	68.9	51.3

Note: These data represent closed cases resulting from petitions filed by a union or employees seeking an election to determine a collective bargaining representative, or petitions from employers seeking an election to determine a collective bargaining representative. Data are presented by calendar year. The number of elections and the number of employees is without regard to AFL-CIO affiliation.

Source: National Labor Relations Board.

Table 1 also shows that the number of employees eligible to vote in elections decreased 69 percent, from 224,262 in 1997 to 69,832 in 2009. While the number of employees eligible to vote in elections won by unions has fluctuated from year to year, overall it declined by 51 percent. Despite the decrease, the data show that, if an employee was involved in a union representation election, the employee was more likely to gain union representation in 2009 than in 1997. In addition, there is a greater tendency for employees to choose union representation when two or more unions are seeking certification than when only one union is seeking certification.

The NLRB holds a certification election for one of two reasons: (1) to conduct a single union vote to certify or grant the right to represent a group of employees; or (2) to conduct a multiple union election either to certify or to grant the right to represent a group of employees to one union or to change which union is representing the employees. In multiple union elections, one union may be attempting to decertify another union and become the union of choice. The data presented in this article exclude *decertification elections*, which are elections that remove *all* union representation from the employees.

Table 2 shows that, in 1997, barely 50 percent of elections to certify one union were won in favor of union representation; this percentage increased to over 64 percent in 2009. The average over the period was approximately 54 percent.

Table 2. National Labor Relations Board (NLRB) Union Representation Elections, elections with choice of one union, 1997-2009

Year	Total number of elections to certify one union	Number of elections to certify one union that won in favor of union representation	Percent of elections to certify one union that won in favor of union representation
1997	3,165	1,580	49.9
1998	3,195	1,626	50.9
1999	2,901	1,473	50.8
2000	2,784	1,421	51
2001	2,455	1,309	53.3
2002	2,528	1,367	54.1
2003	2,261	1,263	55.9
2004	2,161	1,203	55.7
2005	1,963	1,127	57.4
2006	1,533	893	58.3

Note: These data do not include decertification elections, which are elections that remove all union representation from the employees.

Source: National Labor Relations Board.

Year	Total number of elections to certify one union	Number of elections to certify one union that won in favor of union representation	Percent of elections to certify one union that won in favor of union representation
2007	1,397	793	56.8
2008	1,482	936	63.2
2009	1,199	769	64.1
Total, 1997 to 2009	29,024	15,760	54.3
Note: These data do not include decertification elections, which are elections that remove all union representation from the employees.			
Source: National Labor Relations Board.			

Table 3 shows that, in 1997, when given a choice of two or more unions, less than 80 percent of elections resulted in favor of union representation. This percentage increased to a little more than 90 percent in 2009. The average over the period was about 85 percent--significantly more than the approximately 54 percent averaged over the period for elections won in favor of union representation with only a single union seeking certification.

Table 3. National Labor Relations Board (NLRB) Union Representation Elections, elections with choice of two or more unions, 1997-2009

Year	Total number of elections with choice of two or more unions	Number of elections won in favor of union representation with choice of two or more unions	Percent of elections won in favor of union representation with choice of two or more unions
1997	96	76	79.2
1998	101	85	84.2
1999	111	103	92.8
2000	112	92	82.1
2001	116	86	74.1
2002	147	139	94.6
2003	91	77	84.6
2004	132	109	82.6
2005	136	121	89
2006	117	95	81.2
2007	113	97	85.8
2008	106	92	86.8
2009	105	95	90.5
Total, 1997 to 2009	1,483	1,267	85.4
Note: These data do not include decertification elections, which are elections that remove all union representation from the employees.			
Source: National Labor Relations Board.			

In about 5 percent of all union representation elections held from 1997 to 2009 (regardless of outcome), employees had the choice of two or more unions. In about 7 percent of all elections that were won in favor of union representation over the 1997-2009 period, employees had a choice of two or more unions for their representation.

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