Technical information: (202) 691-5606• dprweb@bls.gov • www.bls.gov/lpc Media contact: (202)691-5902 • PressOffice@bls.gov

Productivity and Costs

Second Quarter 2015, Preliminary
Nonfarm business sector labor productivity increased at a 1.3 percent annual rate during the second quarter of 2015, the U.S. Bureau of Labor Statistics reported today, as output increased 2.8 percent and hours worked increased 1.5 percent. (All quarterly percent changes in this release are seasonally adjusted annual rates.) From the second quarter of 2014 to the second quarter of 2015, productivity increased 0.3 percent, reflecting increases in output and hours worked of 2.8 percent and 2.6 percent, respectively. (See chart 1 and table A.)

Labor productivity, or output per hour, is calculated by dividing an index of real output by an index of hours worked of all persons, including employees, proprietors, and unpaid family workers.


Unit labor costs in the nonfarm business sector increased 0.5 percent in the second quarter of 2015, reflecting a 1.8 percent increase in hourly compensation and a 1.3 percent increase in productivity. Unit labor costs increased 2.1 percent over the last four quarters. (See chart 2 and tables $A$ and 2.)

## Historical Revisions to Productivity and Costs Data

Data in this release reflect the revisions to the National Income and Product Accounts (NIPA) released by the Bureau of Economic Analysis of the U.S. Department of Commerce on July 30, 2015. See "Revised measures" section (page 2).

BLS calculates unit labor costs as the ratio of hourly compensation to labor productivity; increases in hourly compensation tend to increase unit labor costs and increases in output per hour tend to reduce them.

Manufacturing sector labor productivity increased 2.5 percent in the second quarter of 2015, as output increased 1.5 percent and hours worked decreased 1.0 percent. Productivity increased 3.4 percent in the durable manufacturing sector and 1.2 percent in the nondurable goods sector. (See tables A, 3, 4, and 5.) Over the last four quarters, manufacturing productivity increased 1.1 percent, as output increased 2.3 percent and hours increased 1.2 percent. Unit labor costs in manufacturing decreased 2.3 percent in the second quarter of 2015 and increased 0.2 percent from the same quarter a year ago. (See tables A and 3.)

The concepts, sources, and methods used for the manufacturing output series differ from those used in the business and nonfarm business output series; these output measures are not directly comparable. See Technical Notes for a more detailed explanation. (See page 7.)

## Revised measures

Productivity, unit labor costs, and related measures in the business and nonfarm business sectors were subject to revision going back to 2010, due to revisions in source data including output, compensation, and hours. Measures of output for the business and nonfarm business sectors and measures of compensation for all sectors incorporate the revised National Income and Product Accounts (NIPA) data released on July 30 by the Bureau of Economic Analysis, U.S. Department of Commerce. Hours were revised for the business and nonfarm business sectors to incorporate revised NIPA data on government enterprises employment and the proportion of sector compensation paid to employees of nonprofit institutions. Measures of manufacturing output and all related measures were revised back to 1987 to reflect revised output indexes constructed by BLS using data from the U.S. Department of Commerce. In particular, the revisions incorporate data from the 2012 Economic Census as well as improvements to BLS methodology for estimating annual manufacturing output. Output data for the manufacturing sector also incorporate historically revised indexes of industrial production published by the Board of Governors of the Federal Reserve System on July 21.

Table B presents revised and previous productivity and related measures for the nonfarm business, business, and manufacturing sectors for the first quarter of 2015 and table C presents annual data for nonfarm business and total manufacturing from 2012 to 2014. Revised quarterly and annual series for all sectors in recent years appear in tables 1-6 and appendix tables 1-6. Historical annual indexes for the manufacturing sectors appear in appendix tables 7-9. Full historical annual and quarterly measures can be found on the Productivity and Costs home page: www.bls.gov/lpc/\#data.

Nonfarm business sector productivity decreased 1.1 percent in the first quarter of 2015-rather than falling 3.1 percent as reported June 4 -solely reflecting a 2.1 -percentage point upward revision to output; hours increased at the same 1.6 percent rate reported previously. Unit labor costs increased 2.3 percent in the first quarter of 2015-much less than a previously-published increase of 6.7 percentdue to both the upward revision to productivity and a 2.2-percentage point downward revision to hourly compensation. Real hourly compensation increased 4.2 percent after revision, rather than the previous estimate of 6.5 percent.

Historical revisions to quarterly series of labor productivity in the nonfarm business sector are presented in Charts 3 and 4 . Chart 3 shows the revised and previous estimates of percent changes from previous quarter, for the first quarter of 2011 through the first quarter of 2015. Most notable were downward revisions in the third quarters of both 2012 and 2013, and the upward revision in the
first quarter of 2015. The average growth rate from the first quarter of 2011 to the first quarter of 2015 was revised down by 0.1 percentage point, to a rate of 0.5 percent.


Chart 4 shows the previous and revised percent changes from the same quarter a year ago in nonfarm business labor productivity. After revision, the four-quarter rate of productivity growth dipped below zero for the first three quarters of 2013. The last time this measure was negative for three consecutive quarters was the first three quarters of 1982; in 2013 hours were rising faster than output, while in 1982 output was falling faster than hours.


Annual Average productivity growth in the nonfarm business sector was not revised for 2014. (See table C.) Productivity growth was revised down in both 2013 and 2012, to rates of 0.0 percent in 2013 and 0.9 percent in 2012 . The revised annual rate of 0.0 percent in 2013 is the lowest annual change in
productivity since a 1.0 percent decline in 1982. The average annual rate of productivity growth from 2007 to 2014 -corresponding to the current business cycle-was revised down from 1.4 percent to 1.3 percent per year, well below the long-term rate from 1947 to 2014 of 2.2 percent per year.

Manufacturing sector productivity declined 0.6 percent in the first quarter of 2015-a smaller decline than previously reported-as an upward revision to output was greater than an upward revision to hours. Unit labor costs decreased 1.1 percent rather than increasing 3.4 percent as reported June 4, due to both the upward revision to productivity and a 4.1-percentage point downward revision to hourly compensation.

Annual average manufacturing productivity grew 1.3 percent in 2014, less than the previous estimate of 2.2 percent. Unit labor costs increased 1.4 percent in 2014, rather than 0.3 percent as previously reported. There were also historical revisions to manufacturing productivity for the complete series, going back to 1987. (See chart 5.) The revised long-term growth rate from 1987 to 2014 is 3.4 percent, larger than a previous estimate of 3.2 percent. From 1987 to 2000 the average annual rate of growth in manufacturing productivity was revised down from 3.7 percent to 3.5 percent. For the 2000-2007 period the average annual rate was revised up from 3.7 percent to 4.7 percent, and during the current business cycle from 2007 to 2014 the average annual rate was revised up from 1.7 percent to 2.2 percent. This recent period saw the largest single-year revisions-a large downward revision in 2009 followed by large upward revisions in 2010 and 2011.


Nonfinancial corporate sector productivity and related measures were subject to revision back to 2011, to incorporate source data revisions to series from the Bureau of Economic Analysis, including output, compensation, and data on the proportion of employees working in the corporate sector. Firstquarter 2015 productivity growth was revised down to a decline of 2.1 percent, rather than the previously-published decline of 1.2 percent; this revision was due solely to a downward revision to output. Annual average productivity was revised down 0.1 percentage points in 2014 to a rate of 0.4 percent, revised up 0.7 percentage points in 2013 to a rate of 1.0 percent, and revised down 0.3 percentage points in 2012 to a rate of 1.6 percent. (See tables D and 6.)

The revised Productivity and Costs news release for second-quarter 2015 is scheduled to be released on Wednesday, September 2, 2015 at 8:30 a.m. (EDT).


|  | Labor productivity | Output | Hours worked | Hourly compensation | Real hourly compensation | Unit labor costs | Unit profits | Implicit price deflator |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change, annual rate, first quarter 2015 |  |  |  |  |  |  |  |  |
| Q to Q Revised | -2.1 | -0.4 | 1.8 | 0.4 | 3.5 | 2.6 | -19.3 | -0.8 |
| Q to Q Previous | -1.2 | 0.6 | 1.8 | 3.4 | 6.5 | 4.6 | -27.8 | -1.2 |
| Percent change, annual average |  |  |  |  |  |  |  |  |
| 2014 | 0.4 | 3.2 | 2.8 | 2.4 | 0.8 | 2.0 | -0.4 | 0.7 |
| 2013 | 1.0 | 3.0 | 2.0 | 1.3 | -0.2 | 0.3 | 4.4 | 0.8 |
| 2012 | 1.6 | 4.0 | 2.4 | 2.9 | 0.7 | 1.2 | 6.4 | 1.4 |

## TECHNICAL NOTES

Labor Hours: Hours data for the labor productivity and cost measures include hours worked for all persons working in the sector-wage and salary workers, the self-employed and unpaid family workers. The primary source of hours and employment data is the BLS Current Employment Statistics (CES) program, which provides monthly survey data on the number of jobs held by wage and salary workers in nonfarm establishments, counting a person who is employed by two or more establishments at each place of employment. The CES also provides average weekly paid hours of production and nonsupervisory workers in these establishments. Weekly paid hours are adjusted to hours at work using data from the National Compensation Survey (NCS) for 2001 forward and data from the BLS Hours at Work survey, conducted for this purpose, for earlier years. The Office of Productivity and Technology estimates average weekly hours at work for nonproduction and supervisory workers using information from the Current Population Survey (CPS), the CES, and the NCS.

Data from the CPS are used to estimate hours worked for farm labor, nonfarm proprietors, and nonfarm unpaid family workers. Using CPS information on employment and hours worked at primary jobs and all other jobs, separately, the BLS productivity measures assign all hours worked to the correct industrial sector. Hours for government enterprises are derived from the CPS, the CES, and the National Income and Product Accounts (NIPA) prepared by the Bureau of Economic Analysis (BEA) of the Department of Commerce.

Output: Business sector output is a chain-type, current-weighted index constructed after excluding from gross domestic product (GDP) the following outputs: general government, nonprofit institutions, and private households (including owner-occupied housing). Corresponding exclusions also are made in labor inputs. Business output accounted for about 76 percent of the value of GDP in 2014. Nonfarm business, which excludes farming, accounted for about 75 percent of GDP in 2014.

Annual indexes for manufacturing and its durable and nondurable goods components are constructed by deflating current-dollar industry value of production data from the U.S. Bureau of the Census with deflators from the BLS. These deflators are based on data from the BLS producer price program and other sources. The industry shipments are aggregated using annual weights, and intrasector transactions are removed. Quarterly manufacturing output measures are based on the indexes of industrial production prepared monthly by the Board of Governors of the Federal Reserve System, adjusted to be consistent with annual indexes of manufacturing sector output prepared by BLS.

Nonfinancial corporate output is a chain-type, current-weighted index calculated on the basis of the costs incurred and the incomes earned from production. The output measure excludes the following outputs from GDP: general government; nonprofit institutions; private households; unincorporated business; and those corporations classified as offices of bank holding companies, offices of other holding companies, or offices in the finance and insurance sector. Nonfinancial corporations accounted for about 49 percent of the value of GDP in 2014.

Labor Productivity: The measure describes the relationship between real output and the labor time involved in its production. Measures of labor productivity growth show the changes from period to period in the amount of goods and services produced per hour worked. They reflect the joint effects of many influences, including changes in technology; capital investment; level of output; utilization of capacity, energy, and materials; the organization of production; managerial skill; and the characteristics and effort of the work force.

Labor Compensation: The measure includes accrued wages and salaries, supplements, employer contributions to employee benefit plans, and taxes. Estimates of labor compensation by major sector, required for measures of hourly compensation and unit labor costs, are based primarily on employee compensation data from the NIPA, prepared by the BEA. The compensation of employees in general government, nonprofit institutions and private households are subtracted from compensation of domestic employees to derive employee compensation for the business sector. The labor compensation of proprietors cannot be explicitly identified and must be estimated. This is done by assuming that proprietors have the same hourly compensation as employees in the same sector. The quarterly labor productivity and cost measures do not contain estimates of compensation for unpaid family workers.

Unit Labor Costs: These measures describe the relationship between compensation per hour and labor productivity, or real output per hour, and can be used as an indicator of inflationary pressure on producers. Increases in hourly compensation increase unit labor costs; labor productivity increases offset compensation increases and lower unit labor costs.

Presentation of the data: The quarterly data in this release are presented in three ways: as percent changes from the previous quarter presented at a compound annual rate, as percent changes from the corresponding quarter of the previous year, and as index number series where 2009=100. Annual data are presented both as index number series and percent changes from the previous year.

The index numbers and rates of change reported in the productivity and costs news release are rounded to one decimal place. All percent changes in this release and on the BLS web site are calculated using index numbers to three decimal places. A complete historical series of these index numbers are available at the BLS web site, www.bls.gov/data/home.htm, or by contacting the BLS Division of Major Sector Productivity (Telephone 202-691-5606 or email DPRWEB@BLS.GOV).

For a more detailed explanation of methodology see "Technical Information About the Major Sector Productivity and Costs Methods" at www.bls.gov/lpc/lpcmethods.pdf.

Information in this release will be made available to sensory-impaired individuals upon request. Voice phone: 202-691-5606; Federal Relay Service number: 1-800-877-8339.

Table 1. Business sector: Productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

| Year <br> and <br> quarter | Output <br> per hour <br> of all <br> persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real compensation per hour (2) | Unit labor costs | Unit nonlabor payments (3) | Implicit price deflator (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |  |  |
| 2015 II | 1.7 | 2.8 | 1.1 | 2.1 | -0.8 | 0.5 | 4.5 | 2.2 |
| I | -1.3 r | 0.6 r | 1.9 | 0.9 r | 4.0 r | 2.3 r | -3.3 r | -0.1 r |
| 2014 ANNUAL | 0.6 r | 3.0 r | 2.4 | 2.6 r | 1.0 r | 2.0 r | 0.6 r | 1.4 r |
| 2014 IV | -2.4 r | 2.6 r | 5.2 | 3.0 r | 3.9 | 5.6 r | -8.2 r | -0.6 r |
| III | 2.5 r | 5.5 r | 2.9 | 2.5 r | 1.3 r | 0.0 r | 2.9 r | 1.2 r |
| II | 2.9 | 5.7 | 2.7 | -0.9 r | -3.2 r | -3.7 r | 10.6 r | 2.3 r |
| I | -3.6r | -1.7 r | 2.0 | 5.9 r | 3.7 r | 9.9 r | -8.5 r | 1.5 r |
| 2013 ANNUAL | 0.4 r | 2.0 r | 1.6 r | 1.2 r | -0.2 r | 0.8 r | 2.4 r | 1.5 r |
| 2013 IV | 3.4 r | 5.1 r | 1.7 | 2.1 r | 0.7 r | -1.2 r | 4.4 r | 1.2 r |
| III | 1.3 r | 3.9 r | 2.5 r | 0.5 r | -1.8 r | $-0.9 \mathrm{r}$ | 5.3 r | 1.7 r |
| II | 0.6 r | 1.6 r | 1.0 | 6.3 r | 6.5 r | 5.7 r | -5.6 r | 0.6 r |
| I | 1.2 r | 2.5 r | 1.3 | -8.6 r | -9.9 r | -9.7 r | 18.8 r | 1.6 r |

Percent change from corresponding quarter of previous year

| 2015 | II | 0.1 |  | 2.9 |  | 2.8 |  | 2.1 |  | 2.1 |  | 2.0 |  | -1.1 |  | 0.7 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 0.4 | r | 3.6 | r | 3.2 |  | 1.4 |  | 1.5 | r | 1.0 | r | 0.3 | r | 0.7 | r |
| 2014 | ANNUAL | 0.6 | r | 3.0 | r | 2.4 |  | 2.6 |  | 1.0 | r | 2.0 | r | 0.6 | r | 1.4 | $r$ |
| 2014 | IV | -0.2 | r | 3.0 | r | 3.2 |  | 2.6 |  | 1.4 |  | 2.8 | r | -1.1 | r | 1.1 |  |
|  | III | 1.3 | r | 3.6 | r | 2.3 |  | 2.4 |  | 0.6 | $r$ | 1.1 | $r$ | 2.1 | r | 1.5 | $r$ |
|  | II | 1.0 | r | 3.2 |  | 2.2 |  | 1.9 |  | -0.2 | $r$ | 0.9 | $r$ | 2.7 | r | 1.7 | $r$ |
|  | I | 0.4 | r | 2.2 | r | 1.8 |  | 3.7 | r | 2.2 | r | 3.3 | $r$ | -1.3 | r | 1.3 | r |
| 2013 | ANNUAL | 0.4 | r | 2.0 | r | 1.6 | r | 1.2 | r | -0.2 | r | 0.8 | r | 2.4 | r | 1.5 | r |
| 2013 | IV | 1.6 | r | 3.3 | r | 1.6 |  | -0.1 |  | -1.3 |  | -1.7 | r | 5.4 | $r$ | 1.3 | r |
|  | III | 0.3 | r | 2.0 | r | 1.7 |  | 2.0 | r | 0.5 |  | 1.7 | $r$ | 0.9 | $r$ | 1.3 |  |
|  | II | -0.3 | r | 1.2 | $r$ | 1.5 |  | 2.0 | r | 0.6 | $r$ | 2.3 | $r$ | 0.4 | $r$ | 1.5 | $r$ |
|  | I | 0.1 | r | 1.4 | r | 1.3 |  | 1.1 | r | -0.6 | r | 1.0 | r | 3.1 | r | 1.9 | r |
|  |  |  |  |  |  |  | Ind | s 2009 | = |  |  |  |  |  |  |  |  |
| 2015 | II | 105.3 |  | 116.6 |  | 110.7 |  | 112.9 |  | 102.2 |  | 107.2 |  | 111.8 |  | 109.1 |  |
|  | I | 104.9 | r | 115.8 | r | 110.4 | r | 112.3 | r | 102.4 | $r$ | 107.1 | $r$ | 110.5 | r | 108.5 | $r$ |
| 2014 | ANNUAL | 105.2 | r | 113.9 | r | 108.3 | r | 111.1 | r | 100.7 | r | 105.6 | r | 112.2 | r | 108.4 | r |
| 2014 | IV | 105.2 | r | 115.6 | r | 109.9 | r | 112.0 | r | 101.4 | $r$ | 106.5 | $r$ | 111.4 | $r$ | 108.5 | r |
|  | III | 105.9 | r | 114.8 | $r$ | 108.5 | r | 111.2 | r | 100.4 | $r$ | 105.0 | r | 113.9 | r | 108.7 | r |
|  | II | 105.2 | r | 113.3 | r | 107.7 | $r$ | 110.5 | $r$ | 100.1 | $r$ | 105.0 | r | 113.1 | $r$ | 108.4 | $r$ |
|  | I | 104.5 | r | 111.8 | r | 107.0 | r | 110.7 | r | 100.9 | r | 106.0 | r | 110.2 | r | 107.8 | r |
| 2013 | ANNUAL | 104.6 | r | 110.6 | r | 105.7 | r | 108.3 | r | 99.7 | r | 103.6 | r | 111.5 | r | 106.9 | r |
| 2013 | IV | 105.4 | r | 112.2 | $r$ | 106.5 | r | 109.2 | $r$ | 100.0 | $r$ | 103.6 | $r$ | 112.7 | $r$ | 107.4 | $r$ |
|  | III | 104.6 | $r$ | 110.9 | $r$ | 106.0 | r | 108.6 | $r$ | 99.9 | $r$ | 103.9 | $r$ | 111.5 | r | 107.1 | $r$ |
|  | II | 104.2 | r | 109.8 |  | 105.4 | $r$ | 108.5 | r | 100.3 | $r$ | 104.1 | $r$ | 110.1 | r | 106.6 | $r$ |
|  | I | 104.1 | $r$ | 109.4 |  | 105.1 | $r$ | 106.8 | $r$ | 98.7 | $r$ | 102.7 | $r$ | 111.7 | r | 106.4 | $r$ |

See footnotes following Table 6.

Table 2. Nonfarm business sector: Productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

| Year <br> and <br> quarter | Output <br> per hour <br> of all <br> persons | Output | Hours <br> of all <br> persons | Compensation per hour <br> (1) | Real <br> compensation per hour (2) | Unit labor costs | Unit nonlabor payments (3) | Implicit <br> price <br> deflator <br> (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |  |  |
| 2015 II | 1.3 | 2.8 | 1.5 | 1.8 | -1.1 | 0.5 | 4.7 | 2.2 |
| I | -1.1 r | 0.5 r | 1.6 | 1.1 r | 4.2 r | 2.3 r | -1.8 r | 0.5 r |
| 2014 ANNUAL | 0.7 | 3.0 | 2.3 | 2.7 r | 1.1 r | 2.0 r | 0.9 r | 1.5 r |
| 2014 IV | -2.2 r | 2.6 | 4.9 | 3.4 | 4.2 | 5.7 r | -8.1 r | -0.5 r |
| III | 3.1 r | 5.5 r | 2.3 r | 3.2 r | 2.0 r | 0.1 r | 4.1 r | 1.8 r |
| II | 2.8 r | 5.4 r | 2.5 | -0.8 r | -3.1 r | -3.5r | 9.5 r | 1.9 r |
| I | -3.5r | -1.2 r | 2.3 r | 5.5 r | 3.4 r | 9.3 r | -8.4 r | 1.3 r |
| 2013 ANNUAL | 0.0 r | 1.7 r | 1.7 | 1.1 | -0.4 r | 1.1 r | 2.1 r | 1.5 r |
| 2013 IV | 3.5 r | 5.2 r | 1.7 | 2.3 r | 0.9 r | -1.2 r | 5.7 r | 1.7 r |
| III | 1.4 r | 3.5 r | 2.1 | 0.9 r | -1.4 r | -0.5 r | 5.8 r | 2.2 r |
| II | 0.1 r | 1.1 r | 1.1 | 6.3 r | 6.5 r | 6.2 r | -5.0 r | 1.2 r |
| I | -0.1 r | 1.7 r | 1.8 | -9.2 r | -10.5 r | -9.1 r | 16.8 r | 1.2 r |

Percent change from corresponding quarter of previous year

| 2015 | II | 0.3 |  | 2.8 |  | 2.6 |  | 2.4 |  | 2.3 |  | 2.1 |  | -0.4 |  | 1.0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 0.6 | r | 3.5 | $r$ | 2.8 |  | 1.7 |  | 1.8 | $r$ | 1.1 | r | 0.7 | r | 0.9 | r |
| 2014 | ANNUAL | 0.7 |  | 3.0 |  | 2.3 |  | 2.7 | r | 1.1 | $r$ | 2.0 | r | 0.9 | r | 1.5 | r |
| 2014 | IV | 0.0 | r | 3.0 | r | 3.0 |  | 2.8 |  | 1.6 |  | 2.8 | r | -1.0 | r | 1.1 |  |
|  | III | 1.4 | r | 3.7 | $r$ | 2.2 |  | 2.5 | $r$ | 0.7 |  | 1.1 | $r$ | 2.5 | $r$ | 1.7 | r |
|  | II | 1.0 | $r$ | 3.2 | $r$ | 2.2 |  | 1.9 | $r$ | -0.1 | $r$ | 0.9 | $r$ | 2.9 | $r$ | 1.8 | r |
|  | I | 0.3 | r | 2.1 | $r$ | 1.8 |  | 3.7 | r | 2.3 | r | 3.4 | r | -0.7 | r | 1.6 | r |
| 2013 | ANNUAL | 0.0 | r | 1.7 | r | 1.7 |  | 1.1 |  | -0.4 | r | 1.1 | r | 2.1 | r | 1.5 | r |
| 2013 | IV | 1.2 | r | 2.9 | $r$ | 1.7 | r | -0.1 |  | -1.3 | $r$ | -1.3 | r | 5.5 | r | 1.6 | r |
|  | III | -0.2 | $r$ | 1.6 | $r$ | 1.9 | r | 1.9 |  | 0.3 | $r$ | 2.1 | $r$ | 0.5 | r | 1.4 | $r$ |
|  | II | -0.8 | r | 1.0 | r | 1.8 |  | 1.7 | $r$ | 0.3 |  | 2.5 | r | -0.1 | r | 1.4 | r |
|  | I | -0.2 | r | 1.4 | $r$ | 1.6 |  | 0.8 | r | -0.9 | r | 1.0 | r | 2.5 | r | 1.6 | r |
|  |  |  |  |  |  |  | Ind | s 2009 | = |  |  |  |  |  |  |  |  |
| 2015 | II | 105.4 |  | 116.6 |  | 110.6 |  | 113.0 |  | 102.3 |  | 107.3 |  | 111.3 |  | 108.9 |  |
|  | I | 105.0 | r | 115.8 | $r$ | 110.2 | r | 112.5 | r | 102.6 | $r$ | 107.1 | r | 110.0 | r | 108.3 | r |
| 2014 | ANNUAL | 105.2 | r | 114.0 | r | 108.4 | r | 111.1 | r | 100.7 | $r$ | 105.7 | r | 111.1 | r | 107.9 | r |
| 2014 | IV | 105.3 | r | 115.6 | $r$ | 109.8 | r | 112.2 | r | 101.6 | r | 106.5 | r | 110.5 | r | 108.2 | r |
|  | III | 105.9 | r | 114.9 | $r$ | 108.5 | r | 111.3 | r | 100.5 | $r$ | 105.1 | r | 112.9 | $r$ | 108.3 | r |
|  | II | 105.1 | $r$ | 113.4 | $r$ | 107.9 | $r$ | 110.4 | r | 100.0 | $r$ | 105.0 | $r$ | 111.8 | $r$ | 107.8 | $r$ |
|  | I | 104.4 | r | 111.9 | r | 107.2 | r | 110.6 | r | 100.8 | $r$ | 106.0 | r | 109.3 | r | 107.4 |  |
| 2013 | ANNUAL | 104.4 | r | 110.6 | r | 105.9 | r | 108.2 | r | 99.6 | r | 103.6 | r | 110.1 | r | 106.3 | r |
| 2013 | IV | 105.3 | r | 112.2 | $r$ | 106.6 | r | 109.1 | r | 100.0 | $r$ | 103.7 | r | 111.7 | r | 107.0 | r |
|  | III | 104.4 | r | 110.8 | $r$ | 106.2 | r | 108.5 | r | 99.8 | $r$ | 104.0 | r | 110.2 | $r$ | 106.5 | r |
|  | II | 104.0 | $r$ | 109.9 | $r$ | 105.6 | $r$ | 108.3 | r | 100.1 | $r$ | 104.1 | $r$ | 108.6 | $r$ | 106.0 | r |
|  | I | 104.0 | $r$ | 109.6 | $r$ | 105.3 | r | 106.6 | r | 98.6 | $r$ | 102.5 | r | 110.0 | r | 105.7 | r |

See footnotes following Table 6.

Table 3. Manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted

| Year <br> and <br> quarter | Output <br> per hour <br> of all <br> persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real compensation per hour (2) | Unit labor costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |
| 2015 II | 2.5 | 1.5 | -1.0 | 0.2 | -2.7 | -2.3 |
| I | -0.6 r | -0.5 r | 0.1 r | -1.7 r | 1.3 r | -1.1 r |
| 2014 ANNUAL | 1.3 r | 2.9 r | 1.6 | 2.7 r | 1.0 r | 1.4 r |
| 2014 IV | -0.4 r | 4.0 r | 4.4 | 4.3 r | 5.1 | 4.7 r |
| III | 2.9 r | 4.4 r | 1.4 | 2.7 r | 1.5 r | -0.2 r |
| II | 2.8 r | 6.3 r | 3.4 | -1.8 r | -4.2 | -4.4 r |
| I | 2.0 r | 1.0 r | -1.0 | 8.7 r | 6.5 r | 6.5 r |
| 2013 ANNUAL | 0.7 r | 1.5 r | 0.8 | 0.2 r | -1.2 r | -0.5 r |
| 2013 IV | -0.5 r | 3.4 r | 3.9 | -0.3 r | -1.6 r | 0.2 r |
| III | -0.9 r | 0.6 r | 1.5 | 1.0 r | -1.3 r | 1.9 r |
| II | 2.5 r | 0.1 r | -2.3 | 4.1 r | 4.3 r | 1.6 r |
| I | 1.1 r | 3.5 r | 2.3 | -5.4 r | -6.7 r | -6.4 r |

## Percent change from corresponding quarter of previous year

| 2015 | II | 1.1 |  | 2.3 |  | 1.2 | 1.3 |  | 1.3 |  | 0.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 1.2 |  | 3.5 | r | 2.3 | 0.8 | r | 0.9 | r | -0.3 r |
| 2014 | ANNUAL | 1.3 | r | 2.9 | $r$ | 1.6 | 2.7 | r | 1.0 | r | 1.4 r |
| 2014 | IV | 1.8 | r | 3.9 | $r$ | 2.0 | 3.4 | $r$ | 2.2 | r | 1.5 r |
|  | III | 1.8 |  | 3.7 | $r$ | 1.9 | 2.2 | $r$ | 0.5 | $r$ | 0.4 r |
|  | II | 0.8 | $r$ | 2.8 | $r$ | 2.0 | 1.8 | $r$ | -0.2 | $r$ | 1.0 r |
|  | I | 0.8 | $r$ | 1.3 | $r$ | 0.5 | 3.3 | r | 1.9 | r | 2.5 r |
| 2013 | ANNUAL | 0.7 |  | 1.5 | r | 0.8 | 0.2 | r | -1.2 | r | -0.5 r |
| 2013 | IV | 0.5 |  | 1.9 | $r$ | 1.3 | -0.2 | $r$ | -1.4 | $r$ | -0.7 r |
|  | III | 1.1 |  | 1.5 | $r$ | 0.4 | 0.9 | $r$ | -0.6 | $r$ | -0.2 r |
|  | II | 1.0 |  | 1.2 | r | 0.2 | 0.4 | $r$ | -0.9 | r | -0.6 r |
|  | I | 0.1 | $r$ | 1.2 | $r$ | 1.2 | -0.3 | r | -2.0 | r | -0.4 r |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | II | 121.2 |  | 130.7 |  | 107.9 | 108.5 |  | 98.2 |  | 89.6 |
|  | I | 120.4 | $r$ | 130.2 | r | 108.2 r | 108.5 | r | 98.9 | $r$ | 90.1 r |
| 2014 | ANNUAL | 120.0 | r | 128.3 | r | 106.9 | 107.9 | r | 97.8 | r | 89.9 r |
| 2014 | IV | 120.6 | r | 130.4 | $r$ | 108.2 | 109.0 | r | 98.6 | r | 90.4 r |
|  | III | 120.7 | r | 129.1 | $r$ | 107.0 | 107.8 | $r$ | 97.4 | $r$ | 89.3 r |
|  | II | 119.8 | r | 127.8 | $r$ | 106.6 | 107.1 | $r$ | 97.0 | r | 89.4 r |
|  | I | 119.0 | r | 125.8 | r | 105.7 | 107.6 | r | 98.1 | $r$ | 90.4 r |
| 2013 | ANNUAL | 118.5 | r | 124.6 | r | 105.2 | 105.0 | r | 96.8 | r | 88.7 r |
| 2013 | IV | 118.4 | r | 125.5 | r | 106.0 | 105.4 | r | 96.5 | r | 89.0 r |
|  | III | 118.6 |  | 124.5 | $r$ | 105.0 | 105.4 | $r$ | 96.9 | $r$ | 88.9 r |
|  | II | 118.8 | $r$ | 124.3 | $r$ | 104.6 | 105.2 | $r$ | 97.3 | r | 88.5 r |
|  | I | 118.1 | r | 124.2 | r | 105.2 | 104.1 | r | 96.2 | r | 88.2 r |

See footnotes following Table 6.

Table 4. Durable manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted

| Year <br> and <br> quarter | Output per hour of all persons | Output | Hours <br> of all <br> persons | Compensation per hour <br> (1) | Real compensation per hour (2) | Unit labor costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |
| 2015 II | 3.4 | 1.7 | -1.6 | 0.0 | -2.9 | -3.3 |
| I | -2.2 r | -2.3 r | -0.1 r | -2.9 r | 0.1 r | -0.6 r |
| 2014 ANNUAL | 1.9 r | 4.2 r | 2.3 | 2.1 | 0.5 | 0.2 r |
| 2014 IV | 0.5 r | 3.9 r | 3.3 | 5.0 | 5.9 | 4.5 r |
| III | 3.2 r | 6.4 r | 3.1 | 2.3 r | 1.1 r | -0.9 r |
| II | 3.0 r | 8.7 r | 5.5 | -2.6 r | -5.0 r | -5.5 r |
| I | 2.6 r | 1.5 r | -1.1 | 8.6 r | 6.4 r | 5.8 r |
| 2013 ANNUAL | 0.7 r | 1.8 r | 1.1 | -0.4 r | $-1.8 \mathrm{r}$ | -1.1 r |
| 2013 IV | 0.7 r | 5.5 r | 4.8 | -2.5 r | -3.8 r | -3.1 r |
| III | -0.3 r | 1.4 r | 1.7 | 1.7 r | -0.6 r | 2.0 r |
| II | 2.4 r | -0.3 r | -2.6 | 3.5 r | 3.7 r | 1.0 r |
| I | -0.5 r | 3.4 r | 3.9 | -6.7 r | -8.0 r | -6.2r |

Percent change from corresponding quarter of previous year

| 2015 | II | 1.2 |  | 2.4 |  | 1.1 | 1.1 |  | 1.0 |  | $\begin{aligned} & -0.1 \\ & -0.7 r \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 1.1 |  | 4.1 |  | 2.9 r | 0.4 |  | 0.5 |  |  |
| 2014 | ANNUAL | 1.9 | r | 4.2 |  | 2.3 | 2.1 |  | 0.5 |  | 0.2 r |
| 2014 | IV | 2.3 |  | 5.1 |  | 2.7 | 3.2 |  | 2.0 |  | 0.9 r |
|  | III | 2.4 |  | 5.5 |  | 3.0 | 1.3 |  | -0.4 |  | -1.0 r |
|  | II | 1.5 |  | 4.2 |  | 2.7 | 1.2 |  | -0.9 | r | -0.3 r |
|  | I | 1.3 | $r$ | 2.0 |  | 0.7 | 2.7 |  | 1.3 |  | 1.4 r |
| 2013 | ANNUAL | 0.7 | r | 1.8 |  | 1.1 | -0.4 |  | -1.8 | r | -1.1 r |
| 2013 | IV | 0.6 |  | 2.5 |  | 1.9 | -1.1 | r | -2.3 | r | $-1.6 \mathrm{r}$ |
|  | III | 1.0 |  | 1.7 |  | 0.7 | 0.9 | $r$ | -0.6 | r | -0.1 r |
|  | II | 0.8 |  | 1.1 |  | 0.3 | -0.1 | $r$ | -1.5 | $r$ | -0.9 r |
|  | I | 0.6 | r | 2.1 | r | 1.5 | -1.1 | r | -2.8 | r | -1.8 r |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | II | 125.0 |  | 139.1 |  | 111.2 | 106.8 |  | 96.7 |  | 85.4 |
|  | I | 124.0 | r | 138.5 | r | 111.7 r | 106.8 | r | 97.4 | r | 86.2 r |
| 2014 | ANNUAL | 123.9 | r | 136.5 | r | 110.2 | 106.5 | r | 96.5 | r | 86.0 r |
| 2014 | IV | 124.7 | r | 139.3 | r | 111.7 | 107.6 | $r$ | 97.4 | $r$ | 86.3 r |
|  | III | 124.5 | $r$ | 138.0 |  | 110.8 | 106.3 | r | 96.0 | $r$ | 85.4 r |
|  | II | 123.6 | r | 135.9 |  | 110.0 | 105.7 | r | 95.8 | r | 85.6 r |
|  | I | 122.6 | r | 133.1 |  | 108.5 | 106.4 | r | 97.0 | r | 86.8 r |
| 2013 | ANNUAL | 121.6 | r | 131.0 |  | 107.8 | 104.3 | r | 96.1 |  | 85.8 r |
| 2013 | IV | 121.9 | r | 132.6 | r | 108.8 | 104.2 | $r$ | 95.5 | r | 85.5 r |
|  | III | 121.7 |  | 130.8 |  | 107.5 | 104.9 | $r$ | 96.4 | $r$ | 86.2 r |
|  | II | 121.8 |  | 130.4 |  | 107.1 | 104.5 | $r$ | 96.6 | r | 85.8 r |
|  | I | 121.0 | r | 130.4 | r | 107.8 | 103.6 | r | 95.7 | r | 85.6 r |

See footnotes following Table 6 .
r=revised
Source: Bureau of Labor Statistics

Table 5. Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted

| Year <br> and <br> quarter | Output per hour of all persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real compensation per hour (2) | Unit labor costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |
| 2015 II | 1.2 | 1.3 | 0.1 | 0.5 | -2.4 | -0.6 |
| I | 1.2 r | 1.6 r | 0.4 r | 0.5 r | 3.6 r | -0.6 r |
| 2014 ANNUAL | 1.0 r | 1.5 r | 0.5 | 3.7 r | 2.0 r | 2.6 r |
| 2014 IV | -2.1 r | 4.1 r | 6.3 | 3.1 r | 3.9 r | 5.3 r |
| III | 3.6 r | 2.1 r | -1.4 | 3.2 r | 2.1 r | -0.4 r |
| II | 3.7 r | 3.7 r | 0.0 | -0.6 | -3.0 | -4.2 r |
| I | 1.4 r | 0.4 r | -0.9 | 8.8 r | 6.6 r | 7.3 r |
| 2013 ANNUAL | 0.9 r | 1.1 r | 0.2 | 1.2 r | -0.2 r | 0.3 r |
| 2013 IV | -1.4 r | 1.0 r | 2.4 | 4.0 r | 2.5 r | 5.4 r |
| III | -1.6 r | -0.4 | 1.2 | -0.3 r | -2.6 r | 1.3 r |
| II | 2.1 r | 0.3 r | -1.8 | 5.3 r | 5.5 r | 3.1 r |
| I | 3.6 r | 3.3 r | -0.3 | -3.2 r | -4.6 r | -6.6r |

Percent change from corresponding quarter of previous year

| 2015 | II | 1.0 |  | 2.3 |  | 1.3 | 1.8 |  | 1.8 |  | 0.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 1.6 | $r$ | 2.9 | r | 1.3 | 1.6 | r | 1.6 | r | 0.0 r |
| 2014 | ANNUAL | 1.0 | r | 1.5 | r | 0.5 | 3.7 | r | 2.0 | r | 2.6 r |
| 2014 | IV | 1.6 | r | 2.6 | r | 0.9 | 3.6 | r | 2.4 | $r$ | 1.9 r |
|  | III | 1.8 | $r$ | 1.8 | r | 0.0 | 3.8 | $r$ | 2.0 | $r$ | 1.9 r |
|  | II | 0.5 | $r$ | 1.2 | $r$ | 0.7 | 2.9 | $r$ | 0.8 | $r$ | 2.4 r |
|  | I | 0.1 | r | 0.4 | r | 0.2 | 4.4 | $r$ | 2.9 | r | 4.3 r |
| 2013 | ANNUAL | 0.9 | r | 1.1 | r | 0.2 | 1.2 | r | -0.2 | r | 0.3 r |
| 2013 | IV | 0.7 | $r$ | 1.1 | $r$ | 0.4 | 1.4 | r | 0.1 | r | 0.7 |
|  | III | 1.3 | r | 1.2 | r | -0.1 | 0.9 | r | -0.6 | r | -0.4 r |
|  | II | 1.5 |  | 1.5 |  | 0.0 | 1.5 | $r$ | 0.1 | r | 0.0 r |
|  | I | 0.2 | r | 0.8 | r | 0.6 | 1.2 | r | -0. 5 | r | 1.1 r |
|  |  |  |  |  |  | s 2009= |  |  |  |  |  |
| 2015 | II | 113.3 |  | 116.2 |  | 102.6 | 111.1 |  | 100.6 |  | 98.1 |
|  | I | 112.9 | $r$ | 115.9 | r | 102.6 r | 110.9 | $r$ | 101.2 | r | 98.2 r |
| 2014 | ANNUAL | 112.3 | r | 114.0 | r | 101.5 | 109.8 | r | 99.5 | r | 97.7 r |
| 2014 | IV | 112.6 | r | 115.4 | $r$ | 102.5 | 110.8 | $r$ | 100.3 | r | 98.4 r |
|  | III | 113.2 | r | 114.3 | r | 100.9 | 109.9 | r | 99.3 | $r$ | 97.1 r |
|  | II | 112.2 | $r$ | 113.6 | r | 101.3 | 109.1 | $r$ | 98.8 | r | 97.2 r |
|  | I | 111.2 | r | 112.6 | $r$ | 101.3 | 109.2 | r | 99.6 | r | 98.3 r |
| 2013 | ANNUAL | 111.2 | r | 112.3 | r | 101.0 | 105.9 | r | 97.5 | r | 95.3 r |
| 2013 | IV | 110.8 | $r$ | 112.5 | $r$ | 101.5 | 107.0 | r | 98.0 | r | 96.5 r |
|  | III | 111.2 |  | 112.2 | $r$ | 100.9 | 105.9 | r | 97.4 | $r$ | 95.3 r |
|  | II | 111.6 |  | 112.3 | $r$ | 100.6 | 106.0 | $r$ | 98.0 | r | 95.0 r |
|  | I | 111.0 | $r$ | 112.2 | $r$ | 101.1 | 104.7 | r | 96.7 | r | 94.2 r |

See footnotes following Table 6 .

Table 6. Nonfinancial corporate sector: Productivity, hourly compensation, unit labor costs, unit profits, and prices, seasonally adjusted

| Year | Output |  |  |  | Real |  | Unit |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Hourly compen- | hourly compen- | Unit | non- <br> labor | Total unit | Unit pro- | Implicit <br> price |
| and | employee |  | Employee | sation | sation | labor | costs | cost | fits | deflator |
| quarter | hour | Output | hours | (1) | (2) | costs | (6) | (7) | (8) | (4) |


| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 | I | -2.1 |  | -0.4 | r | 1.8 | 0.4 | r | 3.5 | r | 2.6 | r | 3.3 | r | 2.8 | r | -19.3 | r | -0.8 | r |
| 2014 | ANNUAL | 0.4 |  | 3.2 | r | 2.8 | 2.4 | r | 0.8 | r | 2.0 | r | -1.4 | r | 0.9 | r | -0.4 | r | 0.7 | r |
| 2014 | IV | 3.4 |  | 7.4 | r | 3.9 | 1.5 | r | 2.3 | r | -1.8 | r | -6.4 | r | -3.3 | r | -6.5 | r | -3.8 | r |
|  | III | 2.4 |  | 5.2 | r | 2.7 | 1.6 | r | 0.4 | r | -0.8 | r | -1.1 | r | -0.9 | $r$ | 17.2 | $r$ | 1.6 | $r$ |
|  | II | 1.7 |  | 6.2 | $r$ | 4.4 | -1.7 | $r$ | -4.1 | $r$ | -3.3 | $r$ | -3.4 | r | -3.4 | $r$ | 27.4 | $r$ | 0.5 | $r$ |
|  | I | -1.7 |  | 0.2 | r | 2.0 | 8.4 | r | 6.2 | r | 10.3 | $r$ | -0.8 | r | 6.5 | r | -22.0 | r | 1.9 | r |
| 2013 | ANNUAL | 1.0 |  | 3.0 |  | 2.0 | 1.3 |  | -0.2 | r | 0.3 | r | -0.2 | r | 0.1 | r | 4.4 | r | 0.8 | r |
| 2013 | IV | -0.2 |  | 2.3 |  | 2.4 | 0.9 | $r$ | -0. 5 | r | 1.1 | $r$ | 0.8 | r | 1.0 | r | 0.9 | $r$ | 1.0 |  |
|  | III | -2.0 |  | 0.5 |  | 2.6 | -0.3 | r | -2.6 | r | 1.7 | r | 1.2 | r | 1.6 | r | -7.5 | $r$ | 0.2 |  |
|  | II | 4.8 |  | 6.0 |  | 1.1 | 4.4 | r | 4.6 | r | -0.5 | r | -4.0 | $r$ | -1.6 | r | 6.9 | $r$ | -0. | $r$ |
|  | I | -0.5 |  | 2.8 | r | 3.3 | -4.2 | r | -5.6 | r | -3.7 | r | 1.8 | r | -1.9 | r | 14.6 | r | 0.3 |  |



| 2015 | I | 1.3 | r | 4.6 | r | 3.2 | 0.4 | r | 0.5 |  | -0.9 |  | -1.9 | r | -1.2 | r | 3.0 | r | -0.6 r |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | ANNUAL | 0.4 | r | 3.2 | r | 2.8 | 2.4 | r | 0.8 | r | 2.0 | r | $-1.4$ | r | 0.9 | r | -0.4 | r | 0.7 r |
| 2014 | IV | 1.4 | r | 4.7 | r | 3.3 | 2.4 | r | 1.1 | r | 0.9 | $r$ | -2.9 | r | -0.3 | $r$ | 2.1 | r | 0.0 r |
|  | III | 0.5 | r | 3.4 | $r$ | 2.9 | 2.2 | $r$ | 0.4 | r | 1.7 | $r$ | -1.1 | $r$ | 0.8 | $r$ | 4.1 | $r$ | 1.3 r |
|  | II | -0.6 | $r$ | 2.3 | $r$ | 2.9 | 1.7 |  | -0.3 | $r$ | 2.3 | $r$ | -0.6 | $r$ | 1.4 | $r$ | -1.9 | r | 0.9 r |
|  | I | 0.2 | $r$ | 2.2 | $r$ | 2.0 | 3.3 | r | 1.9 | r | 3.1 | $r$ | -0.7 | $r$ | 1.8 | r | -6.1 | r | 0.7 r |
| 2013 | ANNUAL | 1.0 | r | 3.0 | r | 2.0 | 1.3 |  | -0.2 | r | 0.3 | r | -0.2 | r | 0.1 | r | 4.4 | r | 0.8 r |
| 2013 | IV | 0.5 | r | 2.9 | r | 2.4 | 0.1 |  | -1.1 |  | -0.4 | $r$ | -0.1 | $r$ | -0.3 | $r$ | 3.4 | r | 0.3 r |
|  | III | 2.0 | $r$ | 4.2 | $r$ | 2.2 | 1.8 |  | 0.3 |  | -0.2 | $r$ | -1.2 | $r$ | -0.5 | r | 4.3 | r | 0.2 r |
|  | II | 1.2 | r | 3.1 | $r$ | 1.9 | 1.9 |  | 0.5 | r | 0.7 | $r$ | -0.4 | $r$ | 0.3 | r | 4.8 | $r$ | 1.0 |
|  | I | 0.1 |  | 1.9 | r | 1.8 r | 1.3 | $r$ | -0.4 | r | 1.1 | r | 0.9 | r | 1.0 |  | 5.2 | r | 1.6 r |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 | I | 108.8 | r | 122.4 | r | 112.4 r | 111.1 | r | 101.3 | r | 102.1 | $r$ | 95.9 | r | 100.0 | r | 143.2 | r | 104.6 r |
| 2014 | ANNUAL | 108.3 | r | 119.6 | r | 110.5 r | 110.6 | r | 100.2 | r | 102.1 | r | 96.6 | r | 100.3 | r | 148.0 | r | 105.3 r |
| 2014 | IV | 109.4 | r | 122.5 | $r$ | 111.9 r | 111.0 | r | 100.5 | r | 101.5 | $r$ | 95.1 | r | 99.4 | r | 151.1 | r | 104.8 r |
|  | III | 108.5 | r | 120.3 | r | 110.9 r | 110.6 | r | 99.9 | r | 101.9 | $r$ | 96.7 | r | 100.2 | r | 153.7 | r | 105.8 r |
|  | II | 107.9 | $r$ | 118.8 | $r$ | 110.1 r | 110.2 | $r$ | 99.8 | $r$ | 102.1 | $r$ | 97.0 | $r$ | 100.4 | $r$ | 147.7 | $r$ | 105.4 r |
|  | I | 107.4 | $r$ | 117.0 | r | 108.9 r | 110.7 | r | 100.9 | $r$ | 103.0 | r | 97.8 | r | 101.3 | r | 139.0 | r | 105.2 r |
| 2013 | ANNUAL | 107.9 | r | 116.0 | r | 107.5 r | 108.0 | r | 99.5 | r | 100.1 | r | 98.0 | r | 99.4 | r | 148.5 | r | 104.6 r |
| 2013 | IV | 107.9 | $r$ | 117.0 | $r$ | 108.4 r | 108.5 | r | 99.4 | r | 100.5 | r | 98.0 | r | 99.7 | r | 148.0 | r | 104.7 r |
|  | III | 107.9 | $r$ | 116.3 | r | 107.7 r | 108.2 | $r$ | 99.5 | r | 100.2 | $r$ | 97.8 | $r$ | 99.4 | r | 147.6 | r | 104.5 r |
|  | II | 108.5 | r | 116.1 | $r$ | 107.1 r | 108.3 | $r$ | 100.1 | r | 99.8 | $r$ | 97.5 | r | 99.1 | r | 150.5 | r | 104.4 r |
|  | I | 107.2 | $r$ | 114.5 | r | 106.8 r | 107.1 | r | 99.0 | r | 99.9 | $r$ | 98.5 | r | 99.5 | r | 148.0 | r | 104.5 r |
| See footnot r=revised |  | folld | ow | Table | , |  |  |  |  |  |  |  | August 11, 2015Source: |  |  |  |  |  |  |

SOURCES: Output data are from the Bureau of Economic Analysis and the Census Bureau of the U.S. Department of Commerce; the Bureau of Labor Statistics, U.S. Department of Labor; and the Federal Reserve Board. Hours and compensation data are from the Bureau of Labor Statistics and the Bureau of Economic Analysis.

RELIABILITY: Productivity and cost measures are regularly revised as more complete information becomes available. The measures are first published within 40 days of the close of the reference period; revisions appear 30 days later, and second revisions after an additional 60 days. In the business sector, the third publication (second revision) of a quarterly index of output per hour of all persons has differed from the initial value by between -1.6 and 1.4 index points approximately 95 percent of the time. This interval is based on the performance of this measure between the fourth quarter of 1995 and the first quarter of 2015.

## Table Footnotes

(1) Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Except for nonfinancial corporations, where there are no self-employed, data also include an estimate of wages, salaries, and supplemental payments for the self-employed.
(2) The change for recent quarters is based on the Consumer Price Index for all urban consumers (CPI-U). The trend from 1978-2014 is based on the Consumer Price Index research series (CPI-U-RS).
(3) Unit nonlabor payments include profits, consumption of fixed capital, taxes on production and imports less subsidies, net interest and miscellaneous payments, business current transfer payments, rental income of persons, and the current surplus of government enterprises.
(4) Current dollar output divided by the output index.
(5) Quarterly changes: Percent change compounded at annual rate is calculated using index numbers to three decimal places. Indexes published in the news release are rounded to one decimal place for convenience. Annual changes: Percent change is calculated using annual indexes to three decimal places.
(6) Unit nonlabor costs include consumption of fixed capital, taxes on production and imports less subsidies, net interest and miscellaneous payments, and business current transfer payments.
(7) Total unit costs are the sum of unit labor and nonlabor costs.
(8) Unit profits include corporate profits before tax with inventory valuation and capital consumption adjustments.

Appendix table 1.
Business sector: Revised productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

| Year <br> and <br> quarter | Output <br> per hour <br> of all <br> persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real compensation per hour (2) | Unit labor costs | Unit nonlabor payments (3) | Implicit price deflator (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |  |  |
| 2012 ANNUAL | 0.7 r | 2.9 r | 2.2 | 2.8 | 0.7 | 2.0 r | 1.7 | 1.9 r |
| 2012 IV | -1.9 r | 0.2 r | 2.1 | 11.0 r | 8.2 r | 13.1 r | -12.3 r | 1.4 r |
| III | -1.1 r | 0.6 r | 1.7 | 0.4 r | -1.3 r | 1.5 r | 3.4 r | 2.4 r |
| II | 2.4 r | 2.6 r | 0.2 | 2.6 r | 1.6 r | 0.2 r | 4.7 r | 2.1 r |
| I | 0.1 r | 3.4 r | 3.3 r | 9.7 r | 7.2 r | 9.6 r | -7.5 r | 1.7 |
| 2011 ANNUAL | 0.1 | 2.1 | 2.0 | 2.2 | -1.0 | 2.1 | 2.3 | 2.2 |
| 2011 IV | 3.2 | 6.1 | 2.8 | -4.8 | -6.4 | -7.7 | 13.0 | 0.8 |
| III | -1.0 | 1.1 | 2.2 | 2.1 | -0.5 | 3.2 | 2.1 | 2.7 |
| II | 1.3 | 3.8 | 2.5 | -1.7 | -6.1 | -2.9 | 11.6 | 3.1 |
| I | -3.3 | -2.2 | 1.2 | 6.9 r | 2.5 | 10.6 | -9.1 | 1.7 |
| 2010 ANNUAL | 3.3 | 3.2 | -0.1 | 1.9 | 0.2 | -1.4 | 4.7 | 1.1 |
| 2010 IV | 1.2 | 3.4 | 2.1 | 1.6 | -1.7 | 0.3 | 5.4 | 2.5 |
| III | 2.3 | 4.1 | 1.8 | 2.1 | 0.9 | -0.2 | 4.4 | 1.7 |
| II | 1.6 | 5.0 | 3.4 | 4.5 | 4.6 | 2.9 | -0.4 | 1.5 |
| I | 1.6 | 2.0 | 0.4 | -3.0 | -3.6 | -4.5 | 10.6 | 1.7 |

Percent change from corresponding quarter of previous year

| 2012 | ANNUAL | 0.7 |  | 2.9 | r | 2.2 |  | 2.8 |  | 0.7 |  | 2.0 | $r$ | 1.7 |  | 1.9 | r |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | IV | -0.2 |  | 1.7 | r | 1.8 | r | 5.8 | r | 3.8 | r | 6.0 | r | -3.2 | $r$ | 1.9 | r |
|  | III | 1.1 |  | 3.1 | $r$ | 2.0 |  | 1.8 |  | 0.2 | $r$ | 0.7 | r | 3.1 | $r$ | 1.8 | $r$ |
|  | II | 1.1 |  | 3.3 | $r$ | 2.1 |  | 2.3 |  | 0.4 |  | 1.1 | $r$ | 2.8 | $r$ | 1.8 |  |
|  | I | 0.9 |  | 3.6 | r | 2.7 |  | 1.2 | r | -1.6 | $r$ | 0.3 | r | 4.5 | $r$ | 2.1 |  |
| 2011 | ANNUAL | 0.1 |  | 2.1 |  | 2.0 |  | 2.2 |  | -1.0 |  | 2.1 |  | 2.3 |  | 2.2 |  |
| 2011 | IV | 0.0 |  | 2.2 |  | 2.2 |  | 0.6 |  | -2.7 |  | 0.6 |  | 4.0 |  | 2.1 |  |
|  | III | -0.5 |  | 1.5 |  | 2.0 |  | 2.2 |  | -1. 5 |  | 2.7 |  | 2.2 |  | 2.5 |  |
|  | II | 0.3 |  | 2.2 |  | 1.9 |  | 2.2 |  | -1.1 |  | 1.8 |  | 2.8 |  | 2.2 |  |
|  | I | 0.4 |  | 2.5 |  | 2.1 |  | 3.7 | r | 1.6 |  | 3.3 |  | -0.1 |  | 1.8 |  |
| 2010 | ANNUAL | 3.3 |  | 3.2 |  | -0.1 |  | 1.9 |  | 0.2 |  | -1.4 |  | 4.7 |  | 1.1 |  |
| 2010 | IV | 1.7 |  | 3.6 |  | 1.9 |  | 1.2 |  | 0.0 |  | -0.4 |  | 4.9 |  | 1.9 |  |
|  | III | 2.6 |  | 4.0 |  | 1.4 |  | 1.4 |  | 0.2 |  | -1.1 |  | 5.2 |  | 1.5 |  |
|  | II | 3.7 |  | 3.3 |  | -0.3 |  | 1.7 |  | -0.1 |  | -1.9 |  | 5.1 |  | 1.0 |  |
|  | I | 5.2 |  | 1.8 |  | -3.3 |  | 3.0 |  | 0.7 |  | -2.1 |  | 3.5 |  | 0.2 |  |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | ANNUAL | 104.1 | r | 108.4 | r | 104.1 | $r$ | 107.0 | r | 100.0 | r | 102.7 | r | 108.9 | $r$ | 105.3 | $r$ |
| 2012 | IV | 103.8 | $r$ | 108.7 | r | 104.8 | $r$ | 109.3 | r | 101.4 | $r$ | 105.3 | r | 107.0 | r | 106.0 | r |
|  | III | 104.3 | r | 108.6 | r | 104.2 | $r$ | 106.5 | r | 99.4 | $r$ | 102.1 | r | 110.5 | r | 105.7 | r |
|  | II | 104.5 | r | 108.5 | $r$ | 103.8 | r | 106.4 | r | 99.7 | $r$ | 101.7 | $r$ | 109.6 | r | 105.0 | $r$ |
|  | I | 103.9 | r | 107.8 | r | 103.7 | r | 105.7 | r | 99.3 | $r$ | 101.7 | $r$ | 108.4 | $r$ | 104.5 | $r$ |
| 2011 | ANNUAL | 103.4 |  | 105.3 |  | 101.9 |  | 104.1 |  | 99.3 |  | 100.7 |  | 107.0 |  | 103.3 |  |
| 2011 | IV | 103.9 | r | 106.9 |  | 102.9 | $r$ | 103.3 | r | 97.6 | $r$ | 99.4 | r | 110.5 | r | 104.0 |  |
|  | III | 103.1 |  | 105.3 |  | 102.2 | $r$ | 104.6 | $r$ | 99.2 |  | 101.4 |  | 107.2 |  | 103.8 |  |
|  | II | 103.4 | r | 105.1 |  | 101.6 | $r$ | 104.0 | r | 99.3 | $r$ | 100.6 | $r$ | 106.6 |  | 103.1 |  |
|  | I | 103.0 | r | 104.1 |  | 101.0 | $r$ | 104.4 | r | 100.9 | $r$ | 101.4 | $r$ | 103.7 | r | 102.3 |  |
| 2010 | ANNUAL | 103.3 |  | 103.2 |  | 99.9 |  | 101.9 |  | 100.2 |  | 98.6 |  | 104.7 |  | 101.1 |  |
| 2010 | IV | 103.9 | r | 104.7 |  | 100.7 | r | 102.7 | r | 100.3 | $r$ | 98.8 |  | 106.2 | r | 101.9 |  |
|  | III | 103.6 |  | 103.8 |  | 100.2 |  | 102.3 | r | 100.7 | $r$ | 98.7 |  | 104.8 |  | 101.3 |  |
|  | II | 103.0 | r | 102.8 |  | 99.7 | $r$ | 101.8 | r | 100.5 | $r$ | 98.8 |  | 103.7 |  | 100.9 |  |
|  | I | 102.6 |  | 101.5 |  | 98.9 |  | 100.7 |  | 99.4 |  | 98.1 |  | 103.8 |  | 100.5 |  |

See footnotes following Table 6.
r=revised
Source: Bureau of Labor Statistics

Appendix table 2 .
Nonfarm business sector: Revised productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

| Year <br> and <br> quarter | Output <br> per hour <br> of all <br> persons | Output | Hours <br> of all <br> persons | Compensation per hour <br> (1) | Real compensation per hour (2) | Unit labor costs | Unit nonlabor payments (3) | Implicit price deflator <br> (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |  |  |
| 2012 ANNUAL | 0.9 r | 3.1 r | 2.2 | 2.7 | 0.6 | 1.7 | 2.1 r | 1.9 r |
| 2012 IV | -2.2 r | 0.2 r | 2.4 | 10.7 r | 7.9 r | 13.1 r | -13.1 r | 1.1 r |
| III | -0.8 r | 1.0 r | 1.8 r | 0.3 r | -1.5 r | 1.1 r | 3.4 r | 2.1 r |
| II | 2.5 r | 2.7 r | 0.2 r | 2.4 r | 1.4 r | -0.1 r | 5.3 r | 2.2 r |
| I | 0.6 r | 3.9 r | 3.2 r | 9.6 r | 7.2 r | 8.9 r | -6.9 r | 1.7 r |
| 2011 ANNUAL | 0.2 | 2.2 | 2.0 | 2.2 | -0.9 | 2.1 | 1.4 | 1.8 |
| 2011 IV | 3.0 | 5.8 | 2.7 r | -4.9 r | -6.6 | -7.7 | 14.3 | 1.3 |
| III | -0.8 r | 1.1 | 2.0 | 2.4 | -0.2 | 3.3 | 1.5 | 2.5 |
| II | 1.5 | 4.5 | 2.9 | -2.0 | -6.4 | -3.5 | 11.9 | 2.8 |
| I | -3.3 | -2.5 | 0.9 | 7.3 | 2.9 | 11.0 | -11.2 | 0.9 |
| 2010 ANNUAL | 3.3 | 3.2 | -0.1 | 2.0 | 0.3 | -1.3 | 4.2 | 1.0 |
| 2010 IV | 1.6 | 3.8 | 2.1 | 1.8 | -1.5 | 0.2 | 4.3 | 1.9 |
| III | 2.1 | 4.1 | 2.0 | 1.9 | 0.7 | -0.2 | 3.8 | 1.5 |
| II | 1.5 | 4.7 | 3.2 | 4.8 | 4.9 | 3.2 | -0.5 | 1.6 |
| I | 2.1 | 2.2 | 0.1 | -2.7 | -3.3 | -4.8 | 10.8 | 1.6 |


| Percent change from corresponding quarter of previous year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | ANNUAL | 0.9 | r | 3.1 | r | 2.2 |  | 2.7 |  | 0.6 |  | 1.7 |  | 2.1 | r | 1.9 | r |
| 2012 | IV | 0.0 | $r$ | 2.0 |  | 1.9 r |  | 5.6 | r | 3.7 | r | 5.6 | r | -3.1 | $r$ | 1.8 | r |
|  | III | 1.3 | r | 3.4 | r | 2.0 |  | 1.7 | r | 0.0 |  | 0.4 | r | 3.7 | $r$ | 1.8 | r |
|  | II | 1.3 | r | 3.4 |  | 2.0 r | r | 2.2 |  | 0.3 | r | 0.9 | r | 3.3 | $r$ | 1.9 |  |
|  | I | 1.1 | r | 3.8 | r | 2.7 |  | 1.1 | r | -1.7 | r | 0.0 | r | 4.8 | r | 2.1 | r |
| 2011 | ANNUAL | 0.2 |  | 2.2 |  | 2.0 |  | 2.2 |  | -0.9 |  | 2.1 |  | 1.4 |  | 1.8 |  |
| 2011 | IV | 0.1 | r | 2.2 |  | 2.1 |  | 0.6 |  | -2.7 |  | 0.5 |  | 3.6 |  | 1.9 |  |
|  | III | -0.3 |  | 1.7 |  | 2.0 |  | 2.3 |  | -1.4 |  | 2.6 |  | 1.3 |  | 2.0 |  |
|  | II | 0.4 |  | 2.4 |  | 2.0 |  | 2.2 |  | -1.1 |  | 1.7 |  | 1.8 |  | 1.8 |  |
|  | I | 0.4 |  | 2.5 |  | 2.1 r |  | 3.9 |  | 1.7 |  | 3.4 |  | -1.1 |  | 1.5 |  |
| 2010 | ANNUAL | 3.3 |  | 3.2 |  | -0.1 |  | 2.0 |  | 0.3 |  | -1.3 |  | 4.2 |  | 1.0 |  |
| 2010 | IV | 1.8 |  | 3.7 |  | 1.9 |  | 1.4 |  | 0.1 |  | -0.4 |  | 4.5 |  | 1.6 |  |
|  | III | 2.6 |  | 4.1 |  | 1.4 |  | 1.5 |  | 0.3 |  | -1.1 |  | 4.6 |  | 1.3 |  |
|  | II | 3.6 |  | 3.2 |  | -0.3 |  | 1.8 |  | 0.0 |  | -1.8 |  | 4.7 |  | 0.9 |  |
|  | I | 5.2 |  | 1.8 |  | -3.3 |  | 3.1 |  | 0.7 |  | -2.0 |  | 3.0 |  | 0.1 |  |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | ANNUAL | 104.4 | r | 108.8 | r | 104.1 r |  | 107.0 | r | 100.0 | r | 102.5 | r | 107.9 | r | 104.7 | r |
| 2012 | IV | 104.1 | $r$ | 109.1 | r | 104.9 r |  | 109.3 | r | 101.3 | r | 105.0 | $r$ | 105.9 | r | 105.3 | r |
|  | III | 104.6 | $r$ | 109.1 | r | 104.2 r |  | 106.5 | $r$ | 99.4 | $r$ | 101.8 | r | 109.7 | r | 105.1 | $r$ |
|  | II | 104.9 | r | 108.8 | r | 103.7 |  | 106.5 | r | 99.8 | r | 101.5 | r | 108.7 | r | 104.5 | r |
|  | I | 104.2 | r | 108.1 |  | 103.7 |  | 105.8 | r | 99.4 | r | 101.5 | r | 107.3 | r | 104.0 | r |
| 2011 | ANNUAL | 103.5 |  | 105.5 |  | 101.9 |  | 104.2 |  | 99.4 |  | 100.7 |  | 105.7 |  | 102.8 |  |
| 2011 | IV | 104.0 | r | 107.0 |  | 102.9 | $r$ | 103.4 | r | 97.7 | r | 99.4 | r | 109.3 | r | 103.5 |  |
|  | III | 103.3 | r | 105.5 |  | 102.2 |  | 104.7 | $r$ | 99.4 | $r$ | 101.4 |  | 105.7 |  | 103.2 |  |
|  | II | 103.5 | r | 105.2 |  | 101.7 r |  | 104.1 |  | 99.5 | $r$ | 100.6 | r | 105.3 |  | 102.6 |  |
|  | I | 103.1 | r | 104.1 |  | 101.0 |  | 104.7 |  | 101.1 | r | 101.5 | r | 102.4 | r | 101.9 |  |
| 2010 | ANNUAL | 103.3 |  | 103.2 |  | 99.9 |  | 102.0 |  | 100.3 |  | 98.7 |  | 104.2 |  | 101.0 |  |
| 2010 | IV | 104.0 | $r$ | 104.7 |  | 100.7 r |  | 102.8 | r | 100.4 | r | 98.9 |  | 105.5 | r | 101.6 |  |
|  | III | 103.6 |  | 103.8 |  | 100.2 r |  | 102.4 |  | 100.8 | $r$ | 98.8 |  | 104.4 |  | 101.2 |  |
|  | II | 103.0 | r | 102.7 |  | 99.7 r |  | 101.9 | r | 100.6 | r | 98.9 |  | 103.4 |  | 100.8 |  |
|  | I | 102.7 |  | 101.5 |  | 98.9 |  | 100.7 |  | 99.4 |  | 98.1 |  | 103.6 |  | 100.4 |  |

See footnotes following Table 6.


Appendix table 4.
Durable manufacturing sector: Revised productivity, hourly compensation, and unit labor costs seasonally adjusted

| Year <br> and <br> quarter | Output per hour of all persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real compensation per hour (2) | Unit labor costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |
| 2012 ANNUAL | 3.0 | 5.9 r | 2.9 | 1.5 r | -0.6 r | -1.4 r |
| 2012 IV | 2.4 r | 2.3 r | -0.2 | 5.4 r | 2.8 r | 2.9 r |
| III | -1.1 r | -1.2 r | 0.0 | -2.2 r | -3.9 r | -1.1 r |
| II | 1.7 r | 4.1 r | 2.3 | -0.8 r | -1.7 r | -2.5 r |
| I | 6.9 r | 10.1 r | 3.0 | 11.5 r | 9.1 r | 4.3 r |
| 2011 ANNUAL | 4.9 r | 8.9 r | 3.8 | 1.8 | -1.3 | -2.9 r |
| 2011 IV | 0.3 r | 8.0 r | 7.7 | -6.1 | -7.7 | -6.4 r |
| III | 8.7 r | 8.9 r | 0.2 | 2.2 | -0.4 | -5.9 r |
| II | -2.7 r | 2.1 r | 4.9 | -4.2 | -8.5 | -1.6 r |
| I | 6.8 r | 11.0 r | 4.0 | 5.6 | 1.3 | -1.1 r |
| 2010 ANNUAL | 11.8 r | 11.6 r | -0.2 | 1.3 | -0.3 | -9.3r |
| 2010 IV | 5.1 r | 7.2 r | 2.0 | 4.5 | 1.2 | -0.6 r |
| III | 5.1 r | 12.8 r | 7.3 | -1.4 | -2.6 | -6.2 r |
| II | 18.6 r | 21.5 r | 2.4 | 12.1 | 12.2 | -5.5 r |
| I | 13.2 r | 16.0 r | 2.5 | -11.9 | -12.5 | -22.2 r |


| Percent change from corresponding quarter of previous year |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | ANNUAL | 3.0 |  | 5.9 | r | 2.9 | 1.5 r | r | -0.6 | r | -1. 4 | r |
| 2012 | IV | 2.4 r |  | 3.8 |  | 1.3 | 3.4 | r | 1.4 | r | 0.9 | $r$ |
|  | III | 1.9 r |  | 5.2 |  | 3.2 | 0.4 |  | -1.3 | r | -1.5 | $r$ |
|  | II | 4.4 r |  | 7.7 |  | 3.3 | 1.5 |  | -0.4 |  | -2.7 | r |
|  | I | 3.2 r |  | 7.2 | r | 3.9 | 0.6 | r | -2.1 | r | -2.5 | r |
| 2011 | ANNUAL | 4.9 r |  | 8.9 | r | 3.8 | 1.8 |  | -1.3 |  | -2.9 | r |
| 2011 | IV | 3.2 r |  | 7.4 |  | 4.1 | -0.7 |  | -3.9 |  | -3.8 | $r$ |
|  | III | 4.4 r |  | 7.2 |  | 2.7 | 2.0 |  | -1.7 |  | -2.3 | $r$ |
|  | II | 3.5 r |  | 8.2 |  | 4.5 | 1.0 |  | -2.2 |  | -2.4 | $r$ |
|  | I | 8.8 r |  | 13.0 | r | 3.9 | 5.1 |  | 2.9 |  | -3.4 | $r$ |
| 2010 | ANNUAL | 11.8 r |  | 11.6 | $r$ | -0.2 | 1.3 |  | -0.3 |  | -9.3 | $r$ |
| 2010 | IV | 10.4 r |  | 14.3 |  | 3.5 | 0.4 |  | -0.8 |  | -9.0 | r |
|  | III | 11.7 r |  | 15.1 |  | 3.0 | 1.0 |  | -0.2 |  | -9.6 | $r$ |
|  | II | 15.2 r |  | 14.7 |  | -0.4 | 1.6 |  | -0.1 |  | -11.8 | $r$ |
|  | I | 9.5 r |  | 2.5 | r | -6.4 | 2.1 |  | -0.3 |  | -6.8 | $r$ |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | ANNUAL | 120.7 r |  | 128.7 |  | 106.6 | 104.7 | $r$ | 97.8 | r | 86.7 | r |
| 2012 | IV | 121.2 r |  | 129.4 | r | 106.7 | 105.4 | r | 97.7 | r | 87.0 | r |
|  | III | 120.5 r |  | 128.6 |  | 106.8 | 104.0 | r | 97.1 | $r$ | 86.3 | $r$ |
|  | II | 120.8 r |  | 129.0 |  | 106.8 | 104.6 | $r$ | 98.0 | $r$ | 86.6 | $r$ |
|  | I | 120.3 r |  | 127.7 |  | 106.2 | 104.8 | r | 98.5 | r | 87.1 | $r$ |
| 2011 | ANNUAL | 117.2 r |  | 121.5 |  | 103.6 | 103.1 |  | 98.4 |  | 88.0 | r |
| 2011 | IV | 118.3 r |  | 124.7 |  | 105.4 | 101.9 |  | 96.3 |  | 86.2 | $r$ |
|  | III | 118.2 r |  | 122.3 |  | 103.5 | 103.6 |  | 98.3 |  | 87.6 | r |
|  | II | 115.8 r |  | 119.7 |  | 103.4 | 103.0 |  | 98.4 |  | 89.0 | r |
|  | I | 116.5 r |  | 119.1 |  | 102.2 | 104.1 |  | 100.6 |  | 89.3 | r |
| 2010 | ANNUAL | 111.8 r |  | 111.6 |  | 99.8 | 101.3 |  | 99.7 |  | 90.7 | r |
| 2010 | IV | 114.7 r |  | 116.1 |  | 101.2 | 102.7 |  | 100.3 |  | 89.6 | r |
|  | III | 113.2 r |  | 114.1 |  | 100.7 | 101.6 |  | 100.0 |  | 89.7 | r |
|  | II | 111.8 r |  | 110.7 |  | 99.0 | 101.9 |  | 100.6 |  | 91.1 | $r$ |
|  | I | 107.2 r |  | 105.4 |  | 98.4 | 99.1 |  | 97.8 |  | 92.4 |  |

Appendix table 5.
Nondurable manufacturing sector: Revised productivity, hourly compensation, and unit labor costs seasonally adjusted

| Year <br> and <br> quarter | Output per hour of all persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real compensation per hour (2) | Unit labor costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |
| 2012 ANNUAL | -0.6 r | 0.7 r | 1.2 | 2.2 r | 0.1 r | 2.7 r |
| 2012 IV | 1.2 r | 1.6 r | 0.4 | 2.2 r | -0.4 r | 1.0 r |
| III | -0.9 r | 0.7 r | 1.6 | 1.7 r | -0.1 r | 2.7 r |
| II | -3.1 r | -2.3 r | 0.8 | 4.3 r | 3.3 r | 7.7 r |
| I | -2.1 r | 0.9 r | 3.1 | 6.0 r | 3.7 r | 8.3 r |
| 2011 ANNUAL | 4.1 r | 3.4 r | -0.7 | 1.2 | -1.9 | -2.7 r |
| 2011 IV | 0.7 r | 0.8 r | 0.1 | -2.6 | -4.2 | -3.3r |
| III | 2.4 r | 3.2 r | 0.8 | -0.3 | -2.8 | -2.6 r |
| II | 2.9 r | 1.9 r | -1.0 | 1.0 | -3.5 | -1.9 r |
| I | 3.5 r | 2.1 r | -1.4 | -0.2 | -4.3 | -3.6 r |
| 2010 ANNUAL | 6.4 r | 6.7 r | 0.3 | 1.1 | -0.5 | -5.0 r |
| 2010 IV | 6.6 r | 3.2 r | -3.2 | 4.5 | 1.2 | -1.9 r |
| III | 5.4 r | 6.1 r | 0.8 | 4.1 | 2.9 | -1.2 r |
| II | 7.0 r | 11.9 r | 4.5 | -0.9 | -0.7 | -7.4 r |
| I | 8.5 r | 10.2 r | 1.6 | -3.0 | -3.6 | -10.6 r |


| Percent change from corresponding quarter of previous year |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | ANNUAL | -0.6 | r | 0.7 | r | 1.2 | 2.2 | r | 0.1 |  | 2.7 r |
| 2012 | IV | -1.2 | r | 0.2 | r | 1.5 | 3.6 | r | 1.6 | r | 4.9 r |
|  | III | -1.4 | $r$ | 0.0 | $r$ | 1.4 | 2.3 |  | 0.6 |  | 3.7 r |
|  | II | -0.6 | r | 0.6 |  | 1.2 | 1.8 | r | -0.1 | $r$ | 2.4 r |
|  | I | 1.0 | r | 1.7 | r | 0.7 | 1.0 | r | -1.8 |  | 0.0 r |
| 2011 | ANNUAL | 4.1 | r | 3.4 |  | -0.7 | 1.2 |  | -1.9 |  | -2.7 r |
| 2011 | IV | 2.4 | $r$ | 2.0 |  | -0.4 | -0.5 |  | -3.7 |  | -2.8 r |
|  | III | 3.8 | $r$ | 2.6 |  | -1.2 | 1.2 |  | -2.4 |  | -2.5 r |
|  | II | 4.6 |  | 3.3 |  | -1.2 | 2.3 |  | -1.0 |  | -2.1 r |
|  | I | 5.6 | r | 5.8 |  | 0.1 | 1.9 |  | -0.3 |  | -3.5 r |
| 2010 | ANNUAL | 6.4 | $r$ | 6.7 |  | 0.3 | 1.1 |  | -0.5 |  | -5.0 r |
| 2010 | IV | 6.9 | r | 7.8 | $r$ | 0.9 | 1.1 |  | -0.1 |  | -5.3 r |
|  | III | 7.3 | $r$ | 8.9 |  | 1.5 | 0.9 |  | -0.3 |  | -6.0 r |
|  | II | 6.8 | r | 7.7 |  | 0.8 | 0.6 |  | -1.1 |  | -5.8 r |
|  | I | 4.7 | r | 2.5 |  | -2.1 | 1.8 |  | -0.5 |  | -2.8 r |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | ANNUAL | 110.2 | r | 111.1 |  | 100.8 | 104.6 | r | 97.7 | r | 94.9 r |
| 2012 | IV | 110.1 | r | 111.3 | $r$ | 101.1 | 105.5 | r | 97.8 | r | 95.9 r |
|  | III | 109.7 | $r$ | 110.9 | $r$ | 101.0 | 104.9 | r | 97.9 | $r$ | 95.6 r |
|  | II | 110.0 | $r$ | 110.7 |  | 100.6 | 104.5 | $r$ | 98.0 | $r$ | 95.0 r |
|  | I | 110.9 | $r$ | 111.3 |  | 100.4 | 103.4 | r | 97.2 | r | 93.3 r |
| 2011 | ANNUAL | 110.8 | $r$ | 110.3 |  | 99.6 | 102.4 |  | 97.6 |  | 92.4 r |
| 2011 | IV | 111.5 | r | 111.1 |  | 99.7 | 101.9 |  | 96.3 |  | 91.4 r |
|  | III | 111.3 | $r$ | 110.8 |  | 99.6 | 102.6 |  | 97.3 |  | 92.2 r |
|  | II | 110.6 | r | 110.0 |  | 99.4 | 102.6 |  | 98.0 |  | 92.8 r |
|  | I | 109.8 | $r$ | 109.5 |  | 99.7 | 102.4 |  | 98.9 |  | 93.2 r |
| 2010 | ANNUAL | 106.4 | $r$ | 106.7 |  | 100.3 | 101.1 |  | 99.5 |  | 95.0 r |
| 2010 | IV | 108.9 | $r$ | 108.9 |  | 100.0 | 102.4 |  | 100.0 |  | 94.1 r |
|  | III | 107.1 | $r$ | 108.0 |  | 100.8 | 101.3 |  | 99.7 |  | 94.5 r |
|  | II | 105.7 | $r$ | 106.4 |  | 100.7 | 100.3 |  | 99.0 |  | 94.8 r |
|  | I | 104.0 | r | 103.5 |  | 99.5 | 100.5 |  | 99.2 |  | 96.7 r |

Appendix table 6.
Nonfinancial corporate sector: Revised productivity, hourly compensation, unit labor costs, unit profits, and prices, seasonally adjusted

| Year <br> and <br> quarter | Output per allemployee hour | Output | Employee hours | Hourly compensation (1) | Real <br> hourly <br> compen- <br> sation <br> (2) | Unit labor costs | Unit nonlabor costs (6) | Total <br> unit <br> cost <br> (7) | Unit <br> pro- <br> fits <br> (8) |  | Implicit price deflator <br> (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent change from previous quarter at annual rate(5) |  |  |  |  |  |  |  |  |  |  |
| 2012 ANNUAL | 1.6 r | 4.0 r | 2.4 | 2.9 r | 0.7 | 1.2 r | -0.4 r | 0.7 r | 6.4 | $r$ | 1.4 |
| 2012 IV | 6.0 r | 7.9 r | 1.7 | 7.9 r | 5.2 r | 1.8 r | -3.8 r | -0.1 r | 4.4 | $r$ | 0.5 r |
| III | -5.0 r | -3.7 r | 1.4 | 0.1 r | -1.7 r | 5.4 r | 4.5 r | 5.1 r | -5.9 | $r$ | 3.4 r |
| II | 0.3 r | 0.9 r | 0.6 | 1.6 r | 0.7 r | 1.3 r | 1.0 r | 1.2 r | 8.8 | $r$ | 2.3 r |
| I | 6.2 r | 9.9 r | 3.5 | 12.2 r | 9.8 r | 5.7 r | -3.2 r | 2.6 r | -2.5 | r | 1.9 r |
| 2011 ANNUAL | -0.2 | 2.5 | 2.7 | 2.1 | -1.0 | 2.4 | 1.9 | 2.2 | 3.1 |  | 2.3 |
| 2011 IV | 3.2 | 5.8 | 2.5 | -4.4 | -6.0 | -7.4 | -2.4 | -5.8 | 9.5 |  | -3.7 |
| III | -3.0 | 0.1 | 3.1 | 1.0 | -1.6 | 4.1 | 3.2 | 3.8 | 12.2 |  | 4.9 |
| II | 2.0 | 6.0 | 3.9 | -2.4 | -6.8 | -4.3 | -0.8 | -3.2 | 56.3 |  | 3.1 |
| I | 1.9 | 3.3 | 1.3 | 9.9 | 5.3 | 7.8 | 4.0 | 6.5 | -34.3 |  | 0.0 |
| 2010 ANNUAL | 5.3 | 5.5 | 0.2 | 1.5 | -0.1 | -3.6 | -3.2 | -3.5 | 29.7 |  | 0.0 |
| 2010 IV | -5.5 | -3.1 | 2.5 | 0.5 | -2.7 | 6.3 | 6.0 | 6.2 | -10.3 |  | 3.7 |
| III | 1.8 | 5.0 | 3.1 | 0.8 | -0.4 | -1.0 | -2.2 | -1.4 | 41.8 |  | 3.7 |
| II | -1.1 | 2.9 | 4.0 | 3.0 | 3.1 | 4.1 | 0.0 | 2.7 | 12.7 |  | 4.0 |
| I | 8.8 | 9.8 | 0.9 | -3.3 | -3.9 | -11.1 | -5.7 | -9.3 | 38.7 |  | -4.4 |

Percent change from corresponding quarter of previous year

| 2012 | ANNUAL | 1.6 | r | 4.0 | r | 2.4 | 2.9 | r | 0.7 |  | 1.2 | r | -0.4 | r | 0.7 | r | 6.4 | r | 1.4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | IV | 1.8 | r | 3.6 | r | 1.8 | 5.4 | $r$ | 3.4 | r | 3.5 | $r$ | -0.4 | $r$ | 2.2 | r | 1.1 | $r$ | 2.0 |  |
|  | III | 1.1 | r | 3.1 | $r$ | 2.0 | 2.2 | r | 0.5 | r | 1.1 | $r$ | 0.0 | r | 0.7 | $r$ | 2.3 | r | 0.9 | r |
|  | II | 1.6 | r | 4.1 | $r$ | 2.4 | 2.4 |  | 0.5 |  | 0.8 | $r$ | -0.4 | $r$ | 0.4 | $r$ | 6.9 | $r$ | 1.3 |  |
|  | I | 2.1 | r | 5.4 | r | 3.2 | 1.4 | r | -1.4 | r | -0.7 | $r$ | -0.8 | $r$ | -0.7 | $r$ | 17.0 | r | 1.5 | r |
| 2011 | ANNUAL | -0.2 |  | 2.5 |  | 2.7 | 2.1 |  | -1.0 |  | 2.4 |  | 1.9 |  | 2.2 |  | 3.1 |  | 2.3 |  |
| 2011 | IV | 1.0 |  | 3.8 |  | 2.7 | 0.9 |  | -2. 4 |  | -0.2 |  | 0.9 |  | 0.2 |  | 6.0 |  | 1.0 |  |
|  | III | -1.2 |  | 1.5 |  | 2.7 | 2.1 |  | -1.5 |  | 3.3 |  | 3.0 |  | 3.2 |  | 0.8 |  | 2.9 |  |
|  | II | 0.0 |  | 2.7 |  | 2.7 | 2.1 |  | -1.2 |  | 2.1 |  | 1.7 |  | 1.9 |  | 6.9 |  | 2.6 |  |
|  | I | -0.8 |  | 2.0 |  | 2.7 | 3.5 |  | 1.3 |  | 4.3 |  | 1.9 |  | 3.5 |  | -1.5 |  | 2.8 |  |
| 2010 | ANNUAL | 5.3 |  | 5.5 |  | 0.2 | 1.5 |  | -0.1 |  | -3.6 |  | -3.2 |  | -3.5 |  | 29.7 |  | 0.0 |  |
| 2010 | IV | 0.9 |  | 3.5 |  | 2.6 | 0.2 |  | -1.0 |  | -0.6 |  | -0.6 |  | -0.6 |  | 18.7 |  | 1.7 |  |
|  | III | 5.2 |  | 7.2 |  | 1.9 | 0.7 |  | -0.5 |  | -4.2 |  | -3.5 |  | -4.0 |  | 40.5 |  | 0.6 |  |
|  | II | 6.7 |  | 6.6 |  | -0.1 | 1.5 |  | -0.3 |  | -4.9 |  | -4.7 |  | -4.8 |  | 36.1 |  | -0.9 |  |
|  | I | 8.7 |  | 4.9 |  | -3.6 | 3.6 |  | 1.2 |  | -4.7 |  | -4.1 |  | -4.5 |  | 25.8 |  | -1.4 |  |
| Indexes 2009=100 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2012 | ANNUAL | 106.8 | r | 112.6 | r | 105.3 | 106.7 | r | 99.7 | r | 99.8 | r | 98.2 | r | 99.3 | r | 142.2 | r | 103.8 | r |
| 2012 | IV | 107.4 | r | 113.7 | r | 105.9 r | 108.3 | r | 100.4 | r | 100.9 | $r$ | 98.1 | r | 99.9 | r | 143.1 | r | 104.5 | r |
|  | III | 105.8 | r | 111.6 | $r$ | 105.4 r | 106.3 | $r$ | 99.2 | r | 100.4 | $r$ | 99.0 | $r$ | 100.0 | $r$ | 141.5 | $r$ | 104.3 | $r$ |
|  | II | 107.2 | r | 112.6 | $r$ | 105.1 | 106.2 | $r$ | 99.6 | r | 99.1 | $r$ | 97.9 | $r$ | 98.7 | $r$ | 143.7 | $r$ | 103.4 | $r$ |
|  | I | 107.1 | r | 112.4 | r | 104.9 | 105.8 | $r$ | 99.4 | r | 98.8 | $r$ | 97.7 | r | 98.4 | $r$ | 140.7 | r | 102.9 | $r$ |
| 2011 | ANNUAL | 105.1 |  | 108.2 |  | 102.9 | 103.7 |  | 98.9 |  | 98.6 |  | 98.6 |  | 98.6 |  | 133.7 |  | 102.3 |  |
| 2011 | IV | 105.5 |  | 109.7 |  | 104.0 | 102.8 |  | 97.1 |  | 97.5 |  | 98.5 |  | 97.8 |  | 141.6 |  | 102.4 |  |
|  | III | 104.6 |  | 108.2 |  | 103.4 | 104.0 |  | 98.7 |  | 99.3 |  | 99.1 |  | 99.3 |  | 138.4 |  | 103.4 |  |
|  | II | 105.4 |  | 108.2 |  | 102.6 | 103.7 |  | 99.1 |  | 98.4 |  | 98.3 |  | 98.3 |  | 134.5 |  | 102.1 |  |
|  | I | 104.9 |  | 106.6 |  | 101.6 | 104.3 |  | 100.8 |  | 99.5 |  | 98.5 |  | 99.1 |  | 120.2 |  | 101.3 |  |
| 2010 | ANNUAL | 105.3 |  | 105.5 |  | 100.2 | 101.5 |  | 99.9 |  | 96.4 |  | 96.8 |  | 96.5 |  | 129.7 |  | 100.0 |  |
| 2010 | IV | 104.4 |  | 105.8 |  | 101.3 | 101.9 |  | 99.5 |  | 97.6 |  | 97.6 |  | 97.6 |  | 133.6 |  | 101.4 |  |
|  | III | 105.9 |  | 106.6 |  | 100.7 | 101.8 |  | 100.2 |  | 96.1 |  | 96.1 |  | 96.1 |  | 137.2 |  | 100.4 |  |
|  | II | 105.4 |  | 105.3 |  | 99.9 | 101.6 |  | 100.3 |  | 96.4 |  | 96.7 |  | 96.5 |  | 125.8 |  | 99.5 |  |
|  | I | 105.7 |  | 104.6 |  | 98.9 | 100.8 |  | 99.5 |  | 95.4 |  | 96.7 |  | 95.8 |  | 122.1 |  | 98.6 |  |

See footnotes following Table 6.

Appendix table 7.
Manufacturing sector: Productivity, hourly compensation, and unit labor costs.


Appendix table 8.
Durable manufacturing sector: Productivity, hourly compensation, and unit labor costs.


Appendix table 9.
Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor costs.

| Year | Output per hour of all persons | Output | Hours <br> of all <br> persons | Compensation per hour (1) | Real <br> compensation per hour (2) | Unit labor costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indexes 2009=100 |  |  |  |  |  |  |
| 2014 | 112.3 r | 114.0 r | 101.5 | 109.8 r | 99.5 r | 97.7 r |
| 2013 | 111.2 r | 112.3 r | 101.0 | 105.9 r | 97.5 r | 95.3 r |
| 2012 | 110.2 r | 111.1 r | 100.8 | 104.6 r | 97.7 r | 94.9 r |
| 2011 | 110.8 r | 110.3 r | 99.6 | 102.4 | 97.6 | 92.4 r |
| 2010 | 106.4 r | 106.7 r | 100.3 | 101.1 | 99.5 | 95.0 r |
| 2009 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2008 | 103.1 r | 112.9 r | 109.6 | 97.1 | 96.7 | 94.2 r |
| 2007 | 101.4 r | 115.3 r | 113.6 | 93.8 | 97.0 | 92.4 r |
| 2006 | 98.3 r | 112.9 r | 114.9 | 90.4 | 96.2 | 92.0 r |
| 2005 | 97.1 r | 111.4 r | 114.8 | 89.4 | 98.2 | 92.1 r |
| 2004 | 91.7 r | 108.2 r | 118.0 | 85.6 | 97.2 | 93.3 r |
| 2003 | 86.8 r | 104.9 r | 120.9 | 82.8 | 96.6 | 95.5 r |
| 2002 | 82.8 r | 104.5 r | 126.2 | 78.2 | 93.3 | 94.4 r |
| 2001 | 78.9 r | 104.9 r | 132.9 | 75.6 | 91.6 | 95.8 r |
| 2000 | 78.1 r | 109.7 r | 140.5 | 72.1 | 89.8 | 92.3 r |
| 1999 | 74.4 r | 107.2 r | 144.1 | 67.4 | 86.8 | 90.6 r |
| 1998 | 72.9 r | 106.1 r | 145.6 | 65.0 | 85.5 | 89.2 r |
| 1997 | 71.5 r | 105.8 r | 147.9 | 61.8 | 82.4 | 86.4 r |
| 1996 | 68.9 r | 101.9 r | 147.9 | 59.3 | 80.7 | 86.0 r |
| 1995 | 67.3 r | 101.5 r | 150.8 | 57.2 | 80.1 | 85.1 r |
| 1994 | 66.3 r | 100.7 r | 151.9 | 55.9 | 80.1 | 84.4 r |
| 1993 | 65.2 r | 98.1 r | 150.5 | 54.8 | 80.2 | 84.1 r |
| 1992 | 64.5 r | 95.9 r | 148.7 | 53.9 | 80.8 | 83.6 r |
| 1991 | 62.8 r | 92.6 r | 147.4 | 51.5 | 79.1 | 82.0 r |
| 1990 | 61.5 r | 92.6 r | 150.4 | 48.8 | 77.8 | 79.4 r |
| 1989 | 59.8 r | 91.1 r | 152.5 | 46.1 | 77.0 | 77.1 r |
| 1988 | 59.8 r | 90.2 r | 150.7 | 44.4 | 77.4 | 74.2 r |
| 1987 | 59.4 r | 88.1 r | 148.3 | 42.3 | 76.5 | 71.3 r |

