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 8:30 a.m. (ET) Thursday, February 1, 2024**

USDL 24-0147

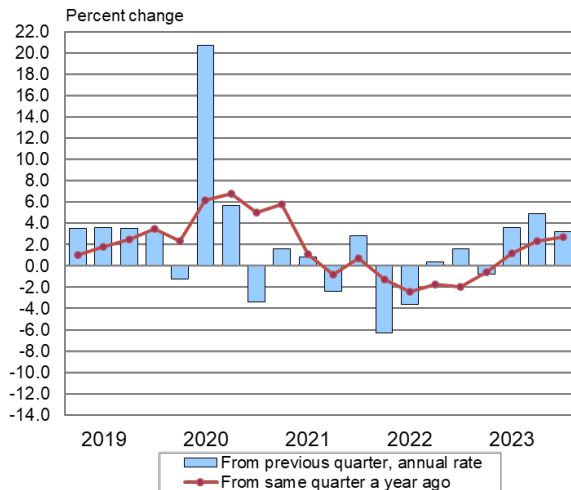
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**PRODUCTIVITY AND COSTS**

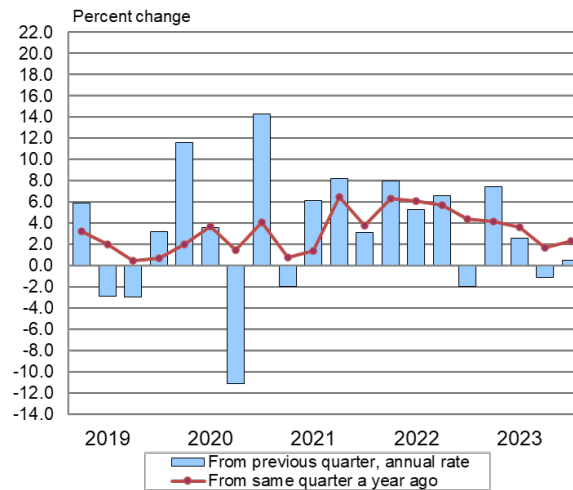
Fourth Quarter and Annual Averages 2023, Preliminary

**Nonfarm business sector labor productivity** increased 3.2 percent in the fourth quarter of 2023, the U.S. Bureau of Labor Statistics reported today, as output increased 3.7 percent and hours worked increased 0.4 percent. (All quarterly percent changes in this release are seasonally adjusted annual rates.) From the same quarter a year ago, nonfarm business sector labor productivity increased 2.7 percent. (See chart 1 and table A1.) Annual average productivity increased 1.2 percent from 2022 to 2023. (See table C1.)

**Chart 1. Labor productivity, nonfarm business, 2019Q1 – 2023Q4**



**Chart 2. Unit labor costs, nonfarm business, 2019Q1 – 2023Q4**



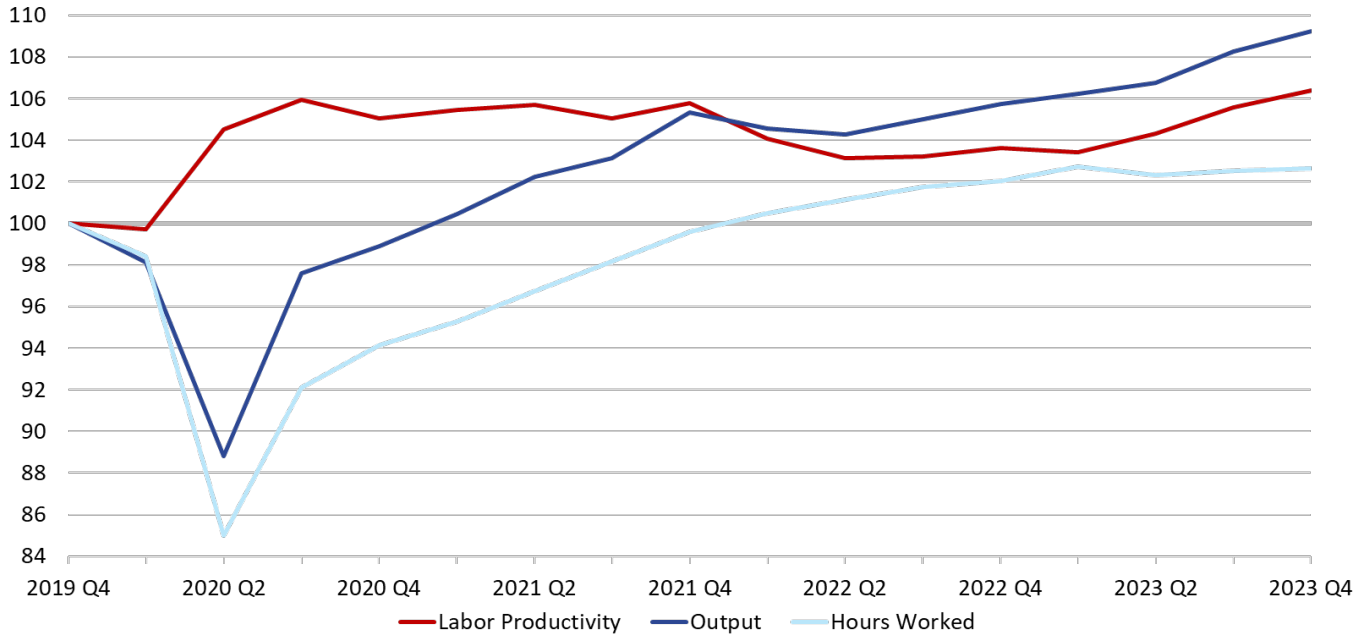
**Unit labor costs** in the nonfarm business sector increased 0.5 percent in the fourth quarter of 2023, reflecting a 3.7-percent increase in hourly compensation and a 3.2-percent increase in productivity. Unit labor costs increased 2.3 percent over the last four quarters. (See chart 2 and tables A1 and 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 productivity tend to reduce them. Real hourly compensation, which takes into account consumer prices, increased 0.9 percent in the fourth quarter of 2023, and increased 1.8 percent over the last four quarters.

Labor productivity, or output per hour, is calculated by dividing an index of real output by an index of hours worked by all workers, including employees, proprietors, and unpaid family workers. During the current business cycle, starting in the fourth quarter of 2019, labor productivity has grown at an annual rate of 1.6 percent, as output grew at a 2.2-percent per year rate, outpacing hours worked, which grew at a 0.7-percent annual rate. (See chart 3.) The 1.6-percent annual rate of productivity growth in the current

business cycle thus far is just 0.1-percentage point above the previous business cycle rate from the fourth quarter of 2007 through fourth-quarter 2019, and is below the long-term rate since the first quarter of 1947 (2.1 percent).

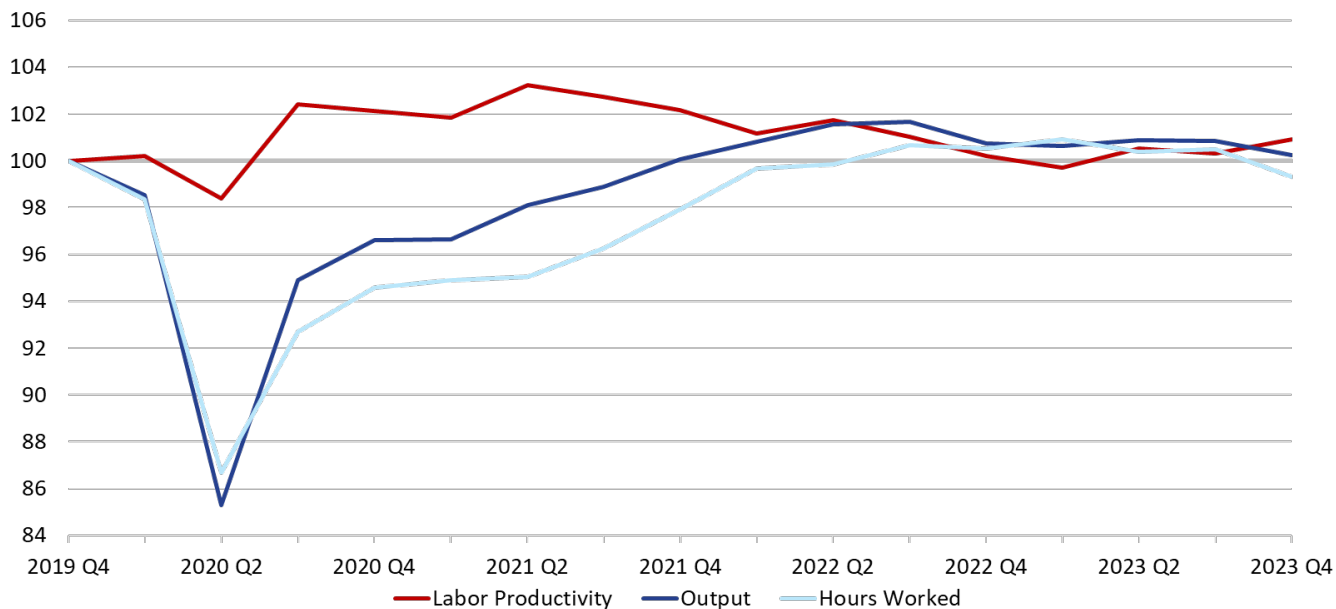
Chart 3. Labor Productivity, Output, and Hours Worked index series, nonfarm business, 2019 Q4 – 2023 Q4



**Manufacturing sector labor productivity** increased 2.3 percent in the fourth quarter of 2023, as output decreased 2.4 percent and hours worked decreased 4.6 percent. The 4.6-percent decrease in hours worked is the largest decline since the historic decline in the second quarter of 2020. In the durable manufacturing sector, productivity increased 1.4 percent, reflecting a 4.4-percent decrease in output and a 5.7-percent decrease in hours worked. Nondurable manufacturing sector productivity increased 2.5 percent, as output decreased 0.3 percent and hours worked decreased 2.7 percent. Total manufacturing sector productivity increased 0.7 percent from the same quarter a year ago. (See tables A1, 3, 4, and 5.)

**Unit labor costs** in the total manufacturing sector increased 4.2 percent in the fourth quarter of 2023, reflecting a 6.6-percent increase in hourly compensation and a 2.3-percent increase in productivity. Manufacturing unit labor costs increased 5.4 percent from the same quarter a year ago. (See tables A1 and 3.)

Chart 4. Labor Productivity, Output, and Hours Worked index series, manufacturing, 2019 Q4 – 2023 Q4



Manufacturing sector labor productivity has increased at an annual rate of 0.2 percent during the current business cycle, which began in the fourth quarter of 2019. This rate reflects a 0.1-percent growth rate for output and a 0.2-percent rate of decline for hours worked. (See chart 4.) This slow productivity growth rate follows the 0.0-percent annual rate of growth during the last business cycle that spanned the fourth quarter of 2007 through fourth-quarter 2019, and is below the long-term rate since the first quarter of 1987 of 2.1 percent.

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 the Technical Notes for a more detailed explanation. (See page 7.)

### Revised measures

Revised and previously published measures for the **third quarter of 2023** are shown in tables A2 and B1 and cover the following major sectors: nonfarm business, business, manufacturing, and nonfinancial corporations.

In the third quarter of 2023, **nonfarm business** productivity was revised down 0.3 percentage point, to an increase of 4.9 percent, due to a 0.3-percentage point downward revision to output. (See table B1.) Unit labor costs decreased 1.1 percent in the third quarter, rather than decreasing 1.2 percent as previously reported.

In the **manufacturing sector**, productivity declined 0.8 percent in the third quarter of 2023 as previously reported. Unit labor costs were revised upwards 0.1 percentage point to an increase of 6.3 percent.

As for the **nonfinancial corporate sector**, productivity was revised up 0.3 percentage point in the third quarter of 2023 to an increase of 2.5 percent. This revision reflects a 0.2-percentage point upward revision to output to an increase of 3.3 percent. Hours worked were unrevised. (See table A2.)

## Annual averages

Table C1 presents **annual average changes** for the most recent 5 years for the nonfarm business sector and the total manufacturing sector. **Nonfarm business sector** productivity increased 1.2 percent in 2023, as output increased 2.6 percent and hours worked increased 1.3 percent.

Unit labor costs in the nonfarm business sector increased 2.9 percent in 2023, reflecting an increase of 4.2 percent in hourly compensation and an increase of 1.2 percent in productivity. Real hourly compensation, which takes into account changes in consumer prices, increased 0.1 percent in 2023.

In the **manufacturing sector**, productivity decreased 0.8 percent in 2023, reflecting a decrease in output of 0.5 percent and an increase in hours of 0.3 percent.

Manufacturing unit labor costs increased 5.5 percent in 2023, as hourly compensation increased 4.7 percent while productivity decreased 0.8 percent. Manufacturing real hourly compensation increased 0.5 percent.

Quarterly and annual data for all sectors from 2021 forward appear in tables 1-6. Full historical measures can be found on the Productivity and Costs home page: [www.bls.gov/productivity/tables/](http://www.bls.gov/productivity/tables/).

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**The revised Productivity and Costs news release for fourth-quarter and annual averages 2023 is scheduled to be released on Thursday, March 7, 2024, at 8:30 a.m. (ET).**

### Upcoming Revisions

Data in this release do not reflect the annual benchmark revision of the BLS Current Employment Statistics program data to be released February 2, 2024. This benchmark will be incorporated in the next release on March 7, 2024.

### Upcoming Method Change

Beginning with the Productivity and Costs news release scheduled for March 7, 2024, estimates of hours worked by self-employed workers and unpaid family workers will reflect a method change to reduce volatility of the estimates. Self-employed and unpaid family workers accounted for 7.4 percent of hours worked in the nonfarm business sector in 2022. The method change will remove statistically insignificant variability during seasonal adjustment of the Current Population Survey (CPS) source data. In addition, volatility associated with respondent turnover will be reduced by adjusting respondent weights. These two adjustments by the BLS productivity program will dampen noise in the series without losing important information about cyclical changes in hours worked by self-employed and unpaid family workers. A more detailed discussion of the upcoming changes is available in the Monthly Labor Review at [www.bls.gov/opub/mlr/2023/article/an-improved-estimate-of-self-employment-hours.htm](http://www.bls.gov/opub/mlr/2023/article/an-improved-estimate-of-self-employment-hours.htm).

**Table A1. Labor productivity growth and related measures - preliminary fourth-quarter 2023**  
(percent change from previous quarter at annual rate and from same quarter a year ago)

| Sector                   | Percent change from:    | Labor productivity | Output      | Hours worked | Hourly compensation | Real hourly compensation | Unit labor costs |
|--------------------------|-------------------------|--------------------|-------------|--------------|---------------------|--------------------------|------------------|
| Nonfarm business         | <b>Previous quarter</b> | <b>3.2</b>         | <b>3.7</b>  | <b>0.4</b>   | <b>3.7</b>          | <b>0.9</b>               | <b>0.5</b>       |
|                          | A year ago              | 2.7                | 3.3         | 0.6          | 5.0                 | 1.8                      | 2.3              |
| Business                 | <b>Previous quarter</b> | <b>3.3</b>         | <b>3.5</b>  | <b>0.2</b>   | <b>4.0</b>          | <b>1.2</b>               | <b>0.6</b>       |
|                          | A year ago              | 2.7                | 3.3         | 0.6          | 5.0                 | 1.8                      | 2.2              |
| Manufacturing            | <b>Previous quarter</b> | <b>2.3</b>         | <b>-2.4</b> | <b>-4.6</b>  | <b>6.6</b>          | <b>3.8</b>               | <b>4.2</b>       |
|                          | A year ago              | 0.7                | -0.5        | -1.2         | 6.2                 | 2.9                      | 5.4              |
| Durable manufacturing    | <b>Previous quarter</b> | <b>1.4</b>         | <b>-4.4</b> | <b>-5.7</b>  | <b>9.0</b>          | <b>6.0</b>               | <b>7.4</b>       |
|                          | A year ago              | 0.0                | -0.3        | -0.3         | 6.4                 | 3.1                      | 6.4              |
| Nondurable manufacturing | <b>Previous quarter</b> | <b>2.5</b>         | <b>-0.3</b> | <b>-2.7</b>  | <b>2.5</b>          | <b>-0.2</b>              | <b>0.0</b>       |
|                          | A year ago              | 2.0                | -0.7        | -2.7         | 5.5                 | 2.2                      | 3.4              |

**Table A2. Labor productivity growth and related measures - revised and previously published third-quarter 2023**  
(percent change from previous quarter at annual rate)

| Sector                 |                      | Labor productivity | Output     | Hours worked | Hourly compensation | Real hourly compensation | Unit labor costs |
|------------------------|----------------------|--------------------|------------|--------------|---------------------|--------------------------|------------------|
| Nonfinancial corporate | <b>Revised</b>       | <b>2.5</b>         | <b>3.3</b> | <b>0.8</b>   | <b>3.7</b>          | <b>0.1</b>               | <b>1.2</b>       |
|                        | Previously published | 2.2                | 3.1        | 0.8          | 3.9                 | 0.3                      | 1.7              |

**Table B1. Labor productivity growth and related measures - revised and previously published third-quarter 2023**  
(percent change from previous quarter at annual rate)

| Sector                   |                      | Labor productivity | Output      | Hours worked | Hourly compensation | Real hourly compensation | Unit labor costs |
|--------------------------|----------------------|--------------------|-------------|--------------|---------------------|--------------------------|------------------|
| Nonfarm business         | <b>Revised</b>       | <b>4.9</b>         | <b>5.8</b>  | <b>0.9</b>   | <b>3.8</b>          | <b>0.2</b>               | <b>-1.1</b>      |
|                          | Previously published | 5.2                | 6.1         | 0.9          | 3.9                 | 0.3                      | -1.2             |
| Business                 | <b>Revised</b>       | <b>4.8</b>         | <b>5.6</b>  | <b>0.7</b>   | <b>3.9</b>          | <b>0.3</b>               | <b>-0.9</b>      |
|                          | Previously published | 5.2                | 6.0         | 0.8          | 4.0                 | 0.4                      | -1.2             |
| Manufacturing            | <b>Revised</b>       | <b>-0.8</b>        | <b>-0.3</b> | <b>0.5</b>   | <b>5.5</b>          | <b>1.8</b>               | <b>6.3</b>       |
|                          | Previously published | -0.8               | -0.3        | 0.5          | 5.4                 | 1.8                      | 6.2              |
| Durable manufacturing    | <b>Revised</b>       | <b>-2.0</b>        | <b>1.4</b>  | <b>3.4</b>   | <b>3.5</b>          | <b>-0.1</b>              | <b>5.6</b>       |
|                          | Previously published | -1.8               | 1.6         | 3.4          | 3.4                 | -0.2                     | 5.3              |
| Nondurable manufacturing | <b>Revised</b>       | <b>2.6</b>         | <b>-1.9</b> | <b>-4.4</b>  | <b>8.7</b>          | <b>5.0</b>               | <b>6.0</b>       |
|                          | Previously published | 2.3                | -2.1        | -4.2         | 8.8                 | 5.0                      | 6.4              |

| Sector           | Year | Labor productivity | Output | Hours worked | Hourly compensation | Real hourly compensation | Unit labor costs |
|------------------|------|--------------------|--------|--------------|---------------------|--------------------------|------------------|
| Nonfarm business | 2023 | 1.2                | 2.6    | 1.3          | 4.2                 | 0.1                      | 2.9              |
|                  | 2022 | -1.9               | 2.1    | 4.0          | 3.7                 | -4.1                     | 5.6              |
|                  | 2021 | 1.7                | 7.2    | 5.5          | 4.9                 | 0.0                      | 3.1              |
|                  | 2020 | 5.2                | -2.8   | -7.6         | 8.2                 | 6.7                      | 2.9              |
|                  | 2019 | 2.3                | 3.0    | 0.7          | 3.9                 | 2.1                      | 1.6              |
| Manufacturing    | 2023 | -0.8               | -0.5   | 0.3          | 4.7                 | 0.5                      | 5.5              |
|                  | 2022 | -1.3               | 2.8    | 4.2          | 3.5                 | -4.3                     | 4.8              |
|                  | 2021 | 1.7                | 4.9    | 3.2          | 2.3                 | -2.4                     | 0.6              |
|                  | 2020 | 0.6                | -6.9   | -7.4         | 6.8                 | 5.4                      | 6.2              |
|                  | 2019 | -2.2               | -2.0   | 0.2          | 2.5                 | 0.7                      | 4.8              |

## TECHNICAL NOTES

### Labor Hours

Hours worked 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 and hours paid to wage and salary workers in nonfarm establishments, counting a person who is employed by two or more establishments at each place of employment. As of the February 3, 2023 Employment Situation release, the CES program has updated the national nonfarm payroll series to the 2022 North American Industry Classification System (NAICS). The BLS Major Sector Productivity program will be remaining on a NAICS 2017 basis for the time being by converting NAICS 2022 data from CES back to a NAICS 2017 basis using ratios published on the CES website and based on the Quarterly Census of Employment and Wages (QCEW). Hours of paid time off are removed from hours paid using data from the National Compensation Survey (NCS) for 1996 forward and data from the BLS Hours at Work survey, conducted for this purpose, prior to 1990. Between 1990 and 1995, hours of paid time off are removed using a combination of NCS and Hours at Work survey data. Off-the-clock hours are added, yielding hours worked, using data from the Current Population Survey (CPS).

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 appropriate 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.

Detailed hours data are presented in the table “Hours Worked in Total U.S. Economy and Subsectors” on the BLS website ([www.bls.gov/productivity/tables/total-economy-hours-employment.xlsx](http://www.bls.gov/productivity/tables/total-economy-hours-employment.xlsx)).

### 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 households (including owner-occupied housing). Corresponding exclusions also are made in labor hours worked. Business output accounted for about 77 percent of the value of GDP in 2023. Nonfarm business, which excludes farming, accounted for about 76 percent of GDP in 2023.

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 Index program and other sources. The industry shipments are aggregated using annual weights, and intrasectoral 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; 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 52 percent of the value of GDP in 2022.

## **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 households are subtracted from compensation of employees in domestic industries 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 2017=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](http://www.bls.gov/data/home.htm), or by contacting the BLS Division of Major Sector Productivity (Telephone 202-691-5606 or email [productivity@bls.gov](mailto:productivity@bls.gov)).

For a more detailed explanation of methodology see the Handbook of Methods at [www.bls.gov/pub/hom/msp/home.htm](http://www.bls.gov/pub/hom/msp/home.htm).

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

| Year and quarter   | Labor productivity | Output  | Hours worked | Hourly compensation (1) | Real hourly compensation (2) | Unit labor costs | Unit nonlabor payments (3) | Value-added output price deflator (4) |
|--|--------------------|---------|--------------|-------------------------|------------------------------|------------------|----------------------------|---------------------------------------|
| -----  |                    |         |              |                         |                              |                  |                            |                                       |
| Percent change from previous quarter at annual rate (5)    |                    |         |              |                         |                              |                  |                            |                                       |
| 2023 ANNUAL  | 1.3                | 2.6     | 1.3          | 4.2                     | 0.1                          | 2.9              | 3.6                        | 3.2                                   |
| 2023 IV  | 3.3                | 3.5     | 0.2          | 4.0                     | 1.2                          | 0.6              | 0.9                        | 0.7                                   |
| III  | 4.8 r              | 5.6 r   | 0.7 r        | 3.9 r                   | 0.3 r                        | -0.9 r           | 7.8 r                      | 2.8 r                                 |
| II   | 3.4                | 2.0     | -1.4         | 5.8                     | 3.1                          | 2.4              | -0.6                       | 1.1                                   |
| I  | -0.6               | 2.1     | 2.7          | 6.5                     | 2.7                          | 7.1              | -1.3                       | 3.3                                   |
| 2022 ANNUAL  | -1.8               | 1.9     | 3.8          | 3.8                     | -4.0                         | 5.7              | 10.5                       | 7.8                                   |
| 2022 IV  | 2.0                | 2.9     | 0.9          | -0.1                    | -4.1                         | -2.0             | 10.9                       | 3.5                                   |
| III  | 0.2                | 2.7     | 2.5          | 6.9                     | 1.3                          | 6.7              | 0.7                        | 4.0                                   |
| II   | -3.4               | -1.3    | 2.1          | 1.9                     | -7.2                         | 5.4              | 17.2                       | 10.5                                  |
| I  | -6.7               | -3.0    | 4.0          | 0.9                     | -7.7                         | 8.2              | 11.4                       | 9.6                                   |
| 2021 ANNUAL  | 1.8                | 7.2     | 5.3          | 4.9                     | 0.1                          | 3.1              | 7.9                        | 5.1                                   |
| 2021 IV  | 2.8                | 8.8     | 5.8          | 6.1                     | -2.4                         | 3.2              | 14.5                       | 8.0                                   |
| III  | -2.0               | 3.3     | 5.4          | 6.1                     | -0.5                         | 8.3              | 4.3                        | 6.6                                   |
| II   | 1.1                | 7.2     | 6.0          | 7.3                     | -0.6                         | 6.2              | 8.7                        | 7.3                                   |
| I  | 1.9                | 6.7     | 4.6          | -0.3                    | -4.5                         | -2.2             | 19.9                       | 6.6                                   |
| -----  |                    |         |              |                         |                              |                  |                            |                                       |
| Percent change from corresponding quarter of previous year |                    |         |              |                         |                              |                  |                            |                                       |
| 2023 ANNUAL  | 1.3                | 2.6     | 1.3          | 4.2                     | 0.1                          | 2.9              | 3.6                        | 3.2                                   |
| 2023 IV  | 2.7                | 3.3     | 0.6          | 5.0                     | 1.8                          | 2.2              | 1.6                        | 2.0                                   |
| III  | 2.4 r              | 3.1 r   | 0.7          | 4.0                     | 0.4 r                        | 1.6 r            | 4.1 r                      | 2.7                                   |
| II   | 1.2                | 2.4     | 1.2          | 4.8                     | 0.7                          | 3.5              | 2.3                        | 3.0                                   |
| I  | -0.5               | 1.6     | 2.0          | 3.8                     | -1.9                         | 4.2              | 6.6                        | 5.3                                   |
| 2022 ANNUAL  | -1.8               | 1.9     | 3.8          | 3.8                     | -4.0                         | 5.7              | 10.5                       | 7.8                                   |
| 2022 IV  | -2.0               | 0.3     | 2.4          | 2.4                     | -4.5                         | 4.5              | 9.9                        | 6.9                                   |
| III  | -1.8               | 1.7     | 3.6          | 3.9                     | -4.1                         | 5.9              | 10.8                       | 8.0                                   |
| II   | -2.4               | 1.8     | 4.3          | 3.7                     | -4.5                         | 6.3              | 11.8                       | 8.6                                   |
| I  | -1.3               | 4.0     | 5.3          | 5.1                     | -2.8                         | 6.5              | 9.7                        | 7.8                                   |
| 2021 ANNUAL  | 1.8                | 7.2     | 5.3          | 4.9                     | 0.1                          | 3.1              | 7.9                        | 5.1                                   |
| 2021 IV  | 0.9                | 6.5     | 5.5          | 4.8                     | -2.0                         | 3.8              | 11.7                       | 7.1                                   |
| III  | -0.8               | 5.6     | 6.4          | 5.6                     | 0.2                          | 6.4              | 4.9                        | 5.8                                   |
| II   | 1.4                | 15.2    | 13.6         | 2.7                     | -2.1                         | 1.3              | 11.1                       | 5.3                                   |
| I  | 5.7                | 2.5     | -3.1         | 6.5                     | 4.4                          | 0.8              | 4.2                        | 2.2                                   |
| -----  |                    |         |              |                         |                              |                  |                            |                                       |
| Indexes 2017=100   |                    |         |              |                         |                              |                  |                            |                                       |
| 2023 ANNUAL  | 110.3              | 116.0   | 105.2        | 131.8                   | 105.7                        | 119.5            | 123.9                      | 121.4                                 |
| 2023 IV  | 111.9              | 117.7   | 105.2        | 133.9                   | 106.2                        | 119.7            | 125.2                      | 122.1                                 |
| III  | 111.0 r            | 116.7 r | 105.1 r      | 132.6 r                 | 105.9 r                      | 119.5 r          | 124.9 r                    | 121.9 r                               |
| II   | 109.7              | 115.1   | 104.9        | 131.4                   | 105.8                        | 119.8            | 122.6                      | 121.0                                 |
| I  | 108.8              | 114.6   | 105.3        | 129.5                   | 105.0                        | 119.1            | 122.8                      | 120.7                                 |
| 2022 ANNUAL  | 108.8              | 113.1   | 103.9        | 126.4                   | 105.6                        | 116.2            | 119.6                      | 117.6                                 |
| 2022 IV  | 108.9              | 114.0   | 104.6        | 127.5                   | 104.4                        | 117.0            | 123.2                      | 119.7                                 |
| III  | 108.4              | 113.2   | 104.4        | 127.5                   | 105.5                        | 117.6            | 120.1                      | 118.7                                 |
| II   | 108.4              | 112.4   | 103.7        | 125.4                   | 105.1                        | 115.7            | 119.8                      | 117.5                                 |
| I  | 109.3              | 112.8   | 103.2        | 124.8                   | 107.1                        | 114.2            | 115.2                      | 114.6                                 |
| 2021 ANNUAL  | 110.9              | 110.9   | 100.0        | 121.8                   | 109.9                        | 109.8            | 108.2                      | 109.1                                 |
| 2021 IV  | 111.2              | 113.6   | 102.2        | 124.5                   | 109.3                        | 112.0            | 112.1                      | 112.0                                 |
| III  | 110.4              | 111.3   | 100.7        | 122.7                   | 109.9                        | 111.1            | 108.4                      | 109.9                                 |
| II   | 111.0              | 110.4   | 99.4         | 120.9                   | 110.1                        | 108.9            | 107.2                      | 108.2                                 |
| I  | 110.7              | 108.5   | 98.0         | 118.8                   | 110.2                        | 107.3            | 105.0                      | 106.3                                 |
| -----  |                    |         |              |                         |                              |                  |                            |                                       |

See footnotes following Table 6.  
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February 1, 2024  
Source: Bureau of Labor Statistics

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

| Year and quarter   | Labor productivity | Output  | Hours worked | Hourly compensation (1) | Real hourly compensation (2) | Unit labor costs | Unit nonlabor payments (3) | Value-added output price deflator (4) |
|--|--------------------|---------|--------------|-------------------------|------------------------------|------------------|----------------------------|---------------------------------------|
| -----  |                    |         |              |                         |                              |                  |                            |                                       |
| Percent change from previous quarter at annual rate (5)    |                    |         |              |                         |                              |                  |                            |                                       |
| 2023 ANNUAL  | 1.2                | 2.6     | 1.3          | 4.2                     | 0.1                          | 2.9              | 4.0                        | 3.4                                   |
| 2023 IV  | 3.2                | 3.7     | 0.4          | 3.7                     | 0.9                          | 0.5              | 1.3                        | 0.9                                   |
| III  | 4.9 r              | 5.8 r   | 0.9          | 3.8 r                   | 0.2 r                        | -1.1 r           | 8.3 r                      | 3.0 r                                 |
| II   | 3.6                | 2.0     | -1.5         | 6.2                     | 3.4                          | 2.6              | -0.1                       | 1.4                                   |
| I  | -0.8               | 1.8     | 2.6          | 6.5                     | 2.7                          | 7.4              | -0.3                       | 3.9                                   |
| 2022 ANNUAL  | -1.9               | 2.1     | 4.0          | 3.7                     | -4.1                         | 5.6              | 10.1                       | 7.5                                   |
| 2022 IV  | 1.6                | 2.8     | 1.3          | -0.5                    | -4.5                         | -2.0             | 11.0                       | 3.5                                   |
| III  | 0.4                | 2.8     | 2.4          | 7.1                     | 1.4                          | 6.6              | 0.6                        | 3.9                                   |
| II   | -3.6               | -1.1    | 2.6          | 1.5                     | -7.6                         | 5.3              | 16.1                       | 9.9                                   |
| I  | -6.3               | -2.8    | 3.7          | 1.1                     | -7.5                         | 8.0              | 10.3                       | 9.0                                   |
| 2021 ANNUAL  | 1.7                | 7.2     | 5.5          | 4.9                     | 0.0                          | 3.1              | 7.2                        | 4.8                                   |
| 2021 IV  | 2.8                | 8.9     | 5.9          | 6.0                     | -2.6                         | 3.1              | 15.8                       | 8.4                                   |
| III  | -2.4               | 3.4     | 5.9          | 5.6                     | -0.9                         | 8.2              | 4.2                        | 6.4                                   |
| II   | 0.8                | 7.3     | 6.4          | 7.0                     | -0.8                         | 6.1              | 6.5                        | 6.3                                   |
| I  | 1.6                | 6.5     | 4.9          | -0.4                    | -4.6                         | -2.0             | 19.3                       | 6.5                                   |
| -----  |                    |         |              |                         |                              |                  |                            |                                       |
| Percent change from corresponding quarter of previous year |                    |         |              |                         |                              |                  |                            |                                       |
| 2023 ANNUAL  | 1.2                | 2.6     | 1.3          | 4.2                     | 0.1                          | 2.9              | 4.0                        | 3.4                                   |
| 2023 IV  | 2.7                | 3.3     | 0.6          | 5.0                     | 1.8                          | 2.3              | 2.2                        | 2.3                                   |
| III  | 2.3 r              | 3.1 r   | 0.8          | 4.0                     | 0.4                          | 1.7 r            | 4.6 r                      | 2.9 r                                 |
| II   | 1.2                | 2.4     | 1.2          | 4.8                     | 0.7                          | 3.6              | 2.7                        | 3.2                                   |
| I  | -0.6               | 1.6     | 2.2          | 3.6                     | -2.1                         | 4.2              | 6.6                        | 5.3                                   |
| 2022 ANNUAL  | -1.9               | 2.1     | 4.0          | 3.7                     | -4.1                         | 5.6              | 10.1                       | 7.5                                   |
| 2022 IV  | -2.0               | 0.4     | 2.5          | 2.3                     | -4.6                         | 4.4              | 9.4                        | 6.5                                   |
| III  | -1.7               | 1.8     | 3.6          | 3.9                     | -4.1                         | 5.7              | 10.5                       | 7.8                                   |
| II   | -2.4               | 2.0     | 4.5          | 3.5                     | -4.7                         | 6.1              | 11.5                       | 8.4                                   |
| I  | -1.3               | 4.1     | 5.5          | 4.9                     | -3.0                         | 6.3              | 9.1                        | 7.5                                   |
| 2021 ANNUAL  | 1.7                | 7.2     | 5.5          | 4.9                     | 0.0                          | 3.1              | 7.2                        | 4.8                                   |
| 2021 IV  | 0.7                | 6.5     | 5.8          | 4.5                     | -2.2                         | 3.8              | 11.3                       | 6.9                                   |
| III  | -0.8               | 5.7     | 6.5          | 5.6                     | 0.2                          | 6.5              | 3.9                        | 5.4                                   |
| II   | 1.1                | 15.1    | 13.8         | 2.5                     | -2.3                         | 1.4              | 9.8                        | 4.8                                   |
| I  | 5.8                | 2.4     | -3.2         | 6.6                     | 4.5                          | 0.8              | 4.1                        | 2.2                                   |
| -----  |                    |         |              |                         |                              |                  |                            |                                       |
| Indexes 2017=100   |                    |         |              |                         |                              |                  |                            |                                       |
| 2023 ANNUAL  | 110.2              | 116.2   | 105.5        | 131.5                   | 105.5                        | 119.4            | 123.5                      | 121.2                                 |
| 2023 IV  | 111.8              | 117.9   | 105.5        | 133.6                   | 106.0                        | 119.6            | 125.0                      | 121.9                                 |
| III  | 110.9 r            | 116.9 r | 105.4 r      | 132.4 r                 | 105.7 r                      | 119.4 r          | 124.5 r                    | 121.6 r                               |
| II   | 109.6              | 115.3   | 105.2        | 131.2                   | 105.7                        | 119.7            | 122.1                      | 120.8                                 |
| I  | 108.6              | 114.7   | 105.6        | 129.2                   | 104.8                        | 119.0            | 122.1                      | 120.3                                 |
| 2022 ANNUAL  | 108.8              | 113.3   | 104.1        | 126.3                   | 105.4                        | 116.0            | 118.7                      | 117.2                                 |
| 2022 IV  | 108.8              | 114.2   | 104.9        | 127.2                   | 104.1                        | 116.9            | 122.2                      | 119.2                                 |
| III  | 108.4              | 113.4   | 104.6        | 127.4                   | 105.3                        | 117.5            | 119.1                      | 118.2                                 |
| II   | 108.3              | 112.6   | 104.0        | 125.2                   | 105.0                        | 115.6            | 118.9                      | 117.0                                 |
| I  | 109.3              | 112.9   | 103.3        | 124.8                   | 107.0                        | 114.1            | 114.5                      | 114.3                                 |
| 2021 ANNUAL  | 110.9              | 111.0   | 100.1        | 121.8                   | 109.9                        | 109.9            | 107.8                      | 109.0                                 |
| 2021 IV  | 111.1              | 113.7   | 102.4        | 124.4                   | 109.1                        | 112.0            | 111.8                      | 111.9                                 |
| III  | 110.3              | 111.4   | 100.9        | 122.6                   | 109.9                        | 111.1            | 107.7                      | 109.6                                 |
| II   | 111.0              | 110.4   | 99.5         | 120.9                   | 110.1                        | 109.0            | 106.6                      | 107.9                                 |
| I  | 110.8              | 108.5   | 98.0         | 118.9                   | 110.4                        | 107.3            | 105.0                      | 106.3                                 |
| -----  |                    |         |              |                         |                              |                  |                            |                                       |

See footnotes following Table 6.  
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February 1, 2024  
Source: Bureau of Labor Statistics

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

| Year and quarter   | Labor productivity | Output  | Hours worked | Hourly compensation (1) | Real hourly compensation (2) | Unit labor costs |
|--|--------------------|---------|--------------|-------------------------|------------------------------|------------------|
| -----  |                    |         |              |                         |                              |                  |
| Percent change from previous quarter at annual rate (5)    |                    |         |              |                         |                              |                  |
| 2023 ANNUAL  | -0.8               | -0.5    | 0.3          | 4.7                     | 0.5                          | 5.5              |
| 2023 IV  | 2.3                | -2.4    | -4.6         | 6.6                     | 3.8                          | 4.2              |
| III  | -0.8               | -0.3    | 0.5          | 5.5 r                   | 1.8                          | 6.3 r            |
| II   | 3.3                | 1.1     | -2.1         | 8.1                     | 5.2                          | 4.7              |
| I  | -1.9               | -0.4    | 1.5          | 4.5                     | 0.8                          | 6.6              |
| 2022 ANNUAL  | -1.3               | 2.8     | 4.2          | 3.5                     | -4.3                         | 4.8              |
| 2022 IV  | -3.2               | -3.6    | -0.5         | -0.1                    | -4.1                         | 3.2              |
| III  | -2.8               | 0.4     | 3.3          | 7.7                     | 2.0                          | 10.8             |
| II   | 2.2                | 3.0     | 0.7          | 3.2                     | -6.0                         | 1.0              |
| I  | -3.9               | 3.1     | 7.3          | 0.7                     | -7.9                         | 4.7              |
| 2021 ANNUAL  | 1.7                | 4.9     | 3.2          | 2.3                     | -2.4                         | 0.6              |
| 2021 IV  | -2.2               | 4.8     | 7.2          | 8.0                     | -0.7                         | 10.4             |
| III  | -1.9               | 3.3     | 5.3          | -1.7                    | -7.8                         | 0.2              |
| II   | 5.5                | 6.1     | 0.6          | 6.1                     | -1.7                         | 0.6              |
| I  | -1.1               | 0.2     | 1.3          | -1.3                    | -5.4                         | -0.2             |
| -----  |                    |         |              |                         |                              |                  |
| Percent change from corresponding quarter of previous year |                    |         |              |                         |                              |                  |
| 2023 ANNUAL  | -0.8               | -0.5    | 0.3          | 4.7                     | 0.5                          | 5.5              |
| 2023 IV  | 0.7                | -0.5    | -1.2         | 6.2                     | 2.9                          | 5.4              |
| III  | -0.7               | -0.8    | -0.1         | 4.5 r                   | 0.9                          | 5.2              |
| II   | -1.2               | -0.7    | 0.5          | 5.0                     | 0.9                          | 6.3              |
| I  | -1.4               | -0.2    | 1.3          | 3.8                     | -1.9                         | 5.3              |
| 2022 ANNUAL  | -1.3               | 2.8     | 4.2          | 3.5                     | -4.3                         | 4.8              |
| 2022 IV  | -1.9               | 0.7     | 2.7          | 2.8                     | -4.1                         | 4.9              |
| III  | -1.7               | 2.8     | 4.6          | 4.8                     | -3.2                         | 6.6              |
| II   | -1.5               | 3.6     | 5.1          | 2.5                     | -5.7                         | 4.0              |
| I  | -0.7               | 4.3     | 5.0          | 3.2                     | -4.6                         | 3.9              |
| 2021 ANNUAL  | 1.7                | 4.9     | 3.2          | 2.3                     | -2.4                         | 0.6              |
| 2021 IV  | 0.0                | 3.6     | 3.5          | 2.7                     | -4.0                         | 2.6              |
| III  | 0.3                | 4.2     | 3.8          | 2.6                     | -2.7                         | 2.2              |
| II   | 4.9                | 15.0    | 9.6          | -0.6                    | -5.2                         | -5.2             |
| I  | 1.6                | -1.9    | -3.5         | 4.3                     | 2.3                          | 2.6              |
| -----  |                    |         |              |                         |                              |                  |
| Indexes 2017=100   |                    |         |              |                         |                              |                  |
| 2023 ANNUAL  | 98.0               | 99.8    | 101.8        | 124.0                   | 99.4                         | 126.5            |
| 2023 IV  | 98.5               | 99.3    | 100.8        | 126.9                   | 100.6                        | 128.8            |
| III  | 98.0 r             | 99.9 r  | 102.0 r      | 124.9 r                 | 99.7 r                       | 127.5 r          |
| II   | 98.1 r             | 100.0 r | 101.9        | 123.2                   | 99.3                         | 125.6 r          |
| I  | 97.4               | 99.7    | 102.4        | 120.9                   | 98.0                         | 124.1            |
| 2022 ANNUAL  | 98.8               | 100.3   | 101.5        | 118.5                   | 98.9                         | 119.9            |
| 2022 IV  | 97.8               | 99.8    | 102.1        | 119.5                   | 97.8                         | 122.2            |
| III  | 98.6               | 100.8   | 102.2        | 119.6                   | 98.9                         | 121.2            |
| II   | 99.3               | 100.7   | 101.4        | 117.4                   | 98.4                         | 118.1            |
| I  | 98.8               | 99.9    | 101.2        | 116.4                   | 99.9                         | 117.9            |
| 2021 ANNUAL  | 100.2              | 97.5    | 97.4         | 114.5                   | 103.3                        | 114.3            |
| 2021 IV  | 99.8               | 99.2    | 99.4         | 116.2                   | 102.0                        | 116.5            |
| III  | 100.3              | 98.0    | 97.7         | 114.0                   | 102.2                        | 113.7            |
| II   | 100.8              | 97.2    | 96.5         | 114.5                   | 104.3                        | 113.6            |
| I  | 99.4               | 95.8    | 96.3         | 112.8                   | 104.7                        | 113.5            |
| -----  |                    |         |              |                         |                              |                  |

See footnotes following Table 6.  
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February 1, 2024  
Source: Bureau of Labor Statistics

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

| Year and quarter   | Labor productivity | Output | Hours worked | Hourly compensation (1) | Real hourly compensation (2) | Unit labor costs |
|--|--------------------|--------|--------------|-------------------------|------------------------------|------------------|
| -----  |                    |        |              |                         |                              |                  |
| Percent change from previous quarter at annual rate (5)    |                    |        |              |                         |                              |                  |
| 2023 ANNUAL  | -1.2               | 0.2    | 1.4          | 4.4                     | 0.3                          | 5.6              |
| 2023 IV  | 1.4                | -4.4   | -5.7         | 9.0                     | 6.0                          | 7.4              |
| III  | -2.0 r             | 1.4 r  | 3.4          | 3.5 r                   | -0.1 r                       | 5.6 r            |
| II   | 5.2                | 3.9 r  | -1.2         | 7.8                     | 4.9                          | 2.5 r            |
| I  | -4.2               | -1.8   | 2.5          | 5.6                     | 1.7                          | 10.2             |
| 2022 ANNUAL  | -1.0               | 3.6    | 4.7          | 2.4                     | -5.2                         | 3.5              |
| 2022 IV  | -2.2               | -2.7   | -0.5         | -1.5                    | -5.5                         | 0.7              |
| III  | -3.7               | 2.0    | 5.9          | 7.5                     | 1.9                          | 11.7             |
| II   | 3.7                | 5.4    | 1.6          | 3.4                     | -5.8                         | -0.3             |
| I  | -3.0               | 5.6    | 8.9          | -1.8                    | -10.2                        | 1.2              |
| 2021 ANNUAL  | 0.7                | 3.8    | 3.1          | 3.2                     | -1.6                         | 2.4              |
| 2021 IV  | 0.2                | 5.3    | 5.1          | 9.5                     | 0.7                          | 9.3              |
| III  | -3.0               | 2.7    | 5.9          | -7.4                    | -13.2                        | -4.6             |
| II   | -2.6               | -2.9   | -0.3         | 9.0                     | 0.9                          | 11.9             |
| I  | -4.4               | -0.6   | 3.9          | 0.7                     | -3.5                         | 5.3              |
| -----  |                    |        |              |                         |                              |                  |
| Percent change from corresponding quarter of previous year |                    |        |              |                         |                              |                  |
| 2023 ANNUAL  | -1.2               | 0.2    | 1.4          | 4.4                     | 0.3                          | 5.6              |
| 2023 IV  | 0.0                | -0.3   | -0.3         | 6.4                     | 3.1                          | 6.4              |
| III  | -0.9 r             | 0.2    | 1.0          | 3.8                     | 0.2                          | 4.7 r            |
| II   | -1.3               | 0.3 r  | 1.7          | 4.8                     | 0.7                          | 6.2 r            |
| I  | -1.6               | 0.7    | 2.4          | 3.7                     | -2.0                         | 5.4              |
| 2022 ANNUAL  | -1.0               | 3.6    | 4.7          | 2.4                     | -5.2                         | 3.5              |
| 2022 IV  | -1.3               | 2.5    | 3.9          | 1.8                     | -5.0                         | 3.2              |
| III  | -0.8               | 4.5    | 5.3          | 4.6                     | -3.5                         | 5.3              |
| II   | -0.6               | 4.7    | 5.3          | 0.7                     | -7.3                         | 1.3              |
| I  | -2.1               | 2.6    | 4.8          | 2.0                     | -5.7                         | 4.2              |
| 2021 ANNUAL  | 0.7                | 3.8    | 3.1          | 3.2                     | -1.6                         | 2.4              |
| 2021 IV  | -2.5               | 1.1    | 3.6          | 2.7                     | -3.9                         | 5.3              |
| III  | -2.7               | 0.9    | 3.8          | 3.4                     | -1.9                         | 6.2              |
| II   | 6.6                | 18.0   | 10.7         | 0.7                     | -4.1                         | -5.6             |
| I  | 2.3                | -2.3   | -4.5         | 5.7                     | 3.6                          | 3.3              |
| -----  |                    |        |              |                         |                              |                  |
| Indexes 2017=100   |                    |        |              |                         |                              |                  |
| 2023 ANNUAL  | 96.0               | 98.2   | 102.2        | 123.4                   | 98.9                         | 128.5            |
| 2023 IV  | 96.4               | 97.7   | 101.4        | 126.5                   | 100.3                        | 131.3            |
| III  | 96.0 r             | 98.8 r | 102.9 r      | 123.8 r                 | 98.9 r                       | 128.9 r          |
| II   | 96.5 r             | 98.5 r | 102.1        | 122.8                   | 98.9                         | 127.2 r          |
| I  | 95.3               | 97.6   | 102.4        | 120.5                   | 97.7                         | 126.4            |
| 2022 ANNUAL  | 97.2               | 97.9   | 100.8        | 118.2                   | 98.7                         | 121.6            |
| 2022 IV  | 96.3               | 98.0   | 101.8        | 118.9                   | 97.3                         | 123.4            |
| III  | 96.9               | 98.7   | 101.9        | 119.3                   | 98.7                         | 123.2            |
| II   | 97.8               | 98.2   | 100.4        | 117.2                   | 98.2                         | 119.8            |
| I  | 96.9               | 96.9   | 100.0        | 116.2                   | 99.7                         | 119.9            |
| 2021 ANNUAL  | 98.2               | 94.5   | 96.3         | 115.3                   | 104.1                        | 117.5            |
| 2021 IV  | 97.6               | 95.6   | 97.9         | 116.7                   | 102.4                        | 119.6            |
| III  | 97.6               | 94.4   | 96.7         | 114.1                   | 102.3                        | 116.9            |
| II   | 98.3               | 93.7   | 95.3         | 116.3                   | 105.9                        | 118.3            |
| I  | 99.0               | 94.4   | 95.4         | 113.9                   | 105.7                        | 115.0            |
| -----  |                    |        |              |                         |                              |                  |

See footnotes following Table 6.  
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February 1, 2024  
Source: Bureau of Labor Statistics

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

| Year and quarter   | Labor productivity | Output  | Hours worked | Hourly compensation (1) | Real hourly compensation (2) | Unit labor costs |
|--|--------------------|---------|--------------|-------------------------|------------------------------|------------------|
| -----  |                    |         |              |                         |                              |                  |
| Percent change from previous quarter at annual rate (5)    |                    |         |              |                         |                              |                  |
| 2023 ANNUAL  | 0.3                | -1.3    | -1.6         | 4.9                     | 0.7                          | 4.6              |
| 2023 IV  | 2.5                | -0.3    | -2.7         | 2.5                     | -0.2                         | 0.0              |
| III  | 2.6 r              | -1.9 r  | -4.4 r       | 8.7 r                   | 5.0                          | 6.0 r            |
| II   | 2.0                | -1.7    | -3.6         | 8.4                     | 5.6                          | 6.3              |
| I  | 1.1                | 0.9     | -0.2         | 2.4                     | -1.3                         | 1.3              |
| 2022 ANNUAL  | -1.6               | 1.7     | 3.4          | 5.3                     | -2.6                         | 7.1              |
| 2022 IV  | -4.2               | -4.6    | -0.4         | 2.6                     | -1.5                         | 7.1              |
| III  | -0.2               | -1.2    | -1.1         | 7.5                     | 1.8                          | 7.6              |
| II   | 1.3                | 0.6     | -0.7         | 2.7                     | -6.5                         | 1.3              |
| I  | -3.9               | 0.6     | 4.7          | 5.2                     | -3.8                         | 9.4              |
| 2021 ANNUAL  | 1.1                | 4.5     | 3.3          | 0.7                     | -3.9                         | -0.4             |
| 2021 IV  | -6.2               | 3.8     | 10.7         | 5.7                     | -2.8                         | 12.7             |
| III  | -1.5               | 2.6     | 4.2          | 10.1                    | 3.3                          | 11.8             |
| II   | 12.1               | 14.4    | 2.1          | 1.1                     | -6.4                         | -9.8             |
| I  | 1.7                | -1.2    | -2.9         | -5.7                    | -9.6                         | -7.2             |
| -----  |                    |         |              |                         |                              |                  |
| Percent change from corresponding quarter of previous year |                    |         |              |                         |                              |                  |
| 2023 ANNUAL  | 0.3                | -1.3    | -1.6         | 4.9                     | 0.7                          | 4.6              |
| 2023 IV  | 2.0                | -0.7    | -2.7         | 5.5                     | 2.2                          | 3.4              |
| III  | 0.3 r              | -1.8 r  | -2.2 r       | 5.5                     | 1.9                          | 5.2 r            |
| II   | -0.4               | -1.7    | -1.3         | 5.2                     | 1.1                          | 5.6              |
| I  | -0.5               | -1.1    | -0.6         | 3.8                     | -1.9                         | 4.3              |
| 2022 ANNUAL  | -1.6               | 1.7     | 3.4          | 5.3                     | -2.6                         | 7.1              |
| 2022 IV  | -1.8               | -1.2    | 0.6          | 4.5                     | -2.5                         | 6.3              |
| III  | -2.3               | 0.9     | 3.3          | 5.2                     | -2.9                         | 7.7              |
| II   | -2.6               | 1.9     | 4.6          | 5.9                     | -2.5                         | 8.7              |
| I  | -0.1               | 5.2     | 5.4          | 5.5                     | -2.5                         | 5.6              |
| 2021 ANNUAL  | 1.1                | 4.5     | 3.3          | 0.7                     | -3.9                         | -0.4             |
| 2021 IV  | 1.3                | 4.7     | 3.4          | 2.6                     | -4.0                         | 1.3              |
| III  | 1.8                | 5.9     | 4.0          | 1.1                     | -4.1                         | -0.7             |
| II   | 2.2                | 10.3    | 7.9          | -3.1                    | -7.7                         | -5.2             |
| I  | -0.7               | -2.5    | -1.8         | 2.1                     | 0.1                          | 2.9              |
| -----  |                    |         |              |                         |                              |                  |
| Indexes 2017=100   |                    |         |              |                         |                              |                  |
| 2023 ANNUAL  | 99.2               | 100.2   | 101.0        | 125.1                   | 100.3                        | 126.1            |
| 2023 IV  | 100.0              | 99.8    | 99.8         | 127.5                   | 101.1                        | 127.5            |
| III  | 99.4 r             | 99.9 r  | 100.5 r      | 126.7 r                 | 101.2 r                      | 127.5 r          |
| II   | 98.8 r             | 100.3 r | 101.6        | 124.1                   | 100.0                        | 125.6 r          |
| I  | 98.3               | 100.8   | 102.5        | 121.6                   | 98.6                         | 123.7            |
| 2022 ANNUAL  | 98.9               | 101.5   | 102.7        | 119.2                   | 99.6                         | 120.6            |
| 2022 IV  | 98.0               | 100.5   | 102.6        | 120.9                   | 99.0                         | 123.3            |
| III  | 99.1               | 101.7   | 102.7        | 120.1                   | 99.3                         | 121.2            |
| II   | 99.1               | 102.0   | 102.9        | 118.0                   | 98.9                         | 119.0            |
| I  | 98.8               | 101.9   | 103.1        | 117.2                   | 100.6                        | 118.6            |
| 2021 ANNUAL  | 100.6              | 99.9    | 99.3         | 113.2                   | 102.2                        | 112.6            |
| 2021 IV  | 99.8               | 101.7   | 101.9        | 115.7                   | 101.5                        | 116.0            |
| III  | 101.4              | 100.8   | 99.4         | 114.1                   | 102.3                        | 112.6            |
| II   | 101.8              | 100.1   | 98.4         | 111.4                   | 101.5                        | 109.5            |
| I  | 98.9               | 96.8    | 97.9         | 111.1                   | 103.1                        | 112.3            |
| -----  |                    |         |              |                         |                              |                  |

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

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

| Year and quarter   | Labor productivity | Output  | Hours worked | Hourly compensation (1) | Real hourly compensation (2) | Unit labor costs | Value-added output price deflator (4) | Unit nonlabor costs (6) | Unit combined input costs (7) | Unit profits (8) |
|--|--------------------|---------|--------------|-------------------------|------------------------------|------------------|---------------------------------------|-------------------------|-------------------------------|------------------|
| -----  |                    |         |              |                         |                              |                  |                                       |                         |                               |                  |
| Percent change from previous quarter at annual rate (5)    |                    |         |              |                         |                              |                  |                                       |                         |                               |                  |
| 2023 III   | 2.5 r              | 3.3 r   | 0.8          | 3.7 r                   | 0.1 r                        | 1.2 r            | 1.9 r                                 | -3.3 r                  | -0.2 r                        | 13.7 r           |
| II   | 2.2                | 1.2     | -0.9         | 7.2                     | 4.4                          | 4.9              | 3.1                                   | -2.4                    | 2.6                           | 6.0              |
| I  | 1.6                | 4.3     | 2.6          | 6.7                     | 2.9                          | 5.0              | 0.0                                   | 2.3                     | 4.1                           | -18.8            |
| 2022 ANNUAL  | -1.0               | 3.1     | 4.2          | 4.1                     | -3.7                         | 5.2              | 7.5                                   | 11.8                    | 7.2                           | 9.1              |
| 2022 IV  | -1.3               | -0.1    | 1.2          | 0.3                     | -3.7                         | 1.7              | 1.1                                   | 2.2                     | 1.8                           | -2.3             |
| III  | 1.4                | 5.0     | 3.6          | 6.7                     | 1.0                          | 5.2              | 3.1                                   | 1.1                     | 3.9                           | -0.6             |
| II   | -1.6               | 0.6     | 2.3          | 2.6                     | -6.5                         | 4.3              | 11.2                                  | 9.1                     | 5.8                           | 42.8             |
| I  | -3.1               | 0.8     | 4.0          | 1.7                     | -7.0                         | 4.9              | 10.4                                  | 22.8                    | 10.2                          | 11.7             |
| 2021 ANNUAL  | 3.6                | 9.0     | 5.1          | 4.7                     | -0.2                         | 1.0              | 4.8                                   | 3.8                     | 1.8                           | 23.3             |
| 2021 IV  | -2.5               | 5.2     | 8.0          | 4.2                     | -4.2                         | 6.9              | 7.7                                   | 18.6                    | 10.3                          | -4.7             |
| III  | 2.6                | 7.0     | 4.2          | 8.7                     | 1.9                          | 5.9              | 3.6                                   | 15.2                    | 8.6                           | -17.9            |
| II   | 0.6                | 6.4     | 5.8          | 6.9                     | -0.9                         | 6.3              | 8.5                                   | -12.0                   | 0.4                           | 59.6             |
| I  | 3.4                | 7.7     | 4.2          | -0.5                    | -4.7                         | -3.8             | 5.7                                   | 5.6                     | -1.0                          | 53.3             |
| -----  |                    |         |              |                         |                              |                  |                                       |                         |                               |                  |
| Percent change from corresponding quarter of previous year |                    |         |              |                         |                              |                  |                                       |                         |                               |                  |
| 2023 III   | 1.2                | 2.2 r   | 0.9          | 4.5                     | 0.9                          | 3.2 r            | 1.5                                   | -0.4 r                  | 2.1 r                         | -1.1 r           |
| II   | 1.0                | 2.6     | 1.6          | 5.2                     | 1.1                          | 4.2              | 1.8                                   | 0.7                     | 3.1                           | -4.4             |
| I  | 0.0                | 2.4     | 2.4          | 4.1                     | -1.6                         | 4.1              | 3.8                                   | 3.6                     | 3.9                           | 3.0              |
| 2022 ANNUAL  | -1.0               | 3.1     | 4.2          | 4.1                     | -3.7                         | 5.2              | 7.5                                   | 11.8                    | 7.2                           | 9.1              |
| 2022 IV  | -1.2               | 1.6     | 2.8          | 2.8                     | -4.1                         | 4.0              | 6.4                                   | 8.5                     | 5.4                           | 11.5             |
| III  | -1.5               | 2.9     | 4.4          | 3.8                     | -4.2                         | 5.3              | 8.1                                   | 12.6                    | 7.5                           | 10.8             |
| II   | -1.2               | 3.4     | 4.6          | 4.3                     | -4.0                         | 5.5              | 8.2                                   | 16.3                    | 8.7                           | 5.7              |
| I  | -0.6               | 4.8     | 5.5          | 5.3                     | -2.6                         | 6.0              | 7.5                                   | 10.2                    | 7.3                           | 8.7              |
| 2021 ANNUAL  | 3.6                | 9.0     | 5.1          | 4.7                     | -0.2                         | 1.0              | 4.8                                   | 3.8                     | 1.8                           | 23.3             |
| 2021 IV  | 1.0                | 6.6     | 5.5          | 4.8                     | -2.0                         | 3.7              | 6.4                                   | 6.1                     | 4.4                           | 17.6             |
| III  | 4.6                | 10.9    | 6.0          | 5.7                     | 0.3                          | 1.1              | 4.0                                   | 14.3                    | 4.7                           | 0.5              |
| II   | 3.7                | 17.1    | 12.9         | 1.7                     | -3.1                         | -1.9             | 5.6                                   | 3.1                     | -0.5                          | 48.8             |
| I  | 5.7                | 2.4     | -3.2         | 6.5                     | 4.4                          | 0.7              | 3.3                                   | -5.6                    | -1.3                          | 37.5             |
| -----  |                    |         |              |                         |                              |                  |                                       |                         |                               |                  |
| Indexes 2017=100   |                    |         |              |                         |                              |                  |                                       |                         |                               |                  |
| 2023 III   | 111.1 r            | 117.8 r | 106.1 r      | 133.4 r                 | 106.6 r                      | 120.2 r          | 121.8 r                               | 110.2 r                 | 116.9 r                       | 154.9 r          |
| II   | 110.4              | 116.9   | 105.9        | 132.2                   | 106.5                        | 119.8            | 121.2                                 | 111.1                   | 117.0                         | 150.0            |
| I  | 109.8              | 116.5   | 106.1        | 129.9                   | 105.4                        | 118.4            | 120.3                                 | 111.8                   | 116.2                         | 147.8            |
| 2022 ANNUAL  | 109.6              | 114.6   | 104.5        | 126.7                   | 105.8                        | 115.5            | 118.8                                 | 110.0                   | 113.7                         | 153.2            |
| 2022 IV  | 109.3              | 115.3   | 105.4        | 127.8                   | 104.6                        | 116.9            | 120.3                                 | 111.2                   | 115.0                         | 155.7            |
| III  | 109.7              | 115.3   | 105.1        | 127.7                   | 105.6                        | 116.4            | 120.0                                 | 110.6                   | 114.5                         | 156.6            |
| II   | 109.3              | 113.9   | 104.2        | 125.7                   | 105.4                        | 115.0            | 119.0                                 | 110.3                   | 113.4                         | 156.9            |
| I  | 109.8              | 113.7   | 103.6        | 124.9                   | 107.1                        | 113.8            | 115.9                                 | 107.9                   | 111.8                         | 143.5            |
| 2021 ANNUAL  | 110.8              | 111.1   | 100.3        | 121.7                   | 109.8                        | 109.8            | 110.5                                 | 98.4                    | 106.1                         | 140.4            |
| 2021 IV  | 110.6              | 113.5   | 102.6        | 124.3                   | 109.1                        | 112.4            | 113.1                                 | 102.5                   | 109.2                         | 139.6            |
| III  | 111.3              | 112.1   | 100.7        | 123.1                   | 110.3                        | 110.5            | 111.0                                 | 98.2                    | 106.5                         | 141.3            |
| II   | 110.6              | 110.2   | 99.6         | 120.6                   | 109.8                        | 109.0            | 110.0                                 | 94.8                    | 104.3                         | 148.4            |
| I  | 110.5              | 108.5   | 98.2         | 118.5                   | 110.0                        | 107.3            | 107.8                                 | 97.9                    | 104.2                         | 132.0            |

See footnotes following Table 6.  
r=revised

February 1, 2024  
Source: Bureau of Labor Statistics

**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.

**SIZE OF REVISIONS:** Productivity and cost measures are revised on a regular schedule as more complete data become available. The first estimate is published within 40 days of the close of the reference quarter, the second estimate approximately 30 days later, and the third estimate approximately 60 days after the second estimate. Based on past revisions, the third estimate of nonfarm business sector quarterly labor productivity growth has differed from the first estimate by -1.1 to +1.3 percentage point about 80 percent of the time. This interval is based on estimates for reference quarters from the first quarter of 2001 to the third quarter of 2023. For more about revisions to labor productivity growth see “Revisions to BLS quarterly labor productivity estimates: How large are they?” at [www.bls.gov/opub/mlr/2022/article/revisions-to-bls-quarterly-labor-productivity-estimates-how-large-are-they.htm](http://www.bls.gov/opub/mlr/2022/article/revisions-to-bls-quarterly-labor-productivity-estimates-how-large-are-they.htm).

### 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 1978-2022 is based on the Consumer Price Index Retroactive series (CPI-URS).
- (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 adjustment.