# N E W S R E L E A S E <br> BUGREAUOF LABOR STATISTICS 

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## Productivity and Costs by Industry <br> Wholesale Trade and Retail Trade Industries - 2023

Labor productivity declined 1.6 percent in wholesale trade and rose 1.6 percent in retail trade in 2023, the U.S. Bureau of Labor Statistics reported today. In wholesale trade, productivity decreased for a second year in a row after growing annually since 2011. Wholesale trade output grew a modest 0.4 percent with hours worked growing at a higher rate of 2.1 percent. Retail trade productivity rebounded in 2023 after having declined in 2022. Retail trade output rose 1.6 percent while hours declined 0.1 percent. Unit labor costs, which reflect the total labor costs required to produce a unit of output, rose 6.4 percent in wholesale trade and 0.5 percent in retail trade.

The ten largest, four-digit NAICS industries by number of workers represent 57.8 percent of all workers in the wholesale and retail trade sector. Among these ten industries, productivity growth was greatest in clothing stores ( +6.3 percent) after falling slightly in the previous year. Both gasoline stations and department stores posted significant productivity declines (-7.5 percent each).

Chart 1. Productivity change in the largest (by number of workers) four-digit NAICS wholesale and retail trade industries, 2023


## Labor Productivity Rose in Over Half of the Three-Digit NAICS Industries in 2023

Productivity increased in 9 of the 15 three-digit NAICS industries in 2023. (See table 1.) The industries with double-digit gains were nonstore retailers (+12.3 percent) and electronics and appliance stores ( +10.2 percent). Furniture and home furnishings stores had a small productivity gain ( +0.3 percent) as declines of over seven percent in both output and hours worked balanced out. Gasoline stations (-7.5 percent) and general merchandise stores ( -5.9 percent) had the largest productivity declines. (See chart 2.)

Chart 2. Productivity change in three-digit NAICS wholesale and retail trade industries, 2023


In wholesale trade, productivity fell 1.6 percent as output growth (+0.4 percent) was slower than growth in hours worked (+2.1 percent).

- Productivity increased in only 7 of the 19 four-digit NAICS wholesale trade industries while output rose in 6 industries and hours worked grew in 14.
- Productivity fell 3.2 percent in durable goods wholesalers and fell 0.6 percent in nondurable goods wholesalers.
- The highest increase in productivity occurred in motor vehicle and parts merchant wholesalers ( +7.1 percent) as output rose at a faster rate ( +8.4 percent) than hours worked ( +1.2 percent) leading to 3 years in a row of growth for all three measures.

In retail trade, productivity increased 1.6 percent as output increased (+1.6 percent) and hours worked declined slightly (-0.1 percent).

- Productivity increased in 14 of the 27 four-digit NAICS retail trade industries while output grew in 11 industries and hours worked rose in 13.
- The largest productivity increase of 14.2 percent occurred in electronic shopping and mail-order houses as output increased 10.2 percent while hours fell 3.5 percent. This industry has shown positive productivity growth for nine consecutive years.
- In other general merchandise stores (the second largest retail employer), productivity dropped ( -6.0 percent) for only the second time since the beginning of the series in 1987. Output in other general merchandise stores shifted down 1.4 percent, and hours climbed 4.9 percent after falling the year before.


## Unit Labor Costs Rise in Most Trade Industries in 2023

When hourly compensation outpaces productivity gains, unit labor costs grow.

- Unit labor costs rose in 10 of 15 three-digit NAICS wholesale and retail trade industries in 2023. (See chart 3.)
- The largest decrease in unit labor costs occurred in nonstore retailers ( -8.6 percent) in which productivity grew (+12.3 percent) over four times the rate of hourly compensation (+2.7 percent).
- Among four-digit NAICS industries, unit labor costs rose in 16 of 19 wholesale trade industries, and in 20 of 27 retail trade industries.
- Hourly compensation rose in 38 of the 46 four-digit NAICS industries.

Chart 3. Unit labor costs, productivity, and hourly compensation in three-digit NAICS wholesale and retail trade industries, 2023


## 2019 to 2023 Trends

Output increased in 26 of the 46 four-digit trade industries from 2019 to 2023. (See table 3.) Note that the annual percent changes for periods of more than 1 year are annualized average rates of change over the entire period, or a compound annual growth rate. The two industries with the highest increases during that period were electronic shopping and mail-order houses ( +15.2 percent per year) and druggists' goods merchant wholesalers (+7.1 percent). Vending machine operators experienced the steepest annual declines in output during this period (-6.4 percent).

Hours worked increased in 23 of the 46 four-digit trade industries from 2019 to 2023. The two industries with the largest decreases in hours worked over the 4 years were jewelry, luggage, and leather goods stores (-7.3 percent per year) and direct selling establishments (-6.0 percent). The industry with the largest increase in hours worked was lawn and garden equipment and supplies stores (+2.5 percent).

## Long-term Labor Productivity Increases in All but One Industry

From 1987 to 2023, labor productivity increased 2.4 percent per year in wholesale trade and 3.1 percent per year in retail trade. (See table 2.)

- Among the 46 four-digit NAICS industries, productivity rose in all but one industry-metal and mineral merchant wholesalers.
- Of the 45 four-digit NAICS industries with increasing productivity growth, output rose in 38. Hours worked increased in 19.
- Median productivity among four-digit NAICS industries grew at an annual rate of 1.9 percent.
- Among subperiods, productivity growth in the wholesale nondurable and retail trade industries was slower from 2007 to 2019 than during the periods preceding and following. The slowest productivity for wholesale durable goods occurred over the 2019-23 period. The productivity growth in retail trade was fastest in the 2019-23 period but was highest for both wholesale goods industries in the 1987-2007 period. (See chart 4).
- Productivity grew in 43 of the 46 four-digit NAICS industries during the 1987-2007 period. The number of industries with productivity growth fell to 34 from 2007 to 2019 and then remained at 34 from 2019 to 2023.


## Long-term Trends in Unit Labor Costs Vary by Sector

From 1987 to 2023, unit labor costs increased 1.5 percent per year in wholesale trade and 0.2 percent per year in retail trade. (See table 2.)

- Among the 46 four-digit NAICS industries, unit labor costs rose in 17 of 19 wholesale trade industries and 14 of 27 retail trade industries from 1987 to 2023.
- Across sub-periods, unit labor costs rose in 29 industries in 1987-2007, 34 industries in 2007-19, and 38 industries in 2019-23.
- In all three periods, unit labor costs remained positive for wholesale nondurable goods. After decreasing unit labor costs from 1987-2007, wholesale durable goods unit labor costs increased for both the 2007-19 and 2019-23 periods. In retail trade, unit labor costs were slightly negative from 1987 to 2007, were unchanged from 2007 to 2019, and rose 2.0 percent per year from 2019 to 2023.

Chart 4. Long-term changes in productivity and unit labor costs for retail trade industry and the wholesale trade durable and nondurable goods industry groups



Unit Labor Costs



## Additional Information

The trade measures in this release incorporate benchmark data from the Census Bureau's Annual Wholesale Trade Report (January 2024), Monthly Wholesale Trade Survey (February 2024), Annual Retail Trade Survey (January 2024), Monthly Retail Trade Survey (February 2024), and Nonemployer Statistics (March 2024) with the National Income and Product Accounts (March 2024) from the Bureau of Economic Analysis. Accordingly, the labor productivity and output series for all industries have been revised for 2022 and earlier years. Additionally, the unit labor cost measures incorporate preliminary data from the BLS Quarterly Census of Employment and Wages (March 2024).

Measures of hours worked for all industries reflect a change in methods and are revised historically. Estimates of hours worked by self-employed workers and unpaid family workers reflect a method change that makes industry-level estimates consistent with the newly composited quarterly major sector estimates that remove variability during seasonal adjustment and reduce volatility in these workers. A more detailed discussion of the changes is available in the Monthly Labor Review at www.bls.gov/opub/mlr/2023/article/an-improved-estimate-of-self-employmenthours.htm.

More information about the North American Industry Classification System (NAICS) can be found at www.census.gov/naics/.

Access the productivity data dashboard at www.bls.gov/productivity/tables/labor-productivity-detailedindustries.xlsx for

- Additional industries and sectors
- Detailed data series: indexes of productivity and related measures; rates of change; and levels of industry employment, hours worked, nominal value of production, and labor compensation
- Additional years and long-term data

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## Technical Note

Labor Productivity: Labor productivity describes the relationship between output and the labor hours involved in its production. These measures show the changes from period to period in the amount of goods and services produced per hour worked. Although the labor productivity measures relate real output in an industry to hours worked of all persons in that industry, they do not measure the specific contribution of labor to growth in output. Rather, they reflect the joint effects of many influences, including: changes in technology; capital investment; utilization of capacity, energy, and materials; the use of purchased services inputs, including contract employment services; the organization of production; the characteristics and effort of the workforce; and managerial skill.

Unit Labor Costs: Unit labor costs represent the cost of labor required to produce one unit of output. The unit labor cost indexes are computed by dividing an index of nominal industry labor compensation by an index of real industry output. Unit labor costs also describe the relationship between compensation per hour worked (hourly compensation) and real output per hour worked (labor productivity). When hourly compensation growth outpaces productivity, unit labor costs increase. Alternatively, when productivity growth exceeds hourly compensation, unit labor costs decrease.

Output: Industry output is measured as an annual-weighted index of the changes in the various products (in real terms) provided for sale outside the industry. Real industry output for data in this release is derived by deflating nominal sales or values of production using price indexes. Industry output measures are constructed primarily using U.S. Census Bureau data from the economic censuses and annual surveys along with U.S. Bureau of Economic Analysis National Income and Product Accounts reported revenues and prices, together with information on price changes from BLS.

Labor Hours: Labor hours are measured as annual hours worked by all workers in an industry. All workers include the sum of BLS Current Employment Statistics (CES) data on the number of jobs held by wage and salary workers in nonfarm establishments and Current Population Survey (CPS) data on the number of self-employed and unpaid family workers. Labor hours for wage and salary workers are estimated using CES data on hours paid of all employees. Paid hours are adjusted to an hours worked concept using ratios of hours worked to hours paid based on data from the National Compensation Survey (NCS) and off-the-clock hours incorporated from CPS data. Hours worked of self-employed and unpaid family workers are directly from the CPS. For some industries, employment and hours data are supplemented or further disaggregated using data from the BLS Quarterly Census of Employment and Wages (QCEW), the Census Bureau, or other sources. Hours worked are estimated separately for different types of workers and then are directly aggregated; no adjustments for labor composition are made.

Labor Compensation: Labor compensation, defined as payroll plus supplemental payments, is a measure of the cost to the employer of securing the services of labor. Payroll includes salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind. Supplemental payments include both legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of federal old age and survivors' insurance, unemployment compensation, and workers’ compensation. Payments for voluntary programs include all programs not specifically required by legislation, such as the employer portion of private health
insurance and pension plans. Industry compensation measures are constructed primarily using data from the BLS QCEW and the economic censuses of the Census Bureau at the U.S. Department of Commerce.

Annual Percent Change: The annual percent change is the change in a series from one year to the next as a percent of the series value in the previous year. Over a period of more than one year, the annual percent change is the compound annual growth rate in an index series, or an annualized average growth rate. Because the change of an index series varies from year to year, the annual percent change for a long time period reflects the constant rate that can be applied to each year in a period, from the start to the end, that would give the same total result. It is calculated as (Ending Value/Starting Value) $)^{\wedge}(1 /$ Number of Years) -1 .

Table 1. Recent labor productivity, unit labor costs, and related data

| Industry | 2017 <br> NAICS code | 2023 <br> Employment (thousands) | Percent change, 2022-2023 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Labor productivity | Unit labor costs | Output | Hours worked | $\begin{aligned} & \text { Labor } \\ & \text { compen- } \\ & \text { sation } \end{aligned}$ | Hourly compensation |
| Wholesale trade.. | 42 | 6,222.4 | -1.6 | 6.4 | 0.4 | 2.1 | 6.8 | 4.6 |
| Merchant wholesalers, durable goods. | 423 | 3,450.3 | -3.2 | 9.2 | -1.2 | 2.0 | 7.8 | 5.7 |
| Motor vehicles and parts... | 4231 | 387.3 | 7.1 | 0.1 | 8.4 | 1.2 | 8.4 | 7.2 |
| Furniture and furnishings... | 4232 | 116.9 | -1.7 | 7.5 | -4.9 | -3.3 | 2.3 | 5.8 |
| Lumber and construction supplies.. | 4233 | 265.6 | -1.6 | 7.1 | -2.0 | -0.4 | 5.0 | 5.4 |
| Commercial equipment... | 4234 | 754.7 | -6.7 | 12.0 | -4.3 | 2.5 | 7.2 | 4.5 |
| Metals and minerals...... | 4235 | 135.5 | 2.6 | 5.1 | -1.3 | -3.8 | 3.7 | 7.8 |
| Appliances and electric goods. | 4236 | 375.3 | -6.9 | 14.8 | -5.6 | 1.4 | 8.4 | 6.8 |
| Hardware and plumbing.......... | 4237 | 315.8 | -4.9 | 14.2 | -3.5 | 1.5 | 10.2 | 8.6 |
| Machinery and supplies. | 4238 | 764.9 | -2.7 | 9.6 | 1.0 | 3.9 | 10.7 | 6.6 |
| Miscellaneous durable goods... | 4239 | 334.3 | -18.0 | 22.0 | -14.1 | 4.7 | 4.8 | 0.0 |
| Merchant wholesalers, nondurable goods... | 424 | 2,253.4 | -0.6 | 4.5 | 1.6 | 2.2 | 6.2 | 3.9 |
| Paper and paper products.. | 4241 | 116.7 | 3.6 | 9.0 | -8.0 | -11.2 | 0.3 | 13.0 |
| Druggists' goods... | 4242 | 262.3 | 6.5 | -1.3 | 8.8 | 2.2 | 7.5 | 5.2 |
| Apparel and piece goods... | 4243 | 159.0 | -15.8 | 16.8 | -11.6 | 5.0 | 3.2 | -1.7 |
| Grocery and related products.. | 4244 | 829.2 | -5.2 | 10.3 | -1.9 | 3.5 | 8.3 | 4.6 |
| Farm product raw materials. | 4245 | 74.2 | 6.3 | -0.1 | 4.9 | -1.3 | 4.8 | 6.2 |
| Chemicals. | 4246 | 154.2 | -2.2 | 6.6 | -0.3 | 2.0 | 6.3 | 4.3 |
| Petroleum.. | 4247 | 106.2 | 4.4 | 3.3 | 10.7 | 6.0 | 14.3 | 7.9 |
| Alcoholic beverages.. | 4248 | 216.7 | -9.0 | 10.0 | -5.8 | 3.4 | 3.5 | 0.1 |
| Miscellaneous nondurable goods... | 4249 | 334.9 | -7.2 | 8.3 | -5.7 | 1.5 | 2.1 | 0.5 |
| Electronic markets and agents and brokers...... | 425 | 518.7 | 1.5 | -0.9 | 3.5 | 1.9 | 2.6 | 0.6 |
| Electronic markets and agents and brokers............. | 4251 | 518.7 | 1.5 | -0.9 | 3.5 | 1.9 | 2.6 | 0.6 |
| Retail trade.. | 44-45 | 16,391.5 | 1.6 | 0.5 | 1.6 | -0.1 | 2.1 | 2.2 |
| Motor vehicle and parts dealers.. | 441 | 2,095.3 | 3.1 | -4.9 | 4.0 | 0.9 | -1.1 | -2.0 |
| Automobile dealers... | 4411 | 1,313.2 | 3.6 | -6.7 | 4.5 | 0.9 | -2.5 | -3.4 |
| Other motor vehicle dealers.. | 4412 | 180.0 | -4.0 | -0.4 | -2.1 | 2.0 | -2.5 | -4.4 |
| Auto parts, accessories, and tire stores....... | 4413 | 602.1 | 3.6 | 1.8 | 4.4 | 0.7 | 6.3 | 5.5 |
| Furniture and home furnishings stores..... | 442 | 448.9 | 0.3 | 3.4 | -7.2 | -7.4 | -4.0 | 3.7 |
| Furniture stores........ | 4421 | 221.1 | 2.3 | 1.4 | -4.4 | -6.5 | -3.1 | 3.7 |
| Home furnishings stores. | 4422 | 227.8 | -2.4 | 6.3 | -10.6 | -8.4 | -5.0 | 3.7 |
| Electronics and appliance stores. | 443 | 428.2 | 10.2 | -5.4 | 5.1 | -4.7 | -0.6 | 4.3 |
| Electronics and appliance stores.. | 4431 | 428.2 | 10.2 | -5.4 | 5.1 | -4.7 | -0.6 | 4.3 |
| Building material and garden supply stores................ | 444 | 1,441.7 | -1.4 | 5.2 | -3.9 | -2.6 | 1.0 | 3.7 |
| Building material and supplies dealers.............. | 4441 | 1,242.6 | -3.1 | 6.6 | -4.9 | -1.9 | 1.3 | 3.3 |
| Lawn and garden equipment and supplies stores..... | 4442 | 199.1 | 9.5 | -3.4 | 2.5 | -6.4 | -1.0 | 5.8 |
| Food and beverage stores... | 445 | 3,259.7 | -0.4 | 7.2 | -1.3 | -0.9 | 5.9 | 6.8 |
| Grocery stores... | 4451 | 2,810.4 | 0.2 | 6.7 | -1.3 | -1.4 | 5.3 | 6.9 |
| Specialty food stores... | 4452 | 248.1 | -8.1 | 15.0 | -3.4 | 5.1 | 11.1 | 5.8 |
| Beer, wine and liquor stores. | 4453 | 201.2 | -1.0 | 8.0 | -0.6 | 0.3 | 7.3 | 6.9 |
| Health and personal care stores.... | 446 | 1,100.5 | 4.7 | 1.9 | 3.9 | -0.8 | 5.9 | 6.8 |
| Health and personal care stores.............................. | 4461 | 1,100.5 | 4.7 | 1.9 | 3.9 | -0.8 | 5.9 | 6.8 |
| Gasoline stations... | 447 | 995.5 | -7.5 | 11.9 | -4.6 | 3.2 | 6.8 | 3.5 |
| Gasoline stations. | 4471 | 995.5 | -7.5 | 11.9 | -4.6 | 3.2 | 6.8 | 3.5 |
| Clothing and clothing accessories stores.. | 448 | 1,173.8 | 2.1 | 3.7 | 0.2 | -1.8 | 3.9 | 5.8 |
| Clothing stores... | 4481 | 859.6 | 6.3 | 2.1 | 4.1 | -2.1 | 6.2 | 8.5 |
| Shoe stores.. | 4482 | 175.2 | -5.1 | 7.4 | -3.5 | 1.7 | 3.6 | 1.9 |
| Jewelry, luggage, and leather goods stores.......... | 4483 | 139.0 | -8.4 | 9.6 | -12.4 | -4.3 | -3.9 | 0.4 |
| Sports, hobby, music instruments, book stores...... | 451 | 611.1 | 1.4 | 5.3 | -1.0 | -2.4 | 4.3 | 6.9 |
| Sporting goods and musical instrument stores......... | 4511 | 540.1 | 1.6 | 7.1 | -1.0 | -2.5 | 6.0 | 8.8 |
| Book stores and news dealers........................... | 4512 | 71.0 | 0.5 | -7.1 | -1.0 | -1.5 | -8.0 | -6.6 |

Table 1. Recent labor productivity, unit labor costs, and related data - Continued

| Industry | 2017 <br> NAICS code | $2023$ <br> Employment (thousands) | Percent change, 2022-2023 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Labor productivity | Unit <br> labor <br> costs | Output | Hours worked | Labor compensation | Hourly compensation |
| General merchandise stores. | 452 | 3,164.5 | -5.9 | 4.4 | -2.0 | 4.1 | 2.4 | -1.7 |
| Department stores.............................................. | 4522 | 955.0 | -7.5 | 6.7 | -5.2 | 2.5 | 1.2 | -1.2 |
| Other general merchandise stores.......................... | 4523 | 2,209.5 | -6.0 | 4.2 | -1.4 | 4.9 | 2.8 | -2.0 |
| Miscellaneous store retailers.. | 453 | 956.4 | 3.0 | -0.6 | 4.0 | 1.0 | 3.4 | 2.4 |
| Florists.. | 4531 | 85.1 | -2.4 | 0.4 | 8.4 | 11.0 | 8.8 | -2.0 |
| Office supplies, stationery and gift stores................ | 4532 | 220.3 | -3.7 | 6.0 | -4.8 | -1.1 | 0.9 | 2.0 |
| Used merchandise stores...................................... | 4533 | 244.3 | 3.3 | 2.3 | 3.7 | 0.3 | 6.0 | 5.7 |
| Other miscellaneous store retailers. | 4539 | 406.7 | 5.6 | -3.2 | 6.2 | 0.6 | 2.9 | 2.3 |
| Nonstore retailers. | 454 | 715.9 | 12.3 | -8.6 | 9.3 | -2.7 | -0.1 | 2.7 |
| Electronic shopping and mail-order houses............. | 4541 | 495.5 | 14.2 | -10.2 | 10.2 | -3.5 | -1.1 | 2.5 |
| Vending machine operators................................... | 4542 | 45.0 | -16.4 | 23.6 | -10.3 | 7.3 | 10.9 | 3.4 |
| Direct selling establishments................................. | 4543 | 175.4 | 5.0 | 0.9 | 2.2 | -2.7 | 3.1 | 6.0 |

Table 2. Long run labor productivity, unit labor costs, and related data

| Industry |  | $2023$ <br> Employment (thousands) | Annual percent change, 1987-2023 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Labor productivity | Unit labor costs | Output | Hours worked | Labor compensation | Hourly compensation |
| Wholesale trade......................................................... | 42 | 6,222.4 | 2.4 | 1.5 | 2.7 | 0.3 | 4.3 | 3.9 |
| Merchant wholesalers, durable goods. | 423 | 3,450.3 | 3.7 | 0.3 | 4.0 | 0.3 | 4.3 | 4.0 |
| Motor vehicles and parts...................................... | 4231 | 387.3 | 3.2 | 0.8 | 3.2 | 0.0 | 4.0 | 4.0 |
| Furniture and furnishings...................................... | 4232 | 116.9 | 1.6 | 2.4 | 1.4 | -0.2 | 3.9 | 4.1 |
| Lumber and construction supplies. | 4233 | 265.6 | 0.6 | 2.4 | 1.4 | 0.8 | 3.8 | 3.0 |
| Commercial equipment......................................... | 4234 | 754.7 | 9.7 | -5.1 | 10.2 | 0.4 | 4.6 | 4.2 |
| Metals and minerals. | 4235 | 135.5 | -0.3 | 4.1 | -0.2 | 0.0 | 3.9 | 3.8 |
| Appliances and electric goods............................... | 4236 | 375.3 | 6.4 | -1.8 | 6.1 | -0.3 | 4.2 | 4.5 |
| Hardware and plumbing. | 4237 | 315.8 | 1.3 | 2.5 | 2.4 | 1.0 | 4.9 | 3.9 |
| Machinery and supplies........................................ | 4238 | 764.9 | 1.5 | 2.5 | 1.7 | 0.2 | 4.3 | 4.0 |
| Miscellaneous durable goods................................ | 4239 | 334.3 | 1.0 | 2.8 | 1.6 | 0.6 | 4.4 | 3.8 |
| Merchant wholesalers, nondurable goods................. | 424 | 2,253.4 | 1.0 | 3.0 | 1.2 | 0.2 | 4.2 | 4.1 |
| Paper and paper products..................................... | 4241 | 116.7 | 1.2 | 2.8 | -0.1 | -1.3 | 2.7 | 4.1 |
| Druggists' goods.. | 4242 | 262.3 | 2.1 | 3.7 | 3.4 | 1.3 | 7.3 | 5.9 |
| Apparel and piece goods. | 4243 | 159.0 | 1.0 | 2.5 | 0.7 | -0.3 | 3.2 | 3.5 |
| Grocery and related products................................ | 4244 | 829.2 | 0.8 | 2.8 | 1.5 | 0.6 | 4.3 | 3.6 |
| Farm product raw materials................................... | 4245 | 74.2 | 1.2 | 3.8 | -0.4 | -1.6 | 3.3 | 5.0 |
| Chemicals........................................................... | 4246 | 154.2 | 0.3 | 3.5 | 0.6 | 0.3 | 4.2 | 3.8 |
| Petroleum. | 4247 | 106.2 | 1.8 | 2.6 | 0.8 | -1.0 | 3.5 | 4.5 |
| Alcoholic beverages.............................................. | 4248 | 216.7 | 0.6 | 2.7 | 2.1 | 1.5 | 4.8 | 3.3 |
| Miscellaneous nondurable goods........................... | 4249 | 334.9 | 0.1 | 3.4 | -0.2 | -0.3 | 3.2 | 3.5 |
| Electronic markets and agents and brokers................. | 425 | 518.7 | 1.3 | 1.4 | 2.5 | 1.2 | 3.9 | 2.7 |
| Electronic markets and agents and brokers.............. | 4251 | 518.7 | 1.3 | 1.4 | 2.5 | 1.2 | 3.9 | 2.7 |
| Retail trade. | 44-45 | 16,391.5 | 3.1 | 0.2 | 3.3 | 0.1 | 3.5 | 3.3 |
| Motor vehicle and parts dealers................................ | 441 | 2,095.3 | 2.0 | 1.2 | 2.7 | 0.6 | 3.9 | 3.2 |
| Automobile dealers.............................................. | 4411 | 1,313.2 | 2.1 | 1.3 | 2.7 | 0.6 | 4.0 | 3.4 |
| Other motor vehicle dealers. | 4412 | 180.0 | 2.1 | 1.3 | 3.4 | 1.3 | 4.8 | 3.5 |
| Auto parts, accessories, and tire stores................... | 4413 | 602.1 | 1.4 | 1.3 | 1.9 | 0.6 | 3.2 | 2.6 |
| Furniture and home furnishings stores........................ | 442 | 448.9 | 3.6 | -0.4 | 3.1 | -0.5 | 2.7 | 3.2 |
| Furniture stores. | 4421 | 221.1 | 3.3 | -0.3 | 2.8 | -0.5 | 2.4 | 2.9 |
| Home furnishings stores....................................... | 4422 | 227.8 | 4.1 | -0.5 | 3.5 | -0.5 | 3.0 | 3.5 |
| Electronics and appliance stores............................... | 443 | 428.2 | 10.3 | -6.3 | 9.7 | -0.5 | 2.9 | 3.4 |
| Electronics and appliance stores............................ | 4431 | 428.2 | 10.3 | -6.3 | 9.7 | -0.5 | 2.9 | 3.4 |
| Building material and garden supply stores................. | 444 | 1,441.7 | 2.3 | 0.6 | 2.8 | 0.5 | 3.5 | 2.9 |
| Building material and supplies dealers..................... | 4441 | 1,242.6 | 2.2 | 0.7 | 2.8 | 0.6 | 3.6 | 3.0 |
| Lawn and garden equipment and supplies stores..... | 4442 | 199.1 | 3.0 | -0.2 | 3.0 | 0.0 | 2.9 | 2.8 |
| Food and beverage stores......................................... | 445 | 3,259.7 | 0.8 | 2.4 | 0.7 | -0.1 | 3.1 | 3.2 |
| Grocery stores.. | 4451 | 2,810.4 | 0.7 | 2.6 | 0.7 | 0.0 | 3.3 | 3.3 |
| Specialty food stores........................................... | 4452 | 248.1 | 0.4 | 2.2 | -0.2 | -0.6 | 2.0 | 2.6 |
| Beer, wine and liquor stores.................................. | 4453 | 201.2 | 2.0 | 1.0 | 1.6 | -0.4 | 2.6 | 3.1 |
| Health and personal care stores................................. | 446 | 1,100.5 | 2.2 | 1.2 | 2.8 | 0.6 | 4.1 | 3.4 |
| Health and personal care stores............................. | 4461 | 1,100.5 | 2.2 | 1.2 | 2.8 | 0.6 | 4.1 | 3.4 |
| Gasoline stations.................................................... | 447 | 995.5 | 1.0 | 2.3 | 0.9 | -0.1 | 3.2 | 3.3 |
| Gasoline stations................................................ | 4471 | 995.5 | 1.0 | 2.3 | 0.9 | -0.1 | 3.2 | 3.3 |
| Clothing and clothing accessories stores.................... | 448 | 1,173.8 | 4.4 | -1.0 | 3.5 | -0.9 | 2.4 | 3.3 |
| Clothing stores.................................................... | 4481 | 859.6 | 4.7 | -1.2 | 3.9 | -0.8 | 2.6 | 3.4 |
| Shoe stores.......................................................... | 4482 | 175.2 | 3.0 | -0.2 | 2.1 | -0.8 | 1.9 | 2.7 |
| Jewelry, luggage, and leather goods stores............. | 4483 | 139.0 | 4.3 | -0.6 | 2.8 | -1.5 | 2.2 | 3.7 |
| Sports, hobby, music instruments, book stores........... | 451 | 611.1 | 3.9 | -0.4 | 3.6 | -0.2 | 3.2 | 3.4 |
| Sporting goods and musical instrument stores........ | 4511 | 540.1 | 4.6 | -0.9 | 4.6 | 0.0 | 3.6 | 3.6 |
| Book stores and news dealers............................... | 4512 | 71.0 | 0.7 | 1.8 | -0.6 | -1.3 | 1.2 | 2.6 |

Table 2. Long run labor productivity, unit labor costs, and related data - Continued

| Industry |  | $2023$ <br> Employment (thousands) | Annual percent change, 1987-2023 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Labor productivity | Unit labor costs | Output | Hours worked | Labor compensation | Hourly compensation |
| General merchandise stores. | 452 | 3,164.5 | 3.3 | -0.4 | 3.8 | 0.6 | 3.4 | 2.8 |
| Department stores............................................... | 4522 | 955.0 | 1.2 | 1.0 | 0.0 | -1.1 | 1.1 | 2.2 |
| Other general merchandise stores.......................... | 4523 | 2,209.5 | 4.8 | -1.2 | 6.7 | 1.8 | 5.3 | 3.5 |
| Miscellaneous store retailers.................................... | 453 | 956.4 | 3.6 | -0.6 | 3.2 | -0.3 | 2.6 | 2.9 |
| Florists. | 4531 | 85.1 | 2.8 | 0.2 | 0.3 | -2.4 | 0.5 | 3.0 |
| Office supplies, stationery and gift stores................ | 4532 | 220.3 | 5.0 | -1.9 | 3.0 | -2.0 | 1.1 | 3.1 |
| Used merchandise stores..................................... | 4533 | 244.3 | 4.4 | -1.7 | 5.8 | 1.3 | 4.1 | 2.7 |
| Other miscellaneous store retailers. | 4539 | 406.7 | 1.9 | 0.6 | 2.8 | 0.9 | 3.4 | 2.5 |
| Nonstore retailers. | 454 | 715.9 | 9.1 | -3.9 | 9.5 | 0.4 | 5.2 | 4.8 |
| Electronic shopping and mail-order houses............. | 4541 | 495.5 | 10.5 | -4.7 | 14.1 | 3.2 | 8.7 | 5.3 |
| Vending machine operators................................... | 4542 | 45.0 | 0.2 | 3.4 | -2.1 | -2.3 | 1.2 | 3.6 |
| Direct selling establishments................................. | 4543 | 175.4 | 3.5 | -0.1 | 1.4 | -2.0 | 1.3 | 3.4 |

Table 3. Labor productivity, unit labor costs, and related data, 2019-2023

| Industry |  | $2023$ <br> Employment (thousands) | Annual percent change, 2019-2023 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Labor productivity | Unit labor costs | Output | Hours worked | Labor compensation | Hourly compensation |
| Wholesale trade......................................................... | 42 | 6,222.4 | 0.5 | 5.2 | 1.0 | 0.5 | 6.2 | 5.7 |
| Merchant wholesalers, durable goods.. | 423 | 3,450.3 | 1.1 | 4.7 | 2.0 | 0.9 | 6.8 | 5.8 |
| Motor vehicles and parts. | 4231 | 387.3 | 2.9 | 3.2 | 3.9 | 0.9 | 7.2 | 6.2 |
| Furniture and furnishings....................................... | 4232 | 116.9 | 0.5 | 4.2 | -1.0 | -1.5 | 3.2 | 4.7 |
| Lumber and construction supplies. | 4233 | 265.6 | -0.6 | 6.4 | 0.6 | 1.3 | 7.1 | 5.7 |
| Commercial equipment. | 4234 | 754.7 | 0.1 | 5.2 | 1.6 | 1.5 | 6.9 | 5.3 |
| Metals and minerals. | 4235 | 135.5 | 0.1 | 7.5 | -1.9 | -2.0 | 5.4 | 7.6 |
| Appliances and electric goods............................... | 4236 | 375.3 | 3.1 | 2.6 | 3.3 | 0.3 | 6.0 | 5.7 |
| Hardware and plumbing. | 4237 | 315.8 | 0.4 | 6.8 | 1.7 | 1.3 | 8.6 | 7.2 |
| Machinery and supplies........................................ | 4238 | 764.9 | 0.0 | 5.6 | 1.1 | 1.2 | 6.8 | 5.6 |
| Miscellaneous durable goods................................ | 4239 | 334.3 | 0.9 | 4.7 | 2.2 | 1.2 | 7.0 | 5.7 |
| Merchant wholesalers, nondurable goods.................. | 424 | 2,253.4 | 0.8 | 5.0 | 0.7 | -0.1 | 5.7 | 5.8 |
| Paper and paper products. | 4241 | 116.7 | 1.2 | 7.1 | -3.9 | -5.0 | 2.9 | 8.4 |
| Druggists' goods. | 4242 | 262.3 | 5.0 | 0.9 | 7.1 | 2.1 | 8.1 | 5.9 |
| Apparel and piece goods. | 4243 | 159.0 | -5.2 | 8.6 | -4.3 | 1.0 | 3.9 | 3.0 |
| Grocery and related products................................ | 4244 | 829.2 | -0.2 | 6.3 | 0.0 | 0.1 | 6.3 | 6.1 |
| Farm product raw materials. | 4245 | 74.2 | -1.5 | 5.9 | -0.4 | 1.1 | 5.5 | 4.4 |
| Chemicals. | 4246 | 154.2 | 1.1 | 4.9 | -0.5 | -1.5 | 4.4 | 6.0 |
| Petroleum. | 4247 | 106.2 | -2.3 | 5.9 | -1.3 | 1.0 | 4.5 | 3.5 |
| Alcoholic beverages. | 4248 | 216.7 | 2.0 | 2.2 | 1.7 | -0.3 | 3.9 | 4.2 |
| Miscellaneous nondurable goods........................... | 4249 | 334.9 | -0.7 | 7.1 | -1.4 | -0.8 | 5.6 | 6.4 |
| Electronic markets and agents and brokers................. | 425 | 518.7 | -3.5 | 8.4 | -3.4 | 0.1 | 4.7 | 4.7 |
| Electronic markets and agents and brokers.............. | 4251 | 518.7 | -3.5 | 8.4 | -3.4 | 0.1 | 4.7 | 4.7 |
| Retail trade.. | 44-45 | 16,391.5 | 3.8 | 2.0 | 3.1 | -0.6 | 5.2 | 5.8 |
| Motor vehicle and parts dealers................................ | 441 | 2,095.3 | 0.6 | 5.8 | 0.3 | -0.3 | 6.2 | 6.5 |
| Automobile dealers. | 4411 | 1,313.2 | 0.5 | 7.0 | -0.1 | -0.6 | 6.9 | 7.6 |
| Other motor vehicle dealers. | 4412 | 180.0 | 1.7 | 2.4 | 2.5 | 0.8 | 4.9 | 4.1 |
| Auto parts, accessories, and tire stores................... | 4413 | 602.1 | 2.8 | 0.7 | 3.0 | 0.2 | 3.7 | 3.5 |
| Furniture and home furnishings stores........................ | 442 | 448.9 | 1.4 | 4.6 | -1.5 | -2.8 | 3.1 | 6.1 |
| Furniture stores.. | 4421 | 221.1 | 1.7 | 2.8 | -0.5 | -2.1 | 2.3 | 4.5 |
| Home furnishings stores....................................... | 4422 | 227.8 | 1.0 | 6.9 | -2.7 | -3.6 | 4.0 | 7.9 |
| Electronics and appliance stores............................... | 443 | 428.2 | 6.9 | -0.8 | 2.7 | -3.9 | 1.9 | 6.1 |
| Electronics and appliance stores........................... | 4431 | 428.2 | 6.9 | -0.8 | 2.7 | -3.9 | 1.9 | 6.1 |
| Building material and garden supply stores................. | 444 | 1,441.7 | 0.5 | 4.5 | 0.9 | 0.3 | 5.4 | 5.1 |
| Building material and supplies dealers..................... | 4441 | 1,242.6 | 0.4 | 5.0 | 0.3 | 0.0 | 5.3 | 5.3 |
| Lawn and garden equipment and supplies stores..... | 4442 | 199.1 | 1.8 | 1.8 | 4.4 | 2.5 | 6.3 | 3.7 |
| Food and beverage stores........................................ | 445 | 3,259.7 | 1.0 | 4.7 | 1.2 | 0.1 | 5.9 | 5.8 |
| Grocery stores.................................................... | 4451 | 2,810.4 | 1.0 | 4.8 | 1.0 | 0.0 | 5.9 | 5.8 |
| Specialty food stores........................................... | 4452 | 248.1 | -1.0 | 6.9 | -0.7 | 0.3 | 6.2 | 5.9 |
| Beer, wine and liquor stores.................................. | 4453 | 201.2 | 2.0 | 2.5 | 3.5 | 1.4 | 6.1 | 4.6 |
| Health and personal care stores................................ | 446 | 1,100.5 | 4.9 | -1.3 | 4.2 | -0.7 | 2.8 | 3.6 |
| Health and personal care stores............................. | 4461 | 1,100.5 | 4.9 | -1.3 | 4.2 | -0.7 | 2.8 | 3.6 |
| Gasoline stations.................................................... | 447 | 995.5 | -2.3 | 8.7 | -1.1 | 1.2 | 7.4 | 6.2 |
| Gasoline stations................................................. | 4471 | 995.5 | -2.3 | 8.7 | -1.1 | 1.2 | 7.4 | 6.2 |
| Clothing and clothing accessories stores.................... | 448 | 1,173.8 | 7.6 | -1.0 | 2.5 | -4.7 | 1.5 | 6.6 |
| Clothing stores..................................................... | 4481 | 859.6 | 7.1 | -0.7 | 2.6 | -4.2 | 1.9 | 6.4 |
| Shoe stores........................................................ | 4482 | 175.2 | 4.4 | 2.3 | -0.5 | -4.7 | 1.8 | 6.8 |
| Jewelry, luggage, and leather goods stores............. | 4483 | 139.0 | 13.4 | -4.9 | 5.1 | -7.3 | 0.0 | 7.9 |
| Sports, hobby, music instruments, book stores........... | 451 | 611.1 | 5.9 | 0.8 | 4.5 | -1.4 | 5.3 | 6.7 |
| Sporting goods and musical instrument stores........ | 4511 | 540.1 | 6.7 | 0.5 | 5.3 | -1.2 | 5.9 | 7.2 |
| Book stores and news dealers............................... | 4512 | 71.0 | -0.6 | 4.0 | -2.7 | -2.2 | 1.1 | 3.3 |

Table 3. Labor productivity, unit labor costs, and related data, 2019-2023 - Continued

| Industry |  | $2023$ <br> Employment (thousands) | Annual percent change, 2019-2023 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Labor productivity | Unit labor costs | Output | Hours worked | Labor compensation | Hourly compensation |
| General merchandise stores.. | 452 | 3,164.5 | 1.6 | 2.5 | 1.7 | 0.1 | 4.2 | 4.1 |
| Department stores. | 4522 | 955.0 | 1.6 | 1.7 | -1.7 | -3.3 | 0.0 | 3.4 |
| Other general merchandise stores.......................... | 4523 | 2,209.5 | 0.7 | 3.5 | 2.4 | 1.7 | 6.0 | 4.3 |
| Miscellaneous store retailers. | 453 | 956.4 | 6.1 | 0.2 | 4.4 | -1.6 | 4.7 | 6.4 |
| Florists............................................................... | 4531 | 85.1 | 3.3 | 0.7 | 5.2 | 1.8 | 5.9 | 4.0 |
| Office supplies, stationery and gift stores.. | 4532 | 220.3 | 2.4 | 2.5 | -2.5 | -4.8 | 0.0 | 5.0 |
| Used merchandise stores.. | 4533 | 244.3 | 4.4 | -0.1 | 6.6 | 2.2 | 6.5 | 4.3 |
| Other miscellaneous store retailers. | 4539 | 406.7 | 8.9 | -0.1 | 6.1 | -2.5 | 6.0 | 8.7 |
| Nonstore retailers................................................... | 454 | 715.9 | 14.2 | -4.6 | 13.7 | -0.5 | 8.5 | 9.0 |
| Electronic shopping and mail-order houses............. | 4541 | 495.5 | 12.7 | -3.9 | 15.2 | 2.2 | 10.7 | 8.4 |
| Vending machine operators................................... | 4542 | 45.0 | -2.9 | 7.7 | -6.4 | -3.6 | 0.8 | 4.5 |
| Direct selling establishments................................. | 4543 | 175.4 | 8.5 | -0.8 | 2.0 | -6.0 | 1.2 | 7.6 |

