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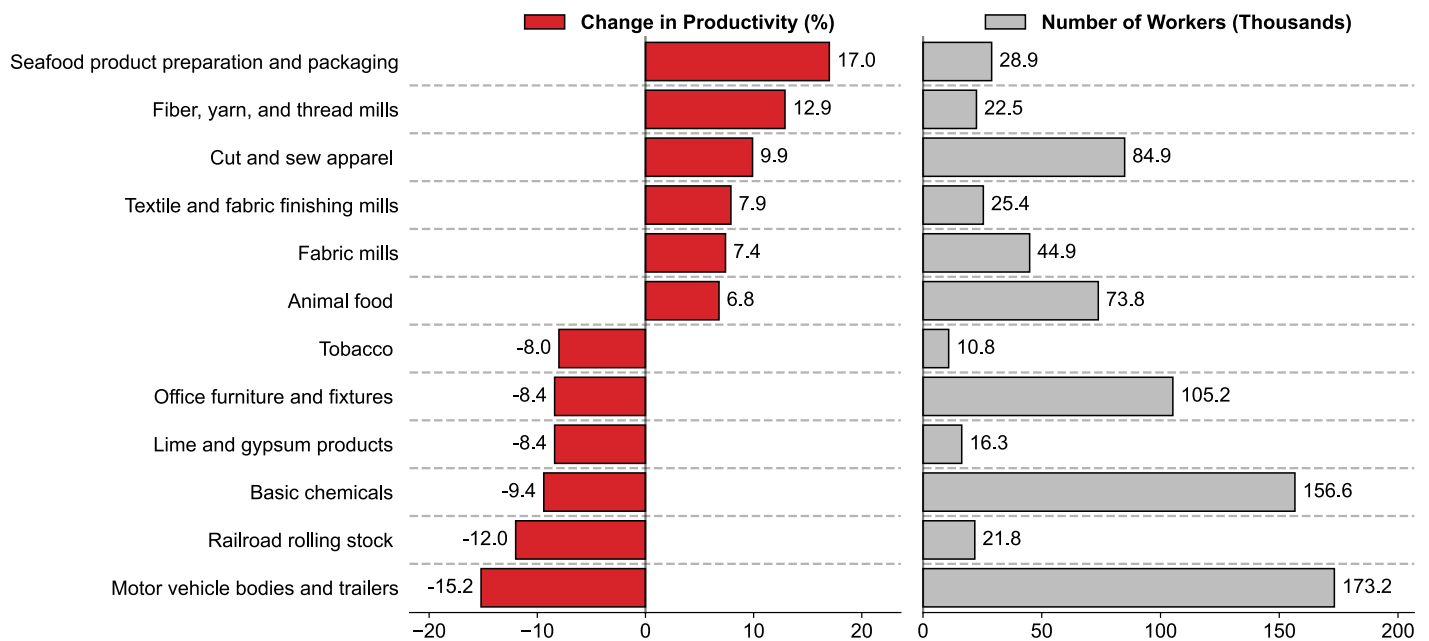
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PRODUCTIVITY AND COSTS BY INDUSTRY
MANUFACTURING AND MINING INDUSTRIES – 2023

Labor productivity declines were widespread among manufacturing industries in 2023, with decreases in 60 of the 86 four-digit NAICS manufacturing industries, the U.S. Bureau of Labor Statistics reported today. Of the 51 industries in durable manufacturing, 41 had productivity decreases in 2023 led by a decline of 15.2 percent in the motor vehicle bodies and trailers manufacturing industry. Although not as widespread compared to durable goods, productivity declined in 19 of 35 nondurable goods manufacturing industries led by a 9.4-percent decline in the basic chemicals industry. Productivity fell in 3 of the 5 mining industries in 2023 with the greatest decrease occurring in the support activities for mining industry (–5.5 percent). (See table 1.)

Hours worked decreased in 44 of the 86 four-digit manufacturing industries in 2023. Hours worked increased in 4 of 5 mining industries with support activities for mining the highest at 8.1 percent. Nine mining and manufacturing industries increased both output and hours worked in 2023. Six of these 9 industries had declining labor productivity.

Chart 1. Largest changes in productivity in four-digit NAICS manufacturing and mining industries, 2023



Labor Productivity Trends in Three-Digit NAICS Industries, 2023

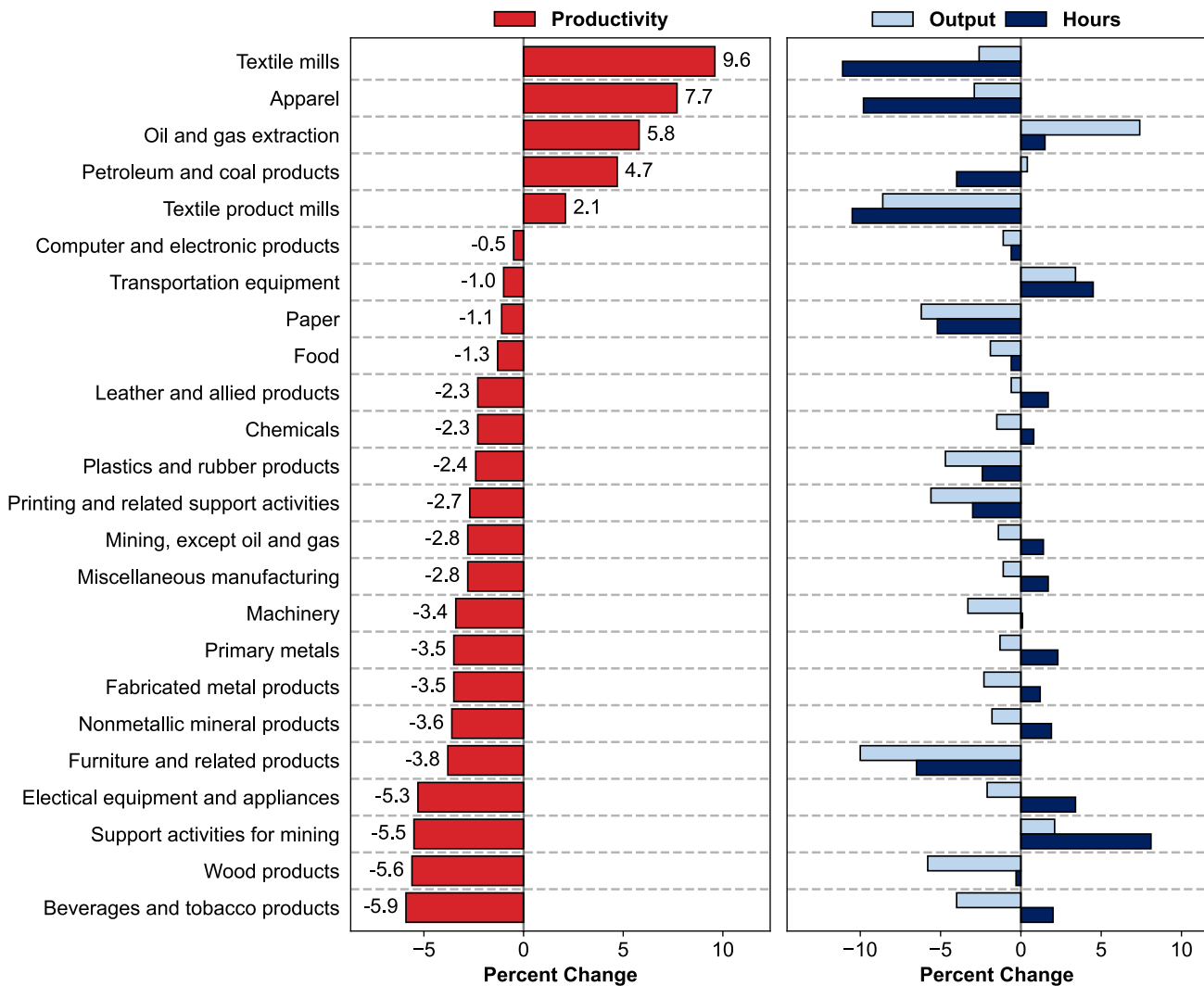
Manufacturing

- Labor productivity decreased in 17 of the 21 three-digit NAICS manufacturing industries in 2023. Eleven industries had growth in hours worked. (See chart 2.)
- Output decreased in 19 industries. Twelve of these industries had an output decline of more than 2.0 percent.
- The textile mills and apparel industries had the largest productivity gains among the three-digit NAICS industries (+9.6 percent and +7.7 percent, respectively).
- Beverages and tobacco products manufacturing had the largest productivity decline (-5.9 percent).

Mining

- Labor productivity declined in 2 of the 3 three-digit NAICS mining industries in 2023.
- Oil and gas extraction had a productivity gain of 5.8 percent due to a 7.4-percent increase in output with a 1.5-percent increase in hours worked.
- Labor productivity fell most in support activities for mining (-5.5 percent) with hours worked (+8.1 percent) growing faster than output (+2.1 percent).

Chart 2. Productivity change in three-digit NAICS manufacturing and mining industries, 2023



Trends in Unit Labor Costs in 2023

Unit labor costs reflect the total labor costs required to produce a unit of output. Unit labor costs increase when hourly compensation growth exceeds productivity growth.

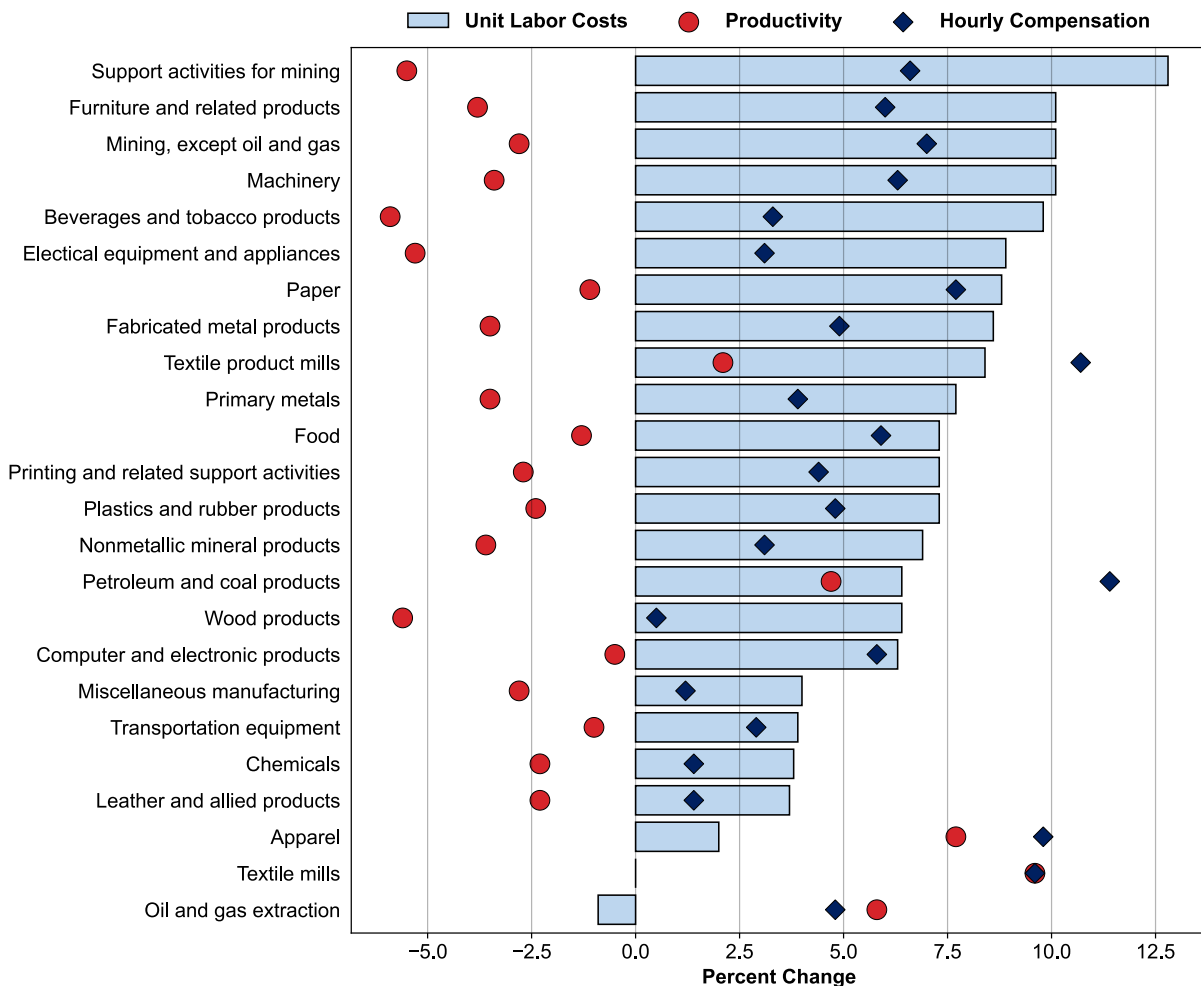
Manufacturing

- In manufacturing, unit labor costs increased in 20 of 21 three-digit NAICS industries in 2023 at an average rate of 6.6 percent. (See chart 3.) The three industries with the largest growth in unit labor costs were furniture and related products (+10.1 percent), machinery (+10.1 percent), and beverages and tobacco products (+9.8 percent). All three industries had declining labor productivity.
- Unit labor costs increased in 76 out of 86 four-digit NAICS manufacturing industries. Labor compensation gains were not as widespread as compared to 2022 in these industries. In 2023, 67 manufacturing industries recorded growth in labor compensation. In 2022 that number was 82. (See table 1.)

Mining

- Unit labor costs increased in 2 of the 3 three-digit NAICS mining industries. The greatest growth in unit labor costs occurred in support activities for mining at 12.8 percent. Oil and gas extraction is the only mining industry to have a decline in labor costs at 0.9 percent.

Chart 3. Unit labor costs, productivity, and hourly compensation in three-digit NAICS manufacturing and mining industries, 2023



2019 to 2023 Trends

Productivity increased in 36 of the 86 four-digit NAICS manufacturing industries from 2019 to 2023. Over this period, 3 of the 5 four-digit NAICS mining industries experienced productivity growth. 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. (See table 3.)

Manufacturing

- The two industries with the greatest gains in productivity from 2019 to 2023 were audio and video equipment (+9.6 percent per year) and magnetic media manufacturing and reproducing (+8.4 percent). The largest productivity decline occurred in the plywood and engineered wood products industry (−6.3 percent).
- Output decreased in over half of the four-digit NAICS manufacturing industries from 2019 to 2023. The largest decline in output occurred in the iron and steel mills and ferroalloys industry (−7.8 percent per year) while the greatest output growth was in the audio and video equipment manufacturing industry (+6.0 percent).
- Hours worked fell in 51 out of 86 four-digit NAICS manufacturing industries from 2019 to 2023. Apparel knitting mills recorded the largest drop in hours worked (−8.7 percent per year). However, three industries had growth in hours worked of 5.0 percent or greater over this period: beverages (+5.9 percent), motor vehicles (+5.4 percent), and other transportation equipment (+5.0 percent).

Mining

- In 2023, hours worked remained below pre-pandemic levels in all five of the four-digit NAICS mining industries. The largest decline in hours worked occurred in coal mining which decreased by 4.5 percent per year from 2019 to 2023.
- Output increased from 2019 to 2023 in three mining industries. The greatest increase in output occurred in support activities for mining at 7.1 percent per year. Coal mining and metal ore mining both have yet to return to their pre-pandemic levels of output with annual decreases of 5.3 percent and 2.7 percent respectively from 2019 to 2023.

Long-Term Trends in Labor Productivity and Unit Labor Costs

Chart 4 displays the number of four-digit NAICS manufacturing and mining industries with increases in productivity, output, and hours worked for selected time periods through 2023.

Labor Productivity

- Over the entire **1987-2023** period, labor productivity rose in 82 of the 91 manufacturing and mining industries. Output rose in 46 industries while hours worked increased in only 19. (See table 2.) In the 19 industries where hours worked increased, they rose at a slow pace of 0.7 percent per year.
- During the **2007-2019** period, productivity increased in 35 industries. Of these industries, only five had simultaneous growth in output as well as hours worked. Oil and gas extraction had the greatest growth in output over this period (+7.0 percent).
- In the most recent **2019-2023** period, productivity increased in 39 industries. Hours worked grew in 34 industries, which is more than the other selected time periods. Beverages had the highest annual growth in hours worked from 2019 to 2023 (+5.9 percent).

- Support activities for mining had the highest annual growth in productivity (+11.5 percent) and output (+7.1 percent) of all 91 manufacturing and mining industries.

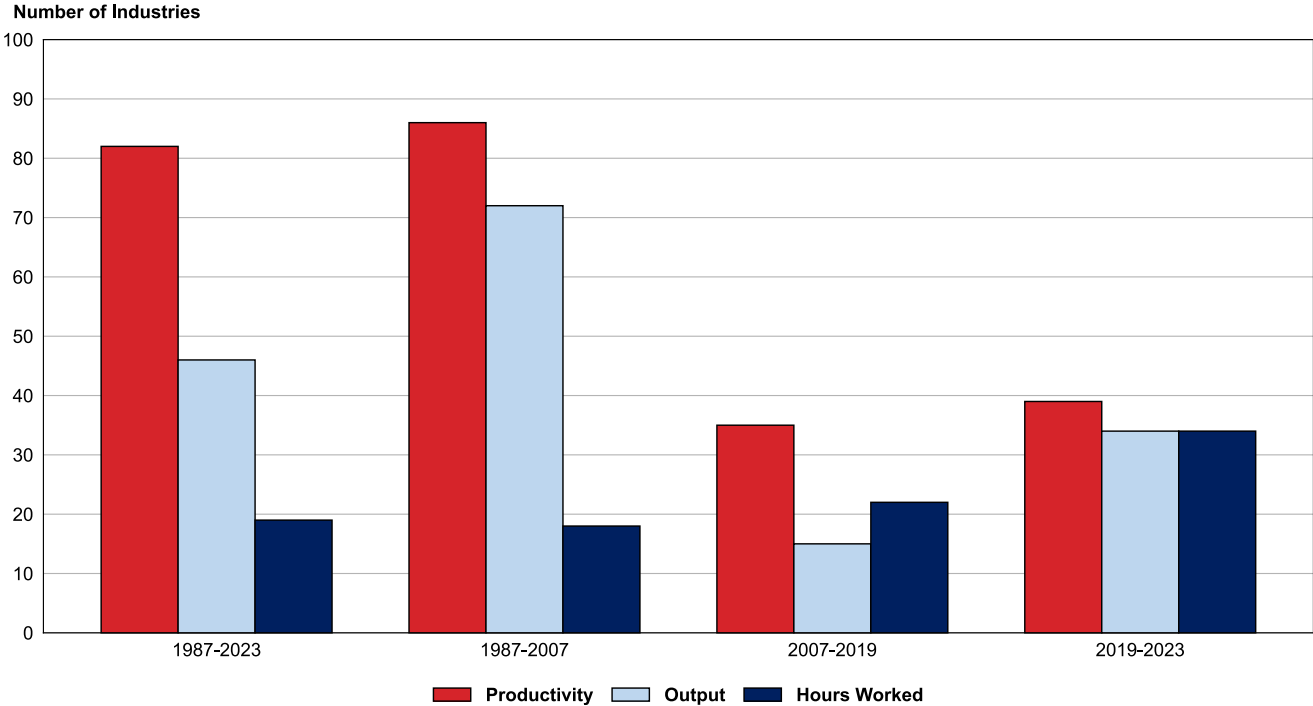
Unit Labor Costs

- From **1987 to 2023**, unit labor costs increased in 79 of the 86 four-digit NAICS manufacturing industries and in all five mining industries. (See table 2.)
- In both the **2007-2019** and **2019-2023** time periods, unit labor costs increased in 82 out of 86 manufacturing industries and in 3 of the 5 mining industries. From 2007 to 2019, unit labor costs rose the most in the resin, rubber, and artificial fibers industry (+5.0 percent per year). From 2019 to 2023, unit labor costs rose the most in the plywood and engineered wood products industry (+11.3 percent).

The computer and peripheral equipment industry recorded the largest productivity gain (+12.2 percent per year) as well as the largest unit labor costs decline (-10.5 percent) during the 1987-2023 period. However, from 2007 to 2019, labor productivity fell (-2.4 percent) as did unit labor costs (-0.4 percent). For the 2019-2023 period, both labor productivity (+2.0 percent) and unit labor costs (+2.1 percent) grew.

From 2019 and 2023, the support activities for mining industry posted the greatest productivity growth (+11.5 percent), and audio and video equipment had the largest unit labor costs decline (-13.5 percent).

Chart 4. Number of manufacturing and mining industries with increases in labor productivity, output, and hours worked



Additional Information

Beginning with this news release, 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-employment-hours.htm.

Manufacturing industry output measures for 2021 and earlier years are constructed primarily using data from the economic censuses and annual surveys of the U.S. Census Bureau together with data on price changes primarily from BLS. Manufacturing industry output for 2022 and 2023 is estimated based on historical relationships between BLS sectoral output, BLS price indexes, and data on industrial production from the Federal Reserve Board.

Mining industry output measures are constructed primarily using data from the U.S. Energy Information Administration and the U.S. Geological Survey's Mineral Commodity Summaries and Mineral Yearbooks. The data from the U.S. Energy Information Administration are usually revised on a monthly schedule while the U.S. Geological Survey's publications are released annually.

Access productivity data at www.bls.gov/productivity/tables/labor-productivity-detailed-industries.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, sectoral output, and labor compensation

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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 is usually derived by deflating nominal sales or values of production using BLS price indexes, but for some industries it is measured by physical quantities of output. Output is the measure of what is produced by an industry, derived by adjusting shipments for changes in inventories and removing intra-industry transactions. Industry output measures are constructed primarily using data from the economic censuses and annual surveys of the Census Bureau, U.S. Department of Commerce, together with data on price changes primarily from BLS. Data from the Bureau of Economic Analysis at the U.S. Department of Commerce is used in part to construct intra-industry transactions. Other data sources include the Energy Information Administration at the U.S. Department of Energy and the U.S. Geological Survey at the U.S. Department of the Interior. Manufacturing industry output for 2022 and 2023 is estimated based on historical relationships between BLS sectoral output, BLS price indexes, and data on industrial production from the Federal Reserve Board.

Labor Hours: Labor hours are measured as annual hours worked by all employed persons in an industry. Data on industry employment and hours come primarily from the BLS Current Employment Statistics (CES) survey and Current Population Survey (CPS). CES data on the number of total and production worker jobs held by wage and salary workers in nonfarm establishments are supplemented with CPS data on self-employed and unpaid family workers to estimate industry employment. Hours worked estimates are derived using CES and CPS employment, CES data on the average weekly hours paid of all employees, CPS data on hours of self-employed and unpaid family workers, and ratios of hours worked to hours paid based on data from both the CPS and the National Compensation Survey (NCS). 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 $(\text{Ending Value}/\text{Starting Value})^{(1/\text{Number of Years})}-1$.

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

Industry	2017 NAICS code	2023 Employment (thousands)	Percent change, 2022-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Mining								
Mining.....	21	606.9	1.0	4.3	5.8	4.8	10.5	5.4
Oil and gas extraction.....	211	118.4	5.8	-0.9	7.4	1.5	6.4	4.8
Oil and gas extraction.....	2111	118.4	5.8	-0.9	7.4	1.5	6.4	4.8
Mining, except oil and gas.....	212	189.7	-2.8	10.1	-1.4	1.4	8.5	7.0
Coal mining.....	2121	42.7	-4.9	16.8	-2.0	3.1	14.4	11.0
Metal ore mining.....	2122	43.7	2.3	4.2	-1.8	-4.0	2.3	6.6
Nonmetallic mineral mining and quarrying.....	2123	103.3	-3.6	9.9	-0.8	2.9	9.0	6.0
Support activities for mining.....	213	298.8	-5.5	12.8	2.1	8.1	15.2	6.6
Support activities for mining.....	2131	298.8	-5.5	12.8	2.1	8.1	15.2	6.6
Nondurable Manufacturing								
Food.....	311	1,779.1	-1.3	7.3	-1.9	-0.6	5.3	5.9
Animal food.....	3111	73.8	6.8	8.2	-1.8	-8.0	6.3	15.6
Grain and oilseed milling.....	3112	63.7	2.8	8.9	-1.1	-3.8	7.7	12.0
Sugar and confectionery products.....	3113	81.5	3.6	10.5	-1.8	-5.2	8.5	14.4
Fruit and vegetable preserving and specialty.....	3114	172.8	5.7	3.3	-1.5	-6.8	1.8	9.2
Dairy products.....	3115	166.2	-6.6	9.0	-2.1	4.9	6.7	1.8
Animal slaughtering and processing.....	3116	554.6	-4.0	5.2	-2.3	1.7	2.7	1.0
Seafood product preparation and packaging.....	3117	28.9	17.0	6.9	0.3	-14.3	7.2	25.0
Bakeries and tortilla products.....	3118	371.4	-2.9	7.8	-1.8	1.1	5.8	4.7
Other food products.....	3119	266.2	-1.9	11.0	-2.1	-0.2	8.7	9.0
Beverages and tobacco products.....	312	343.8	-5.9	9.8	-4.0	2.0	5.4	3.3
Beverages.....	3121	333.0	-4.2	8.4	-2.3	2.0	6.0	3.8
Tobacco.....	3122	10.8	-8.0	7.0	-8.0	0.0	-1.6	-1.6
Textile mills.....	313	92.8	9.6	0.0	-2.6	-11.1	-2.6	9.6
Fiber, yarn, and thread mills.....	3131	22.5	12.9	-5.5	-4.8	-15.7	-10.1	6.6
Fabric mills.....	3132	44.9	7.4	4.7	-5.4	-11.9	-0.9	12.5
Textile and fabric finishing mills.....	3133	25.4	7.9	-3.3	2.9	-4.6	-0.5	4.3
Textile product mills.....	314	106.7	2.1	8.4	-8.6	-10.5	-0.9	10.7
Textile furnishings mills.....	3141	42.3	1.7	9.3	-11.6	-13.0	-3.3	11.2
Other textile product mills.....	3149	64.4	3.5	6.8	-5.4	-8.6	1.1	10.6
Apparel.....	315	107.8	7.7	2.0	-2.9	-9.8	-1.0	9.8
Apparel knitting mills.....	3151	7.3	-1.1	3.2	-6.1	-5.2	-3.2	2.1
Cut and sew apparel.....	3152	84.9	9.9	0.9	-2.4	-11.2	-1.5	10.9
Accessories and other apparel.....	3159	15.6	1.2	8.1	-3.8	-5.0	3.9	9.4
Leather and allied products.....	316	30.0	-2.3	3.7	-0.6	1.7	3.1	1.4
Leather and hide tanning and finishing.....	3161	4.1	-0.9	-3.5	2.7	3.6	-0.9	-4.4
Footwear.....	3162	12.3	-4.6	10.9	-1.0	3.8	9.8	5.8
Other leather products.....	3169	13.6	-1.6	1.0	-2.1	-0.5	-1.1	-0.6
Paper.....	322	358.3	-1.1	8.8	-6.2	-5.2	2.1	7.7
Pulp, paper, and paperboard mills.....	3221	87.6	2.2	10.3	-4.6	-6.7	5.2	12.8
Converted paper products.....	3222	270.7	-2.7	8.4	-7.2	-4.6	0.6	5.4
Printing and related support activities.....	323	391.8	-2.7	7.3	-5.6	-3.0	1.3	4.4
Printing and related support activities.....	3231	391.8	-2.7	7.3	-5.6	-3.0	1.3	4.4
Petroleum and coal products.....	324	109.1	4.7	6.4	0.4	-4.0	6.9	11.4
Petroleum and coal products.....	3241	109.1	4.7	6.4	0.4	-4.0	6.9	11.4
Chemicals.....	325	918.5	-2.3	3.8	-1.5	0.8	2.2	1.4
Basic chemicals.....	3251	156.6	-9.4	11.5	-5.1	4.8	5.9	1.0
Resin, rubber, and artificial fibers.....	3252	97.2	-0.3	-1.0	-0.9	-0.5	-1.8	-1.3
Agricultural chemicals.....	3253	38.5	-3.1	1.4	-0.7	2.5	0.6	-1.8
Pharmaceuticals and medicines.....	3254	351.1	2.9	-0.2	2.8	-0.2	2.6	2.8

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

Industry	2017 NAICS code	2023 Employment (thousands)	Percent change, 2022-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Paints, coatings, and adhesives.....	3255	65.2	1.2	0.7	-3.0	-4.2	-2.3	2.0
Soaps, cleaning compounds, and toiletries.....	3256	125.7	-2.6	2.5	-0.5	2.1	1.9	-0.2
Other chemical products and preparations.....	3259	84.2	-3.7	5.6	-3.5	0.3	1.9	1.6
Plastics and rubber products.....	326	742.2	-2.4	7.3	-4.7	-2.4	2.3	4.8
Plastics products.....	3261	605.1	-2.8	7.7	-5.3	-2.6	2.0	4.7
Rubber products.....	3262	137.1	-0.5	5.4	-1.9	-1.4	3.5	5.0
Durable Manufacturing								
Wood products.....	321	451.9	-5.6	6.4	-5.8	-0.3	0.2	0.5
Sawmills and wood preservation.....	3211	103.4	-2.7	3.2	-0.1	2.6	3.0	0.4
Plywood and engineered wood products.....	3212	83.1	-3.4	5.3	-7.9	-4.7	-3.0	1.8
Other wood products.....	3219	265.4	-7.4	8.2	-7.3	0.1	0.3	0.2
Nonmetallic mineral products.....	327	437.9	-3.6	6.9	-1.8	1.9	5.0	3.1
Clay products and refractories.....	3271	42.3	5.8	10.3	-7.9	-12.9	1.6	16.6
Glass and glass products.....	3272	87.0	-4.2	6.8	-3.2	1.1	3.4	2.3
Cement and concrete products.....	3273	209.6	-3.8	7.0	-1.4	2.5	5.5	3.0
Lime and gypsum products.....	3274	16.3	-8.4	8.6	-1.4	7.7	7.1	-0.6
Other nonmetallic mineral products.....	3279	82.7	-7.5	6.2	0.1	8.2	6.3	-1.8
Primary metals.....	331	380.5	-3.5	7.7	-1.3	2.3	6.3	3.9
Iron and steel mills and ferroalloys.....	3311	83.6	-0.4	3.8	-0.4	0.0	3.3	3.4
Steel products from purchased steel.....	3312	60.4	-5.5	8.7	-0.4	5.4	8.2	2.7
Alumina and aluminum production.....	3313	60.7	-4.4	9.0	-4.6	-0.2	4.0	4.2
Other nonferrous metal production.....	3314	64.3	-5.0	9.4	1.7	7.0	11.2	3.9
Foundries.....	3315	111.5	-7.4	14.4	-6.2	1.4	7.3	5.9
Fabricated metal products.....	332	1,480.7	-3.5	8.6	-2.3	1.2	6.2	4.9
Forging and stamping.....	3321	90.7	-2.6	10.3	-7.1	-4.5	2.5	7.4
Cutlery and handtools.....	3322	36.9	-3.2	0.9	-2.0	1.3	-1.1	-2.4
Architectural and structural metals.....	3323	418.5	-4.6	7.4	-0.3	4.5	7.0	2.4
Boilers, tanks, and shipping containers.....	3324	95.4	-4.8	12.5	-4.7	0.1	7.2	7.1
Hardware.....	3325	24.8	0.4	4.0	-2.2	-2.6	1.7	4.4
Spring and wire products.....	3326	41.2	0.5	5.0	-1.2	-1.6	3.8	5.5
Machine shops and threaded products.....	3327	354.2	-0.7	6.8	-1.5	-0.8	5.2	6.0
Coating, engraving, and heat treating metals.....	3328	131.7	-6.7	14.1	-5.7	1.0	7.6	6.5
Other fabricated metal products.....	3329	287.3	-4.0	10.4	-1.9	2.2	8.3	6.0
Machinery.....	333	1,145.2	-3.4	10.1	-3.3	0.1	6.4	6.3
Agriculture, construction, and mining machinery.....	3331	223.2	-3.9	13.0	-2.5	1.5	10.2	8.6
Industrial machinery.....	3332	136.2	-5.4	8.5	-4.7	0.8	3.4	2.6
Commercial and service industry machinery.....	3333	91.1	-1.4	3.0	-0.5	0.9	2.5	1.6
HVAC and commercial refrigeration equipment.....	3334	149.2	-7.5	16.9	-7.5	0.0	8.1	8.2
Metalworking machinery.....	3335	162.9	-2.9	6.0	-3.6	-0.7	2.2	2.9
Turbine and power transmission equipment.....	3336	93.0	-4.8	14.4	-5.2	-0.4	8.4	8.9
Other general purpose machinery.....	3339	289.6	-1.0	8.8	-1.8	-0.8	6.9	7.7
Computer and electronic products.....	334	1,111.3	-0.5	6.3	-1.1	-0.6	5.2	5.8
Computer and peripheral equipment.....	3341	163.9	2.5	2.3	1.3	-1.1	3.7	4.8
Communications equipment.....	3342	86.7	6.0	0.1	1.8	-4.0	1.9	6.2
Audio and video equipment.....	3343	19.6	-0.1	-7.6	-1.8	-1.7	-9.3	-7.7
Semiconductors and electronic components.....	3344	396.1	0.8	6.0	0.5	-0.3	6.6	6.9
Electronic instruments.....	3345	432.9	-3.1	8.4	-2.7	0.4	5.5	5.0
Magnetic media manufacturing and reproducing.....	3346	12.1	5.7	-2.2	-1.0	-6.4	-3.2	3.4
Electrical equipment and appliances.....	335	421.0	-5.3	8.9	-2.1	3.4	6.6	3.1
Electric lighting equipment.....	3351	39.4	-4.5	3.8	-3.1	1.4	0.6	-0.8
Household appliances.....	3352	65.6	-1.5	-11.5	-1.6	-0.1	-12.9	-12.8
Electrical equipment.....	3353	149.0	-5.6	7.6	0.2	6.2	7.8	1.5
Other electrical equipment and components.....	3359	167.0	-6.5	17.4	-3.9	2.8	12.8	9.8

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

Industry	2017 NAICS code	2023 Employment (thousands)	Percent change, 2022-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Transportation equipment.....	336	1,804.3	-1.0	3.9	3.4	4.5	7.5	2.9
Motor vehicles.....	3361	296.0	2.2	1.2	6.1	3.8	7.4	3.5
Motor vehicle bodies and trailers.....	3362	173.2	-15.2	8.5	-12.7	3.0	-5.3	-8.0
Motor vehicle parts.....	3363	577.1	4.0	-1.0	8.4	4.3	7.3	2.9
Aerospace products and parts.....	3364	534.6	-3.6	8.2	2.5	6.4	10.9	4.3
Railroad rolling stock.....	3365	21.8	-12.0	16.6	-6.3	6.5	9.3	2.6
Ship and boat building.....	3366	158.7	-6.5	9.1	-3.0	3.8	5.9	2.0
Other transportation equipment.....	3369	42.9	-1.6	8.2	-5.5	-3.9	2.2	6.4
Furniture and related products.....	337	386.1	-3.8	10.1	-10.0	-6.5	-0.9	6.0
Household and institutional furniture.....	3371	249.5	-3.3	8.6	-10.8	-7.7	-3.1	5.0
Office furniture and fixtures.....	3372	105.2	-8.4	15.5	-9.2	-0.9	4.8	5.7
Other furniture related products.....	3379	31.4	5.9	-2.0	-8.9	-14.0	-10.8	3.7
Miscellaneous manufacturing.....	339	688.5	-2.8	4.0	-1.1	1.7	2.9	1.2
Medical equipment and supplies.....	3391	340.3	-0.4	1.8	0.0	0.3	1.8	1.4
Other miscellaneous manufacturing.....	3399	348.2	-5.5	7.0	-2.5	3.1	4.3	1.1

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

Industry	2017 NAICS code	2023 Employment (thousands)	Annual percent change, 1987-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Mining								
Mining.....	21	606.9	1.8	1.9	1.6	-0.2	3.5	3.7
Oil and gas extraction.....	211	118.4	3.4	1.4	2.0	-1.3	3.4	4.8
Oil and gas extraction.....	2111	118.4	3.4	1.4	2.0	-1.3	3.4	4.8
Mining, except oil and gas.....	212	189.7	0.9	2.1	-0.2	-1.1	1.9	3.1
Coal mining.....	2121	42.7	1.2	1.6	-1.9	-3.1	-0.3	2.9
Metal ore mining.....	2122	43.7	-0.2	3.8	0.2	0.4	4.0	3.6
Nonmetallic mineral mining and quarrying.....	2123	103.3	1.1	2.5	0.9	-0.2	3.3	3.5
Support activities for mining.....	213	298.8	3.2	1.0	4.7	1.4	5.7	4.3
Support activities for mining.....	2131	298.8	3.2	1.0	4.7	1.4	5.7	4.3
Nondurable Manufacturing								
Food.....	311	1,779.1	0.5	2.4	1.0	0.5	3.4	2.9
Animal food.....	3111	73.8	1.1	2.5	1.4	0.3	4.0	3.6
Grain and oilseed milling.....	3112	63.7	1.5	1.8	0.8	-0.7	2.6	3.3
Sugar and confectionery products.....	3113	81.5	0.8	2.5	0.5	-0.3	3.0	3.3
Fruit and vegetable preserving and specialty.....	3114	172.8	0.9	2.2	0.7	-0.2	2.8	3.1
Dairy products.....	3115	166.2	0.8	2.4	1.1	0.3	3.6	3.3
Animal slaughtering and processing.....	3116	554.6	0.3	2.6	1.3	1.0	3.9	2.9
Seafood product preparation and packaging.....	3117	28.9	1.8	2.8	0.1	-1.7	2.9	4.7
Bakeries and tortilla products.....	3118	371.4	0.0	2.3	0.2	0.3	2.5	2.3
Other food products.....	3119	266.2	-0.4	2.7	1.9	2.3	4.6	2.3
Beverages and tobacco products.....	312	343.8	-1.0	3.4	-0.4	0.6	2.9	2.3
Beverages.....	3121	333.0	-0.2	2.6	0.9	1.1	3.6	2.4
Tobacco.....	3122	10.8	1.8	2.3	-2.9	-4.7	-0.7	4.1
Textile mills.....	313	92.8	2.1	0.6	-2.7	-4.7	-2.1	2.7
Fiber, yarn, and thread mills.....	3131	22.5	1.5	0.3	-2.6	-4.1	-2.3	1.8
Fabric mills.....	3132	44.9	2.4	0.8	-2.9	-5.2	-2.1	3.2
Textile and fabric finishing mills.....	3133	25.4	1.2	1.2	-3.0	-4.2	-1.9	2.4
Textile product mills.....	314	106.7	0.4	2.7	-2.0	-2.3	0.7	3.1
Textile furnishings mills.....	3141	42.3	0.2	2.7	-2.8	-2.9	-0.1	2.9
Other textile product mills.....	3149	64.4	1.1	2.4	-0.7	-1.8	1.7	3.5
Apparel.....	315	107.8	0.1	1.8	-5.9	-6.0	-4.2	1.9
Apparel knitting mills.....	3151	7.3	0.4	1.8	-6.9	-7.2	-5.2	2.2
Cut and sew apparel.....	3152	84.9	0.4	1.6	-5.8	-6.2	-4.3	2.0
Accessories and other apparel.....	3159	15.6	-2.8	3.1	-5.3	-2.6	-2.4	0.2
Leather and allied products.....	316	30.0	1.2	2.3	-3.4	-4.5	-1.2	3.5
Leather and hide tanning and finishing.....	3161	4.1	1.6	1.1	-2.4	-3.9	-1.4	2.6
Footwear.....	3162	12.3	1.0	2.8	-4.6	-5.5	-1.9	3.8
Other leather products.....	3169	13.6	0.8	2.6	-2.6	-3.4	-0.1	3.4
Paper.....	322	358.3	1.0	2.1	-0.6	-1.7	1.4	3.1
Pulp, paper, and paperboard mills.....	3221	87.6	1.8	1.5	-1.0	-2.8	0.5	3.3
Converted paper products.....	3222	270.7	0.5	2.7	-0.6	-1.1	2.1	3.2
Printing and related support activities.....	323	391.8	1.0	1.6	-1.1	-2.0	0.5	2.6
Printing and related support activities.....	3231	391.8	1.0	1.6	-1.1	-2.0	0.5	2.6
Petroleum and coal products.....	324	109.1	2.0	2.6	0.9	-1.0	3.6	4.7
Petroleum and coal products.....	3241	109.1	2.0	2.6	0.9	-1.0	3.6	4.7
Chemicals.....	325	918.5	0.7	2.4	0.6	-0.2	3.0	3.2
Basic chemicals.....	3251	156.6	1.4	2.0	0.3	-1.2	2.3	3.5
Resin, rubber, and artificial fibers.....	3252	97.2	1.1	2.5	-0.1	-1.1	2.4	3.6
Agricultural chemicals.....	3253	38.5	1.4	2.2	0.5	-0.9	2.7	3.6
Pharmaceuticals and medicines.....	3254	351.1	-0.7	3.8	1.1	1.9	5.0	3.1

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

Industry	2017 NAICS code	2023 Employment (thousands)	Annual percent change, 1987-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Paints, coatings, and adhesives.....	3255	65.2	0.5	2.5	0.0	-0.5	2.5	3.0
Soaps, cleaning compounds, and toiletries.....	3256	125.7	0.5	1.6	0.7	0.2	2.3	2.1
Other chemical products and preparations.....	3259	84.2	1.5	1.6	-0.1	-1.6	1.5	3.1
Plastics and rubber products.....	326	742.2	1.1	1.9	0.9	-0.2	2.8	3.0
Plastics products.....	3261	605.1	1.0	2.0	1.1	0.1	3.1	3.0
Rubber products.....	3262	137.1	1.6	1.6	0.3	-1.3	1.8	3.1
Durable Manufacturing								
Wood products.....	321	451.9	0.7	2.6	-0.2	-0.8	2.5	3.3
Sawmills and wood preservation.....	3211	103.4	1.4	1.8	0.2	-1.2	2.0	3.2
Plywood and engineered wood products.....	3212	83.1	-0.1	2.8	-0.6	-0.6	2.2	2.8
Other wood products.....	3219	265.4	0.7	2.9	-0.1	-0.7	2.8	3.6
Nonmetallic mineral products.....	327	437.9	0.7	2.0	0.3	-0.5	2.3	2.7
Clay products and refractories.....	3271	42.3	1.2	1.7	-1.2	-2.4	0.5	2.9
Glass and glass products.....	3272	87.0	1.1	1.5	-0.3	-1.4	1.2	2.6
Cement and concrete products.....	3273	209.6	0.1	2.4	0.5	0.4	2.9	2.5
Lime and gypsum products.....	3274	16.3	0.6	3.4	-0.4	-0.9	3.0	4.0
Other nonmetallic mineral products.....	3279	82.7	1.0	1.9	1.3	0.3	3.2	2.9
Primary metals.....	331	380.5	1.2	1.6	-0.5	-1.6	1.2	2.8
Iron and steel mills and ferroalloys.....	3311	83.6	1.7	0.9	-0.4	-2.1	0.5	2.6
Steel products from purchased steel.....	3312	60.4	-0.1	2.7	-0.4	-0.4	2.2	2.6
Alumina and aluminum production.....	3313	60.7	1.0	2.1	-0.6	-1.6	1.5	3.1
Other nonferrous metal production.....	3314	64.3	1.2	2.4	-0.3	-1.4	2.2	3.6
Foundries.....	3315	111.5	0.9	1.8	-0.9	-1.8	0.9	2.8
Fabricated metal products.....	332	1,480.7	0.7	2.1	0.5	-0.3	2.6	2.8
Forging and stamping.....	3321	90.7	1.5	1.5	0.0	-1.4	1.5	3.0
Cutlery and handtools.....	3322	36.9	0.9	1.5	-1.0	-1.8	0.5	2.4
Architectural and structural metals.....	3323	418.5	0.3	2.7	0.7	0.4	3.5	3.0
Boilers, tanks, and shipping containers.....	3324	95.4	0.5	2.2	0.0	-0.4	2.2	2.7
Hardware.....	3325	24.8	0.5	1.8	-1.9	-2.4	-0.1	2.4
Spring and wire products.....	3326	41.2	1.5	1.7	-0.4	-1.9	1.4	3.3
Machine shops and threaded products.....	3327	354.2	1.5	1.6	1.8	0.3	3.4	3.1
Coating, engraving, and heat treating metals.....	3328	131.7	1.9	1.3	1.6	-0.2	3.0	3.3
Other fabricated metal products.....	3329	287.3	0.4	2.1	0.0	-0.4	2.1	2.5
Machinery.....	333	1,145.2	1.3	1.6	0.8	-0.5	2.4	2.9
Agriculture, construction, and mining machinery.....	3331	223.2	1.7	1.3	1.8	0.1	3.1	3.0
Industrial machinery.....	3332	136.2	0.7	1.8	0.6	-0.1	2.4	2.5
Commercial and service industry machinery.....	3333	91.1	1.2	1.1	-0.1	-1.3	1.1	2.4
HVAC and commercial refrigeration equipment.....	3334	149.2	0.3	2.5	0.1	-0.2	2.6	2.8
Metalworking machinery.....	3335	162.9	2.0	0.8	0.5	-1.5	1.3	2.8
Turbine and power transmission equipment.....	3336	93.0	1.0	1.3	0.5	-0.5	1.8	2.3
Other general purpose machinery.....	3339	289.6	1.2	2.2	0.8	-0.3	3.1	3.4
Computer and electronic products.....	334	1,111.3	7.2	-3.9	5.3	-1.7	1.2	3.0
Computer and peripheral equipment.....	3341	163.9	12.2	-10.5	8.7	-3.1	-2.7	0.4
Communications equipment.....	3342	86.7	4.6	-1.1	1.6	-2.9	0.5	3.4
Audio and video equipment.....	3343	19.6	2.5	-0.5	-0.3	-2.7	-0.7	2.0
Semiconductors and electronic components.....	3344	396.1	10.5	-6.8	9.3	-1.1	1.8	3.0
Electronic instruments.....	3345	432.9	2.3	0.9	1.0	-1.3	1.9	3.2
Magnetic media manufacturing and reproducing.....	3346	12.1	-0.2	-0.1	-3.1	-2.9	-3.2	-0.3
Electrical equipment and appliances.....	335	421.0	1.3	1.8	0.0	-1.4	1.8	3.2
Electric lighting equipment.....	3351	39.4	1.5	1.5	-0.5	-1.9	1.1	3.1
Household appliances.....	3352	65.6	2.4	-0.2	0.5	-1.8	0.2	2.1
Electrical equipment.....	3353	149.0	1.3	1.9	-0.2	-1.5	1.7	3.3
Other electrical equipment and components.....	3359	167.0	0.6	2.7	-0.1	-0.8	2.5	3.3

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

Industry	2017 NAICS code	2023 Employment (thousands)	Annual percent change, 1987-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Transportation equipment.....	336	1,804.3	1.8	0.6	1.4	-0.4	2.0	2.5
Motor vehicles.....	3361	296.0	1.8	0.7	1.8	0.0	2.4	2.4
Motor vehicle bodies and trailers.....	3362	173.2	0.8	2.6	1.4	0.6	4.1	3.5
Motor vehicle parts.....	3363	577.1	2.4	-0.6	2.3	-0.2	1.7	1.8
Aerospace products and parts.....	3364	534.6	0.9	2.0	-0.4	-1.2	1.6	2.9
Railroad rolling stock.....	3365	21.8	1.4	1.7	1.2	-0.2	3.0	3.2
Ship and boat building.....	3366	158.7	1.4	1.9	0.9	-0.5	2.8	3.3
Other transportation equipment.....	3369	42.9	2.4	0.2	3.1	0.7	3.3	2.7
Furniture and related products.....	337	386.1	0.8	2.1	-0.6	-1.5	1.5	3.0
Household and institutional furniture.....	3371	249.5	0.7	2.2	-0.9	-1.6	1.2	2.9
Office furniture and fixtures.....	3372	105.2	0.8	2.2	-0.3	-1.2	1.9	3.1
Other furniture related products.....	3379	31.4	1.3	1.3	0.1	-1.2	1.4	2.6
Miscellaneous manufacturing.....	339	688.5	1.4	1.6	1.3	-0.1	2.9	3.1
Medical equipment and supplies.....	3391	340.3	1.9	1.3	2.7	0.8	4.1	3.3
Other miscellaneous manufacturing.....	3399	348.2	0.8	1.9	0.0	-0.8	1.9	2.8

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

Industry	2017 NAICS code	2023 Employment (thousands)	Annual percent change, 2019-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Mining								
Mining.....	21	606.9	4.8	-1.0	1.1	-3.5	0.1	3.8
Oil and gas extraction.....	211	118.4	6.3	-3.4	1.8	-4.3	-1.6	2.8
Oil and gas extraction.....	2111	118.4	6.3	-3.4	1.8	-4.3	-1.6	2.8
Mining, except oil and gas.....	212	189.7	-0.1	5.8	-2.1	-2.0	3.7	5.7
Coal mining.....	2121	42.7	-0.8	6.7	-5.3	-4.5	1.0	5.8
Metal ore mining.....	2122	43.7	-1.0	7.3	-2.7	-1.7	4.4	6.2
Nonmetallic mineral mining and quarrying.....	2123	103.3	1.2	4.5	0.4	-0.8	4.9	5.7
Support activities for mining.....	213	298.8	11.5	-7.0	7.1	-4.0	-0.4	3.8
Support activities for mining.....	2131	298.8	11.5	-7.0	7.1	-4.0	-0.4	3.8
Nondurable Manufacturing								
Food.....	311	1,779.1	-0.7	6.5	-0.1	0.5	6.3	5.7
Animal food.....	3111	73.8	-1.7	7.4	-0.1	1.6	7.3	5.7
Grain and oilseed milling.....	3112	63.7	-1.0	6.1	-0.1	0.8	6.0	5.1
Sugar and confectionery products.....	3113	81.5	-0.6	6.1	0.2	0.8	6.3	5.4
Fruit and vegetable preserving and specialty.....	3114	172.8	1.8	4.6	-0.4	-2.2	4.2	6.5
Dairy products.....	3115	166.2	-2.6	6.2	-0.2	2.5	6.0	3.4
Animal slaughtering and processing.....	3116	554.6	-0.4	7.9	-0.7	-0.4	7.2	7.6
Seafood product preparation and packaging.....	3117	28.9	5.3	3.8	-1.0	-6.0	2.8	9.3
Bakeries and tortilla products.....	3118	371.4	-0.6	5.8	0.1	0.7	5.9	5.1
Other food products.....	3119	266.2	-2.7	6.5	0.6	3.4	7.1	3.6
Beverages and tobacco products.....	312	343.8	-7.2	8.6	-1.9	5.7	6.6	0.8
Beverages.....	3121	333.0	-6.1	7.4	-0.5	5.9	6.8	0.9
Tobacco.....	3122	10.8	-5.5	8.4	-4.8	0.8	3.2	2.4
Textile mills.....	313	92.8	2.4	3.5	-3.3	-5.6	0.1	6.1
Fiber, yarn, and thread mills.....	3131	22.5	0.2	4.0	-6.2	-6.4	-2.5	4.2
Fabric mills.....	3132	44.9	3.0	3.8	-2.6	-5.5	1.1	7.0
Textile and fabric finishing mills.....	3133	25.4	1.7	3.6	-3.3	-4.9	0.2	5.3
Textile product mills.....	314	106.7	0.8	6.0	-3.4	-4.2	2.3	6.8
Textile furnishings mills.....	3141	42.3	1.6	5.9	-4.5	-6.0	1.2	7.6
Other textile product mills.....	3149	64.4	0.4	5.9	-2.4	-2.8	3.3	6.3
Apparel.....	315	107.8	2.0	3.4	-2.9	-4.8	0.4	5.5
Apparel knitting mills.....	3151	7.3	5.3	1.7	-3.9	-8.7	-2.3	7.1
Cut and sew apparel.....	3152	84.9	2.3	3.1	-3.4	-5.6	-0.3	5.5
Accessories and other apparel.....	3159	15.6	-0.2	6.4	2.2	2.4	8.7	6.2
Leather and allied products.....	316	30.0	1.3	4.2	0.3	-1.0	4.4	5.5
Leather and hide tanning and finishing.....	3161	4.1	4.7	2.4	0.8	-3.7	3.2	7.2
Footwear.....	3162	12.3	-2.8	6.4	-4.1	-1.4	2.0	3.4
Other leather products.....	3169	13.6	4.2	2.9	4.4	0.2	7.5	7.3
Paper.....	322	358.3	-1.9	6.1	-3.1	-1.2	2.9	4.1
Pulp, paper, and paperboard mills.....	3221	87.6	-0.8	5.7	-4.0	-3.3	1.4	4.8
Converted paper products.....	3222	270.7	-2.0	6.2	-2.4	-0.4	3.7	4.1
Printing and related support activities.....	323	391.8	0.3	4.6	-3.5	-3.8	0.9	4.9
Printing and related support activities.....	3231	391.8	0.3	4.6	-3.5	-3.8	0.9	4.9
Petroleum and coal products.....	324	109.1	1.8	4.2	-0.9	-2.6	3.2	6.0
Petroleum and coal products.....	3241	109.1	1.8	4.2	-0.9	-2.6	3.2	6.0
Chemicals.....	325	918.5	-1.2	4.4	0.0	1.2	4.4	3.1
Basic chemicals.....	3251	156.6	-0.8	5.3	-1.1	-0.3	4.1	4.4
Resin, rubber, and artificial fibers.....	3252	97.2	-1.6	4.7	-2.0	-0.5	2.5	3.0
Agricultural chemicals.....	3253	38.5	-0.2	1.1	1.3	1.5	2.5	1.0
Pharmaceuticals and medicines.....	3254	351.1	0.1	3.7	2.4	2.3	6.2	3.8

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

Industry	2017 NAICS code	2023 Employment (thousands)	Annual percent change, 2019-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Paints, coatings, and adhesives.....	3255	65.2	2.1	2.6	1.9	-0.2	4.6	4.7
Soaps, cleaning compounds, and toiletries.....	3256	125.7	-5.7	4.1	-2.7	3.2	1.4	-1.8
Other chemical products and preparations.....	3259	84.2	-0.3	4.4	-0.4	0.0	4.1	4.1
Plastics and rubber products.....	326	742.2	-1.2	5.7	-1.3	-0.1	4.3	4.4
Plastics products.....	3261	605.1	-1.3	5.7	-1.3	0.1	4.4	4.3
Rubber products.....	3262	137.1	-0.7	5.4	-1.4	-0.7	4.0	4.7
Durable Manufacturing								
Wood products.....	321	451.9	-0.7	7.6	-1.1	-0.4	6.4	6.8
Sawmills and wood preservation.....	3211	103.4	1.6	4.3	0.5	-1.1	4.9	6.0
Plywood and engineered wood products.....	3212	83.1	-6.3	11.3	-5.1	1.3	5.6	4.3
Other wood products.....	3219	265.4	1.1	6.9	0.4	-0.6	7.3	8.0
Nonmetallic mineral products.....	327	437.9	0.8	3.4	1.1	0.2	4.5	4.2
Clay products and refractories.....	3271	42.3	5.1	2.1	0.5	-4.3	2.7	7.3
Glass and glass products.....	3272	87.0	-4.2	6.2	-4.7	-0.5	1.2	1.7
Cement and concrete products.....	3273	209.6	2.1	2.8	2.7	0.6	5.5	4.9
Lime and gypsum products.....	3274	16.3	-0.5	5.0	1.2	1.7	6.2	4.5
Other nonmetallic mineral products.....	3279	82.7	0.5	3.2	2.7	2.3	6.0	3.7
Primary metals.....	331	380.5	-3.9	8.0	-5.1	-1.2	2.4	3.7
Iron and steel mills and ferroalloys.....	3311	83.6	-5.9	10.1	-7.8	-2.0	1.5	3.6
Steel products from purchased steel.....	3312	60.4	-5.2	8.8	-5.3	-0.1	3.0	3.2
Alumina and aluminum production.....	3313	60.7	-3.1	7.1	-3.9	-0.9	2.9	3.8
Other nonferrous metal production.....	3314	64.3	1.4	3.0	1.3	-0.1	4.3	4.5
Foundries.....	3315	111.5	-3.0	7.1	-5.0	-2.0	1.8	3.8
Fabricated metal products.....	332	1,480.7	-0.5	5.2	-1.5	-1.0	3.7	4.7
Forging and stamping.....	3321	90.7	-4.2	8.1	-6.9	-2.8	0.7	3.6
Cutlery and handtools.....	3322	36.9	-1.1	1.8	-0.4	0.7	1.4	0.6
Architectural and structural metals.....	3323	418.5	-1.6	7.0	-1.2	0.4	5.7	5.2
Boilers, tanks, and shipping containers.....	3324	95.4	-2.6	7.8	-3.6	-1.0	4.0	5.0
Hardware.....	3325	24.8	0.3	6.4	-2.0	-2.3	4.2	6.7
Spring and wire products.....	3326	41.2	1.9	4.4	-1.2	-3.0	3.2	6.4
Machine shops and threaded products.....	3327	354.2	0.8	3.7	-1.2	-2.0	2.5	4.5
Coating, engraving, and heat treating metals.....	3328	131.7	2.8	4.0	-0.4	-3.2	3.6	7.0
Other fabricated metal products.....	3329	287.3	0.3	3.5	0.5	0.2	4.0	3.8
Machinery.....	333	1,145.2	-0.4	4.4	-0.5	-0.1	3.9	4.0
Agriculture, construction, and mining machinery.....	3331	223.2	2.3	3.3	2.2	-0.1	5.6	5.7
Industrial machinery.....	3332	136.2	-4.1	5.1	-0.8	3.4	4.3	0.8
Commercial and service industry machinery.....	3333	91.1	3.3	0.8	2.4	-0.9	3.2	4.2
HVAC and commercial refrigeration equipment.....	3334	149.2	-5.8	10.7	-4.3	1.6	5.9	4.3
Metalworking machinery.....	3335	162.9	6.3	-1.2	2.1	-3.9	0.9	5.0
Turbine and power transmission equipment.....	3336	93.0	-0.8	5.5	-3.0	-2.3	2.3	4.6
Other general purpose machinery.....	3339	289.6	-2.6	5.8	-1.8	0.8	3.9	3.1
Computer and electronic products.....	334	1,111.3	0.2	2.6	0.0	-0.2	2.6	2.8
Computer and peripheral equipment.....	3341	163.9	2.0	2.1	-0.1	-2.0	2.1	4.2
Communications equipment.....	3342	86.7	-0.6	-0.4	0.2	0.8	-0.2	-1.0
Audio and video equipment.....	3343	19.6	9.6	-13.5	6.0	-3.3	-8.3	-5.2
Semiconductors and electronic components.....	3344	396.1	2.0	0.7	2.6	0.6	3.4	2.8
Electronic instruments.....	3345	432.9	-1.5	4.6	-1.7	-0.2	2.9	3.1
Magnetic media manufacturing and reproducing.....	3346	12.1	8.4	-4.3	5.6	-2.6	1.0	3.7
Electrical equipment and appliances.....	335	421.0	-1.0	5.6	-0.3	0.7	5.3	4.5
Electric lighting equipment.....	3351	39.4	1.0	1.4	-1.7	-2.7	-0.3	2.4
Household appliances.....	3352	65.6	-2.2	0.4	0.1	2.4	0.5	-1.8
Electrical equipment.....	3353	149.0	-0.2	6.6	0.5	0.7	7.1	6.3
Other electrical equipment and components.....	3359	167.0	-1.9	7.4	-0.8	1.1	6.6	5.4

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

Industry	2017 NAICS code	2023 Employment (thousands)	Annual percent change, 2019-2023					
			Labor productivity	Unit labor costs	Output	Hours worked	Labor compen- sation	Hourly compen- sation
Transportation equipment.....	336	1,804.3	-1.3	4.4	-0.4	0.9	3.9	2.9
Motor vehicles.....	3361	296.0	-4.1	5.7	1.1	5.4	6.8	1.4
Motor vehicle bodies and trailers.....	3362	173.2	-3.5	5.2	-2.4	1.2	2.7	1.5
Motor vehicle parts.....	3363	577.1	1.7	0.9	1.2	-0.4	2.1	2.5
Aerospace products and parts.....	3364	534.6	-4.6	9.3	-4.9	-0.3	3.9	4.2
Railroad rolling stock.....	3365	21.8	-5.3	8.6	-7.0	-1.8	1.0	2.8
Ship and boat building.....	3366	158.7	-0.3	4.2	1.4	1.7	5.6	3.8
Other transportation equipment.....	3369	42.9	-4.6	4.0	0.2	5.0	4.1	-0.8
Furniture and related products.....	337	386.1	-1.9	5.2	-3.7	-1.8	1.3	3.2
Household and institutional furniture.....	3371	249.5	-1.0	4.7	-2.4	-1.5	2.2	3.7
Office furniture and fixtures.....	3372	105.2	-2.4	6.1	-4.8	-2.5	1.0	3.6
Other furniture related products.....	3379	31.4	-3.3	2.9	-5.5	-2.3	-2.7	-0.4
Miscellaneous manufacturing.....	339	688.5	0.9	3.0	0.9	0.0	4.0	4.0
Medical equipment and supplies.....	3391	340.3	1.6	2.2	1.7	0.1	3.9	3.8
Other miscellaneous manufacturing.....	3399	348.2	0.0	4.1	-0.1	-0.1	4.0	4.2