



For release 10:00 a.m. (EDT) Thursday, April 7, 2016

USDL-16-0699

Technical information: (202) 691-5618 • dipsweb@bls.gov • www.bls.gov/lpc

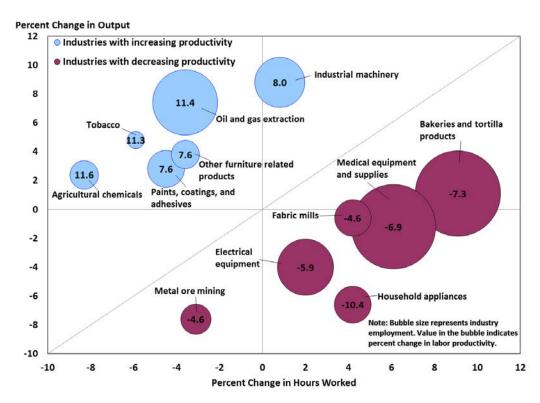
Media contact: (202) 691-5902 • PressOffice@bls.gov

PRODUCTIVITY AND COSTS BY INDUSTRY: MANUFACTURING AND MINING INDUSTRIES, 2015

Labor productivity rose in 31 of 63 manufacturing and mining industries in 2015, the U.S. Bureau of Labor Statistics reported today. This was higher than 2014 when labor productivity rose in 26 industries. Output and hours worked increased in fewer industries in 2015 than in the previous year.

Unit labor costs rose in 43 of 59 manufacturing industries and in three of four mining industries. Twelve industries with productivity increases posted declines in unit labor costs. Increases in labor productivity mitigate the impact of rising hourly compensation on unit labor costs facing employers.

Chart 1. Manufacturing and mining industries with the largest change in productivity, 2015 (4-digit NAICS industries)



¹ Sixty-three manufacturing and mining industries have been updated through 2015, whereas all 91 manufacturing and mining industries have been updated through 2014. See Technical Note for additional information.

Chart 1 shows the industries with the largest changes in productivity in 2015. Industries above the diagonal line had growth in output that was greater than the growth in hours worked, and thus positive productivity growth. In contrast, industries below the diagonal line exhibited declining productivity as, in most cases, hours worked increased and output declined.

Trends in labor productivity and unit labor costs in NAICS 3-digit industries in 2015

Manufacturing

- Labor productivity increased in 9 manufacturing industries in 2015, as output increased in 12 industries and hours worked fell in seven industries (see chart 2).
- Productivity rose fastest in the petroleum and coal products industry, where output increased by 4.6 percent and hours worked declined 2.3 percent.
- Unit labor costs increased in 16 manufacturing industries (see chart 3).
- For five industries, productivity outpaced hourly compensation growth, leading to declines in unit labor costs. Chart 3 shows the relationship between changes in hourly compensation, productivity, and unit labor costs.

Mining

- Productivity rose 11.4 percent in the oil and gas extraction industry, where output increased and hours worked declined.
- Output in mining, except oil and gas, declined at a greater pace than hours worked, resulting in a productivity decline of 1.4 percent.
- Productivity outpaced hourly compensation gains in the oil and gas extraction industry, resulting in a 6.7 percent decline in unit labor costs, while unit labor costs increased 4.8 percent in mining, except oil and gas.

Chart 2. Labor productivity growth in manufacturing and mining industries, 2015 (3-digit NAICS industries)

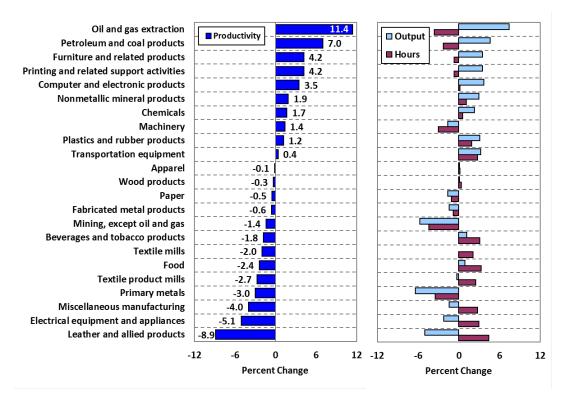
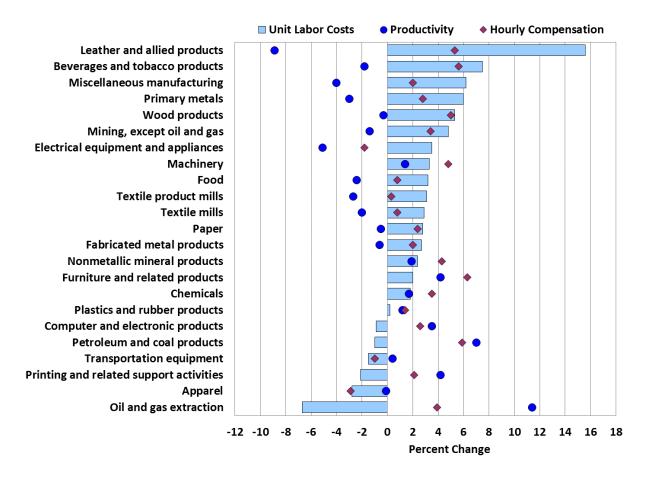


Chart 3. Hourly compensation, productivity, and unit labor costs in manufacturing and mining industries, 2015

(3-digit NAICS industries)



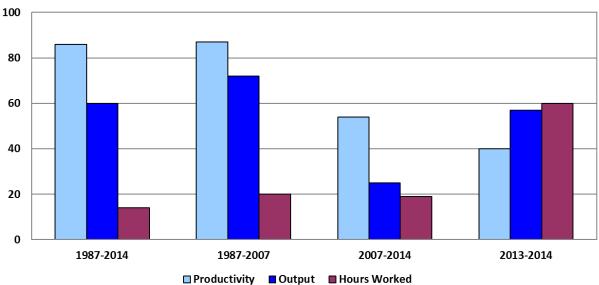
Productivity trends in selected time periods

Chart 4 displays the number of industries with increases in productivity, output, and hours worked for selected time periods through 2014, the latest year for which data are available for all 91 NAICS 4-digit manufacturing and mining industries.

- During the 1987-2014 period, productivity rose in 86 manufacturing and mining industries, with median productivity growth of approximately 1.7 percent per year.
- Productivity growth in the 1987-2014 period was associated with output rising in 60 manufacturing and mining industries, while hours worked increased in only 14.
- Productivity increased in 54 industries in the more recent 2007-2014 period, despite the period encompassing a severe recession.
- The 2007-2014 productivity increases are predominantly the result of a decline in hours worked, rather than an increase in output, as 70 industries experienced decreasing hours worked in this period compared to 25 industries that documented increasing output.

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





Want to know more?

Find more data at www.bls.gov/lpc for:

- -Additional industries and sectors
- -Additional 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

Questions?

Additional information can be obtained by calling (202) 691-5618 or by sending an email via http://data.bls.gov/cgi-bin/forms/ips?/lpc/contact.htm. Information in this report will be made available to sensory-impaired individuals upon request. TDD message referral phone number: 1-800-877-8339.

Subscribe to Newsletter

Customers can subscribe to the industry productivity news releases on the BLS website at https://subscriptions.bls.gov/accounts/USDOLBLS/subscriber/new.

Technical Note

Labor Productivity: Labor productivity describes the relationship between real 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 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; managerial skill; in addition to the characteristics and effort of the workforce.

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 and real output per hour (labor productivity). Increases in hourly compensation increase unit labor costs; increases in labor productivity offset compensation increases and lower unit labor costs.

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. Industry output reflects sectoral value of production, 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, U.S. Department of Commerce, is utilized in part to construct intra-industry transactions. Manufacturing industry output for 2015 is constructed with data on industrial production from the Federal Reserve and manufacturers' shipments, inventories, and orders from the Census Bureau. Other data sources include the Energy Information Administration, U.S. Department of Energy; and the U.S. Geological Survey, U.S. Department of Interior.

Labor Hours: Labor hours reflect 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 self-employed and unpaid family worker data to estimate industry employment. Hours worked estimates are derived using CES and CPS employment, CES data on the average weekly hours paid of production workers, CPS data on hours of nonproduction, self-employed, and unpaid family workers, and ratios of hours worked to hours paid based on data from 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 economic censuses and annual surveys of the Census Bureau, U.S. Department of Commerce. The estimates for 2015 are constructed using data from the BLS Quarterly Census of Employment and Wages (QCEW).

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

Table 1. Necent labor productivity, unit labor co	2012	2015	Percent change, 2014-2015					
Industry	NAICS code	Employment (thousands)	Labor productivity	Unit labor costs	Output	Hours worked	Labor compensation	
Mining								
Mining	21	789.8	16.5	-10.5	4.2	-10.6	-6.8	
Oil and gas extraction Oil and gas extraction	211	193.2	11.4	-6.7	7.4	-3.6	0.2	
	2111	193.2	11.4	-6.7	7.4	-3.6	0.2	
Mining, except oil and gas	212	204.6	-1.4	4.8	-5.7	-4.4	-1.1	
Coal mining	2121	67.8	4.6	2.3	-10.2	-14.2	-8.2	
Metal ore mining	2122	42.1	-4.6	6.5	-7.6	-3.1	-1.6	
Nonmetallic mineral mining and quarrying	2123	94.7	-3.9	8.2	-0.3	3.7	7.9	
Manufacturing								
Food Grain and oilseed milling Fruit and vegetable preserving and specialty Dairy products Animal slaughtering and processing Bakeries and tortilla products Other food products	311	1548.7	-2.4	3.2	0.9	3.3	4.1	
	3112	60.3	-0.9	7.8	-1.0	0.0	6.8	
	3114	170.5	-0.9	10.5	-8.0	-7.1	1.7	
	3115	136.6	-3.2	2.9	0.6	3.9	3.5	
	3116	486.5	-0.5	1.3	3.6	4.1	4.9	
	3118	331.3	-7.3	2.3	1.1	9.1	3.4	
	3119	194.8	-2.5	0.9	2.3	4.9	3.2	
Beverages and tobacco products Beverages Tobacco	312	229.8	-1.8	7.5	1.2	3.1	8.8	
	3121	216.5	-4.2	9.0	-0.7	3.7	8.2	
	3122	13.3	11.3	9.4	4.8	-5.9	14.6	
Textile mills Fiber, yarn, and thread mills Fabric mills Textile and fabric finishing mills	313	124.2	-2.0	2.9	0.0	2.1	2.9	
	3131	28.6	5.6	0.3	3.0	-2.5	3.4	
	3132	61.0	-4.6	3.2	-0.6	4.2	2.6	
	3133	34.6	-3.4	4.2	-0.9	2.6	3.2	
Textile product mills Textile furnishings mills Other textile product mills	314	131.0	-2.7	3.1	-0.3	2.5	2.8	
	3141	55.9	-0.5	1.4	-1.2	-0.6	0.2	
	3149	75.1	-4.4	4.6	0.6	5.2	5.3	
Apparel	315	158.6	-0.1	-2.8	0.1	0.2	-2.7	
Leather and allied products	316	32.9	-8.9	15.6	-5.0	4.4	9.9	
Wood products Sawmills and wood preservation Plywood and engineered wood products Other wood products	321	400.8	-0.3	5.3	0.1	0.4	5.4	
	3211	93.3	7.4	3.3	0.6	-6.2	4.0	
	3212	75.4	-2.0	0.0	4.3	6.4	4.3	
	3219	232.1	-2.3	7.5	-0.9	1.4	6.5	
Paper Pulp, paper, and paperboard mills Converted paper products	322	373.3	-0.5	2.8	-1.6	-1.1	1.3	
	3221	101.8	1.9	0.8	-1.5	-3.4	-0.8	
	3222	271.5	-1.5	4.0	-1.6	-0.1	2.4	
Printing and related support activities Printing and related support activities	323	472.8	4.2	-2.1	3.5	-0.7	1.3	
	3231	472.8	4.2	-2.1	3.5	-0.7	1.3	
Petroleum and coal products Petroleum and coal products	324	114.4	7.0	-1.0	4.6	-2.3	3.6	
	3241	114.4	7.0	-1.0	4.6	-2.3	3.6	
Chemicals Basic chemicals Resin, rubber, and artificial fibers Agricultural chemicals Pharmaceuticals and medicines Paints, coatings, and adhesives	325 3251 3252 3253 3254 3255	822.3 150.6 95.4 37.0 282.5 61.9	1.7 0.9 -0.2 11.6 3.9 7.6	1.8 2.9 0.3 0.5 1.5	2.3 2.6 2.2 2.4 2.9 2.8	0.6 1.7 2.4 -8.3 -1.0 -4.5	4.2 5.6 2.5 2.9 4.5 3.7	
Plastics and rubber products Plastics products Rubber products	326	688.9	1.2	0.2	3.1	1.9	3.3	
	3261	554.8	0.7	1.1	2.9	2.2	4.1	
	3262	134.1	3.1	-3.1	3.9	0.7	0.6	
Nonmetallic mineral products Clay products and refractories Glass and glass products	327	411.8	1.9	2.4	3.0	1.1	5.5	
	3271	48.8	0.7	0.5	3.3	2.6	3.8	
	3272	89.6	2.1	2.3	-1.2	-3.3	1.1	

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

Industry	2012 NAICS code	2015	Percent change, 2014-2015					
		Employment (thousands)	Labor productivity	Unit labor costs	Output	Hours worked	Labor compensation	
Cement and concrete products	3273	183.5	-0.6	4.9	4.6	5.2	9.7	
Lime and gypsum products	3274	14.4	6.0	-7.5	3.0	-2.8	-4.8	
Other nonmetallic mineral products	3279	75.5	7.6	-0.1	4.3	-3.1	4.2	
Primary metals	331	396.0	-3.0	6.0	-6.4	-3.5	-0.8	
Alumina and aluminum production	3313	59.0	-3.8	3.6	-1.5	2.4	2.1	
Foundries	3315	125.1	0.8	4.5	-3.9	-4.7	0.3	
Fabricated metal products	332	1486.9	-0.6	2.7	-1.4	-0.8	1.2	
Forging and stamping	3321	101.1	-1.1	-1.5	1.9	3.1	0.4	
Cutlery and handtools	3322	39.9	-1.4	4.6	-4.6	-3.2	-0.2	
Architectural and structural metals	3323	372.8	-3.8	6.0	-1.9	2.0	4.0	
Boilers, tanks, and shipping containers	3324	99.3	-0.1	-1.2	0.0	0.1	-1.1	
Spring and wire products	3326	44.1	1.4	-1.7	2.5	1.1	0.7	
Machine shops and threaded products	3327	381.2	-0.8	3.8	-3.9	-3.1	-0.3	
Coating, engraving, and heat treating metals	3328	141.8	7.4	0.4	2.0	-5.0	2.4	
Other fabricated metal products	3329	281.9	-0.2	2.0	-1.5	-1.3	0.4	
Machinery	333	1136.0	1.4	3.3	-1.6	-3.0	1.7	
Agriculture, construction, and mining machinery	3331	243.0	1.1	3.0	-7.0	-8.1	-4.2	
Industrial machinery	3332	113.5	8.0	-2.9	8.8	0.8	5.7	
HVAC and commercial refrigeration equipment	3334	129.8	2.7	-0.5	1.9	-0.8	1.5	
Metalworking machinery	3335	186.5	-0.1	4.6	-2.7	-2.6	1.8	
Computer and electronic products	334	1053.8	3.5	-0.9	3.7	0.2	2.8	
Semiconductors and electronic components	3344	368.6	3.4	-2.2	3.8	0.3	1.5	
Electronic instruments	3345	400.5	0.6	1.1	3.5	2.9	4.6	
Electrical equipment and appliances	335	384.1	-5.1	3.5	-2.2	3.0	1.2	
Electric lighting equipment	3351	45.9	3.8	-0.3	1.0	-2.7	0.7	
Household appliances	3352	62.6	-10.4	10.5	-6.6	4.2	3.2	
Electrical equipment	3353	145.1	-5.9	3.0	-4.0	2.0	-1.1	
Other electrical equipment and components	3359	130.5	-1.5	-0.8	4.1	5.8	3.3	
Transportation equipment	336	1607.1	0.4	-1.5	3.2	2.8	1.7	
Motor vehicles	3361	202.2	-0.5	-6.9	4.6	5.2	-2.6	
Motor vehicle parts	3363	563.7	1.7	-2.1	7.5	5.7	5.2	
Aerospace products and parts	3364	488.8	1.0	0.2	0.0	-1.0	0.2	
Ship and boat building	3366	140.1	-4.1	5.2	-5.1	-1.0	-0.1	
Furniture and related products	337	409.5	4.2	2.0	3.5	-0.7	5.6	
Household and institutional furniture	3371	263.1	3.7	2.4	3.2	-0.6	5.6	
Other furniture related products	3379	36.3	7.6	2.1	3.8	-3.6	6.0	
Miscellaneous manufacturing	339	658.1	-4.0	6.2	-1.4	2.8	4.8	
Medical equipment and supplies	3391	326.5	-6.9	7.1	-1.2	6.1	5.8	

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

Table 2. Long run labor productivity, unit labor co	2012 NAICS	2014	Average annual percent change, 1987-2014					
Industry		Employment	Labor	Unit labor	r Hours		Labor	
	code	(thousands)	productivity	costs	Output	worked	compensation	
Mining								
Mining	21	861.2	0.0	4.2	1.1	1.1	5.3	
Oil and gas extraction	211	201.7	1.0	4.5	1.1	0.1	5.6	
Oil and gas extraction	2111	201.7	1.0	4.5	1.1	0.1	5.6	
Mining, except oil and gas	212	211.7	1.5	1.6	0.4	-1.1	2.0	
Coal mining	2121	75.8	1.6	1.2	-0.5	-2.0	0.7	
Metal ore mining	2122	44.1	0.5	3.5	1.1	0.6	4.6	
Nonmetallic mineral mining and quarrying	2123	91.8	1.5	1.8	8.0	-0.7	2.6	
Support Activities for mining	213	447.8	2.4	2.4	5.9	3.4	8.5	
Support Activities for mining	2131	447.8	2.4	2.4	5.9	3.4	8.5	
Manufacturing								
Food	311	1509.8	1.2	1.5	1.4	0.2	2.9	
Animal food	3111	55.7	2.1	1.3	1.8	-0.3	3.1	
Grain and oilseed milling	3112	58.9	2.0	0.9	1.2	-0.8	2.1	
Sugar and confectionery products	3113	71.2	1.2	1.6	0.6	-0.6	2.2	
Fruit and vegetable preserving and specialty	3114	169.6	1.4	1.5	1.2	-0.2	2.7	
Dairy products	3115	134.7	1.7	1.8	1.3	-0.4	3.1	
Animal slaughtering and processing	3116	481.8	0.8	1.6	1.7	0.9	3.3	
Seafood product preparation and packaging	3117	35.7	1.5	2.4	0.2	-1.3	2.7	
Bakeries and tortilla products	3118	311.2	0.5	1.5	0.4	-0.1	1.9	
Other food products	3119	191.0	0.6	2.1	2.0	1.4	4.1	
Beverages and tobacco products	312	217.4	0.2	1.8	-0.2	-0.4	1.6	
Beverages	3121	203.8	1.3	0.8	1.5	0.2	2.3	
Tobacco	3122	13.6	1.7	1.8	-3.2	-4.8	-1.5	
Textile mills	313	124.0	3.3	-0.4	-2.1	-5.3	-2.6	
Fiber, yarn, and thread mills	3131	29.4	3.1	-0.8	-1.8	-4.7	-2.6	
Fabric mills	3132	61.7	3.5	-0.1	-2.5	-5.8	-2.6	
Textile and fabric finishing mills	3133	32.9	2.0	0.4	-2.9	-4.7	-2.5	
Textile product mills	314	120.8	1.0	2.2	-1.7	-2.7	0.4	
Textile furnishings mills	3141	54.0	0.5	2.0	-2.5	-3.0	-0.5	
Other textile product mills	3149	66.8	2.1	1.9	-0.3	-2.4	1.5	
Apparel	315	159.0	-0.7	1.5	-6.9	-6.2	-5.4	
Apparel knitting mills	3151	21.5	-0.4	8.0	-6.7	-6.3	-6.0	
Cut and sew apparel	3152	127.8	-0.7	1.6	-6.9	-6.2	-5.4	
Accessories and other apparel	3159	9.7	-1.7	2.6	-6.8	-5.2	-4.3	
Leather and allied products	316	30.6	1.2	1.6	-4.2	-5.4	-2.7	
Leather and hide tanning and finishing	3161	4.2	1.1	0.5	-3.2	-4.3	-2.7	
Footwear	3162	12.9	1.6	1.9	-5.2	-6.7	-3.3	
Other leather products	3169	13.5	-0.2	2.3	-4.0	-3.8	-1.8	
Wood products	321	392.3	1.4	1.5	0.0	-1.5	1.5	
Sawmills and wood preservation	3211	98.6	1.6	1.0	-0.1	-1.7	0.9	
Plywood and engineered wood products	3212	72.4	1.2	1.3	0.0	-1.2	1.3	
Other wood products	3219	221.3	1.2	2.0	-0.2	-1.4	1.8	
Paper	322	375.3	2.1	1.0	0.1	-1.9	1.2	
Pulp, paper, and paperboard mills	3221	105.4	2.7	8.0	-0.4	-3.0	0.4	
Converted paper products	3222	269.9	1.6	1.5	0.2	-1.4	1.8	
Printing and related support activities	323	483.9	1.3	1.1	-0.6	-1.9	0.5	
Printing and related support activities	3231	483.9	1.3	1.1	-0.6	-1.9	0.5	
	324	112.6	2.3	2.4	1.2	-1.1	3.7	
Petroleum and coal products	324							

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

	2012	2014	Average annual percent change, 1987-2014					
Industry	NAICS code	Employment (thousands)	Labor productivity	Unit labor costs	Output	Hours worked	Labor compensation	
Chamicala	205	0444			4.0			
Chemicals Basic chemicals	325 3251	814.4 147.4	1.6 2.4	1.8 1.3	1.0 0.7	-0.6 -1.7	2.8 2.0	
Resin, rubber, and artificial fibers	3251	95.5	2.4	1.3	0.7	-1.7 -1.6	2.0	
	3252	95.5 37.7	2.3	1.0	1.3	-1.0 -1.0	2.3	
Agricultural chemicals	3253	281.8	-0.1	3.6	1.6	1.7	5.3	
Pharmaceuticals and medicines	3255			2.4				
Paints, coatings, and adhesives		60.3	0.5		-0.3	-0.7	2.1	
Soaps, cleaning compounds, and toiletries	3256	107.5	1.8	0.9	1.4	-0.5	2.2	
Other chemical products and preparations	3259	84.2	2.3	0.8	0.2	-2.0	1.0	
Plastics and rubber products	326	678.0	1.9	1.1	1.4	-0.4	2.5	
Plastics products	3261	544.2	1.8	1.2	1.7	-0.1	2.9	
Rubber products	3262	133.8	2.0	0.8	0.5	-1.5	1.3	
Nonmetallic mineral products	327	398.8	1.2	1.4	0.2	-1.0	1.6	
Clay products and refractories	3271	47.2	1.2	1.1	-1.4	-2.5	-0.2	
Glass and glass products	3272	89.2	2.1	0.4	0.6	-1.5	1.0	
Cement and concrete products	3273	175.2	0.4	2.0	0.1	-0.3	2.1	
Lime and gypsum products	3274	14.5	1.1	2.7	-0.5	-1.6	2.2	
Other nonmetallic mineral products	3279	72.7	1.5	1.4	1.1	-0.4	2.6	
Primary metals	331	402.7	2.7	0.2	0.9	-1.8	1.1	
Iron and steel mills and ferroalloys	3311	92.8	3.8	-0.8	1.4	-2.3	0.6	
Steel products from purchased steel	3312	62.3	0.5	1.9	0.3	-0.2	2.2	
Alumina and aluminum production	3313	58.7	2.8	0.5	0.6	-2.2	1.1	
Other nonferrous metal production	3314	62.2	2.3	1.8	0.4	-1.8	2.2	
Foundries	3315	126.7	1.9	0.7	0.1	-1.8	0.8	
Fabricated metal products				1 5	1.1	0.1	2.6	
Fabricated metal products	332	1495.8	1.2	1.5 0.5	1.1	-0.1	2.6	
Forging and stamping	3321	100.2	2.6		1.6	-1.0	2.0	
Cutlery and handtools	3322	39.2	1.4	1.5	-1.0	-2.4	0.4	
Architectural and structural metals	3323	374.0	0.7	2.1	0.9	0.3	3.0	
Boilers, tanks, and shipping containers	3324	99.2	0.8	1.3	0.8	0.0	2.2	
Hardware	3325	24.4	1.1	1.0	-2.3	-3.3	-1.3	
Spring and wire products	3326	44.0	1.9	1.3	-0.2	-2.1	1.0	
Machine shops and threaded products	3327	387.3	1.7	1.2	2.7	0.9	3.9	
Coating, engraving, and heat treating metals Other fabricated metal products	3328 3329	143.3 284.2	2.3 0.7	0.6 1.8	2.5 0.3	0.2 -0.4	3.1 2.1	
Other fabricated metal products								
Machinery	333	1133.4	2.2	0.6	1.6	-0.6	2.1	
Agriculture, construction, and mining machinery	3331	254.7	2.4	0.3	3.1	0.7	3.3	
Industrial machinery	3332	110.2	1.7	0.9	0.8	-0.9	1.6	
Commercial and service industry machinery	3333	88.1	1.5	0.9	-0.5	-2.0	0.4	
HVAC and commercial refrigeration equipment	3334	128.7	1.9	1.0	1.0	-0.8	2.0	
Metalworking machinery	3335	184.3	1.9	0.6	0.7	-1.2	1.3	
Turbine and power transmission equipment	3336	101.4	1.8	-0.1	1.8	-0.1	1.7	
Other general purpose machinery	3339	266.0	2.2	1.2	1.6	-0.6	2.9	
Computer and electronic products	334	1054.1	9.9	-6.1	7.4	-2.3	0.8	
Computer and peripheral equipment	3341	160.9	16.6	-14.8	12.7	-3.4	-4.1	
Communications equipment	3342	93.9	6.0	-1.8	2.5	-3.3	0.7	
Audio and video equipment	3343	20.4	3.4	1.0	-1.1	-4.3	-0.1	
Semiconductors and electronic components	3344	368.2	13.7	-9.4	11.8	-1.6	1.4	
Electronic instruments	3345	393.0	3.6	0.2	1.6	-1.9	1.7	
Magnetic media manufacturing and reproducing	3346	17.7	1.7	0.5	-1.7	-3.3	-1.2	
Electrical equipment and appliances	335	380.0	2.2	1.1	0.0	-2.1	1.1	
Electrical equipment and appliances Electric lighting equipment	3351	47.2	1.8	1.1	-0.4	-2.1 -2.2	0.8	
	3351	47.2 59.9		-0.5	-0.4 0.1	-2.2 -3.1		
Household appliances			3.4				-0.3	
Electrical equipment Other electrical equipment and components	3353 3359	145.0 127.9	1.7 1.9	1.3 1.6	-0.3 0.2	-2.0 -1.7	1.1 1.8	
Transportation equipment	336	1573.0	3.2	-0.6	2.1	-1.1	1.4	
Motor vehicles	3361	194.0	3.6	-1.0	2.0	-1.5	1.0	
Motor vehicle bodies and trailers	3362	141.9	1.6	1.8	1.9	0.3	3.7	
Motor vehicle parts	3363	539.7	3.4	-1.8	2.9	-0.5	1.0	

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

	2012	2014	Average annual percent change, 1987-2014					
Industry	NAICS	Employment		Unit labor	Output	Hours	Labor	
	code	(thousands)	productivity	costs	· ·	worked	compensation	
Aerospace products and parts	3364	498.4	2.8	0.4	1.0	-1.8	1.3	
Railroad rolling stock	3365	27.2	5.4	-2.1	6.0	0.6	3.8	
Ship and boat building	3366	138.4	1.7	1.8	0.8	-0.9	2.6	
Other transportation equipment	3369	33.4	3.9	-0.9	3.4	-0.5	2.5	
Furniture and related products	337	400.0	1.4	1.4	-0.3	-1.7	1.1	
Household and institutional furniture	3371	256.8	1.1	1.7	-0.9	-1.9	0.8	
Office furniture and fixtures	3372	108.1	1.3	1.4	0.0	-1.3	1.5	
Other furniture related products	3379	35.1	2.5	0.1	1.6	-0.8	1.7	
Miscellaneous manufacturing	339	640.1	2.3	1.3	2.0	-0.3	3.4	
Medical equipment and supplies	3391	317.5	2.9	0.9	3.8	0.9	4.7	
Other miscellaneous manufacturing	3399	322.6	1.7	1.6	0.4	-1.2	2.1	