NEWS RELEASE
BUREAU OF LABOR STATISTICS
U. S. DEPARTMENT OF LABOR

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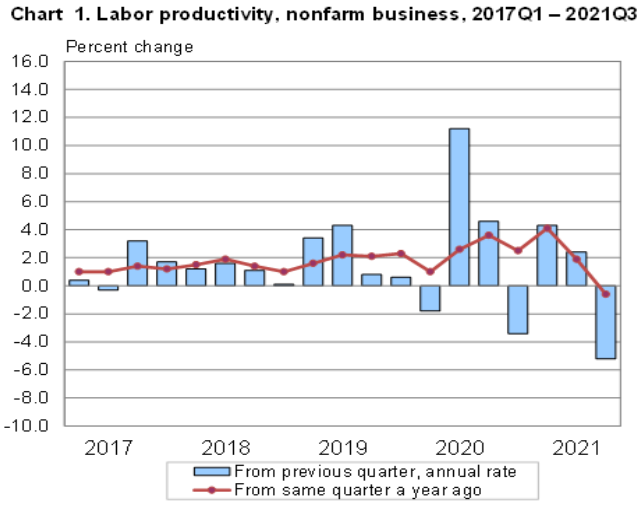
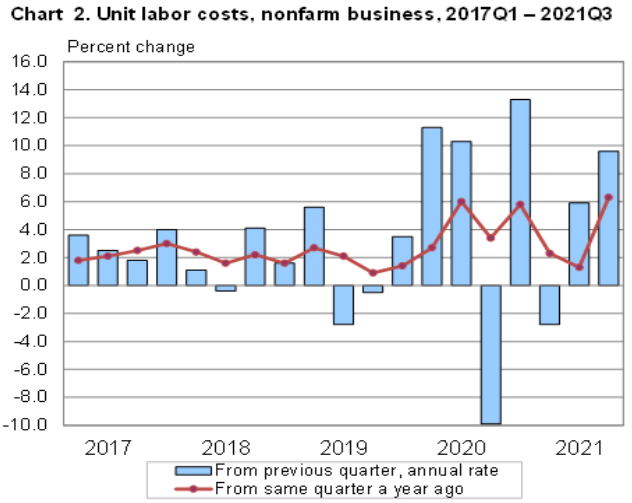
PRODUCTIVITY AND COSTS

Third Quarter 2021, Revised

Nonfarm business sector labor productivity decreased 5.2 percent in the third quarter of 2021, the U.S. Bureau of Labor Statistics reported today, as output increased 1.8 percent and hours worked increased 7.4 percent. This is the largest decline in quarterly productivity since the second quarter of 1960, when the measure decreased 6.1 percent. (All quarterly percent changes in this release are seasonally adjusted annual rates.) From the third quarter of 2020 to the third quarter of 2021, nonfarm business sector labor productivity decreased 0.6 percent. This four-quarter rate is the largest decline since the fourth quarter of 1993, when the measure also declined 0.6 percent. (See chart 1 and table A1.)

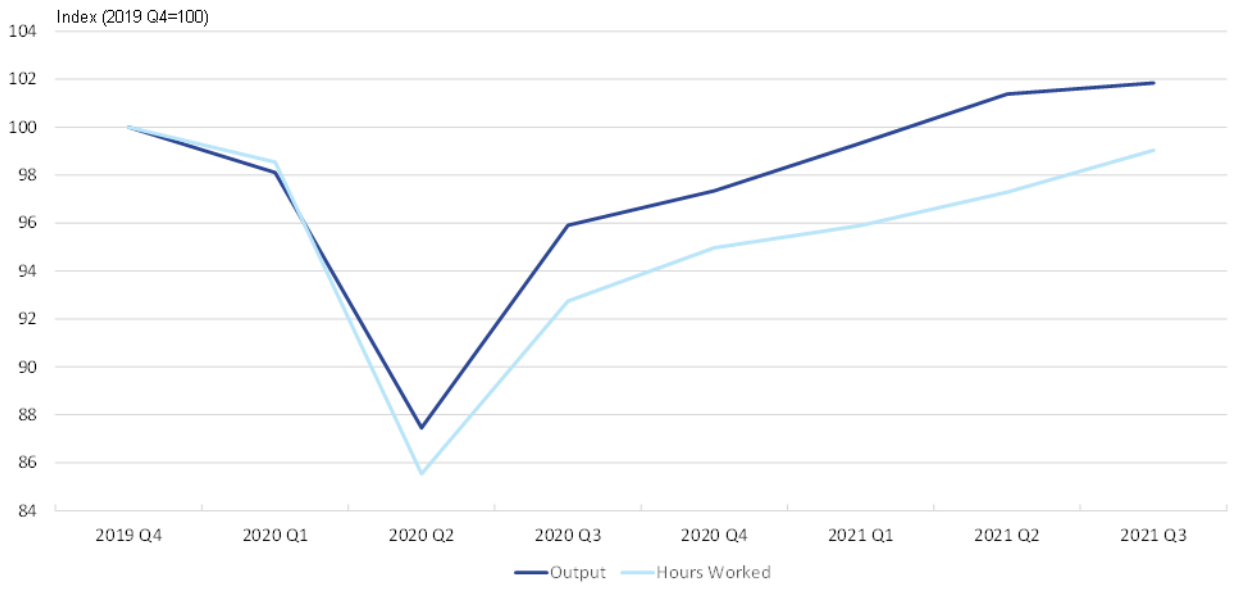




Unit labor costs in the nonfarm business sector increased at an annual rate of 9.6 percent in the third quarter of 2021, reflecting a 3.9-percent increase in hourly compensation and a 5.2-percent decrease in productivity. Unit labor costs increased 6.3 percent over the last four quarters. (See chart 2 and table A1.) BLS calculates unit labor costs as the ratio of hourly compensation to labor productivity. Increases in hourly compensation tend to increase unit labor costs and increases in productivity tend to reduce them.

Labor productivity, or output per hour, is calculated by dividing an index of real output by an index of hours worked by all persons, including employees, proprietors, and unpaid family workers. In the third quarter of 2021, both output and hours worked increased for the fifth consecutive quarter following historic declines in those measures in the second quarter of 2020. The output index is now 1.8 percent above the level seen in the fourth quarter of 2019, the last quarter not affected by the COVID-19 pandemic, while the hours worked index remains 1.0 percent below its fourth quarter 2019 level. (See chart 3 and tables A1 and 2.)

Chart 3. Output and Hours Worked index series, nonfarm business, 2019 Q4 – 2021 Q3



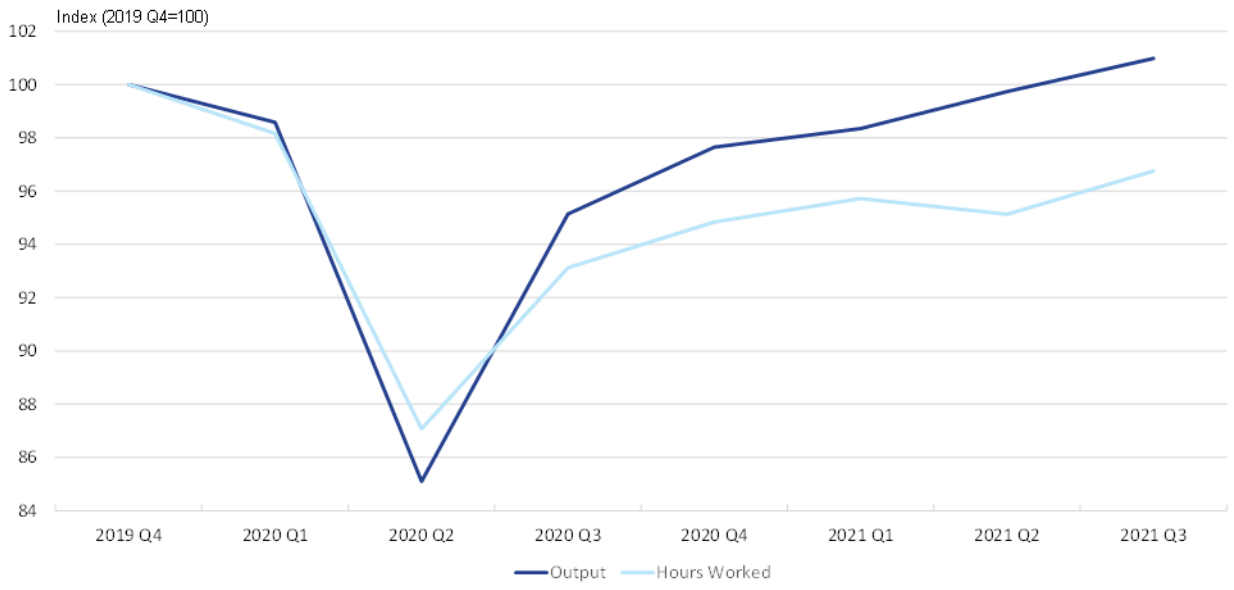
The nonfarm business labor productivity index is 2.8 percent higher in third-quarter 2021 than it was in fourth-quarter 2019, corresponding to an annualized growth rate of 1.6 percent during the pandemic period of fourth quarter 2019 through third quarter 2021. This rate is slightly higher than the 1.4-percent average annual growth rate during the previous business cycle—from 2007 to 2019—but below the long-term average rate since 1947 of 2.1 percent.

Manufacturing sector labor productivity decreased 1.8 percent in the third quarter of 2021, as output increased 5.1 percent and hours worked increased 7.0 percent. In the durable manufacturing sector, productivity increased 0.7 percent, with a 9.7-percent increase in output and an 8.9-percent increase in hours worked. Nondurable manufacturing sector productivity decreased 3.6 percent, as 0.3-percent growth in output was outpaced by 4.0-percent growth in hours worked. Total manufacturing sector productivity increased 2.2 percent from the same quarter a year ago. (See tables A1, 3, 4, and 5.)

Manufacturing sector output is now 1.0 percent above its level in the fourth quarter of 2019, the last quarter not affected by the COVID-19 pandemic. Hours worked in manufacturing remain 3.2 percent below the fourth-quarter 2019 level. The manufacturing labor productivity index was 4.4 percent higher in third-quarter 2021 than in fourth-quarter 2019, corresponding to an annualized labor productivity growth rate of 2.5 percent during that period. This rate is much higher than the 0.2-percent average annual growth rate during the previous business cycle—from 2007 to 2019—and is just above the long-term rate of 2.3 percent per year from 1987 to 2020. (See chart 4 and tables A1 and 3.)

Unit labor costs in the total manufacturing sector increased 4.6 percent in the third quarter of 2021, reflecting a 2.7-percent increase in hourly compensation and a 1.8-percent decrease in productivity. Manufacturing unit labor costs increased 3.7 percent from the same quarter a year ago. (See tables A1 and 3.)

Chart 4. Output and Hours Worked index series, manufacturing, 2019 Q4 – 2021 Q3



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

Preliminary third-quarter 2021 measures were announced today for the **nonfinancial corporate sector.** (See table A2.) Productivity increased 0.7 percent in the third quarter of 2021 as output and hours worked increased 6.8 percent and 6.1 percent, respectively. As in the larger nonfarm business sector, both output and hours worked in the nonfinancial corporate sector have increased in each of the last five quarters. Output is now 5.2 percent above the fourth quarter 2019 level, while hours worked remain 1.2 percent lower than in fourth-quarter 2019, the last quarter not affected by the COVID-19 pandemic. Productivity increased 5.5 percent in the nonfinancial corporate sector over the last four quarters. Unit profits of nonfinancial corporations increased at an 8.3 percent annual rate in the third quarter of 2021 and increased 11.3 percent over the last four quarters. (See table 6.)

Revised measures

Measures released today are based on more recent source data than were available for the preliminary report. Regular updates of source data from the BLS, the Bureau of Economic Analysis (BEA), and the Board of Governors of the Federal Reserve System are reflected in data for the second and third quarters of 2021. Revisions to source data on compensation from BEA, reflecting their incorporation of data from the BLS Quarterly Census of Employment and Wages, resulted in revisions to measures of hourly compensation and unit labor costs in the second quarter of 2021 in all sectors. Measures of output for the manufacturing sectors incorporate revised annual benchmark data from 1987 to 2019 released November 18 by BLS. This revision primarily affected measures in 2018 and 2019; revisions to percent changes prior to 2018 did not exceed 0.1 percentage point.

Table B1 presents revised and previously published productivity and related measures for the nonfarm business, business, and manufacturing sectors for the third quarter of 2021.

In the **third quarter of 2021**, nonfarm business labor productivity decreased 5.2 percent rather than the preliminary estimate of a 5.0-percent decrease, reflecting a 0.1-percentage point upward revision to

output and a 0.4-percentage point upward revision to hours worked. Unit labor costs were revised up 1.3 percentage points due primarily to a 1.0-percentage point upward revision to hourly compensation.

In the manufacturing sector, productivity decreased 1.8 percent rather than 1.0 percent as previously reported, reflecting a 0.6-percentage point downward revision to output and a 0.3-percentage point upward revision to hours worked. Durable manufacturing productivity increased 0.7 percent rather than increasing 1.4 percent as previously reported, reflecting a 0.2-percentage point downward revision to output and a 0.5-percentage point upward revision to hours worked. Nondurable manufacturing productivity was revised down to a decrease of 3.6 percent rather than a decrease of 2.6 percent as previously reported, due to a 1.0-percentage point downward revision to output; hours worked were unrevised. Total manufacturing unit labor costs were revised up 1.7 percentage points to an increase of 4.6 percent, the combined effect of a 0.8-percentage point upward revision to hourly compensation and a 0.8-percentage point downward revision to productivity.

Table B2 shows revised and previously published productivity and related measures for the nonfarm business, business, manufacturing, and nonfinancial corporate sectors for the second quarter of 2021.

In the **second quarter of 2021**, labor productivity, output, and hours worked were unrevised for the nonfarm business sector. Unit labor costs increased 5.9 percent, rather than increasing 1.1 percent as previously reported, due to a 4.9-percentage point upward revision to hourly compensation.

In the manufacturing sector, productivity was revised down 0.1 percentage point to an increase of 8.4 percent. Unit labor costs were revised up to an increase of 1.7 percent rather than the previously reported decrease of 3.5 percent. This large revision is mainly due to a 5.5-percentage point upward revision to hourly compensation.

In the nonfinancial corporate sector, productivity increased 0.8 percent rather than decreasing 1.8 percent as previously reported, due solely to a 2.8-percentage point upward revision to output; hours worked were unrevised. Unit labor costs were revised up 1.9 percentage points to an increase of 7.6 percent, reflecting a 4.7-percentage point upward revision to hourly compensation that was partially offset by a 2.6-percentage point upward revision to labor productivity.

Complete annual and quarterly data series can be found on the Productivity and Costs home page: www.bls.gov/lpc/#data.

The preliminary Productivity and Costs news release for fourth-quarter and annual averages 2021 is scheduled to be released on Thursday, February 3, 2022 at 8:30 a.m. (ET).

Calendar year 2022 release dates for Productivity and Costs news releases are now available at www.bls.gov/schedule/news_release/prod2.htm.

Table A1. Labor productivity growth and related measures - revised third-quarter 2021
(percent change from previous quarter at annual rate and from same quarter a year ago)

Sector	Percent change from:	Labor productivity	Output	Hours worked	Hourly compensation	Real hourly compensation	Unit labor costs
Nonfarm business	**Previous quarter**	**-5.2**	**1.8**	**7.4**	**3.9**	**-2.5**	**9.6**
	A year ago	-0.6	6.2	6.8	5.8	0.4	6.3
Business	**Previous quarter**	**-5.0**	**1.5**	**6.9**	**4.4**	**-2.1**	**9.9**
	A year ago	-0.7	6.0	6.7	5.8	0.5	6.5
Manufacturing	**Previous quarter**	**-1.8**	**5.1**	**7.0**	**2.7**	**-3.7**	**4.6**
	A year ago	2.2	6.1	3.9	5.9	0.6	3.7
Durable manufacturing	**Previous quarter**	**0.7**	**9.7**	**8.9**	**1.7**	**-4.6**	**1.0**
	A year ago	3.0	6.7	3.6	7.1	1.7	4.0
Nondurable manufacturing	**Previous quarter**	**-3.6**	**0.3**	**4.0**	**4.1**	**-2.3**	**8.0**
	A year ago	1.0	5.5	4.4	3.8	-1.4	2.7

Table A2. Labor productivity growth and related measures - preliminary third-quarter 2021
(percent change from previous quarter at annual rate and from same quarter a year ago)

Sector	Percent change from:	Labor productivity	Output	Hours worked	Hourly compensation	Real hourly compensation	Unit labor costs
Nonfinancial corporate	**Previous quarter**	**0.7**	**6.8**	**6.1**	**5.4**	**-1.2**	**4.7**
	A year ago	5.5	12.1	6.2	5.3	0.1	-0.2

Table B1. Labor productivity growth and related measures - revised and previously published third-quarter 2021
(percent change from previous quarter at annual rate)

Sector		Labor productivity	Output	Hours worked	Hourly compensation	Real hourly compensation	Unit labor costs
Nonfarm business	**Revised**	**-5.2**	**1.8**	**7.4**	**3.9**	**-2.5**	**9.6**
	Previously published	-5.0	1.7	7.0	2.9	-3.5	8.3
Business	**Revised**	**-5.0**	**1.5**	**6.9**	**4.4**	**-2.1**	**9.9**
	Previously published	-4.8	1.4	6.5	3.3	-3.1	8.5
Manufacturing	**Revised**	**-1.8**	**5.1**	**7.0**	**2.7**	**-3.7**	**4.6**
	Previously published	-1.0	5.7	6.7	1.9	-4.5	2.9
Durable manufacturing	**Revised**	**0.7**	**9.7**	**8.9**	**1.7**	**-4.6**	**1.0**
	Previously published	1.4	9.9	8.4	0.8	-5.5	-0.6
Nondurable manufacturing	**Revised**	**-3.6**	**0.3**	**4.0**	**4.1**	**-2.3**	**8.0**
	Previously published	-2.6	1.3	4.0	3.5	-2.9	6.2

Table B2. Labor productivity growth and related measures - revised and previously published second-quarter 2021
(percent change from previous quarter at annual rate)

Sector		Labor productivity	Output	Hours worked	Hourly compensation	Real hourly compensation	Unit labor costs
Nonfarm business	**Revised**	**2.4**	**8.5**	**5.9**	**8.4**	**0.0**	**5.9**
	Previously published	2.4	8.5	5.9	3.5	-4.6	1.1
Business	**Revised**	**2.6**	**8.2**	**5.4**	**8.9**	**0.4**	**6.1**
	Previously published	2.6	8.2	5.4	3.9	-4.2	1.3
Manufacturing	**Revised**	**8.4**	**5.8**	**-2.5**	**10.2**	**1.7**	**1.7**
	Previously published	8.5	5.8	-2.5	4.7	-3.5	-3.5
Durable manufacturing	**Revised**	**5.6**	**-0.1**	**-5.4**	**13.1**	**4.3**	**7.1**
	Previously published	5.7	-0.1	-5.4	5.2	-3.0	-0.4
Nondurable manufacturing	**Revised**	**9.8**	**12.7**	**2.6**	**5.8**	**-2.4**	**-3.7**
	Previously published	9.8	12.6	2.6	4.5	-3.6	-4.8
Nonfinancial corporate	**Revised**	**0.8**	**5.7**	**4.9**	**8.5**	**0.0**	**7.6**
	Previously published	-1.8	2.9	4.9	3.8	-4.3	5.7

TECHNICAL NOTES

Labor Hours

Hours worked data for the labor productivity and cost measures include hours worked for all persons working in the sector—wage and salary workers, the self-employed and unpaid family workers. The primary source of hours and employment data is the BLS Current Employment Statistics (CES) program, which provides monthly survey data on the number of jobs held by wage and salary workers in nonfarm establishments, counting a person who is employed by two or more establishments at each place of employment. The CES also provides average weekly paid hours of production and nonsupervisory workers in these establishments. Weekly paid hours are adjusted to hours worked using data from the National Compensation Survey (NCS) for 1996 forward and data from the BLS Hours at Work survey, conducted for this purpose, prior to 1990. Between 1990 and 1995, weekly paid hours are adjusted to hours at work using a combination of NCS and Hours at Work survey data. The Office of Productivity and Technology estimates average weekly hours at work for nonproduction and supervisory workers using information from the Current Population Survey (CPS), the CES, and the NCS.

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

Detailed hours data are presented in the table “Hours Worked in Total U.S. Economy and Subsectors” on the BLS website (www.bls.gov/lpc/special_requests/us_total_hrs_emp.xlsx).

Output

Business sector output is a chain-type, current-weighted index constructed after excluding from gross domestic product (GDP) the following outputs: general government, nonprofit institutions, and private households (including owner-occupied housing). Corresponding exclusions also are made in labor hours worked. Business output accounted for about 75 percent of the value of GDP in 2020. Nonfarm business, which excludes farming, accounted for about 74 percent of GDP in 2020.

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

Nonfinancial corporate output is a chain-type, current-weighted index calculated on the basis of the costs incurred and the incomes earned from production. The output measure excludes the following outputs from GDP: general government; nonprofit institutions; private households; unincorporated business; and those corporations classified as offices of bank holding companies, offices of other holding companies, or offices in the finance and insurance sector. Nonfinancial corporations accounted for about 49 percent of the value of GDP in 2020.

Labor Productivity

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

Labor Compensation

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

Unit Labor Costs

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

Presentation of the data

The quarterly data in this release are presented in three ways: as percent changes from the previous quarter presented at a compound annual rate, as percent changes from the corresponding quarter of the previous year, and as index number series where 2012=100. Annual data are presented both as index number series and percent changes from the previous year.

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

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

Information in this release will be made available to sensory-impaired individuals upon request. Voice phone: 202-691-5200; Federal Relay Service number: 1-800-877-8339.

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

Year and quarter	Labor productivity	Output	Hours worked	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs	Unit nonlabor payments (3)	Implicit price deflator (4)
				Percent change from previous quarter at annual rate (5)				
2021 III	-5.0 r	1.5 r	6.9 r	4.4 r	-2.1 r	9.9 r	0.8 r	6.1
II	2.6	8.2	5.4	8.9 r	0.4 r	6.1 r	9.0 r	7.3
I	4.2	8.2	3.8	1.5	-2.1	-2.6	17.3	5.1
2020 ANNUAL	2.4	-4.2	-6.5	6.8	5.5	4.3	-4.8	0.4
2020 IV	-4.2	6.1	10.8	8.6	6.0	13.4	-13.3	1.6
III	5.9	44.7	36.7	-4.7	-9.0	-10.0	31.7	5.1
II	10.2	-36.8	-42.7	21.9	25.8	10.6	-23.2	-4.6
I	-1.1	-6.8	-5.8	9.2	8.1	10.5	-12.6	0.0
2019 ANNUAL	1.9	2.6	0.7	3.8	2.0	1.8	1.1	1.5
2019 IV	0.5	1.8	1.3	3.9	1.3	3.4	-1.2	1.4
III	0.6	3.1	2.5	0.1	-1.2	-0.4	2.5	0.8
II	4.3	3.5	-0.7	1.4	-2.0	-2.7	10.3	2.7
I	3.2	3.1	-0.2	9.4	8.6	5.9	-5.9	0.7
				Percent change from corresponding quarter of previous year				
2021 III	-0.7 r	6.0 r	6.7 r	5.8 r	0.5 r	6.5 r	2.8 r	5.0
II	2.0	15.8	13.5	3.4 r	-1.3 r	1.3 r	9.9 r	4.7
I	3.9	1.2	-2.6	6.4	4.4	2.4	0.7	1.7
2020 ANNUAL	2.4	-4.2	-6.5	6.8	5.5	4.3	-4.8	0.4
2020 IV	2.5	-2.5	-4.9	8.3	7.0	5.7	-6.4	0.5
III	3.8	-3.5	-7.0	7.2	5.8	3.3	-3.3	0.4
II	2.5	-11.3	-13.5	8.5	8.0	5.9	-9.2	-0.6
I	1.1	0.3	-0.7	3.6	1.5	2.5	-0.6	1.2
2019 ANNUAL	1.9	2.6	0.7	3.8	2.0	1.8	1.1	1.5
2019 IV	2.1	2.9	0.7	3.7	1.6	1.5	1.3	1.4
III	2.0	2.7	0.6	3.1	1.3	1.0	2.0	1.5
II	2.0	2.4	0.4	4.2	2.4	2.2	0.5	1.5
I	1.5	2.5	1.0	4.2	2.6	2.7	0.4	1.7
				Indexes 2012=100				
2021 III	111.6 r	124.5 r	111.6 r	136.5 r	114.5 r	122.3 r	108.7 r	116.3 r
II	113.0	124.1	109.8	135.0 r	115.1 r	119.5 r	108.5 r	114.6
I	112.3	121.6	108.3	132.2	115.0	117.7	106.2	112.6
2020 ANNUAL	110.5	116.0	105.0	128.8	114.0	116.5	103.0	110.6
2020 IV	111.1	119.3	107.3	131.7	115.6	118.5	102.0	111.3
III	112.3	117.5	104.6	129.0	113.9	114.8	105.7	110.8
II	110.7	107.2	96.8	130.6	116.7	117.9	98.7	109.5
I	108.1	120.2	111.2	124.2	110.1	115.0	105.4	110.8
2019 ANNUAL	107.9	121.2	112.3	120.5	108.0	111.7	108.3	110.2
2019 IV	108.4	122.3	112.9	121.5	108.0	112.1	109.0	110.8
III	108.2	121.8	112.5	120.4	107.7	111.2	109.3	110.4
II	108.1	120.8	111.8	120.3	108.0	111.3	108.6	110.2
I	106.9	119.8	112.0	119.9	108.5	112.1	106.0	109.4

See footnotes following Table 6. December 7, 2021
r=revised Source: Bureau of Labor Statistics

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

Year and quarter	Labor productivity	Output	Hours worked	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs	Unit nonlabor payments (3)	Implicit price deflator (4)
				Percent change from previous quarter at annual rate (5)				
2021 III	-5.2 r	1.8 r	7.4 r	3.9 r	-2.5 r	9.6 r	0.6 r	5.8 r
II	2.4	8.5	5.9	8.4 r	0.0 r	5.9 r	6.5 r	6.1
I	4.3	8.4	4.0	1.4	-2.2	-2.8	16.6	4.6
2020 ANNUAL	2.4	-4.4	-6.6	7.0	5.6	4.5	-4.9	0.4
2020 IV	-3.4	6.2	9.9	9.4	6.8	13.3	-14.8	0.9
III	4.6	44.6	38.2	-5.7	-10.0	-9.9	30.5	4.7
II	11.2	-36.9	-43.2	22.7	26.6	10.3	-21.7	-3.9
I	-1.8	-7.4	-5.7	9.3	8.2	11.3	-13.2	0.2
2019 ANNUAL	2.0	2.7	0.7	3.8	2.0	1.8	1.2	1.5
2019 IV	0.6	1.8	1.2	4.1	1.5	3.5	-1.5	1.3
III	0.8	3.2	2.4	0.2	-1.1	-0.5	2.4	0.7
II	4.3	3.6	-0.7	1.4	-2.0	-2.8	10.6	2.7
I	3.4	3.4	0.0	9.2	8.4	5.6	-5.5	0.7
				Percent change from corresponding quarter of previous year				
2021 III	-0.6 r	6.2 r	6.8 r	5.8 r	0.4 r	6.3 r	1.6 r	4.4
II	1.9	15.9	13.7	3.2 r	-1.5 r	1.3 r	8.4 r	4.1
I	4.1	1.3	-2.7	6.4	4.5	2.3	0.4	1.5
2020 ANNUAL	2.4	-4.4	-6.6	7.0	5.6	4.5	-4.9	0.4
2020 IV	2.5	-2.7	-5.0	8.5	7.2	5.8	-6.8	0.4
III	3.6	-3.7	-7.0	7.1	5.8	3.4	-3.3	0.5
II	2.6	-11.5	-13.7	8.8	8.3	6.0	-9.0	-0.4
I	1.0	0.2	-0.8	3.7	1.6	2.7	-0.8	1.2
2019 ANNUAL	2.0	2.7	0.7	3.8	2.0	1.8	1.2	1.5
2019 IV	2.3	3.0	0.7	3.7	1.6	1.4	1.4	1.4
III	2.1	2.8	0.6	3.1	1.3	0.9	2.1	1.4
II	2.2	2.6	0.3	4.3	2.4	2.1	0.8	1.5
I	1.6	2.6	1.1	4.3	2.6	2.7	0.6	1.8
				Indexes 2012=100				
2021 III	111.3 r	124.4 r	111.8 r	136.6 r	114.6 r	122.7 r	108.3 r	116.4 r
II	112.8	123.9	109.9	135.2 r	115.3 r	119.9 r	108.1 r	114.8
I	112.1	121.4	108.3	132.5	115.3	118.2	106.5	113.1
2020 ANNUAL	110.2	115.7	105.0	129.1	114.3	117.1	103.8	111.3
2020 IV	110.9	118.9	107.2	132.1	116.0	119.1	102.5	111.8
III	111.9	117.2	104.7	129.1	114.1	115.4	106.6	111.6
II	110.6	106.9	96.6	131.0	117.1	118.4	99.8	110.3
I	107.7	119.9	111.3	124.5	110.4	115.6	106.1	111.4
2019 ANNUAL	107.7	121.0	112.4	120.7	108.2	112.1	109.2	110.8
2019 IV	108.2	122.2	112.9	121.8	108.2	112.5	109.9	111.4
III	108.1	121.6	112.6	120.5	107.8	111.6	110.3	111.0
II	107.8	120.7	111.9	120.5	108.1	111.7	109.7	110.8
I	106.7	119.6	112.1	120.1	108.7	112.5	106.9	110.1

See footnotes following Table 6. December 7, 2021
r=revised Source: Bureau of Labor Statistics

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

Year and quarter	Labor productivity	Output	Hours worked	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs
			Percent change from previous quarter at annual rate (5)			
2021 III	-1.8 r	5.1 r	7.0 r	2.7 r	-3.7 r	4.6 r
II	8.4 r	5.8	-2.5	10.2 r	1.7 r	1.7 r
I	-0.8	2.9	3.8	0.6	-3.1	1.4
2020 ANNUAL	0.1 r	-6.5 r	-6.6	6.8	5.4	6.6 r
2020 IV	3.2 r	11.0	7.6	10.5	7.9	7.2
III	19.4	56.2	30.8	-12.0	-16.0	-26.3
II	-10.3	-44.5	-38.1	27.2	31.3	41.9
I	1.7 r	-5.5	-7.2	7.8	6.7	6.0
2019 ANNUAL	-1.4	-1.7	-0.2	2.8	1.0	4.3
2019 IV	-2.2 r	-2.0 r	0.1	6.7	4.0	9.1 r
III	-1.6 r	-0.5 r	1.1	-1.1	-2.4	0.4 r
II	-2.0	-3.4 r	-1.4	1.7	-1.7	3.8
I	-0.9 r	-4.0 r	-3.1	6.2	5.4	7.1 r
			Percent change from corresponding quarter of previous year			
2021 III	2.2 r	6.1 r	3.9 r	5.9 r	0.6 r	3.7 r
II	7.3	17.2	9.2	1.9 r	-2.8 r	-5.0 r
I	2.3	-0.2	-2.5	5.6	3.7	3.2
2020 ANNUAL	0.1 r	-6.5 r	-6.6	6.8	5.4	6.6 r
2020 IV	3.0	-2.4	-5.2	7.5	6.2	4.4
III	1.6 r	-5.4 r	-6.8	6.5	5.2	4.9 r
II	-3.2 r	-15.4 r	-12.7	9.7	9.2	13.3 r
I	-1.0 r	-2.9 r	-1.9	3.7	1.6	4.8 r
2019 ANNUAL	-1.4	-1.7	-0.2	2.8	1.0	4.3
2019 IV	-1.7 r	-2.5 r	-0.8	3.3	1.3	5.1 r
III	-1.8	-2.5	-0.7	2.3	0.5	4.2
II	-1.6 r	-1.7 r	-0.1	3.5	1.6	5.3 r
I	-0.6 r	0.1 r	0.6	2.1	0.5	2.7 r
			Indexes 2012=100			
2021 III	99.4 r	102.2 r	102.8 r	129.7 r	108.8 r	130.4 r
II	99.9 r	101.0 r	101.1	128.8 r	109.8 r	128.9 r
I	97.9 r	99.6 r	101.7	125.7	109.4	128.4 r
2020 ANNUAL	96.1 r	95.3 r	99.2	123.2	109.1	128.2 r
2020 IV	98.1 r	98.9 r	100.8	125.5	110.2	128.0 r
III	97.3 r	96.3 r	99.0	122.4	108.1	125.8 r
II	93.1 r	86.2 r	92.5	126.4	113.0	135.8 r
I	95.7 r	99.8 r	104.3	119.0	105.5	124.4 r
2019 ANNUAL	96.0 r	101.9 r	106.2	115.4	103.5	120.3 r
2019 IV	95.3 r	101.2 r	106.3	116.8	103.8	122.6 r
III	95.8 r	101.8 r	106.2	114.9	102.8	120.0 r
II	96.2 r	101.9 r	105.9	115.2	103.4	119.8 r
I	96.7 r	102.8 r	106.3	114.7	103.9	118.7 r

See footnotes following Table 6. December 7, 2021
r=revised Source: Bureau of Labor Statistics

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

Year and quarter	Labor productivity	Output	Hours worked	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs
	Percent change from previous quarter at annual rate (5)					
2021 III	0.7 r	9.7 r	8.9 r	1.7 r	-4.6 r	1.0 r
II	5.6 r	-0.1	-5.4	13.1 r	4.3 r	7.1 r
I	1.1	6.7	5.5	1.8	-1.9	0.7
2020 ANNUAL	-0.2	-8.1	-8.0	6.8	5.5	7.0
2020 IV	4.8	11.0	6.0	12.3	9.6	7.2
III	44.6	97.9	36.9	-16.1	-19.9	-42.0
II	-20.3	-54.4	-42.8	29.7	33.9	62.7
I	-2.6	-10.0	-7.6	6.9	5.8	9.7
2019 ANNUAL	-2.0 r	-2.0 r	0.0	2.3	0.4	4.4 r
2019 IV	-0.8 r	-1.9 r	-1.1	10.2	7.4	11.1 r
III	-1.1 r	-0.3 r	0.8	-2.4	-3.6	-1.3 r
II	-1.2 r	-3.6 r	-2.4	0.9	-2.4	2.2 r
I	-3.3 r	-6.2 r	-2.9	5.8	5.0	9.4 r
	Percent change from corresponding quarter of previous year					
2021 III	3.0 r	6.7 r	3.6 r	7.1 r	1.7 r	4.0 r
II	12.8	23.7	9.7	2.0 r	-2.6 r	-9.5 r
I	5.1	1.7	-3.3	5.6	3.6	0.5
2020 ANNUAL	-0.2	-8.1	-8.0	6.8	5.5	7.0
2020 IV	4.1	-2.6	-6.4	6.9	5.6	2.6
III	2.7	-5.5 r	-8.0	6.4	5.1	3.6
II	-6.6	-20.4	-14.8	10.5	10.1	18.3
I	-1.4	-4.0	-2.6	3.8	1.7	5.3
2019 ANNUAL	-2.0 r	-2.0 r	0.0	2.3	0.4	4.4 r
2019 IV	-1.6 r	-3.0 r	-1.4	3.5	1.5	5.2 r
III	-2.3 r	-2.7 r	-0.4	1.3	-0.5	3.7 r
II	-2.3 r	-2.0 r	0.3	2.6	0.8	5.1 r
I	-1.7 r	-0.4 r	1.4	1.6	0.0	3.4 r
	Indexes 2012=100					
2021 III	101.8 r	103.1 r	101.3 r	131.0 r	109.9 r	128.8 r
II	101.6 r	100.8 r	99.2	130.5 r	111.2 r	128.5 r
I	100.2 r	100.8 r	100.6	126.5	110.1	126.3 r
2020 ANNUAL	96.1 r	94.1 r	97.9	123.8	109.6	128.8 r
2020 IV	99.9 r	99.2 r	99.3	126.0	110.6	126.0 r
III	98.8 r	96.6 r	97.8	122.4	108.1	123.9 r
II	90.1 r	81.5 r	90.5	127.9	114.3	142.0 r
I	95.3 r	99.2 r	104.0	119.8	106.2	125.7 r
2019 ANNUAL	96.3 r	102.5 r	106.4	116.0	104.0	120.4 r
2019 IV	96.0 r	101.8 r	106.1	117.8	104.7	122.8 r
III	96.2 r	102.3 r	106.4	115.0	102.9	119.6 r
II	96.4 r	102.4 r	106.2	115.7	103.8	120.0 r
I	96.7 r	103.3 r	106.8	115.4	104.5	119.3 r

See footnotes following Table 6. December 7, 2021

r=revised Source: Bureau of Labor Statistics

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

Year and quarter	Labor productivity	Output	Hours worked	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs
			Percent change from previous quarter at annual rate (5)			
2021 III	-3.6 r	0.3 r	4.0	4.1 r	-2.3 r	8.0 r
II	9.8	12.7 r	2.6	5.8 r	-2.4 r	-3.7 r
I	-2.1	-1.1	1.0	-2.1	-5.6	0.0
2020 ANNUAL	-0.4 r	-4.7 r	-4.3	7.1	5.8	7.5 r
2020 IV	0.5	10.9	10.3	7.6	5.1	7.0 r
III	-0.1	21.4	21.5	-4.8	-9.1	-4.8
II	-3.3	-31.7	-29.4	25.2	29.3	29.5
I	6.6	-0.3	-6.4	9.8	8.7	3.1
2019 ANNUAL	-0.7 r	-1.3 r	-0.6	3.9	2.0	4.6 r
2019 IV	-4.3 r	-2.1 r	2.3	0.5	-2.0	5.0 r
III	-2.2 r	-0.7 r	1.5	1.4	0.1	3.7 r
II	-3.6 r	-3.1 r	0.5	3.6	0.1	7.4 r
I	2.0 r	-1.6 r	-3.5	6.9	6.1	4.9 r
			Percent change from corresponding quarter of previous year			
2021 III	1.0 r	5.5 r	4.4	3.8 r	-1.4 r	2.7 r
II	1.9	10.7	8.6	1.5 r	-3.1 r	-0.4 r
I	-1.3	-2.4	-1.1	5.9	3.9	7.2
2020 ANNUAL	-0.4 r	-4.7 r	-4.3	7.1	5.8	7.5 r
2020 IV	0.9	-2.2	-3.0	9.0	7.6	8.0
III	-0.4 r	-5.2 r	-4.8	7.1	5.8	7.5 r
II	-0.9 r	-9.8 r	-9.0	8.8	8.3	9.8 r
I	-1.0 r	-1.6 r	-0.6	3.8	1.6	4.8 r
2019 ANNUAL	-0.7 r	-1.3 r	-0.6	3.9	2.0	4.6 r
2019 IV	-2.1 r	-1.9 r	0.2	3.1	1.0	5.2 r
III	-1.1 r	-2.2 r	-1.1	4.3	2.5	5.5 r
II	-0.8 r	-1.4 r	-0.7	5.2	3.3	6.0 r
I	1.1 r	0.4 r	-0.7	3.0	1.3	1.9 r
			Indexes 2012=100			
2021 III	97.3 r	102.4 r	105.3 r	127.5 r	107.0 r	131.1 r
II	98.2 r	102.3 r	104.3	126.3 r	107.6 r	128.6 r
I	95.9 r	99.3 r	103.6	124.5	108.3	129.8 r
2020 ANNUAL	96.5 r	97.7 r	101.3	122.4	108.4	126.9 r
2020 IV	96.4 r	99.6 r	103.3	125.1	109.9	129.8 r
III	96.3 r	97.1 r	100.8	122.9	108.5	127.6 r
II	96.3 r	92.5 r	96.0	124.4	111.2	129.2 r
I	97.1 r	101.7 r	104.8	117.6	104.2	121.1 r
2019 ANNUAL	96.8 r	102.5 r	105.9	114.3	102.5	118.0 r
2019 IV	95.6 r	101.8 r	106.5	114.9	102.1	120.2 r
III	96.6 r	102.3 r	105.9	114.7	102.6	118.7 r
II	97.2 r	102.5 r	105.5	114.3	102.6	117.7 r
I	98.1 r	103.4 r	105.4	113.3	102.6	115.6 r

See footnotes following Table 6. December 7, 2021
r=revised Source: Bureau of Labor Statistics

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

Year and quarter	Labor productivity	Output	Hours worked	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs	Unit nonlabor costs (6)	Total unit costs (7)	Unit profits (8)	Implicit price deflator (4)
				Percent change from previous quarter at annual rate (5)						
2021 III	0.7	6.8	6.1	5.4	-1.2	4.7	15.5	7.7	8.3	7.8
II	0.8 r	5.7 r	4.9	8.5 r	0.0 r	7.6 r	-14.4 r	0.7 r	58.8 r	7.9
I	5.0	8.9	3.7	0.0	-3.6	-4.8	18.7	1.6	30.0	5.1
2020 ANNUAL	2.2	-4.2	-6.3	6.9	5.6	4.6	-10.6	-0.2	2.4	0.1
2020 IV	16.3	28.4	10.3	7.7	5.2	-7.4	53.3	6.3	-31.4	-0.2
III	-0.8	31.7	32.8	-5.7	-9.9	-4.9	-21.4	-9.6	206.1	6.2
II	3.8	-39.0	-41.2	25.0	29.1	20.5	-49.3	-6.5	-9.1	-6.8
I	1.1	-3.3	-4.3	7.8	6.7	6.6	4.2	5.8	-35.4	-0.4
2019 ANNUAL	1.4	2.3	0.9	3.9	2.1	2.5	1.9	2.3	-1.2	1.9
2019 IV	1.1	2.2	1.1	3.6	1.0	2.6	-2.7	0.8	8.8	1.8
III	0.5	1.1	0.6	1.0	-0.4	0.5	5.3	2.0	2.6	2.1
II	1.3	1.6	0.3	2.3	-1.2	1.0	1.7	1.2	13.3	2.6
I	2.7	3.4	0.7	8.0	7.2	5.2	3.2	4.6	-31.2	-1.0
				Percent change from corresponding quarter of previous year						
2021 III	5.5	12.1	6.2	5.3	0.1	-0.2	15.8	4.0	11.3	5.1
II	5.1 r	18.1 r	12.4	2.5 r	-2.2 r	-2.5 r	5.2 r	-0.4 r	44.3 r	4.7
I	5.9	3.0	-2.8	6.2	4.2	0.2	-7.7	-2.3	25.5	1.0
2020 ANNUAL	2.2	-4.2	-6.3	6.9	5.6	4.6	-10.6	-0.2	2.4	0.1
2020 IV	4.9	-0.1	-4.7	8.2	6.9	3.1	-10.7	-1.2	5.4	-0.4
III	1.3	-5.6	-6.8	7.1	5.8	5.8	-20.3	-2.5	18.3	0.1
II	1.6	-11.6	-13.0	9.0	8.5	7.3	-14.2	0.4	-10.0	-0.9
I	1.0	0.4	-0.6	3.6	1.5	2.6	2.1	2.4	-4.9	1.5
2019 ANNUAL	1.4	2.3	0.9	3.9	2.1	2.5	1.9	2.3	-1.2	1.9
2019 IV	1.4	2.1	0.7	3.7	1.6	2.3	1.8	2.1	-3.4	1.4
III	1.1	1.7	0.7	3.5	1.7	2.4	3.2	2.6	-2.4	2.0
II	2.2	3.0	0.8	4.5	2.6	2.2	1.1	1.9	0.8	1.7
I	0.9	2.3	1.4	4.1	2.5	3.2	1.4	2.6	0.6	2.3
				Indexes 2012=100						
2021 III	111.7	125.7	112.6	136.1	114.2	121.9	100.4	114.7	130.4	117.0
II	111.5 r	123.7 r	111.0	134.3 r	114.5 r	120.5 r	96.9 r	112.6 r	127.8 r	114.8 r
I	111.3	122.0	109.6	131.6	114.5	118.3	100.7	112.4	113.8	112.6
2020 ANNUAL	106.7	113.7	106.5	128.9	114.1	120.8	96.3	112.6	100.9	111.0
2020 IV	109.9	119.4	108.6	131.6	115.6	119.8	96.5	112.0	106.6	111.2
III	105.8	112.2	106.0	129.2	114.1	122.1	86.7	110.3	117.2	111.3
II	106.1	104.7	98.7	131.1	117.2	123.6	92.1	113.1	88.6	109.6
I	105.1	118.5	112.8	124.0	109.9	118.0	109.1	115.0	90.7	111.6
2019 ANNUAL	104.4	118.7	113.7	120.6	108.1	115.5	107.7	112.9	98.5	110.8
2019 IV	104.8	119.5	114.0	121.7	108.1	116.1	108.0	113.4	101.2	111.7
III	104.5	118.8	113.7	120.6	107.9	115.4	108.7	113.2	99.1	111.2
II	104.4	118.5	113.5	120.3	108.0	115.3	107.3	112.6	98.4	110.6
I	104.0	118.0	113.4	119.6	108.3	115.0	106.9	112.3	95.4	109.9

See footnotes following Table 6. December 7, 2021
r=revised Source: Bureau of Labor Statistics

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

SIZE OF REVISIONS: Productivity and cost measures are revised on a regular schedule as more complete data become available. The first estimate is published within 40 days of the close of the reference quarter, the second estimate approximately 30 days later, and the third estimate approximately 60 days after the second estimate. Based on past revisions, the third estimate of nonfarm business sector quarterly labor productivity growth has differed from the first estimate by -1.1 to +1.4 percentage point about 80 percent of the time. This interval is based on estimates for reference quarters from the first quarter of 2001 to the second quarter of 2021. For more about revisions to labor productivity growth see "How large are revisions to estimates of quarterly labor productivity growth?" at www.bls.gov/osmr/research-papers/2021/ec210040.htm.

Table Footnotes

(1) Wages and salaries of employees plus employers' contributions for social insurance and private benefit plans. Except for nonfinancial corporations, where there are no self-employed, data also include an estimate of wages, salaries, and supplemental payments for the self-employed.

(2) The change for recent quarters is based on the Consumer Price Index for all urban consumers (CPI-U). The trend from 1978-2020 is based on the Consumer Price Index Retroactive series (CPI-U-RS).

(3) Unit nonlabor payments include profits, consumption of fixed capital, taxes on production and imports less subsidies, net interest and miscellaneous payments, business current transfer payments, rental income of persons, and the current surplus of government enterprises.

(4) Current dollar output divided by the output index.

(5) Quarterly changes: Percent change compounded at annual rate is calculated using index numbers to three decimal places. Indexes published in the news release are rounded to one decimal place for convenience. Annual changes: Percent change is calculated using annual indexes to three decimal places.

(6) Unit nonlabor costs include consumption of fixed capital, taxes on production and imports less subsidies, net interest and miscellaneous payments, and business current transfer payments.

(7) Total unit costs are the sum of unit labor and nonlabor costs.

(8) Unit profits include corporate profits before tax with inventory valuation and capital consumption adjustment.