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PRODUCTIVITY AND COSTS
Third Quarter 2010, Revised

Nonfarm business sector labor productivity increased at a 2.3 percent annual rate during the third quarter of 2010, the U.S. Bureau of Labor Statistics reported today. Labor productivity is calculated by dividing an index of real output by an index of the combined hours worked of all persons, including employees, proprietors, and unpaid family workers. Output increased 3.7 percent and hours worked increased 1.4 percent in the third quarter. (All quarterly percent changes in this release are seasonally adjusted annual rates.) Nonfarm business productivity increased 2.5 percent from the third quarter of 2009 to the third quarter of 2010, as output increased 4.3 percent and hours worked rose 1.7 percent (chart 1, tables A and 2).

The productivity measures released today are based on more recent and more complete data than were available for the preliminary report issued last month (see Revised measures, page 2).

Chart 1. Output per hour, nonfarm business, all persons, 2005Q1 – 2010Q3

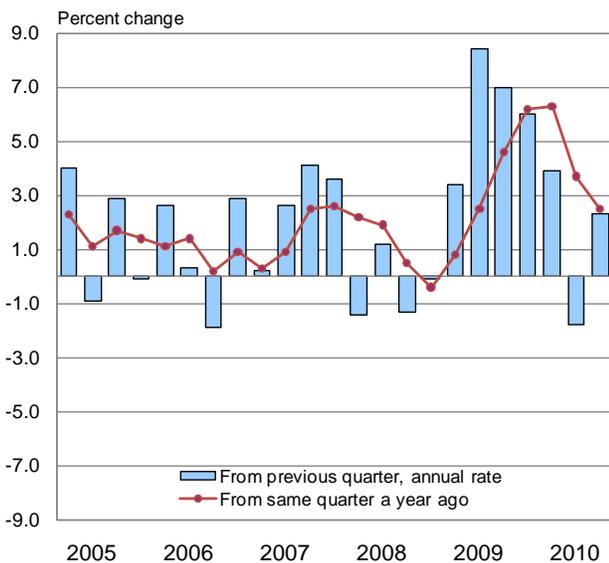
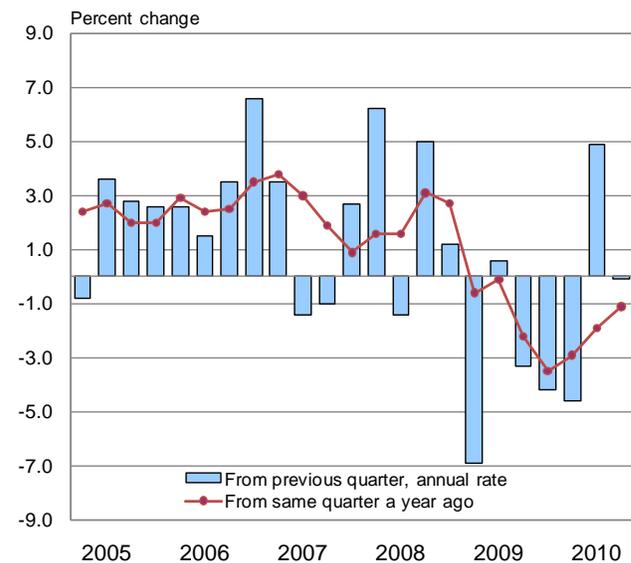


Chart 2. Unit labor costs, nonfarm business, all persons, 2005Q1 – 2010Q3



Unit labor costs in nonfarm businesses decreased 0.1 percent in the third quarter of 2010, because productivity grew 2.3 percent while hourly compensation increased 2.2 percent. Over the last four quarters, unit labor costs declined 1.1 percent (chart 2, tables A and 2). BLS defines 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 output per hour tend to reduce them.

Business sector productivity increased 2.5 percent in the third quarter of 2010, as output increased 3.7 percent and hours increased 1.2 percent. Over the last four quarters, business sector productivity increased 2.6 percent.

Manufacturing sector productivity rose 0.6 percent in the third quarter of 2010, as output and hours grew 4.2 percent and 3.6 percent, respectively. In the durable manufacturing subsector, output per hour declined 0.5 percent as output grew 6.0 percent but hours grew faster, 6.5 percent. In nondurable goods industries productivity increased 3.2 percent, due both to an increase in output and a decline in hours. Over the last four quarters, total manufacturing productivity increased 4.0 percent as output rose 7.1 percent and hours increased 3.0 percent (tables A and 3). **Manufacturing unit labor costs** increased 1.0 percent in the third quarter of 2010, but fell 2.9 percent over the last four quarters.

The data sources and methods used in the preparation of the manufacturing output series differ from those used in preparing the business and nonfarm business output series, and these measures are not directly comparable. See Technical Notes for more information on data sources (page 4).

Preliminary third-quarter 2010 data for the **nonfinancial corporate sector** also were released today. Output per hour fell 2.4 percent as output declined 0.2 percent and hours rose 2.3 percent.

Revised measures

Measures for the second and third quarters of 2010 for all sectors reflect normal updates of source data including output, employment, and hours. Additionally, manufacturing productivity, output, and unit labor costs series were revised back to 1987 to reflect revised output indexes constructed by BLS using data from the U.S. Department of Commerce. Table B presents previous and revised productivity and related measures for the major sectors: business, nonfarm business and manufacturing, for the third and second quarters of 2010. Revised annual indexes for the manufacturing sectors appear in appendix tables 1-3. Full historical annual and quarterly measures can be found on the labor productivity and costs home page <http://www.bls.gov/lpc/#data>.

In the **nonfarm business sector**, third quarter productivity growth was revised up to 2.3 percent from a previous estimate of 1.9 percent, because the upward revision to output was greater than the upward revision to hours. Nonfarm business productivity in the second quarter was not revised. Unit labor costs declined by the same amount in the third quarter as previously reported, 0.1 percent. However, second quarter unit labor costs were revised up substantially due to an upward revision to hourly compensation.

In the **manufacturing sector**, slight upward revisions to output resulted in similar upward revisions to productivity in both the third and second quarters of 2010. Upward revisions to hourly compensation affected unit labor costs. Third quarter unit labor costs increased 1.0 percent rather than declining 0.3 percent. Second quarter unit labor costs were revised to -0.7 percent from the preliminary estimate of -6.4 percent reported on November 4.

The Bureau of Labor Statistics is conducting a customer survey to solicit suggestions from the public to enhance the quality and relevance of BLS productivity data and publications. The survey is available at www.bls.gov/lpc until December 15, 2010.

The preliminary Productivity and Costs press release for fourth-quarter 2010 is scheduled to be released on Thursday, February 3, 2011 at 8:30 a.m. (EST).

Table A. Revised third-quarter 2010 measures: percent change from previous quarter, annual rate (Q to Q) and from same quarter a year ago (Y to Y)											
Sector	Nonfarm Business		Business		Manufacturing		Durable Manufacturing		Nondurable Manufacturing		
	Q to Q	Y to Y	Q to Q	Y to Y	Q to Q	Y to Y	Q to Q	Y to Y	Q to Q	Y to Y	
Productivity	2.3	2.5	2.5	2.6	0.6	4.0	-0.5	5.5	3.2	2.7	
Output	3.7	4.3	3.7	4.2	4.2	7.1	6.0	9.6	2.2	4.2	
Hours	1.4	1.7	1.2	1.6	3.6	3.0	6.5	3.9	-0.9	1.5	
Hourly compensation	2.2	1.4	2.5	1.4	1.6	1.0	0.8	1.5	2.4	-0.3	
Real hourly compensation	0.8	0.2	1.0	0.2	0.1	-0.3	-0.7	0.3	0.9	-1.5	
Unit labor costs	-0.1	-1.1	0.0	-1.1	1.0	-2.9	1.3	-3.8	-0.7	-2.9	
Table B. Revised and previous measures for: third quarter and second quarter 2010											
Sector	Nonfarm Business		Business		Manufacturing		Durable Manufacturing		Nondurable Manufacturing		
	Revised	Previous	Revised	Previous	Revised	Previous	Revised	Previous	Revised	Previous	
Percent change, annual rate, third quarter 2010											
Productivity	2.3	1.9	2.5	2.2	0.6	0.4	-0.5	-0.8	3.2	2.9	
Output	3.7	3.0	3.7	3.0	4.2	4.0	6.0	5.6	2.2	2.2	
Hours	1.4	1.1	1.2	0.8	3.6	3.6	6.5	6.4	-0.9	-0.7	
Hourly compensation	2.2	1.8	2.5	2.1	1.6	0.1	0.8	-1.0	2.4	1.6	
Real hourly compensation	0.8	0.4	1.0	0.7	0.1	-1.4	-0.7	-2.5	0.9	0.1	
Unit labor costs	-0.1	-0.1	0.0	-0.1	1.0	-0.3	1.3	-0.2	-0.7	-1.3	
Percent change, annual rate, second quarter 2010											
Productivity	-1.8	-1.8	-1.8	-1.8	5.6	5.4	11.9	11.6	-1.5	-1.6	
Output	1.6	1.6	1.8	1.8	9.8	9.6	15.4	15.1	3.8	3.7	
Hours	3.5	3.5	3.7	3.7	4.0	4.0	3.1	3.1	5.3	5.3	
Hourly compensation	2.9	-0.6	2.7	-0.7	4.8	-1.3	8.6	-1.3	-1.7	-1.3	
Real hourly compensation	3.7	0.1	3.5	0.0	5.5	-0.6	9.4	-0.5	-1.0	-0.6	
Unit labor costs	4.9	1.3	4.6	1.1	-0.7	-6.4	-2.9	-11.5	-0.2	0.3	
Table C. Nonfinancial corporations: preliminary third-quarter and revised second-quarter 2010 productivity and cost measures											
	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs	Unit profits	Implicit price deflator			
Percent change, annual rate, third quarter 2010											
Q to Q	-2.4	-0.2	2.3	2.2	0.7	4.7	8.8	4.6			
Y to Y	4.5	6.9	2.2	1.2	0.0	-3.2	31.2	-0.1			
Percent change, annual rate, second quarter 2010											
Revised	0.1	4.4	4.3	2.1	2.8	2.0	19.6	2.6			
Previous	-1.6	2.7	4.3	-0.7	0.0	0.9	21.7	2.6			

TECHNICAL NOTES

Labor Hours: Hours data for the labor productivity and cost measures include hours 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. The CES also provides average weekly paid hours of production and nonsupervisory workers in these establishments. Weekly paid hours are adjusted to hours at work using data from the National Compensation Survey (NCS). The BLS Hours at Work survey, conducted for this purpose, was used for earlier years. 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 for farm labor, nonfarm proprietors, and nonfarm unpaid family workers. Estimates of labor input 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.

The CES measures jobs, counting a person who is employed by two or more establishments at each place of employment. In contrast, the CPS features measures of employment that count each person only once and classify each person according to his or her primary job; hours worked at all jobs by that person accrue to his or her primary job. However, the CPS also collects more detailed information on employment and hours worked at primary jobs and all other jobs, separately. The BLS productivity measures use the more detailed information on employment and hours to assign all hours worked to the correct industrial sector and avoid duplicating hours data from the CES.

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 inputs. Business output accounted for about 75 percent of the value of GDP in 2009. Nonfarm business, which excludes farming, accounted for about 74 percent of GDP in 2009.

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 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 index 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. Durables include the following 3-digit NAICS industries: wood product manufacturing; nonmetallic mineral product manufacturing; primary metal manufacturing; fabricated metal product manufacturing; machinery manufacturing; computer and electronic product manufacturing; electrical equipment and appliance manufacturing; transportation equipment manufacturing; furniture and related product manufacturing; and miscellaneous manufacturing. Nondurables include: food manufacturing; beverage and tobacco product manufacturing; textile mills; textile product mills; apparel manufacturing; leather and allied product manufacturing; paper manufacturing; printing and related support activities; petroleum and coal products manufacturing; chemical manufacturing; and plastics and rubber products manufacturing.

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 47 percent of the value of GDP in 2009.

Productivity: These productivity measures describe the relationship between real output and the labor time involved in its production. They show the changes from period to period in the amount of goods and services produced per hour. Although these measures relate output to hours at work of all persons engaged in a sector, they do not measure the specific contribution of labor, capital, or any other factor of production. Rather, 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 domestic employees 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: The measures of unit labor costs in this release describe the relationship between compensation per hour and 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 2005=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. 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 DPRWEB@BLS.GOV)

Information in this release will be made available to sensory-impaired individuals upon request. Voice phone: 202-691-5606; Federal Relay Service number: 1-800-877-8339.

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

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	Unit nonlabor payments (3)	Implicit price deflator (4)
Percent change from previous quarter at annual rate(5)								
2010 III	2.5 r	3.7 r	1.2 r	2.5 r	1.0 r	0.0 r	6.1	2.5
II	-1.8	1.8	3.7	2.7 r	3.5 r	4.6 r	-0.4 r	2.5
I	3.5	5.0	1.4	-1.1	-2.6	-4.5	9.6	1.2
2009 ANNUAL	3.5	-3.7	-6.9	1.8	2.2	-1.6	3.8	0.5
2009 IV	6.1	6.5	0.3	1.5	-1.2	-4.4	5.2	-0.5
III	7.2	1.6	-5.3	3.8	0.0	-3.2	7.4	0.9
II	8.3	-0.3	-7.9	9.0	7.1	0.6	-2.9	-0.8
I	3.5	-6.2	-9.4	-3.6	-1.5	-6.9	13.6	0.8
2008 ANNUAL	1.1	-0.9	-2.0	3.2	-0.6	2.1	1.4	1.8
2008 IV	-0.3	-9.3	-9.0	0.8	11.0	1.1	-7.9	-2.6
III	-1.1	-6.1	-5.0	3.6	-2.6	4.8	5.7	5.1
II	1.2	-0.6	-1.8	0.1	-4.8	-1.1	12.3	4.0
I	-0.9	-2.0	-1.1	4.5	-0.3	5.4	-5.7	0.9
Percent change from corresponding quarter of previous year								
2010 III	2.6 r	4.2 r	1.6 r	1.4 r	0.2 r	-1.1 r	5.1 r	1.4
II	3.7	3.7	0.0	1.7 r	-0.1 r	-1.9 r	5.4 r	1.0
I	6.3	3.2	-2.9	3.2	0.8	-2.9	4.7	0.2
2009 ANNUAL	3.5	-3.7	-6.9	1.8	2.2	-1.6	3.8	0.5
2009 IV	6.3	0.3	-5.6	2.5	1.0	-3.5	5.6	0.1
III	4.6	-3.7	-7.9	2.4	4.0	-2.2	2.2	-0.4
II	2.5	-5.5	-7.8	2.3	3.3	-0.2	1.8	0.6
I	0.8	-5.6	-6.3	0.2	0.3	-0.6	5.6	1.8
2008 ANNUAL	1.1	-0.9	-2.0	3.2	-0.6	2.1	1.4	1.8
2008 IV	-0.3	-4.5	-4.3	2.2	0.6	2.5	0.8	1.8
III	0.5	-1.5	-2.0	3.4	-1.8	2.8	1.9	2.5
II	1.9	0.6	-1.2	3.3	-0.9	1.4	1.8	1.6
I	2.4	1.7	-0.6	3.9	-0.3	1.5	1.3	1.4
Indexes 2005=100								
2010 III	111.1 r	104.4 r	93.9 r	116.2 r	104.1 r	104.6 r	117.6 r	109.8 r
II	110.4	103.4	93.7	115.5 r	103.8 r	104.6 r	115.9 r	109.1
I	111.0	103.0	92.8	114.7	102.9	103.4	116.0	108.4
2009 ANNUAL	107.3	100.4	93.6	113.6	103.4	105.9	111.6	108.1
2009 IV	110.0	101.7	92.5	115.1	103.6	104.6	113.4	108.1
III	108.4	100.1	92.4	114.6	103.9	105.8	112.0	108.2
II	106.5	99.8	93.7	113.6	103.9	106.6	110.0	108.0
I	104.4	99.8	95.6	111.2	102.1	106.5	110.8	108.2
2008 ANNUAL	103.6	104.2	100.5	111.5	101.1	107.6	107.5	107.6
2008 IV	103.5	101.4	98.0	112.2	102.5	108.4	107.3	108.0
III	103.6	103.9	100.3	112.0	99.9	108.1	109.6	108.7
II	103.9	105.6	101.6	111.0	100.6	106.8	108.1	107.3
I	103.6	105.7	102.1	111.0	101.8	107.1	105.0	106.3

See footnotes following Table 6.
r=revised

December 1, 2010
Source: Bureau of Labor Statistics

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

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	Unit nonlabor payments (3)	Implicit price deflator (4)
Percent change from previous quarter at annual rate(5)								
2010 III	2.3 r	3.7 r	1.4 r	2.2 r	0.8 r	-0.1	5.2 r	2.1 r
II	-1.8	1.6	3.5	2.9 r	3.7 r	4.9 r	-0.4 r	2.6
I	3.9	5.0	1.1	-0.9	-2.4	-4.6	9.8	1.2
2009 ANNUAL	3.5	-3.8	-7.0	1.9	2.2	-1.6	4.6	0.8
2009 IV	6.0	6.7	0.7	1.5	-1.1	-4.2	3.5	-1.1
III	7.0	1.4	-5.2	3.4	-0.3	-3.3	8.1	1.1
II	8.4	-0.2	-7.9	9.1	7.2	0.6	-2.9	-0.8
I	3.4	-6.4	-9.5	-3.7	-1.6	-6.9	15.4	1.4
2008 ANNUAL	1.0	-1.1	-2.1	3.3	-0.5	2.2	1.2	1.8
2008 IV	-0.1	-9.5	-9.5	1.1	11.3	1.2	-6.5	-1.9
III	-1.3	-6.2	-4.9	3.7	-2.6	5.0	6.0	5.4
II	1.2	-0.3	-1.5	-0.2	-5.1	-1.4	13.6	4.2
I	-1.4	-2.5	-1.2	4.7	0.0	6.2	-7.0	0.8
Percent change from corresponding quarter of previous year								
2010 III	2.5	4.3 r	1.7 r	1.4 r	0.2 r	-1.1 r	4.5 r	1.2
II	3.7	3.7	0.0	1.7 r	-0.1 r	-1.9 r	5.2 r	0.9
I	6.3	3.2	-2.9	3.2	0.8	-2.9	4.5	0.1
2009 ANNUAL	3.5	-3.8	-7.0	1.9	2.2	-1.6	4.6	0.8
2009 IV	6.2	0.3	-5.6	2.5	1.0	-3.5	5.8	0.2
III	4.6	-3.8	-8.0	2.4	4.0	-2.2	3.2	0.0
II	2.5	-5.6	-8.0	2.4	3.4	-0.1	2.7	1.0
I	0.8	-5.7	-6.4	0.2	0.3	-0.6	6.8	2.2
2008 ANNUAL	1.0	-1.1	-2.1	3.3	-0.5	2.2	1.2	1.8
2008 IV	-0.4	-4.7	-4.3	2.3	0.7	2.7	1.2	2.1
III	0.5	-1.7	-2.2	3.6	-1.6	3.1	1.6	2.5
II	1.9	0.5	-1.3	3.5	-0.8	1.6	1.4	1.5
I	2.2	1.6	-0.6	3.8	-0.3	1.6	0.7	1.2
Indexes 2005=100								
2010 III	111.0 r	104.3 r	93.9 r	116.2 r	104.0 r	104.6 r	117.6 r	109.7 r
II	110.4	103.3	93.6	115.5 r	103.8 r	104.7 r	116.1 r	109.2
I	110.9	102.9	92.8	114.7	102.9	103.4	116.2	108.5
2009 ANNUAL	107.2	100.3	93.5	113.5	103.3	105.9	111.9	108.3
2009 IV	109.9	101.7	92.5	115.0	103.5	104.7	113.5	108.2
III	108.3	100.0	92.4	114.5	103.8	105.8	112.6	108.5
II	106.5	99.7	93.6	113.6	103.9	106.7	110.4	108.2
I	104.3	99.7	95.6	111.1	102.1	106.5	111.2	108.4
2008 ANNUAL	103.6	104.2	100.6	111.5	101.1	107.6	107.0	107.4
2008 IV	103.5	101.4	98.0	112.2	102.5	108.4	107.3	108.0
III	103.5	104.0	100.5	111.9	99.8	108.1	109.1	108.5
II	103.8	105.6	101.7	110.9	100.5	106.8	107.5	107.1
I	103.5	105.7	102.1	111.0	101.8	107.2	104.2	106.0

See footnotes following Table 6.
r=revised

December 1, 2010
Source: Bureau of Labor Statistics

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

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs
Percent change from previous quarter at annual rate(5)						
2010 III	0.6 r	4.2 r	3.6	1.6 r	0.1 r	1.0 r
II	5.6 r	9.8 r	4.0	4.8 r	5.5 r	-0.7 r
I	1.7	7.1	5.3	-6.5	-7.9	-8.1
2009 ANNUAL	2.0	-10.8 r	-12.6	5.2	5.6	3.1 r
2009 IV	8.1	7.2	-0.8	4.4	1.6	-3.5
III	16.9	10.9	-5.1	3.3	-0.4	-11.6
II	6.2	-8.5	-13.8	6.5	4.6	0.3
I	-1.8	-20.9	-19.4	4.0	6.3	5.9
2008 ANNUAL	-0.3 r	-4.4 r	-4.0	4.0	0.1	4.3 r
2008 IV	-2.5 r	-18.3	-16.1	7.0	17.9	9.8 r
III	-1.4 r	-10.3 r	-9.0	6.3	-0.1	7.8 r
II	-6.5 r	-7.7 r	-1.4	3.4	-1.7	10.5 r
I	-0.7	-2.6 r	-2.0	2.2	-2.4	2.9
Percent change from corresponding quarter of previous year						
2010 III	4.0 r	7.1 r	3.0	1.0 r	-0.3 r	-2.9 r
II	7.9	8.7	0.8	1.4 r	-0.4 r	-6.1 r
I	8.1	3.9	-3.9	1.8	-0.6	-5.8
2009 ANNUAL	2.0	-10.8 r	-12.6	5.2	5.6	3.1 r
2009 IV	7.1	-3.7	-10.1	4.5	3.0	-2.4
III	4.4	-10.0	-13.8	5.2	6.9	0.8
II	0.1 r	-14.6 r	-14.7	5.9	7.0	5.9
I	-3.1 r	-14.5	-11.8	5.2	5.3	8.5 r
2008 ANNUAL	-0.3 r	-4.4 r	-4.0	4.0	0.1	4.3 r
2008 IV	-2.8 r	-9.9 r	-7.3	4.7	3.1	7.7 r
III	-1.2 r	-5.4 r	-4.3	5.1	-0.2	6.4 r
II	0.0 r	-2.6 r	-2.7	3.8	-0.5	3.8 r
I	2.6 r	0.6 r	-2.0	2.5	-1.7	-0.2 r
Indexes 2005=100						
2010 III	113.1 r	95.2 r	84.2	117.0 r	104.7 r	103.5 r
II	112.9 r	94.2 r	83.5	116.5 r	104.7 r	103.2 r
I	111.4 r	92.1 r	82.7	115.2	103.3	103.4 r
2009 ANNUAL	106.8 r	88.7 r	83.0	115.2	104.9	107.9 r
2009 IV	110.9 r	90.5 r	81.6	117.1	105.4	105.6 r
III	108.8 r	88.9 r	81.8	115.9	105.0	106.5 r
II	104.6 r	86.7 r	82.8	114.9	105.1	109.9 r
I	103.1 r	88.6 r	86.0	113.1	103.9	109.8 r
2008 ANNUAL	104.7 r	99.4 r	95.0	109.5	99.3	104.6 r
2008 IV	103.5 r	93.9 r	90.7	112.0	102.4	108.2 r
III	104.2 r	98.8 r	94.8	110.1	98.2	105.7 r
II	104.6 r	101.5 r	97.1	108.5	98.3	103.8 r
I	106.3 r	103.6 r	97.4	107.6	98.7	101.2 r

See footnotes following Table 6.
r=revised

December 1, 2010
Source: Bureau of Labor Statistics

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

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs
Percent change from previous quarter at annual rate(5)						
2010 III	-0.5 r	6.0 r	6.5 r	0.8 r	-0.7 r	1.3 r
II	11.9 r	15.4 r	3.1	8.6 r	9.4 r	-2.9 r
I	2.4	9.3	6.8	-7.8	-9.2	-10.0
2009 ANNUAL	-0.2 r	-15.3 r	-15.1	5.8	6.2	6.0 r
2009 IV	8.7	8.0	-0.7	5.3	2.5	-3.1
III	25.8	17.2	-6.8	2.9	-0.8	-18.2
II	5.3	-14.3	-18.6	11.6	9.6	6.0
I	-7.5	-28.8	-23.0	2.1	4.4	10.4
2008 ANNUAL	-1.6 r	-5.7 r	-4.2	3.5	-0.3	5.2 r
2008 IV	-10.5 r	-24.7 r	-15.9	6.6	17.4	19.1 r
III	1.3 r	-11.5 r	-12.7	7.3	0.9	5.9 r
II	-10.1 r	-10.8 r	-0.8	3.8	-1.2	15.5 r
I	-3.6 r	-3.5 r	0.1	-0.3	-4.8	3.4 r
Percent change from corresponding quarter of previous year						
2010 III	5.5 r	9.6 r	3.9	1.5 r	0.3 r	-3.8 r
II	11.9 r	12.4 r	0.5	2.1 r	0.3 r	-8.8 r
I	10.2	4.3	-5.3	2.7	0.3	-6.7
2009 ANNUAL	-0.2 r	-15.3 r	-15.1	5.8	6.2	6.0 r
2009 IV	7.4	-6.3	-12.7	5.4	3.9	-1.9
III	2.3 r	-14.3 r	-16.3	5.7	7.5	3.3 r
II	-3.1 r	-20.2 r	-17.6	6.8	7.9	10.2 r
I	-6.8 r	-19.4 r	-13.5	4.9	5.1	12.6 r
2008 ANNUAL	-1.6 r	-5.7 r	-4.2	3.5	-0.3	5.2 r
2008 IV	-5.9 r	-13.0 r	-7.6	4.3	2.7	10.8 r
III	-1.8 r	-6.8 r	-5.1	4.9	-0.4	6.8 r
II	-1.4 r	-3.9 r	-2.5	3.5	-0.7	5.0 r
I	2.9 r	1.0 r	-1.9	1.6	-2.5	-1.2 r
Indexes 2005=100						
2010 III	114.7 r	93.9 r	81.9 r	118.9 r	106.4 r	103.6 r
II	114.9 r	92.6 r	80.6	118.6 r	106.6 r	103.3 r
I	111.7 r	89.3 r	80.0	116.2	104.2	104.0 r
2009 ANNUAL	105.9 r	85.3 r	80.5	116.2	105.8	109.7 r
2009 IV	111.1 r	87.4 r	78.7	118.6	106.8	106.8 r
III	108.8 r	85.7 r	78.8	117.1	106.1	107.6 r
II	102.7 r	82.4 r	80.2	116.2	106.3	113.2 r
I	101.4 r	85.6 r	84.4	113.1	103.9	111.5 r
2008 ANNUAL	106.1 r	100.6 r	94.8	109.9	99.6	103.5 r
2008 IV	103.4 r	93.2 r	90.2	112.5	102.8	108.8 r
III	106.3 r	100.0 r	94.1	110.7	98.7	104.2 r
II	105.9 r	103.2 r	97.4	108.8	98.5	102.7 r
I	108.8 r	106.2 r	97.6	107.8	98.8	99.0 r

See footnotes following Table 6.
r=revised

December 1, 2010
Source: Bureau of Labor Statistics

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

Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs
Percent change from previous quarter at annual rate(5)						
2010 III	3.2 r	2.2	-0.9 r	2.4 r	0.9 r	-0.7 r
II	-1.5 r	3.8 r	5.3	-1.7 r	-1.0 r	-0.2 r
I	1.6	4.8	3.1	-4.4	-5.8	-5.9
2009 ANNUAL	3.0 r	-5.5 r	-8.3	4.8	5.2	1.7 r
2009 IV	7.5	6.3	-1.2	2.7	0.0	-4.5
III	6.7	4.3	-2.2	4.5	0.8	-2.0
II	4.1	-1.5	-5.4	-1.1	-2.8	-5.0
I	2.5	-10.7	-12.9	8.4	10.8	5.7
2008 ANNUAL	0.4 r	-3.3 r	-3.7	4.9	1.0	4.4 r
2008 IV	7.8 r	-10.0 r	-16.6	7.8	18.7	0.0 r
III	-7.1 r	-9.2 r	-2.3	5.2	-1.1	13.2 r
II	-2.4 r	-4.6 r	-2.3	2.3	-2.7	4.8 r
I	3.0 r	-2.7 r	-5.5	6.9	2.1	3.8 r
Percent change from corresponding quarter of previous year						
2010 III	2.7 r	4.2	1.5 r	-0.3 r	-1.5 r	-2.9
II	3.5	4.8	1.2	0.2 r	-1.5 r	-3.2 r
I	5.0	3.4	-1.5	0.4	-2.0	-4.4
2009 ANNUAL	3.0 r	-5.5 r	-8.3	4.8	5.2	1.7 r
2009 IV	5.2	-0.6	-5.5	3.6	2.0	-1.6
III	5.3 r	-4.7 r	-9.4	4.8	6.5	-0.4 r
II	1.7 r	-7.9 r	-9.5	5.0	6.0	3.2 r
I	0.1 r	-8.7 r	-8.7	5.9	6.1	5.8 r
2008 ANNUAL	0.4 r	-3.3 r	-3.7	4.9	1.0	4.4 r
2008 IV	0.2 r	-6.7 r	-6.9	5.5	3.9	5.3 r
III	-1.7 r	-4.4 r	-2.8	5.7	0.4	7.5 r
II	1.2 r	-1.8 r	-3.0	4.3	0.0	3.0 r
I	1.9 r	-0.3 r	-2.2	4.1	-0.1	2.2 r
Indexes 2005=100						
2010 III	109.2 r	96.4 r	88.3 r	114.2 r	102.2 r	104.6 r
II	108.3 r	95.9 r	88.5	113.5 r	102.0 r	104.8 r
I	108.7 r	95.0 r	87.4	114.0	102.2	104.8 r
2009 ANNUAL	105.7 r	92.4 r	87.4	114.1	103.9	108.0 r
2009 IV	108.3 r	93.9 r	86.7	115.3	103.8	106.4 r
III	106.3 r	92.5 r	86.9	114.5	103.8	107.7 r
II	104.6 r	91.5 r	87.4	113.3	103.6	108.2 r
I	103.6 r	91.8 r	88.7	113.6	104.3	109.6 r
2008 ANNUAL	102.6 r	97.8 r	95.4	108.9	98.7	106.1 r
2008 IV	102.9 r	94.5 r	91.8	111.3	101.7	108.1 r
III	101.0 r	97.0 r	96.0	109.2	97.4	108.1 r
II	102.9 r	99.4 r	96.6	107.9	97.7	104.8 r
I	103.5 r	100.5 r	97.1	107.2	98.4	103.6 r

See footnotes following Table 6.
r=revised

December 1, 2010
Source: Bureau of Labor Statistics

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

Year and quarter	Output per all-employee hour	Output	Employee hours	Hourly compensation (1)	Real hourly compensation (2)	Unit labor costs	Unit non-labor costs (6)	Total unit cost (7)	Unit profits (8)	Implicit price deflator (4)
Percent change from previous quarter at annual rate(5)										
2010 III	-2.4	-0.2	2.3	2.2	0.7	4.7	2.2	4.0	8.8	4.6
II	0.1 r	4.4 r	4.3	2.1 r	2.8 r	2.0 r	-3.4 r	0.4 r	19.6 r	2.6
I	8.6	10.8	2.1	-0.9	-2.3	-8.7	-8.4	-8.6	64.6	-2.1
2009 ANNUAL	1.6	-6.0	-7.5	2.2	2.6	0.6	2.7	1.2	-2.5	0.8
2009 IV	12.5	12.9	0.3	1.4	-1.3	-9.9	-8.1	-9.4	38.2	-5.3
III	5.3	-0.4	-5.4	4.2	0.5	-1.0	-7.8	-3.0	21.2	-0.9
II	3.4	-5.8	-8.9	6.9	5.1	3.4	-2.6	1.6	-21.4	-0.9
I	-5.2	-15.6	-11.0	-3.5	-1.4	1.7	9.0	3.8	-4.2	3.0
2008 ANNUAL	2.7	0.9	-1.7	3.5	-0.3	0.8	3.8	1.6	-14.2	-0.3
2008 IV	0.4	-8.1	-8.4	3.0	13.5	2.7	11.1	5.1	-36.5	-0.4
III	5.9	0.3	-5.3	4.5	-1.8	-1.4	2.3	-0.3	86.7	6.5
II	1.7	-0.4	-2.1	1.9	-3.1	0.2	5.0	1.5	-9.2	0.4
I	0.2	-0.2	-0.4	2.8	-1.8	2.7	2.9	2.7	-35.0	-2.2
Percent change from corresponding quarter of previous year										
2010 III	4.5	6.9	2.2	1.2	0.0	-3.2	-4.5	-3.6	31.2	-0.1
II	6.5 r	6.8 r	0.3	1.7 r	-0.1 r	-4.5 r	-6.9 r	-5.3	34.8 r	-1.5
I	7.4	4.1	-3.1	2.9	0.4	-4.2	-6.7	-5.0	21.3	-2.4
2009 ANNUAL	1.6	-6.0	-7.5	2.2	2.6	0.6	2.7	1.2	-2.5	0.8
2009 IV	3.8	-2.7	-6.3	2.2	0.7	-1.6	-2.6	-1.9	6.0	-1.1
III	0.9	-7.6	-8.4	2.6	4.3	1.7	2.1	1.8	-12.7	0.2
II	1.0	-7.5	-8.4	2.6	3.7	1.6	4.8	2.5	-2.8	2.0
I	0.6	-6.2	-6.8	1.4	1.6	0.8	6.8	2.5	0.8	2.3
2008 ANNUAL	2.7	0.9	-1.7	3.5	-0.3	0.8	3.8	1.6	-14.2	-0.3
2008 IV	2.0	-2.2	-4.1	3.0	1.5	1.0	5.3	2.2	-8.5	1.0
III	4.6	2.5	-2.0	4.0	-1.2	-0.6	1.8	0.1	0.0	0.1
II	2.3	1.5	-0.8	3.5	-0.7	1.2	4.1	2.0	-24.3	-1.4
I	1.9	1.9	0.0	3.5	-0.7	1.6	4.1	2.3	-21.7	-0.8
Indexes 2005=100										
2010 III	111.3	105.3	94.6	114.9	102.8	103.2	110.1	105.1	108.0	105.5
II	112.0 r	105.3 r	94.0	114.2 r	102.7 r	102.0 r	109.5 r	104.1 r	105.8 r	104.3 r
I	112.0	104.2	93.1	113.7	102.0	101.5	110.4	104.0	101.1	103.6
2009 ANNUAL	106.4	99.7	93.7	112.5	102.4	105.8	116.0	108.6	83.4	105.4
2009 IV	109.7	101.6	92.6	113.9	102.5	103.8	112.8	106.3	89.3	104.2
III	106.5	98.5	92.5	113.5	102.9	106.6	115.3	109.0	82.3	105.6
II	105.2	98.6	93.8	112.3	102.8	106.8	117.6	109.8	78.5	105.9
I	104.3	100.1	96.0	110.5	101.5	105.9	118.4	109.4	83.3	106.1
2008 ANNUAL	104.7	106.1	101.3	110.1	99.8	105.1	112.9	107.3	85.5	104.5
2008 IV	105.7	104.4	98.8	111.5	101.9	105.5	115.9	108.4	84.2	105.3
III	105.6	106.7	101.0	110.6	98.7	104.8	112.9	107.0	94.4	105.4
II	104.1	106.6	102.4	109.4	99.1	105.2	112.2	107.1	80.7	103.8
I	103.6	106.7	103.0	108.9	99.9	105.1	110.9	106.7	82.7	103.7

See footnotes following Table 6.
r=revised

December 1, 2010
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. Compensation and hours data are from the Bureau of Labor Statistics and the Bureau of Economic Analysis.

RELIABILITY: Productivity and cost measures are regularly revised as more complete information becomes available. The measures are first published within 40 days of the close of the reference period; revisions appear 30 days later, and second revisions after an additional 60 days. In the business sector, the third publication (second revision) of a quarterly index of output per hour of all persons has differed from the initial value by between -1.7 and +1.5 index points approximately 95 percent of the time. This interval is based on the performance of this measure between the fourth quarter of 1995 and the second quarter of 2010.

Footnotes, Tables 1-6

- (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 1978-2009 is based on the Consumer Price Index research 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 average 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 adjustments.

Appendix table 1.

Manufacturing sector: Productivity, hourly compensation, and unit labor costs.

Year	Output per hour of all persons	Output	Hours of all persons	Compen- sation per hour (1)	Real compen- sation per hour (2)	Unit labor costs
----- Indexes 2005=100 -----						
2009	106.8 r	88.7 r	83.0	115.2	104.9	107.9 r
2008	104.7 r	99.4 r	95.0	109.5	99.3	104.6 r
2007	105.0 r	104.0 r	99.0	105.3	99.2	100.3 r
2006	100.8 r	101.5 r	100.8	102.0	98.8	101.2 r
2005	100.0	100.0	100.0	100.0	100.0	100.0
2004	95.5 r	96.6 r	101.1	96.8	100.0	101.4 r
2003	93.4 r	94.9 r	101.7	96.0	101.9	102.8 r
2002	87.8 r	93.9 r	106.9	88.9	96.5	101.2 r
2001	81.9 r	94.2 r	115.0	84.3	92.9	102.9 r
2000	80.4 r	98.9 r	123.1	81.2	92.0	101.0 r
1999	76.9 r	95.9 r	124.7	75.4	88.3	97.9 r
1998	73.3 r	92.1 r	125.5	72.2	86.3	98.5 r
1997	69.5 r	87.4 r	125.9	68.0	82.4	97.8 r
1996	65.9 r	81.4 r	123.6	66.4	82.2	100.7 r
1995	63.6 r	78.8 r	123.9	65.2	83.0	102.6 r
1994	60.8 r	74.8 r	123.1	64.2	83.7	105.6 r
1993	58.8 r	70.7 r	120.3	62.7	83.4	106.7 r
1992	57.3 r	68.0 r	118.7	61.3	83.5	107.0 r
1991	55.2 r	65.8 r	119.3	58.5	81.8	106.0 r
1990	53.8 r	67.0 r	124.5	55.2	80.0	102.7 r
1989	52.7 r	67.2 r	127.7	52.7	80.1	100.1 r
1988	52.1 r	66.1 r	126.9	51.2	81.1	98.1 r
1987	51.0 r	62.9 r	123.2	49.4	81.2	96.8 r

See footnotes following Table 6.
r=revisedDecember 1, 2010
Source: Bureau of Labor Statistics

Appendix table 2.

Durable manufacturing sector: Productivity, hourly compensation, and unit labor costs.

Year	Output per hour of all persons	Output	Hours of all persons	Compen- sation per hour (1)	Real compen- sation per hour (2)	Unit labor costs
Indexes 2005=100						
2009	105.9 r	85.3 r	80.5	116.2	105.8	109.7 r
2008	106.1 r	100.6 r	94.8	109.9	99.6	103.5 r
2007	107.8 r	106.7 r	99.0	106.1	99.9	98.4 r
2006	102.0 r	103.1 r	101.1	102.2	99.0	100.2 r
2005	100.0	100.0	100.0	100.0	100.0	100.0
2004	95.1 r	95.2 r	100.2	97.0	100.2	102.0 r
2003	93.4 r	93.0 r	99.5	97.3	103.3	104.2 r
2002	87.1 r	91.6 r	105.1	89.1	96.7	102.3 r
2001	80.7 r	92.5 r	114.6	84.9	93.7	105.2 r
2000	79.9 r	98.6 r	123.4	82.6	93.6	103.3 r
1999	75.8 r	94.2 r	124.2	76.5	89.7	100.9 r
1998	70.4 r	87.8 r	124.8	73.3	87.7	104.1 r
1997	65.2 r	81.0 r	124.1	68.9	83.5	105.5 r
1996	61.0 r	73.6 r	120.6	67.7	83.8	110.9 r
1995	58.0 r	69.3 r	119.5	66.9	85.2	115.5 r
1994	54.5 r	64.2 r	117.7	66.5	86.6	121.9 r
1993	52.0 r	59.2 r	114.0	64.8	86.3	124.8 r
1992	50.0 r	56.2 r	112.4	63.6	86.7	127.2 r
1991	47.3 r	54.0 r	114.0	60.3	84.3	127.4 r
1990	46.5 r	56.1 r	120.7	56.7	82.1	121.9 r
1989	45.6 r	56.9 r	124.7	54.3	82.5	119.1 r
1988	45.2 r	56.2 r	124.3	52.7	83.6	116.6 r
1987	44.3 r	53.0 r	119.7	51.3	84.3	115.8 r

See footnotes following Table 6.
r=revisedDecember 1, 2010
Source: Bureau of Labor Statistics

Appendix table 3.

Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor costs.

Year	Output per hour of all persons	Output	Hours of all persons	Compen- sation per hour (1)	Real compen- sation per hour (2)	Unit labor costs
Indexes 2005=100						
2009	105.7 r	92.4 r	87.4	114.1	103.9	108.0 r
2008	102.6 r	97.8 r	95.4	108.9	98.7	106.1 r
2007	102.2 r	101.2 r	99.0	103.8	97.8	101.6 r
2006	99.7 r	99.9 r	100.1	101.5	98.3	101.8 r
2005	100.0	100.0	100.0	100.0	100.0	100.0
2004	95.4 r	98.1 r	102.8	96.5	99.8	101.2 r
2003	92.1 r	97.0 r	105.3	94.0	99.8	102.1 r
2002	87.9 r	96.6 r	110.0	88.8	96.4	101.0 r
2001	82.9 r	96.1 r	115.9	83.0	91.5	100.1 r
2000	80.9 r	99.1 r	122.5	78.5	89.0	97.0 r
1999	78.2 r	98.2 r	125.5	73.2	85.7	93.6 r
1998	77.2 r	97.9 r	126.9	70.2	83.9	90.9 r
1997	75.2 r	97.0 r	128.9	66.5	80.7	88.4 r
1996	72.3 r	93.1 r	128.9	64.2	79.6	88.9 r
1995	70.8 r	93.1 r	131.5	62.7	79.7	88.5 r
1994	69.1 r	91.4 r	132.4	60.9	79.3	88.2 r
1993	67.5 r	88.5 r	131.1	59.6	79.2	88.2 r
1992	66.7 r	86.5 r	129.6	58.0	79.0	86.9 r
1991	65.6 r	84.3 r	128.4	55.9	78.1	85.2 r
1990	64.1 r	84.0 r	131.1	53.0	76.7	82.7 r
1989	62.8 r	83.4 r	132.9	50.0	76.1	79.7 r
1988	62.3 r	81.8 r	131.4	48.5	76.8	77.8 r
1987	61.0 r	78.8 r	129.2	46.3	76.1	75.8 r

See footnotes following Table 6.
r=revisedDecember 1, 2010
Source: Bureau of Labor Statistics