

# News

United States  
Department  
of Labor



Bureau of Labor Statistics

Washington, D.C. 20212

Internet address:	<a href="http://www.bls.gov/lpc/">http://www.bls.gov/lpc/</a>	USDL 03-411
Historical, technical information:	(202) 691-5606	TRANSMISSION OF THIS MATERIAL IS EMBARGOED
Current data:	(202) 691-5200	UNTIL 8:30 A.M. EDT,
Media contact:	(202) 691-5902	THURSDAY, AUG. 7, 2003.

## PRODUCTIVITY AND COSTS

Second Quarter 2003

The Bureau of Labor Statistics of the U.S. Department of Labor reported preliminary productivity data—as measured by output per hour of all persons—for the second quarter of 2003. The preliminary seasonally adjusted annual rates of productivity change in the second quarter were:

6.1 percent in the business sector and  
5.7 percent in the nonfarm business sector.

In the business sector, productivity grew as output rose 3.2 percent and hours dropped 2.7 percent. A similar pattern occurred in nonfarm businesses, output grew 3.4 percent and hours fell 2.2 percent.

In manufacturing, the preliminary productivity changes in the second quarter were:

4.2 percent in manufacturing,  
3.8 percent in durable goods manufacturing, and  
4.4 percent in nondurable goods manufacturing.

Manufacturing productivity grew 4.2 percent in the second quarter reflecting declines in output and hours of 2.1 and 6.1 percent, respectively. Output and hours in manufacturing, which includes about 15 percent of U.S. business-sector employment, tend to vary more from quarter to quarter than data for the aggregate business and nonfarm business sectors. Second-quarter measures are summarized in table A and appear in detail in tables 1 through 5.

The data in this release reflect the annual benchmark revision and other changes to the BLS establishment survey data released by BLS on June 6. In addition, revisions to the Current Population Survey first released by BLS on Feb. 7 have been fully incorporated into the measures. The employment and hours series also incorporate new information on seasonal patterns and new hours worked to hours paid ratios. See Revised Measures, page 4. Appendix tables 1-4 show revised historical series for the business and nonfarm business sectors.

Table A. Productivity and costs: Preliminary second-quarter 2003 measures (Seasonally adjusted annual rates)						
Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Percent change from preceding quarter						
Business	6.1	3.2	-2.7	3.9	3.3	-2.0
Nonfarm business	5.7	3.4	-2.2	3.5	2.9	-2.1
Manufacturing	4.2	-2.1	-6.1	5.4	4.8	1.2
Durable	3.8	-3.1	-6.7	5.2	4.6	1.4
Nondurable	4.4	-1.0	-5.2	5.8	5.2	1.3
Percent change from same quarter a year ago						
Business	4.0	2.9	-1.1	3.1	0.9	-0.9
Nonfarm business	3.8	2.9	-0.9	2.8	0.6	-1.0
Manufacturing	4.8	-0.9	-5.5	5.6	3.4	0.7
Durable	5.5	-0.7	-5.9	5.2	3.0	-0.2
Nondurable	4.1	-1.0	-4.9	6.4	4.1	2.2

The data sources and methods used in the preparation of the manufacturing series differ from those used in preparing the business and nonfarm business series, and these measures are not directly comparable. Output measures for business and nonfarm business are based on measures of gross domestic product prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce. Quarterly output measures for manufacturing reflect indexes of industrial production independently prepared by the Board of Governors of the Federal Reserve System. See Technical Notes for further information on data sources (page 10).

### Business

From the first quarter to the second quarter of 2003, business sector output per hour increased at a 6.1-percent annual rate. Output rose 3.2 percent and hours of all persons engaged in the sector fell 2.7 percent (seasonally adjusted annual rates). As revised, labor productivity grew 2.7 percent in the first quarter of 2003, when output increased 1.4 percent and hours decreased 1.2 percent (table 1).

Hourly compensation increased 3.9 percent in the second quarter, less than the 4.8 percent gain in the first quarter of 2003 (seasonally adjusted annual rates). This measure includes wages and salaries; vacation and other paid leave; bonuses, stock options, and other supplements; employer contributions to employee benefit plans; and taxes. Real hourly compensation, which takes into account changes in consumer prices, rose at a 3.3-percent annual rate during the second quarter of 2003, after rising 0.9 percent during the previous quarter. The second quarter increase of 3.3 percent was the largest in the business sector since a 4.7-percent increase in the third quarter of 2000.

Unit labor costs, which reflect changes in both hourly compensation and productivity, fell 2.0 percent during the second quarter of 2003 after rising 2.0 percent in the previous quarter. The implicit price deflator for the business sector, which reflects changes in both unit labor costs and unit nonlabor payments, increased 0.9 percent in the second quarter and 1.6 percent in the first quarter of 2003.

### **Nonfarm business**

Productivity increased 5.7 percent in the nonfarm business sector during the second quarter of 2003, as output rose 3.4 percent and hours of all persons declined 2.2 percent (seasonally adjusted annual rates). Output per hour grew at a 2.1 percent annual rate in the first quarter of 2003, as output increased 1.4 percent and hours decreased 0.7 percent (table 2).

Hourly compensation in the nonfarm business sector increased 3.5 percent in second quarter 2003, down from the 4.1-percent rise one quarter earlier. When the rise in consumer prices is taken into account, real hourly compensation for the second quarter of 2003 rose 2.9 percent. As in the larger business sector, the second quarter increase in real hourly compensation was the largest since the third quarter of 2000, when it rose 5.0 percent.

Unit labor costs decreased 2.1 percent in the second quarter of 2003, after rising 2.0 percent during the first quarter. The implicit price deflator for nonfarm business output grew 0.8 percent in the second quarter, down from the 1.4-percent increase in the previous quarter.

### **Manufacturing**

Productivity increased 4.2 percent in manufacturing, as output fell 2.1 percent and hours of all persons declined 6.1 percent (seasonally adjusted annual rates). In the previous quarter, productivity rose 4.9 percent, reflecting decreases in output and hours of 0.7 and 5.3 percent, respectively. In durable goods, productivity rose 3.8 percent in the second quarter as output dropped 3.1 percent and hours of all persons fell 6.7 percent. In nondurable goods, second-quarter productivity increased by 4.4 as output declined 1.0 percent and hours fell 5.2 percent (tables 3, 4, and 5).

Hourly compensation of all manufacturing workers rose 5.4 percent during the second quarter, reflecting growth of 5.2 percent in durable goods and 5.8 percent in nondurable goods. When the increase in consumer prices is taken into account, the real hourly compensation of all manufacturing workers increased by 4.8 percent in the second quarter, after rising 3.3 percent one quarter earlier.

Unit labor costs in manufacturing grew 1.2 percent in the second quarter. In durable goods industries, unit labor costs rose 1.4 percent and in nondurable goods industries, they increased 1.3 percent. The change in unit labor costs is roughly equal to the change in hourly compensation less the change in productivity.

### **Revised Measures**

Current and previous measures for the first quarter of 2003 for the business, nonfarm business, and manufacturing sectors are compared in table B. In the business and nonfarm business sectors, productivity was revised up slightly from the numbers reported on June 4. This occurred as both output and hours were revised down, hours more than output. Hourly compensation and unit labor costs grew more than reported on June 4, based on information then available. In manufacturing, productivity growth grew substantially faster than reported on June 4 as a result of a sharp downward revision to hours. Hourly compensation also shows a steep upward revision in the first quarter. Unit labor costs were revised down, reflecting the fact that the upward revision to productivity was larger than the upward revision to hourly compensation.

Table B also shows comparisons of current and previous measures for the fourth quarter of 2002. In that quarter, productivity in the business and nonfarm business sectors also was revised up, reflecting downward revisions to hours growth. In addition, hourly compensation in the fourth quarter was revised down in both sectors reflecting both the changes in hours and new compensation data. Reflecting both of these revisions, unit labor costs in both sectors were revised down by more than three percentage points and now show very little change in the quarter. In the manufacturing sector, productivity was revised up with the incorporation of the new hours data and now shows an increase of 3.6 percent in the fourth quarter rather than the decline reported on June 4. Hourly compensation also was revised up. As in the first quarter numbers, unit labor costs show less of an increase than reported earlier as the upward revision to hourly compensation was less than that to productivity.

Table B. Previous and revised productivity and related measures Quarterly percent changes at seasonally adjusted annual rates						
Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
First quarter 2003						
Business:						
Previous.....	2.5	2.0	-0.5	3.8	0.0	1.3
Current .....	2.7	1.4	-1.2	4.8	0.9	2.0
Nonfarm business:						
Previous.....	1.9	1.8	-0.1	3.4	-0.4	1.5
Current .....	2.1	1.4	-0.7	4.1	0.2	2.0
Manufacturing:						
Previous.....	1.9	-0.7	-2.6	4.5	0.7	2.6
Current .....	4.9	-0.7	-5.3	7.3	3.3	2.2
Fourth quarter 2002						
Business:						
Previous.....	0.3	1.7	1.5	3.6	1.6	3.3
Current .....	1.5	1.7	0.2	1.6	-0.4	0.1
Nonfarm business:						
Previous.....	0.7	1.7	0.9	3.9	1.9	3.2
Current .....	1.7	1.7	0.0	1.6	-0.4	-0.1
Manufacturing:						
Previous.....	-0.5	-3.7	-3.2	5.4	3.4	5.9
Current .....	3.6	-3.7	-7.1	7.4	5.3	3.6

Hours data for the business and nonfarm business sectors now incorporate all of the changes made to the Current Establishment Statistics (CES) data reported on June 6 and the Current Population Survey (CPS) data reported on Feb. 7. They also include a new method of adjusting hours paid to hours at work for the period following 2000, when the Bureau's last Hours at Work Survey was conducted. All of the data incorporate new information on seasonal patterns. Appendix tables 1 and 2 present quarterly and annual measures for the business and nonfarm business sectors for 1998-2000 and appendix tables 3 and 4 show annual indexes for all years beginning in 1947.

In manufacturing, only revised data for recent years were used to prepare the productivity and cost measures; these were linked to the SIC-based hours series previously published by the BLS. For employees in manufacturing establishments, new information adjusted to the old SIC basis was used beginning with the second quarter of 2001. Small revisions to the hours of self-employed workers that reflect the most recent information on seasonal trends extend back to 1998.

The historical revisions to the employment and average weekly hours data from the CES change the indexes of employment and hours in the business and nonfarm business sectors for all years. The CES data incorporate several major changes, as described in release USDL 03-281 (<ftp://ftp.bls.gov/pub/news.release/History/empisit.06062003.news>). These include the conversion to NAICS, the completion of the CES sample redesign, and annual benchmark revisions.

The changes to the CPS data used in the productivity measures were primarily related to the new levels introduced with the use of weights from the 2000 population census. For the purpose of measuring productivity, the revisions to employment and hours in 2000 due to new population weights were interpolated back to 1990 (when the previous population census was conducted). New information on employment and hours levels for the farm sector was introduced beginning with January 2000; the 1947-1999 measures were adjusted to this level.

Productivity and cost measures were revised to reflect new measures of hours at work to hours paid. The Bureau's Hours at Work Survey was discontinued following the collection of data for 2000. New measures based on information from the National Compensation Survey, which collects data on hours worked and employer leave practices, have been linked to the levels beginning with the first quarter of 2001. A description of these measures is available at <http://www.bls.gov/lpc/lprhws/lprwhp.pdf>.

Current and previous changes in the annual measures for the business, nonfarm business, and manufacturing sectors are compared in table C. In the business and nonfarm business sectors, productivity was revised up in both 2001 and 2002, reflecting the downward revisions to hours of all persons. The hourly compensation data also were revised upward by a similar amount. As a result, unit labor costs in both years are about the same as they were in the previously published data. Similarly, in manufacturing, productivity and hourly compensation were revised up in 2001 and 2002 as a result of downward revisions to hours. Unit labor costs were revised only slightly downward in 2002 and were unchanged in 2001.

Table C. Previous and revised productivity and related measures Annual percent changes						
Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Annual average 2002						
Business:						
Previous.....	4.8	2.7	-2.0	2.5	0.9	-2.2
Current .....	5.3	2.7	-2.5	2.8	1.2	-2.3
Nonfarm business:						
Previous.....	4.8	2.7	-2.0	2.4	0.8	-2.3
Current .....	5.4	2.7	-2.5	2.8	1.2	-2.4
Manufacturing:						
Previous.....	4.5	-1.1	-5.4	3.3	1.6	-1.2
Current .....	6.4	-1.1	-7.0	5.0	3.4	-1.3
Annual average 2001						
Business:						
Previous.....	1.1	-0.2	-1.3	2.9	0.2	1.8
Current .....	2.0	-0.2	-2.1	3.8	1.0	1.8
Nonfarm business:						
Previous.....	1.1	-0.1	-1.2	2.7	-0.1	1.6
Current .....	1.9	-0.1	-2.0	3.6	0.8	1.7
Manufacturing:						
Previous.....	0.8	-4.9	-5.6	1.5	-1.2	0.8
Current .....	1.6	-4.9	-6.4	2.4	-0.4	0.8

### Revised measures: Nonfinancial Corporations

Productivity and cost measures for the first quarter for nonfinancial corporations also were revised to incorporate more recent information than was available on June 4. Productivity was revised up, reflecting both an upward revision to output and a larger drop in employee hours. Hourly compensation was revised up. However, the upward revision to productivity was much larger than the upward revision to hourly compensation and unit labor costs were revised down. Unit profits also were revised up (table D).

Productivity and cost measures for the fourth quarter of 2002 also were revised to incorporate more recent information on output, hours, and employee compensation. Fourth quarter 2003 productivity did not rise as rapidly as reported on June 4, reflecting a downward revision to output that was much larger than the downward revision to hours. Hourly compensation also was revised down and unit labor costs show a larger decline than originally reported.

The hours measures for most employees of nonfinancial corporations have been revised only beginning with the second quarter of 2001. The output and compensation measures for nonfinancial corporations are not yet available on a NAICS basis so BLS is continuing to use the levels reported on an SIC basis for the months prior to April 2001. In order to capture the CES benchmark to the Covered Employment and Wages (CEW), CES data for April 2001 through March 2003 reported on a NAICS basis are converted back to the SIC using bridge tables published for first quarter 2001 CEW data. In addition, estimates of hours for employees working on incorporated farms were revised back to 1958. The corporate farm sector has historically been small and the changes in productivity and cost movements due to the incorporation of this revision are very small. As a result of the various revisions, hours in the nonfinancial corporate sector now show larger drops in 2001 and 2002 than previously published. The new measures are shown in table 6.

Table D. Nonfinancial corporations: Previous and revised productivity and cost measures Quarterly percent changes at seasonally adjusted annual rates								
	Produc- tivity	Output	Hours	Hourly compen- sation	Real hourly compen- sation	Unit labor costs	Unit profits	Implicit price deflator
First quarter 2003								
Previous	2.9	2.4	-0.5	4.7	0.8	1.7	2.2	1.0
Current	4.5	2.8	-1.6	5.4	1.5	0.9	7.6	0.7
Fourth quarter 2002								
Previous	5.0	4.5	-0.5	4.9	2.8	-0.1	20.8	0.9
Current	3.6	2.8	-0.8	2.6	0.6	-1.0	22.8	0.9

### Upcoming changes

Historical measures of output and compensation for all sectors, along with the conversion of the manufacturing and nonfinancial corporate sectors from the 1987 Standard Industrial Classification (SIC) to the 2002 North American Industry Classification System (NAICS), will be prepared following the release of the revised national income and product accounts in December. On January 7, 2004, the BLS will post revised productivity and cost measures through fourth quarter, 2002 on its web site. More specific information will be announced later this year.

**Next release date**

The next release of **Productivity and Costs** is scheduled for **8:30 a.m. EDT, Thursday, Sept. 4, 2003**. Revised second-quarter measures for business, nonfarm business, and manufacturing will be released at that time, along with preliminary measures for nonfinancial corporations.

## 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. The Office of Productivity and Technology estimates average weekly paid hours of nonproduction and supervisory workers. Weekly paid hours are adjusted to hours at work using the BLS Hours at Work survey, conducted for this purpose.

Data from the BLS Current Population Survey (CPS) are used for farm labor; in the nonfarm sector, the National Income and Product Accounts (NIPA) prepared by the Bureau of Economic Analysis (BEA) of the Department of Commerce and the CPS are used to measure labor input for government enterprises, proprietors, and unpaid family workers.

**Output:** Business sector output is an annual-weighted index constructed after excluding from gross domestic product (GDP) the following outputs: General government, nonprofit institutions, paid employees of private households, and the rental value of owner-occupied dwellings. Corresponding exclusions also are made in labor inputs. Business output accounted for about 77 percent of the value of GDP in 1996. Nonfarm business, which also excludes farming, accounted for about 76 percent of GDP in 1996.

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 BEA. 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 2-digit SIC industries: Primary metal industries; fabricated metal products; nonelectrical machinery; industrial and commercial machinery and computer equipment; electronic and other electrical equipment; transportation equipment; instruments; lumber and lumber products; furniture and fixtures; stone, clay, and glass and concrete products; and miscellaneous manufactures. Nondurables include: Food and kindred products, tobacco products, textile mill products, apparel products, paper and allied products, printing and publishing, chemicals and chemical products, petroleum refining and related industries, rubber and plastic products, and leather and leather products.

Nonfinancial corporate output is an annual-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; employees of private households; the rental value of owner-occupied dwellings; unincorporated business; and those corporations which are depository institutions, nondepository institutions, security and commodity brokers, insurance carriers, regulated investment offices, small business investment offices, and real estate investment trusts. Nonfinancial corporations accounted for about 53 percent of the value of GDP in 1996.

**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. 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: 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 non-labor payments (3)	Implicit price deflator (4)	
-----									
Indexes 1992=100									
2001	I	r117.4	140.4	r119.6	r137.4	r111.9	r117.1	r112.0	115.2
	II	r117.8	139.4	r118.3	r138.2	r111.6	r117.3	r113.3	115.8
	III	r118.8	139.1	r117.1	r139.1	r112.1	r117.1	r115.1	116.4
	IV	r121.3	140.3	r115.6	r139.8	r112.8	r115.2	r117.0	115.9
	ANNUAL	r118.8	139.8	r117.6	r138.6	r112.1	r116.7	r114.3	115.8
2002	I	r123.9	142.3	r114.9	r141.0	r113.4	r113.8	r119.7	116.0
	II	r124.1	142.5	r114.8	r142.4	r113.5	r114.7	r118.8	116.2
	III	r125.9	144.4	r114.6	r143.1	r113.5	r113.6	r120.9	116.3
	IV	r126.4	145.0	r114.7	r143.7	r113.4	r113.7	r122.1	116.8
	ANNUAL	r125.1	143.5	r114.7	r142.5	r113.5	113.9	120.4	116.3
2003	I	r127.2	r145.5	r114.3	r145.4	r113.7	r114.2	r122.3	r117.2
	II	129.1	146.6	113.6	146.8	114.6	113.7	124.0	117.5
-----									
Percent change from previous quarter at annual rate(5)									
2001	I	r-0.5	-1.0	r-0.5	r4.6	r0.8	r5.1	r0.3	3.4
	II	r1.5	-2.8	r-4.3	r2.3	r-0.9	r0.8	r4.6	2.2
	III	r3.3	-0.9	r-4.1	r2.5	r1.6	r-0.8	6.8	1.8
	IV	r8.7	3.5	r-4.8	r2.1	r2.7	r-6.1	r6.7	-1.6
	ANNUAL	r2.0	-0.2	r-2.1	r3.8	r1.0	1.8	r2.3	2.0
2002	I	r8.7	5.9	r-2.6	r3.5	r2.2	r-4.8	r9.6	0.3
	II	r0.8	0.6	r-0.2	r4.0	r0.4	r3.1	r-3.2	0.7
	III	r5.9	5.3	r-0.6	r2.1	r0.0	r-3.6	r7.6	0.5
	IV	r1.5	1.7	r0.2	r1.6	r-0.4	r0.1	r3.8	1.5
	ANNUAL	r5.3	2.7	r-2.5	r2.8	r1.2	r-2.3	r5.3	0.4
2003	I	r2.7	r1.4	r-1.2	r4.8	r0.9	r2.0	r0.8	r1.6
	II	6.1	3.2	-2.7	3.9	3.3	-2.0	5.8	0.9
-----									
Percent change from corresponding quarter of previous year									
2001	I	r2.2	1.4	r-0.8	r4.9	r1.4	2.6	1.4	2.2
	II	r1.1	-0.7	r-1.7	r4.8	r1.4	r3.7	r-0.5	2.1
	III	r1.7	-1.0	r-2.6	r3.3	r0.6	r1.6	r3.7	2.3
	IV	r3.2	-0.3	r-3.4	r2.9	r1.0	r-0.3	r4.6	1.4
	ANNUAL	r2.0	-0.2	r-2.1	r3.8	r1.0	1.8	r2.3	2.0
2002	I	r5.5	1.4	r-3.9	r2.6	r1.4	-2.8	r6.9	0.7
	II	r5.4	2.3	r-2.9	r3.0	r1.7	r-2.2	r4.9	0.3
	III	r6.0	3.8	r-2.1	r2.9	r1.3	r-2.9	r5.0	0.0
	IV	r4.2	3.4	r-0.8	r2.8	r0.5	r-1.4	r4.3	0.7
	ANNUAL	r5.3	2.7	r-2.5	r2.8	r1.2	r-2.3	r5.3	0.4
2003	I	r2.7	r2.2	r-0.5	r3.1	r0.2	r0.4	r2.2	1.1
	II	4.0	2.9	-1.1	3.1	0.9	-0.9	4.5	1.1
-----									

See footnotes following Table 6.  
r=revised

August 7, 2003  
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 non-labor payments (3)	Implicit price deflator (4)	
Indexes 1992=100									
2001	I	r116.9	140.7	r120.3	r136.7	r111.3	r117.0	r113.5	115.7
	II	r117.4	139.7	r119.0	r137.4	r111.0	r117.1	r114.9	116.3
	III	r118.3	139.4	r117.8	r138.2	r111.4	r116.8	r116.8	116.8
	IV	r120.7	140.4	r116.3	r138.9	r112.1	r115.1	r119.0	116.5
	ANNUAL	r118.3	140.1	r118.4	r137.8	r111.4	r116.5	r116.1	116.3
2002	I	r123.4	142.5	r115.5	r140.2	r112.8	r113.6	r121.5	116.4
	II	r123.7	142.9	r115.5	r141.5	r112.9	r114.4	r121.2	116.8
	III	r125.5	144.7	r115.3	r142.2	r112.8	r113.3	r123.1	116.9
	IV	r126.0	145.3	r115.3	r142.8	r112.7	r113.3	r124.3	117.3
	ANNUAL	r124.7	143.9	r115.4	r141.7	r112.8	113.6	122.5	116.9
2003	I	r126.7	r145.8	r115.1	r144.2	r112.8	r113.8	r124.5	117.7
	II	128.5	147.0	114.4	145.5	113.6	113.2	126.2	117.9
Percent change from previous quarter at annual rate(5)									
2001	I	r-0.4	-0.9	r-0.5	r4.3	r0.5	r4.7	r0.8	3.3
	II	r1.6	-2.7	r-4.3	r2.0	r-1.2	0.3	r5.0	2.0
	III	r3.4	-0.8	r-4.1	r2.4	r1.5	r-0.9	r6.6	1.7
	IV	r8.3	2.9	r-5.0	r2.1	r2.7	r-5.7	r7.7	-1.0
	ANNUAL	r1.9	-0.1	r-2.0	r3.6	r0.8	r1.7	r2.4	1.9
2002	I	r9.3	6.2	r-2.9	r3.7	r2.4	r-5.2	r8.7	-0.2
	II	r1.0	0.9	r0.0	r3.9	r0.3	r2.9	r-0.9	1.4
	III	r5.9	5.2	r-0.6	r2.0	r-0.2	r-3.7	r6.6	0.1
	IV	r1.7	1.7	r0.0	r1.6	r-0.4	r-0.1	r3.9	1.4
	ANNUAL	r5.4	2.7	r-2.5	r2.8	r1.2	r-2.4	r5.6	0.5
2003	I	r2.1	r1.4	r-0.7	r4.1	r0.2	r2.0	r0.4	r1.4
	II	5.7	3.4	-2.2	3.5	2.9	-2.1	5.6	0.8
Percent change from corresponding quarter of previous year									
2001	I	r2.0	1.4	r-0.6	r4.5	r1.1	r2.5	1.4	2.1
	II	r1.1	-0.6	r-1.6	r4.6	r1.1	3.5	-0.3	2.1
	III	r1.7	-0.8	r-2.5	r3.0	r0.3	r1.3	r3.7	2.2
	IV	r3.2	-0.4	r-3.5	r2.7	r0.9	-0.5	r5.0	1.5
	ANNUAL	r1.9	-0.1	r-2.0	r3.6	r0.8	r1.7	r2.4	1.9
2002	I	r5.6	1.3	r-4.0	r2.5	r1.3	-2.9	r7.0	0.6
	II	r5.4	2.3	r-3.0	r3.0	r1.7	r-2.3	r5.4	0.5
	III	r6.1	3.8	r-2.1	r2.9	r1.3	-3.0	5.4	0.1
	IV	r4.4	3.5	r-0.9	r2.8	r0.5	r-1.6	r4.5	0.7
	ANNUAL	r5.4	2.7	r-2.5	r2.8	r1.2	r-2.4	r5.6	0.5
2003	I	r2.6	r2.3	r-0.3	r2.9	r0.0	r0.2	r2.5	1.1
	II	3.8	2.9	-0.9	2.8	0.6	-1.0	4.1	0.9

See footnotes following Table 6.  
r=revised

August 7, 2003  
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	
Indexes 1992=100							
2001	I	135.2	134.9	99.8	132.0	107.5	97.6
	II	r135.8	132.8	r97.8	r133.6	r107.9	98.4
	III	r137.8	131.1	r95.1	r135.0	r108.8	97.9
	IV	r139.9	129.1	r92.3	r136.7	r110.3	97.7
	ANNUAL	r137.1	132.0	r96.3	r134.3	r108.6	97.9
2002	I	r142.9	129.5	r90.6	r138.3	r111.3	96.8
	II	r144.8	130.6	r90.2	r140.5	r112.0	r97.0
	III	r147.2	131.6	r89.4	r141.3	r112.1	96.0
	IV	r148.5	130.3	r87.8	r143.9	r113.6	r96.9
	ANNUAL	r145.8	130.5	r89.5	r141.0	r112.2	r96.7
2003	I	r150.3	130.1	r86.6	r146.4	r114.5	r97.4
	II	151.9	129.4	85.2	148.4	115.9	97.7
Percent change from previous quarter at annual rate(5)							
2001	I	-2.1	-7.6	r-5.7	1.6	-2.1	3.7
	II	r1.8	-6.2	r-7.9	r5.0	r1.7	3.1
	III	r6.1	-4.9	r-10.3	r4.1	r3.2	r-1.8
	IV	r6.0	-6.1	r-11.5	r5.1	r5.7	r-0.9
	ANNUAL	r1.6	-4.9	r-6.4	r2.4	r-0.4	0.8
2002	I	r9.1	1.2	r-7.2	r5.0	r3.7	r-3.8
	II	r5.5	3.5	r-1.9	r6.3	r2.7	r0.8
	III	r6.7	3.0	r-3.4	r2.5	r0.3	-3.9
	IV	r3.6	-3.7	r-7.1	r7.4	r5.3	r3.6
	ANNUAL	r6.4	-1.1	r-7.0	r5.0	r3.4	r-1.3
2003	I	r4.9	-0.7	r-5.3	r7.3	r3.3	r2.2
	II	4.2	-2.1	-6.1	5.4	4.8	1.2
Percent change from corresponding quarter of previous year							
2001	I	1.2	-2.4	-3.6	0.5	-2.9	-0.7
	II	r0.7	-5.0	r-5.7	r3.4	r0.0	r2.7
	III	r1.8	-5.9	r-7.5	r2.1	r-0.6	r0.3
	IV	r2.9	-6.2	r-8.9	r3.9	r2.1	1.0
	ANNUAL	r1.6	-4.9	r-6.4	r2.4	r-0.4	0.8
2002	I	r5.7	-4.0	r-9.2	r4.8	r3.6	-0.9
	II	r6.7	-1.7	r-7.8	r5.1	r3.8	r-1.4
	III	r6.8	0.3	r-6.1	r4.7	r3.1	-2.0
	IV	r6.2	1.0	r-4.9	r5.3	r3.0	r-0.9
	ANNUAL	r6.4	-1.1	r-7.0	r5.0	r3.4	r-1.3
2003	I	r5.2	0.5	r-4.4	r5.9	r2.9	r0.7
	II	4.8	-0.9	-5.5	5.6	3.4	0.7

See footnotes following Table 6.  
r=revised

August 7, 2003  
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	
-----							
Indexes 1992=100							
2001	I	149.3	158.3	106.0	129.4	105.3	r86.6
	II	r149.7	154.9	r103.5	r131.3	r106.1	87.7
	III	r151.7	151.8	r100.1	r132.0	r106.4	87.0
	IV	r153.7	148.6	r96.7	r134.3	r108.4	r87.4
	ANNUAL	r151.0	153.4	r101.5	r131.7	r106.5	87.2
2002	I	r158.1	149.4	r94.5	r135.6	r109.1	85.8
	II	r160.7	151.2	r94.1	r138.2	r110.3	86.0
	III	r163.9	152.6	r93.1	r138.8	r110.1	r84.7
	IV	r166.5	151.5	r90.9	r141.7	r111.9	r85.1
	ANNUAL	r162.3	151.2	r93.2	r138.6	r110.3	85.4
2003	I	r167.9	r151.3	r90.1	r143.6	r112.3	r85.6
	II	169.4	150.1	88.6	145.5	113.6	85.9
-----							
Percent change from previous quarter at annual rate(5)							
2001	I	r-2.0	-8.9	r-7.0	3.1	-0.6	r5.2
	II	r1.0	-8.2	r-9.1	r6.2	r2.9	5.1
	III	r5.4	-7.9	r-12.6	r2.0	r1.1	-3.3
	IV	r5.5	-8.0	r-12.8	r7.2	r7.8	r1.6
	ANNUAL	r0.9	-6.3	r-7.1	r1.8	r-0.9	0.9
2002	I	r11.9	2.1	r-8.7	r3.9	r2.6	r-7.1
	II	r6.7	4.9	r-1.7	r8.1	r4.4	r1.2
	III	r8.3	3.8	r-4.2	r1.6	r-0.5	-6.2
	IV	r6.5	-2.9	r-8.9	r8.7	r6.6	r2.1
	ANNUAL	r7.4	-1.5	r-8.3	r5.2	r3.6	r-2.1
2003	I	r3.3	r-0.5	r-3.7	r5.5	r1.6	r2.2
	II	3.8	-3.1	-6.7	5.2	4.6	1.4
-----							
Percent change from corresponding quarter of previous year							
2001	I	0.5	-2.9	-3.3	-1.1	-4.3	-1.6
	II	r-0.2	-6.3	r-6.1	r3.0	r-0.4	3.2
	III	r0.9	-7.8	r-8.6	r1.1	r-1.6	r0.2
	IV	r2.4	-8.2	r-10.4	r4.6	r2.7	2.1
	ANNUAL	r0.9	-6.3	r-7.1	r1.8	r-0.9	0.9
2002	I	r5.9	-5.6	r-10.8	r4.8	r3.6	-1.0
	II	r7.3	-2.4	r-9.1	r5.3	r3.9	r-1.9
	III	r8.1	0.5	r-7.0	r5.2	r3.5	-2.7
	IV	r8.3	1.9	r-5.9	r5.5	r3.2	r-2.6
	ANNUAL	r7.4	-1.5	r-8.3	r5.2	r3.6	r-2.1
2003	I	r6.2	r1.3	r-4.7	r5.9	r3.0	r-0.2
	II	5.5	-0.7	-5.9	5.2	3.0	-0.2
-----							

See footnotes following Table 6.  
r=revised

August 7, 2003  
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	
Indexes 1992=100							
2001	I	123.1	112.7	91.6	134.7	109.4	
	II	r123.8	111.7	r90.2	r135.8	109.7	
	III	r125.6	111.3	r88.6	r138.6	110.3	
	IV	r127.4	110.1	r86.4	r139.2	r109.3	
	ANNUAL	r125.0	111.5	r89.2	r137.0	109.7	
2002	I	r129.1	110.2	r85.4	r141.6	109.7	
	II	r130.4	110.8	r84.9	r142.9	109.5	
	III	r131.9	111.4	r84.4	r144.3	109.4	
	IV	r131.8	110.1	r83.5	r146.4	r111.0	
	ANNUAL	r130.8	110.6	r84.6	r143.8	r109.9	
2003	I	r134.3	r109.9	r81.9	r149.8	r111.6	
	II	135.7	109.6	80.8	152.0	112.0	
Percent change from previous quarter at annual rate(5)							
2001	I	-2.5	-6.0	-3.6	-0.8	-4.4	1.8
	II	r2.3	-3.8	r-5.9	r3.3	r0.0	r1.0
	III	r5.8	-1.4	r-6.7	r8.4	r7.4	r2.5
	IV	r6.0	-4.0	r-9.4	r1.9	r2.5	-3.8
	ANNUAL	r2.3	-3.2	r-5.3	r3.6	r0.8	1.3
2002	I	r5.4	0.3	r-4.9	r7.1	r5.8	1.6
	II	r4.2	1.9	r-2.1	r3.5	r0.0	r-0.6
	III	r4.6	2.3	r-2.2	r4.2	r2.0	-0.4
	IV	r-0.2	-4.6	r-4.4	r5.7	r3.7	r6.0
	ANNUAL	r4.7	-0.8	r-5.2	r4.9	r3.3	r0.2
2003	I	r7.6	r-0.6	r-7.6	r9.8	r5.8	r2.0
	II	4.4	-1.0	-5.2	5.8	5.2	1.3
Percent change from corresponding quarter of previous year							
2001	I	2.1	-1.9	-3.9	3.1	-0.3	1.0
	II	r1.7	-3.4	r-5.1	r4.1	r0.7	2.4
	III	r2.5	-3.5	r-5.9	r4.1	r1.3	1.5
	IV	r2.8	-3.8	r-6.4	r3.1	r1.3	0.3
	ANNUAL	r2.3	-3.2	r-5.3	r3.6	r0.8	1.3
2002	I	r4.8	-2.2	r-6.7	r5.1	r3.9	r0.3
	II	r5.3	-0.8	r-5.8	r5.2	r3.9	r-0.1
	III	r5.0	0.1	r-4.7	r4.2	r2.5	r-0.8
	IV	r3.5	-0.1	r-3.4	r5.1	r2.8	r1.6
	ANNUAL	r4.7	-0.8	r-5.2	r4.9	r3.3	r0.2
2003	I	r4.0	r-0.3	r-4.1	r5.8	r2.8	r1.7
	II	4.1	-1.0	-4.9	6.4	4.1	2.2

See footnotes following Table 6.  
r=revised

August 7, 2003  
Source: Bureau of Labor Statistics

Table 6. Nonfinancial corporations: 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 costs (7)	Unit profits (8)	Implicit price deflator (4)	
Indexes 1992=100											
2001	I	r118.7	147.9	r124.7	r131.2	r106.8	110.6	111.6	110.8	93.1	109.3
	II	r120.0	147.8	r123.1	r132.6	r107.1	110.4	113.5	111.3	95.4	109.9
	III	r121.3	147.7	r121.7	r133.8	r107.8	110.3	115.5	111.7	97.9	110.5
	IV	r124.5	149.6	r120.2	r134.7	r108.7	108.2	114.1	109.8	107.6	109.6
	ANNUAL	r121.1	148.2	r122.4	r133.0	r107.6	109.9	113.7	110.9	98.5	109.8
2002	I	r126.0	150.8	r119.7	r135.9	r109.4	107.9	114.0	109.5	107.6	109.4
	II	r127.7	152.8	r119.6	r137.3	r109.5	107.5	114.5	109.4	107.8	109.3
	III	r128.7	153.4	r119.2	r138.2	r109.7	107.4	115.4	109.6	104.6	109.1
	IV	r129.9	r154.5	r118.9	r139.1	r109.8	r107.1	r115.2	109.3	r110.1	109.4
	ANNUAL	r128.1	r152.9	r119.4	r137.7	r109.6	107.5	r114.8	r109.4	r107.5	109.3
2003	I	r131.3	r155.5	r118.4	r141.0	r110.2	r107.3	r114.6	r109.3	r112.2	109.6
Percent change from previous quarter at annual rate(5)											
2001	I	-2.6	-3.3	-0.7	-1.2	r-4.7	1.4	10.1	3.7	-20.2	1.7
	II	r4.7	-0.5	r-5.0	r4.3	r1.0	-0.4	7.1	1.6	10.0	2.2
	III	r4.4	-0.3	r-4.5	r3.7	r2.8	-0.6	7.2	1.5	10.8	2.2
	IV	r10.8	5.4	r-4.9	r2.7	r3.3	-7.3	-4.9	-6.7	46.1	-3.3
	ANNUAL	r2.0	-0.1	r-2.1	r3.1	r0.3	1.0	6.5	2.5	-11.7	1.2
2002	I	r5.0	3.3	r-1.6	r3.7	r2.5	-1.2	-0.2	-0.9	-0.2	-0.8
	II	r5.5	5.3	r-0.3	r4.2	r0.6	-1.3	1.7	-0.5	0.9	-0.3
	III	r3.1	1.7	r-1.4	r2.7	r0.5	-0.5	3.1	0.5	-11.2	-0.5
	IV	r3.6	r2.8	r-0.8	r2.6	r0.6	r-1.0	r-0.6	r-0.9	r22.8	0.9
	ANNUAL	r5.8	r3.1	r-2.5	r3.5	r1.8	r-2.2	r1.0	-1.3	r9.1	-0.5
2003	I	r4.5	r2.8	r-1.6	r5.4	r1.5	r0.9	r-1.9	r0.1	r7.6	r0.7
Percent change from corresponding quarter of previous year											
2001	I	0.9	0.4	-0.4	3.5	0.1	2.6	6.7	3.7	-22.0	1.3
	II	r1.5	-0.1	r-1.6	r3.9	r0.5	2.3	6.8	3.5	-19.7	1.3
	III	r1.6	-1.1	r-2.7	r2.7	r0.0	1.1	7.8	2.9	-10.6	1.7
	IV	r4.2	0.3	r-3.8	r2.4	r0.5	-1.8	4.7	0.0	9.2	0.7
	ANNUAL	r2.0	-0.1	r-2.1	r3.1	r0.3	1.0	6.5	2.5	-11.7	1.2
2002	I	r6.2	1.9	r-4.0	r3.6	r2.4	-2.4	2.2	-1.2	15.5	0.0
	II	r6.4	3.4	r-2.8	r3.6	r2.3	-2.6	0.9	-1.7	13.0	-0.6
	III	6.1	3.9	-2.1	3.3	1.7	-2.6	-0.1	-1.9	6.9	-1.3
	IV	r4.3	r3.2	-1.0	r3.3	r1.0	r-1.0	r1.0	-0.4	r2.4	-0.2
	ANNUAL	r5.8	r3.1	r-2.5	r3.5	r1.8	r-2.2	r1.0	-1.3	r9.1	-0.5
2003	I	r4.2	r3.1	r-1.0	r3.7	r0.8	r-0.5	r0.6	r-0.2	r4.3	r0.2

See footnotes following Table 6.  
r=revisedAugust 7, 2003  
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  $-1.4$  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 first quarter of 2003.

### 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 1978-2002 is based on the Consumer Price Index research series (CPI-U-RS).
- (3) Unit nonlabor payments include profits, capital consumption allowances, interest, rental income of persons, and indirect taxes.
- (4) Current dollar output divided by the output index.
- (5) Quarterly changes: Percent change compounded at annual rate from the original data rather than index numbers. Annual changes: Percent change between annual average levels.
- (6) Unit nonlabor costs include capital consumption allowances, interest, rental income of persons, and indirect taxes. For nonfinancial corporations, rental income of persons is zero by definition.
- (7) Total unit costs are the sum of unit labor and nonlabor costs.
- (8) Unit profits include corporate profits with inventory valuation and capital consumption adjustments..

Appendix table 1. Business sector: Revised 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 non-labor payments (3)	Implicit price deflator (4)	
Indexes 1992=100									
1998	I	r109.6	126.7	r115.6	r117.3	r103.5	r107.0	r115.9	110.3
	II	r109.6	127.3	r116.2	r118.8	r104.5	r108.4	r113.9	110.4
	III	r110.2	128.7	r116.8	r120.2	r105.2	r109.0	r113.5	110.7
	IV	r111.5	131.3	r117.8	r121.4	r105.9	r108.9	r114.1	110.8
	ANNUAL	r110.2	128.5	r116.6	r119.4	r104.8	r108.4	r114.3	110.6
1999	I	r112.3	132.4	r117.9	r123.9	r107.6	r110.3	r112.7	111.2
	II	r112.1	133.0	r118.7	r123.9	r106.9	r110.6	r113.0	111.5
	III	r113.1	134.9	r119.4	r125.0	r107.0	r110.6	r113.9	111.8
	IV	r114.7	137.7	r120.1	r126.5	r107.5	r110.3	r115.2	112.1
	ANNUAL	r113.0	134.5	r119.0	r124.8	r107.2	r110.4	r113.7	111.6
2000	I	r114.8	138.4	r120.6	r131.1	r110.3	r114.1	r110.4	112.8
	II	r116.6	140.3	r120.3	r131.9	r110.1	r113.1	r113.8	113.4
	III	r116.8	140.4	r120.2	r134.6	r111.4	r115.3	r111.0	113.7
	IV	r117.5	140.7	r119.7	r135.9	r111.7	115.6	r111.9	114.3
	ANNUAL	r116.5	140.0	r120.1	r133.5	r111.0	r114.6	r111.8	113.5
Percent change from previous quarter at annual rate(5)									
1998	I	r5.2	7.5	2.2	r7.4	r6.7	2.1	r-2.1	0.5
	II	r-0.2	1.9	r2.2	r5.1	r3.9	5.3	r-7.0	0.5
	III	r2.4	4.4	r1.9	r4.8	r2.9	2.3	r-1.3	0.9
	IV	r4.5	8.2	r3.5	r4.1	r2.4	-0.4	2.0	0.5
	ANNUAL	2.6	4.9	2.2	5.5	4.0	2.8	r-2.3	0.8
1999	I	3.1	3.4	r0.3	r8.3	r6.8	r5.1	r-4.8	1.3
	II	r-0.8	2.1	r3.0	r0.2	r-2.7	1.1	0.9	1.0
	III	r3.6	5.9	r2.2	r3.5	r0.4	-0.1	3.3	1.2
	IV	5.8	8.4	2.4	r4.9	r1.9	r-0.8	r4.5	1.1
	ANNUAL	r2.5	4.7	r2.1	r4.5	2.4	1.9	r-0.6	1.0
2000	I	r0.5	2.2	r1.7	r15.2	r11.0	r14.6	r-15.5	2.4
	II	r6.3	5.4	r-0.8	r2.6	r-0.8	-3.5	12.9	2.2
	III	r0.7	0.4	r-0.3	r8.5	r4.7	7.8	-9.6	1.1
	IV	r2.6	0.9	r-1.7	r3.9	r0.9	r1.2	r3.2	1.9
	ANNUAL	r3.1	4.1	r0.9	r6.9	r3.5	3.7	-1.7	1.7
Percent change from corresponding quarter of previous year									
1998	I	3.4	5.7	2.2	4.8	3.4	1.4	r0.6	1.1
	II	2.3	4.4	2.0	5.8	r4.4	3.5	r-3.4	0.8
	III	2.0	4.2	2.2	5.9	4.4	3.9	r-4.1	0.7
	IV	r2.9	5.5	r2.5	5.3	4.0	2.3	-2.1	0.6
	ANNUAL	2.6	4.9	2.2	5.5	4.0	2.8	r-2.3	0.8
1999	I	r2.4	4.5	r2.0	5.6	4.0	r3.1	r-2.8	0.8
	II	2.3	4.5	2.2	4.3	2.3	2.0	-0.8	0.9
	III	2.6	4.9	2.2	r4.0	1.7	1.4	r0.3	1.0
	IV	r2.9	4.9	r2.0	r4.2	r1.5	1.3	0.9	1.2
	ANNUAL	r2.5	4.7	r2.1	r4.5	2.4	1.9	r-0.6	1.0
2000	I	r2.2	4.6	2.3	r5.8	r2.5	3.5	-2.0	1.4
	II	r4.0	5.4	1.3	r6.4	r3.0	2.3	0.8	1.7
	III	3.3	4.1	0.7	7.7	4.1	4.3	-2.5	1.7
	IV	r2.5	2.2	r-0.3	r7.4	r3.9	r4.8	r-2.8	1.9
	ANNUAL	r3.1	4.1	r0.9	r6.9	r3.5	3.7	-1.7	1.7

See footnotes following Table 6.

August 7, 2003

Source: Bureau of Labor Statistics

Appendix table 2. Nonfarm business sector: Revised 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 non-labor payments (3)	Implicit price deflator (4)	
Indexes 1992=100									
1998	I	r109.5	127.0	r116.0	r117.0	r103.2	r106.8	r117.1	110.5
	II	r109.6	127.7	r116.5	r118.5	104.3	r108.1	r115.1	110.6
	III	r110.2	129.0	r117.1	119.9	105.0	r108.8	r114.7	111.0
	IV	111.4	131.6	r118.2	121.1	105.6	r108.7	r115.3	111.1
	ANNUAL	r110.2	128.8	r116.9	119.1	104.5	r108.1	r115.5	110.8
1999	I	r112.0	132.7	118.4	r123.3	r107.1	r110.0	r114.1	111.5
	II	r111.8	133.3	r119.3	123.4	106.4	r110.4	r114.6	111.9
	III	r112.7	135.3	r120.0	r124.4	r106.5	r110.4	r115.6	112.3
	IV	r114.5	138.0	r120.6	r126.2	r107.2	r110.2	r116.9	112.6
	ANNUAL	r112.8	134.8	r119.6	124.3	106.8	r110.3	r115.3	112.1
2000	I	r114.6	138.7	r121.0	130.8	110.1	r114.2	r112.0	113.4
	II	r116.1	140.5	r121.0	r131.4	r109.7	r113.1	r115.3	113.9
	III	r116.4	140.6	r120.8	r134.2	r111.0	r115.3	r112.6	114.3
	IV	r117.0	141.0	r120.5	135.3	111.2	115.6	r113.3	114.8
	ANNUAL	r116.1	140.2	r120.7	133.0	110.6	r114.6	r113.3	114.1
Percent change from previous quarter at annual rate(5)									
1998	I	r5.0	7.8	r2.7	r7.2	r6.6	r2.1	r-1.8	0.6
	II	r0.3	2.1	r1.7	r5.5	r4.3	5.1	-6.8	0.4
	III	r2.0	4.3	r2.3	r4.7	r2.8	2.7	-1.3	1.2
	IV	r4.4	8.3	r3.7	r3.9	2.2	r-0.5	r2.1	0.5
	ANNUAL	2.6	5.0	2.4	5.4	3.9	2.7	r-2.0	0.9
1999	I	2.4	3.3	0.9	r7.5	r5.9	r4.9	r-4.1	1.4
	II	r-0.9	1.9	r2.8	r0.3	r-2.6	1.3	r1.8	1.5
	III	r3.5	6.0	r2.4	r3.5	r0.4	0.0	r3.8	1.4
	IV	6.3	8.3	1.9	r5.7	r2.6	r-0.6	r4.4	1.3
	ANNUAL	r2.3	4.6	r2.3	r4.3	2.2	2.0	-0.2	1.2
2000	I	r0.3	1.9	r1.6	r15.4	r11.3	r15.1	r-15.7	2.7
	II	r5.7	5.4	r-0.2	r1.9	r-1.4	-3.6	r12.3	1.9
	III	r0.8	0.2	r-0.6	r8.8	r5.0	r7.9	-9.1	1.4
	IV	r2.2	1.1	r-1.0	r3.3	r0.4	r1.1	r2.6	1.6
	ANNUAL	r3.0	4.0	1.0	7.0	r3.6	3.9	r-1.8	1.8
Percent change from corresponding quarter of previous year									
1998	I	3.2	5.7	2.4	r4.7	3.2	1.4	r1.1	1.3
	II	r2.3	4.5	r2.1	r5.7	4.2	r3.4	-3.0	0.8
	III	2.0	4.4	2.4	5.9	4.4	r3.9	r-3.9	0.8
	IV	2.9	5.6	2.6	5.3	r4.0	2.3	-2.0	0.7
	ANNUAL	2.6	5.0	2.4	5.4	3.9	2.7	r-2.0	0.9
1999	I	2.3	4.5	2.1	5.4	3.8	3.0	r-2.6	0.9
	II	1.9	4.4	2.4	r4.1	2.0	2.1	-0.4	1.1
	III	r2.3	4.8	r2.5	3.8	r1.4	1.4	0.8	1.2
	IV	r2.8	4.8	r2.0	r4.2	r1.5	1.4	1.4	1.4
	ANNUAL	r2.3	4.6	r2.3	r4.3	2.2	2.0	-0.2	1.2
2000	I	2.3	4.5	r2.2	r6.1	r2.8	3.7	-1.8	1.7
	II	r3.9	5.4	r1.4	r6.5	r3.1	2.5	r0.6	1.8
	III	r3.2	3.9	0.7	r7.8	4.3	4.5	-2.6	1.8
	IV	r2.2	2.2	r-0.1	7.2	r3.7	4.9	-3.1	1.9
	ANNUAL	r3.0	4.0	1.0	7.0	r3.6	3.9	r-1.8	1.8

See footnotes following Table 6.

August 7, 2003

Source: Bureau of Labor Statistics

Appendix table 3. Business sector: Productivity, hourly compensation, unit labor costs, and prices  
Indexes 1992=100

Year	Output per hour of all persons	Output	Hours of all persons	Compensa- tion per hour (1)	Real compensa- tion per hour (2)	Unit labor costs	Unit non- labor pay- ments (3)	Implicit price deflator (4)
1947	r32.7	20.7	r63.3	r7.0	r40.6	21.4	18.9	20.5
1948	r34.2	21.8	r63.8	r7.6	r40.7	22.2	r20.9	21.7
1949	r34.9	21.6	r61.7	r7.7	r41.9	22.0	r20.7	21.5
1950	r37.8	23.7	r62.6	r8.2	r44.2	21.8	21.8	21.8
1951	r38.9	25.2	r64.7	r9.0	r44.9	23.2	24.0	23.5
1952	r40.1	26.0	r64.8	r9.6	r46.8	23.9	23.4	23.7
1953	r41.5	27.2	r65.7	r10.2	r49.4	24.5	22.9	23.9
1954	r42.4	26.9	r63.4	r10.5	r50.6	24.8	22.8	24.1
1955	r44.1	29.0	r65.8	r10.8	r52.1	24.4	24.3	24.4
1956	r44.1	29.5	r66.8	r11.5	r54.7	26.0	23.7	25.2
1957	r45.5	30.0	r65.9	r12.2	r56.4	26.9	24.4	26.0
1958	r46.8	29.4	r62.9	r12.8	r57.3	27.3	25.0	26.5
1959	r48.6	31.9	r65.5	r13.3	r59.2	27.4	25.5	26.7
1960	r49.5	32.5	r65.6	r13.9	r60.7	28.0	r25.1	27.0
1961	r51.3	33.1	r64.5	r14.4	r62.5	28.1	25.5	27.2
1962	r53.6	35.2	r65.7	r15.1	r64.6	28.1	26.3	27.4
1963	r55.7	36.8	r66.1	r15.6	r66.1	28.0	26.9	27.6
1964	r57.6	39.2	r68.0	16.2	67.7	r28.1	27.5	27.9
1965	r59.7	41.9	r70.3	16.8	69.1	28.2	r28.7	28.4
1966	r62.1	44.8	r72.1	17.9	71.7	28.9	r29.4	29.1
1967	r63.5	45.6	r71.9	19.0	r73.6	29.9	r29.8	29.9
1968	r65.5	47.9	r73.2	20.4	76.0	r31.2	r30.7	31.0
1969	r65.8	49.4	r75.1	21.9	r77.2	r33.2	r31.0	32.4
1970	r67.1	49.4	r73.6	r23.6	78.6	35.1	r31.7	33.9
1971	r70.0	51.3	r73.3	25.0	80.1	35.8	r34.5	35.3
1972	72.2	54.7	75.7	26.6	r82.3	36.8	r35.9	36.5
1973	74.5	58.5	r78.6	r28.8	r84.1	r38.7	r37.8	38.4
1974	73.2	57.6	r78.7	r31.6	r83.1	43.2	r40.1	42.1
1975	75.8	57.0	r75.3	r34.8	r83.9	r46.0	r46.2	46.1
1976	r78.4	60.9	r77.7	r37.9	r86.2	r48.3	r48.7	48.5
1977	r79.7	64.3	r80.7	r40.9	r87.4	r51.3	r51.7	51.4
1978	r80.6	68.3	r84.8	r44.5	r88.9	r55.2	r55.0	55.1
1979	r80.5	70.6	r87.7	r48.8	r89.1	r60.6	r58.5	59.8
1980	r80.3	69.8	r86.9	r54.1	r88.9	r67.3	r61.7	65.2
1981	r81.9	71.7	r87.6	r59.2	r89.0	r72.3	r69.4	71.2
1982	81.6	69.6	85.2	r63.7	r90.5	r78.1	r70.5	75.3
1983	r84.5	73.3	r86.7	r66.3	r90.4	r78.5	r76.6	77.8
1984	r86.8	79.7	r91.8	r69.2	r90.7	r79.7	r80.6	80.0
1985	r88.5	83.1	r93.8	r72.6	r92.1	r82.0	r82.4	82.2
1986	r91.2	86.1	r94.4	r76.4	r95.2	r83.8	r83.0	83.5
1987	r91.6	89.2	r97.3	r79.3	r95.6	r86.6	r83.8	85.6
1988	93.0	92.9	r99.9	r83.4	r97.0	r89.7	r85.8	88.3
1989	93.9	96.2	r102.5	r85.7	r95.5	r91.2	r92.0	91.5
1990	r95.3	97.6	r102.5	90.7	96.3	r95.2	r94.0	94.8
1991	r96.4	96.5	r100.1	95.0	r97.4	r98.6	r97.1	98.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.5	103.1	102.6	r102.4	r99.9	101.9	102.5	102.2
1994	r101.7	108.1	r106.3	r104.4	r99.7	102.6	106.4	104.0
1995	r102.3	111.5	r108.9	r106.5	r99.4	104.1	109.4	106.0
1996	r105.1	116.4	r110.7	r109.9	r99.8	r104.6	r113.2	107.7
1997	r107.4	122.5	r114.0	r113.2	r100.7	r105.4	r117.0	109.7
1998	r110.2	128.5	r116.6	r119.4	r104.8	r108.4	r114.3	110.6
1999	r113.0	134.5	r119.0	r124.8	r107.2	r110.4	r113.7	111.6
2000	r116.5	140.0	r120.1	r133.5	r111.0	r114.6	r111.8	113.5
2001	r118.8	139.8	r117.6	r138.6	r112.1	r116.7	r114.3	115.8
2002	r125.1	143.5	r114.7	r142.5	r113.5	113.9	120.4	116.3

See footnotes following Table 6.

August 7, 2003

Source: Bureau of Labor Statistics

Appendix table 4. Nonfarm business sector: Productivity, hourly compensation, unit labor costs, and prices Indexes 1992=100

Year	Output per hour of all persons	Output	Hours of all persons	Compensation per hour (1)	Real compensation per hour (2)	Unit labor costs	Unit non-labor payments (3)	Implicit price deflator (4)
1947	r37.3	20.3	r54.4	r7.4	r43.1	19.9	r17.9	19.2
1948	r38.3	21.2	r55.3	r8.1	r43.4	r21.1	r19.5	20.5
1949	r39.6	21.0	r53.1	r8.3	r45.3	21.0	r20.1	20.7
1950	r42.2	23.1	r54.8	r8.8	r47.3	r20.9	r21.0	20.9
1951	r43.3	24.9	r57.4	r9.6	r47.7	22.1	r22.6	22.3
1952	r44.1	25.6	r58.0	r10.1	r49.3	r22.9	22.4	22.7
1953	r45.1	26.9	r59.5	r10.7	r51.7	23.6	22.4	23.2
1954	r46.0	26.4	r57.4	r11.0	r53.0	23.9	22.5	23.4
1955	r47.9	28.6	r59.8	r11.4	r55.1	23.8	r23.8	23.8
1956	r47.5	29.1	r61.2	r12.1	r57.7	25.5	r23.2	24.7
1957	r48.8	29.7	r60.9	r12.8	r59.0	26.3	24.0	25.4
1958	r49.8	29.1	r58.3	r13.3	r59.7	26.7	r24.3	25.9
1959	r51.8	31.6	r61.0	r13.8	r61.6	26.7	r25.1	26.2
1960	r52.4	32.1	r61.3	r14.5	r63.2	r27.6	r24.5	26.5
1961	r54.2	32.8	r60.5	r15.0	r64.8	27.6	25.0	26.7
1962	r56.6	35.0	r61.9	r15.6	r66.7	27.5	r25.9	26.9
1963	r58.6	36.6	r62.6	r16.1	r68.1	27.5	26.5	27.1
1964	r60.4	39.1	r64.8	r16.6	r69.4	r27.5	27.3	27.5
1965	r62.2	41.9	r67.3	17.2	r70.6	27.6	r28.3	27.8
1966	r64.5	44.9	r69.6	18.2	r72.6	28.2	r29.0	28.5
1967	r65.6	45.7	r69.6	19.3	r74.7	r29.3	r29.5	29.4
1968	r67.7	48.1	r71.1	20.7	r76.9	r30.5	30.4	30.5
1969	r67.8	49.5	r73.1	r22.1	r77.9	32.6	r30.6	31.9
1970	r68.8	49.5	r71.9	23.7	r79.0	34.4	31.3	33.3
1971	r71.6	51.4	r71.7	r25.2	r80.6	35.2	r34.0	34.7
1972	r74.0	54.9	r74.2	r26.8	r82.9	36.2	r35.0	35.8
1973	r76.3	58.9	r77.2	r29.0	r84.5	r37.9	r35.4	37.0
1974	r75.1	58.0	r77.2	r31.8	r83.5	r42.3	r38.1	40.8
1975	r77.1	57.0	r73.9	r35.0	r84.3	r45.4	r44.7	45.1
1976	r79.9	61.1	r76.5	r38.0	r86.5	r47.5	r47.6	47.6
1977	r81.2	64.6	r79.5	r41.1	r87.8	r50.6	r50.7	50.6
1978	r82.2	68.8	r83.6	r44.7	r89.4	r54.4	r53.5	54.1
1979	r81.9	70.9	r86.6	r49.0	r89.5	r59.8	r56.6	58.7
1980	r81.7	70.2	r85.9	r54.3	r89.3	r66.4	r60.6	64.3
1981	r82.7	71.6	r86.6	r59.5	r89.6	r72.0	r67.8	70.5
1982	r82.3	69.4	r84.3	r64.0	r91.0	r77.8	r69.6	74.8
1983	r85.9	73.8	r85.9	r66.7	r91.0	r77.7	r76.4	77.2
1984	r87.7	80.0	r91.1	r69.5	r91.2	r79.3	r79.6	79.4
1985	r88.9	83.0	r93.4	r72.8	r92.4	r81.9	r81.8	81.9
1986	r91.6	86.2	r94.1	r76.6	r95.5	r83.6	r82.6	83.2
1987	r91.9	89.3	r97.1	r79.5	r95.8	r86.5	r83.4	85.4
1988	r93.4	93.3	r99.9	r83.4	r97.0	r89.3	r85.6	87.9
1989	r94.1	96.5	r102.5	r85.6	r95.4	r91.0	r91.5	91.2
1990	95.3	97.8	r102.6	90.5	r96.1	r94.9	r93.7	94.5
1991	r96.5	96.6	r100.1	95.0	r97.4	r98.4	r97.2	98.0
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.5	103.3	102.9	102.2	99.7	101.7	103.0	102.2
1994	101.8	108.2	r106.3	104.3	r99.6	102.5	106.9	104.1
1995	r102.7	111.8	r108.9	r106.5	99.4	103.7	110.4	106.1
1996	r105.3	116.7	r110.8	109.8	r99.7	r104.3	r113.4	107.6
1997	r107.4	122.7	r114.2	r113.0	r100.5	105.2	r117.9	109.8
1998	r110.2	128.8	r116.9	119.1	104.5	r108.1	r115.5	110.8
1999	r112.8	134.8	r119.6	124.3	106.8	r110.3	r115.3	112.1
2000	r116.1	140.2	r120.7	133.0	110.6	r114.6	r113.3	114.1
2001	r118.3	140.1	r118.4	r137.8	r111.4	r116.5	r116.1	116.3
2002	r124.7	143.9	r115.4	r141.7	r112.8	113.6	122.5	116.9

See footnotes following Table 6.

August 7, 2003

Source: Bureau of Labor Statistics