

# News

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**PRODUCTIVITY AND COSTS**

Fourth Quarter and Annual Averages 1989  
Business, Nonfarm Business, and Manufacturing  
and 1989 Annual Averages for  
Nonfinancial Corporations

The Bureau of Labor Statistics of the U.S. Department of Labor today reported revised productivity results--as measured by output per hour of all persons--for the fourth quarter and annual averages for 1989. The percentage changes, based on the latest information available, were:

	Fourth quarter	Annual averages 1988-1989
Business sector.....	0.2	1.1
Nonfarm business sector.....	0.2	0.9
Manufacturing.....	2.8	2.8
Durable goods manufacturing.....	-0.4	2.6
Nondurable goods manufacturing...	8.3	3.1

The 1988-89 productivity increases in business and nonfarm business were the smallest since 1982. Following the pattern of recent years, productivity rose more rapidly in manufacturing than in these two larger sectors.

Fourth-quarter measures are summarized in table A and appear in detail in tables 1 through 5. Annual changes in productivity and related measures appear in tables B and C.

**THIRD-TO-FOURTH QUARTER CHANGES, 1989**

**Business**

Productivity increased at a 0.2 percent annual rate during the fourth quarter of 1989 in the business sector, as output increased 0.1 percent and hours of all persons engaged in the sector were unchanged (seasonally adjusted annual rates). The increase in productivity was the smallest in a year, and it was the first time hours did not increase since the second quarter of 1986. During the third quarter of 1989, business productivity had increased 1.5 percent, as output grew more rapidly than hours (table 1).

Table A. Productivity and costs: Revised fourth quarter 1989 measures  
(Seasonally adjusted annual rates)

Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Percent change from preceding quarter						
Business	0.2	0.1	0.0	5.5	1.5	5.4
Nonfarm business	0.2	0.0	-0.2	6.0	1.9	5.8
Manufacturing	2.8	-1.6	-4.3	6.9	2.8	4.0
Durable	-0.4	-4.9	-4.5	7.3	3.1	7.7
Nondurable	8.3	4.0	-3.9	6.3	2.2	-1.8
Percent change from same quarter a year ago						
Business	1.1	2.7	1.6	5.5	0.9	4.3
Nonfarm business	0.6	2.2	1.6	5.4	0.8	4.8
Manufacturing	2.5	1.6	-0.9	4.7	0.1	2.1
Durable	2.2	0.2	-2.0	4.8	0.2	2.4
Nondurable	3.2	4.0	0.7	4.9	0.3	1.6

Hourly compensation increased at a 5.5 percent annual rate during the fourth quarter of 1989, compared with a 4.7 percent increase during the third quarter. This measure includes wages and salaries, supplements, employer contributions to employee-benefit plans, and taxes. Unit labor costs, which reflect changes in hourly compensation and productivity, increased at a 5.4 percent annual rate during the fourth quarter, compared with a 3.2 percent increase one quarter earlier.

Real hourly compensation, which takes into account changes in the Consumer Price Index for All Urban Consumers (CPI-U), rose 1.5 percent in the fourth quarter, compared with a 1.9 percent gain in the third quarter.

The implicit price deflator for business output, which reflects changes in unit labor costs and unit nonlabor payments, increased 2.8 percent in the fourth quarter.

#### Nonfarm business

Productivity also increased 0.2 percent in the nonfarm business sector during the fourth quarter of 1989, as output was unchanged and hours of all persons--employees, proprietors, and unpaid family workers--decreased 0.2 percent. During the third quarter, nonfarm productivity had increased 2.4 percent (table 2). As in the more comprehensive business sector, the drop in hours was the first decline since the second quarter of 1986.

Hourly compensation rose 6.0 percent in the fourth quarter, or 1.9 percent when the increase in the CPI-U was taken into account. Unit labor costs increased 5.8 percent, compared with a 2.8 percent rise during the third quarter.

The implicit price deflator for nonfarm business output rose 3.4 percent in the fourth quarter, compared with a 2.7 percent increase one quarter earlier.

### **Manufacturing**

Manufacturing productivity increased a good deal more rapidly than in the more comprehensive business sectors reported above, growing at a 2.8 percent seasonally adjusted annual rate in the fourth quarter of 1989. Output fell 1.6 percent and hours of all persons decreased 4.3 percent. This was the first quarterly decline in output since the second quarter of 1986 (when it fell 0.2 percent) and the largest decline in hours since the fourth quarter of 1982 (when a 7.6 percent decline was recorded). During the third quarter, productivity rose 1.2 percent, output rose 1.4 percent, and hours edged up 0.1 percent (table 3).

Hourly compensation of manufacturing workers increased 6.9 percent during the fourth quarter, the largest such increase since the second quarter of 1982 (when it rose 8.2 percent). The fourth quarter 1989 increase was 2.8 percent when the increase in consumer prices was taken into account. Unit labor costs rose at a 4.0 percent annual rate in the fourth quarter of 1989, compared with a 4.6 percent increase during the third quarter.

Productivity increased only in nondurable goods manufacturing in the fourth quarter, but the increase -- 8.3 percent -- outweighed the 0.4 percent productivity decline in durables (tables 4 and 5). Output declined in durables but increased strongly in nondurables; hours declined in both.

### **ANNUAL CHANGES, 1988-1989**

#### **Nonfinancial corporations**

The Bureau of Labor Statistics also reported annual productivity and related indexes for nonfinancial corporations for 1989. Productivity was unchanged from 1988, as output and hours both increased 2.5 percent during the year. This was the first year nonfinancial corporate productivity failed to grow since 1980 (when a 0.7 percent decline occurred). Hourly compensation rose 5.1 percent in 1989 but rose only 0.3 percent when the increase in the CPI-U was taken into account. Unit labor costs rose 5.2 percent (their largest increase since 1982), unit nonlabor costs rose 6.1 percent (also the largest gain since 1982), and unit profits declined 12.7 percent (their largest decline since 1982). Annual changes from 1980 to 1989 are shown in table B.

**Table B. Nonfinancial corporations: Annual changes in productivity and related measures, 1980-1989**

Measure	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Productivity.....	-0.7	0.6	0.3	2.7	2.4	1.6	2.3	2.2	2.3	0.0
Output.....	-1.8	1.6	-3.0	4.7	9.1	4.0	2.7	5.0	6.0	2.5
Hours.....	-1.1	1.0	-3.3	1.9	6.6	2.3	0.4	2.7	3.6	2.5
Hourly comp.....	10.5	9.4	7.3	3.2	3.8	4.0	4.8	3.4	4.3	5.1
Real hourly comp.	-2.7	-0.9	1.1	0.0	-0.5	0.4	2.9	-0.2	0.2	0.3
Unit labor costs..	11.2	8.7	6.9	0.4	1.3	2.4	2.5	1.2	1.9	5.2
Unit nonlabor cost	18.0	16.4	10.9	-1.2	-0.4	1.2	3.4	2.6	2.1	6.1
Total unit costs..	12.9	10.7	8.0	0 0	0.8	2.1	2.7	1.6	2.0	5.4
Unit profit.....	-9.9	15.2	-20.0	41.4	23.1	-2.6	-7.5	-0.1	4.7	-12.7
Implicit price def	10.7	11.0	5.7	2.6	2.8	1.6	1.7	1.4	2.2	3.8

**Revised fourth-quarter and 1989 annual measures**

Previous and revised productivity and cost measures for the fourth quarter and full year 1989 are compared in table C for the business, nonfarm business, and manufacturing sectors. In all sectors, measures of real hourly compensation were affected by updated data on consumer prices: revised seasonal adjustment factors affected movements in consumer prices beginning in 1985. Annual measures are virtually unchanged from those released on February 5, based on information then available.

**Table C. Previous and current productivity and related measures**  
**Fourth quarter and annual averages 1989**  
**(Seasonally adjusted annual rates)**

Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Percent change, third to fourth quarter 1989						
<b>Business:</b>						
Previous	0.2	0.0	-0.2	6.5	2.4	6.3
Current	0.2	0.1	0.0	5.5	1.5	5.4
<b>Nonfarm business:</b>						
Previous	0.2	-0.2	-0.4	6.9	2.8	6.7
Current	0.2	0.0	-0.2	6.0	1.9	5.8
<b>Manufacturing:</b>						
Previous	3.2	-1.3	-4.4	7.2	3.1	3.9
Current	2.8	-1.6	-4.3	6.9	2.8	4.0
Percent change, 1988 - 1989						
<b>Business:</b>						
Previous	1.1	3.4	2.3	5.5	0.7	4.4
Current	1.1	3.4	2.3	5.5	0.6	4.4
<b>Nonfarm business:</b>						
Previous	0.9	3.3	2.4	5.5	0.6	4.6
Current	0.9	3.3	2.4	5.4	0.6	4.5
<b>Manufacturing:</b>						
Previous	2.8	3.7	0.9	4.3	-0.5	1.4
Current	2.8	3.7	0.9	4.3	-0.5	1.5

**Next release date**

The next issue of Productivity and Costs is scheduled for release at **10:00 AM EDT, Monday, May 7, 1990**, and will contain measures for business, nonfarm business, and manufacturing.

#### TECHNICAL NOTES

**Labor Input:** The primary source of hours and employment data is the BLS Current Employment Statistics (CES) program, which provides monthly survey data on total employment and average weekly hours of production and nonsupervisory workers in nonagricultural establishments. Nonproduction and supervisory worker hours are developed by BLS from supplementary sources. Jobs rather than persons are counted. Weekly hours are adjusted to the hours at work definition 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 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 equal to gross national product (GNP) in constant 1982 dollars, less the rest-of-the-world sector, general government, output of nonprofit institutions, output of paid employees of private households, rental value of owner-occupied dwellings, and the statistical discrepancy in computing the NIPA. Corresponding exclusions are also made in labor inputs. Business output was about 81 percent of GNP in 1988. Nonfarm business, which also excludes farming, was about 79 percent of GNP in 1988.

Total manufacturing measures are computed by summing series prepared for the durable and nondurable goods sectors. Durables include the following 2-digit SIC industries: Primary metals; fabricated metal products; nonelectrical machinery; electrical machinery; transportation equipment; instruments; lumber and lumber products; furniture and fixtures; stone, clay, and glass products; and miscellaneous manufactures. Nondurables include: Textile mill products, apparel products, leather and leather products, printing and publishing, chemicals and chemical products, petroleum products, rubber and plastic products, food, and tobacco products. Manufacturing accounted for about 22 percent of GNP in 1988.

Nonfinancial corporate output is equal to GNP in constant 1982 dollars, less the rest-of-the-world sector, general government, output of nonprofit institutions, output of paid employees of private households, rental value of owner-occupied dwellings, unincorporated business, the output of corporations engaged in banking, finance, stock and commodity trading, and credit and insurance agencies, and the statistical discrepancy in computing the NIPA. Nonfinancial corporations accounted for about 60 percent of GNP in 1988.

**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.

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

Year and quarter		Output per hour of all persons	Output	Hours of all persons	Compensa- tion per hour(1)	Real compensa- tion per hour(2)	Unit labor cost	Unit non- labor pay- ments(3)	Implicit price deflator(4)
Indexes 1977=100									
1988	I	113.2	138.2	122.1	196.4	102.3	173.5	168.9	171.9
	II	112.6	139.3	123.8	199.1	r102.6	176.9	168.8	174.1
	III	113.4	140.7	124.0	201.9	102.8	178.0	171.8	175.8
	IV	113.5	141.9	125.0	204.5	103.0	180.2	173.7	177.9
	ANNUAL	113.0	140.0	123.9	200.2	102.5	177.1	170.9	174.9
1989	I	113.8	143.6	126.2	206.9	102.8	181.9	174.7	179.4
	II	114.2	144.4	126.4	210.4	r103.0	184.1	176.3	181.4
	III	114.7	145.6	127.0	212.8	103.5	185.6	176.5	182.4
	IV	114.7	145.6	r127.0	r215.7	r103.9	r188.0	r175.6	r183.7
	ANNUAL	114.2	144.8	126.8	r211.2	r103.2	r184.9	175.8	r181.7
Percent change from previous quarter at annual rate(5)									
1988	I	2.5	4.4	1.9	2.6	r-0.8	0.1	4.2	1.5
	II	-2.1	3.3	5.5	5.7	r1.2	8.0	-0.2	5.1
	III	3.1	4.0	0.9	5.8	r0.7	2.6	7.1	4.1
	IV	0.2	3.4	3.2	5.2	r0.8	5.0	4.6	4.8
	ANNUAL	1.7	4.9	3.2	4.8	0.6	3.0	2.7	2.9
1989	I	1.1	4.8	3.7	4.8	-0.6	3.7	2.4	3.3
	II	1.6	2.3	0.6	6.8	r0.8	5.1	3.5	4.6
	III	1.5	3.5	1.9	4.7	r1.9	3.2	0.4	2.2
	IV	0.2	r0.1	r0.0	r5.5	r1.5	r5.4	r-1.9	r2.8
	ANNUAL	1.1	3.4	2.3	5.5	r0.6	4.4	r2.9	3.9
Percent change from corresponding quarter of previous year									
1988	I	2.9	5.9	2.9	4.3	r0.4	1.3	3.9	2.2
	II	1.7	5.4	3.6	5.1	1.1	3.3	1.4	2.6
	III	1.5	4.7	3.1	5.3	1.1	3.7	1.7	3.0
	IV	0.9	3.8	2.9	4.8	r0.5	3.9	3.9	3.9
	ANNUAL	1.7	4.9	3.2	4.8	0.6	3.0	2.7	2.9
1989	I	0.5	3.9	3.3	5.4	0.6	4.8	3.4	4.3
	II	1.5	3.6	2.1	5.6	0.4	4.1	4.4	4.2
	III	1.1	3.5	2.4	5.4	0.7	4.2	2.7	3.7
	IV	1.1	r2.7	r1.6	r5.5	r0.9	r4.3	r1.1	r3.2
	ANNUAL	1.1	3.4	2.3	5.5	r0.6	4.4	r2.9	3.9

See footnotes following table 6.  
r=revised

March 7, 1990  
Source: Bureau of Labor Statistics

Table 2. Nonfarm business sector: Productivity, hourly compensation, unit labor cost, 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 cost	Unit non-labor payments(3)	Implicit price deflator(4)
Indexes 1977=100									
1988	I	111.0	138.0	124.3	195.0	101.5	175.7	170.3	173.8
	II	110.5	139.5	126.2	197.5	r101.8	178.7	169.8	175.6
	III	111.5	141.1	126.6	200.2	101.9	179.6	172.1	177.0
	IV	112.0	142.8	127.5	203.0	102.3	181.3	176.3	179.6
	ANNUAL	111.1	140.3	126.3	198.7	101.8	178.8	172.2	176.5
1989	I	111.6	143.6	128.6	205.5	102.1	184.1	174.6	180.8
	II	111.9	144.6	129.2	208.3	r102.0	186.1	176.5	182.8
	III	112.6	145.9	129.6	211.0	r102.6	187.4	177.6	184.0
	IV	112.7	145.9	129.5	r214.1	r103.1	r190.1	r177.0	r185.6
	ANNUAL	112.1	145.0	129.4	r209.5	102.4	r186.9	176.5	r183.3
Percent change from previous quarter at annual rate(5)									
1988	I	2.8	4.8	2.0	2.5	r-0.9	-0.3	3.6	1.0
	II	-1.6	4.4	6.1	5.4	r0.9	7.1	-1.0	4.3
	III	3.3	4.6	1.2	5.4	r0.5	2.0	5.4	3.2
	IV	1.9	4.8	2.8	5.9	r1.5	3.8	10.1	5.9
	ANNUAL	2.0	5.4	3.4	4.7	0.5	2.7	2.7	2.7
1989	I	-1.3	2.4	3.7	4.9	-0.5	6.2	-3.7	2.8
	II	1.1	2.8	1.7	5.6	r-0.4	4.5	4.2	4.4
	III	2.4	3.7	1.3	5.3	r2.4	2.8	2.5	2.7
	IV	0.2	r0.0	r-0.2	r6.0	r1.9	r5.8	r-1.2	r3.4
	ANNUAL	0.9	3.3	2.4	r5.4	0.6	r4.5	2.5	r3.8
Percent change from corresponding quarter of previous year									
1988	I	3.0	6.1	3.0	4.2	0.3	1.2	3.7	2.0
	II	1.8	5.7	3.8	4.9	1.0	3.1	1.3	2.5
	III	1.7	5.2	3.4	5.1	0.9	3.3	1.1	2.5
	IV	1.6	4.7	3.0	4.8	r0.5	3.1	4.5	3.6
	ANNUAL	2.0	5.4	3.4	4.7	0.5	2.7	2.7	2.7
1989	I	0.6	4.1	3.5	5.4	0.6	4.8	2.6	4.0
	II	1.3	3.7	2.4	5.5	r0.3	4.1	3.9	4.1
	III	1.0	3.4	2.4	5.4	0.7	4.4	3.2	4.0
	IV	0.6	2.2	1.6	r5.4	r0.8	r4.8	0.4	r3.3
	ANNUAL	0.9	3.3	2.4	r5.4	0.6	r4.5	2.5	r3.8

See footnotes following table 6.  
r=revised

March 7, 1990  
Source: Bureau of Labor Statistics



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

Year and quarter		Output per hour of all persons	Output (6)	Hours of all persons	Compensation per hour(1)	Real compensation per hour(2)	Unit labor cost
Indexes 1977=100							
1988	I	135.5	135.0	99.7	194.3	101.2	143.4
	II	136.3	136.9	100.5	195.3	100.6	143.3
	III	137.8	139.3	101.1	197.4	100.5	143.2
	IV	138.6	141.1	101.8	200.2	100.8	144.4
	ANNUAL	136.5	138.1	101.2	196.0	100.4	143.6
1989	I	139.4	142.2	102.0	201.9	100.3	144.8
	II	140.7	143.4	101.9	203.2	r99.5	144.4
	III	141.1	143.9	102.0	206.1	100.3	146.1
	IV	r142.1	r143.3	100.8	r209.6	r100.9	147.5
	ANNUAL	140.3	143.2	102.1	r204.3	99.9	145.7
Percent change from previous quarter at annual rate(5)							
1988	I	2.2	4.6	2.3	5.6	r2.1	3.3
	II	2.5	5.8	3.2	2.2	r-2.2	-0.3
	III	4.7	7.1	2.4	4.3	r-0.6	-0.3
	IV	2.2	5.1	2.9	5.7	r1.4	3.5
	ANNUAL	2.7	6.1	3.3	3.6	-0.5	0.9
1989	I	2.4	3.1	0.7	3.5	-1.9	1.0
	II	3.7	3.5	-0.2	2.7	r-3.2	-1.0
	III	1.2	1.4	0.1	5.9	r3.0	4.6
	IV	r2.8	r-1.6	r-4.3	r6.9	r2.8	r4.0
	ANNUAL	2.8	3.7	0.9	4.3	-0.5	r1.5
Percent change from corresponding quarter of previous year							
1988	I	3.0	6.2	3.1	2.9	-1.0	-0.1
	II	2.3	6.4	4.0	3.4	-0.5	1.1
	III	2.7	6.2	3.5	3.7	-0.4	1.0
	IV	2.9	5.6	2.7	4.4	r0.2	1.5
	ANNUAL	2.7	6.1	3.3	3.6	-0.5	0.9
1989	I	2.9	5.3	2.3	3.9	-0.8	1.0
	II	3.2	4.7	1.4	4.0	-1.1	0.8
	III	2.4	3.3	0.9	4.4	-0.2	2.0
	IV	r2.5	r1.6	-0.9	r4.7	r0.1	2.1
	ANNUAL	2.8	3.7	0.9	4.3	-0.5	r1.5

See footnotes following table 6.

r=revised

March 7, 1990

Source: Bureau of Labor Statistics

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

Year and quarter		Output per hour of all persons	Output (6)	Hours of all persons	Compensation per hour(1)	Real compensation per hour(2)	Unit labor cost
Indexes 1977=100							
1988	I	142.5	141.3	99.2	192.6	100.3	135.2
	II	143.3	144.0	100.5	192.4	99.1	134.3
	III	144.4	146.4	101.4	193.9	98.7	134.3
	IV	144.9	148.3	102.3	196.9	99.2	135.9
	ANNUAL	142.8	145.0	101.5	192.6	98.7	134.9
1989	I	145.6	149.1	102.4	198.8	98.8	136.5
	II	147.7	150.3	101.7	199.6	r97.8	135.1
	III	148.3	150.4	101.4	202.7	98.6	136.7
	IV	r148.2	r148.6	100.2	r206.3	r99.4	r139.2
	ANNUAL	146.5	149.6	102.1	r200.4	r97.9	r136.8
Percent change from previous quarter at annual rate(5)							
1988	I	1.9	4.3	2.3	6.0	r2.5	4.0
	II	2.3	7.7	5.3	-0.4	r-4.7	-2.6
	III	3.2	6.8	3.4	3.3	r-1.6	0.1
	IV	1.5	5.3	3.8	6.3	r1.9	4.8
	ANNUAL	2.3	6.6	4.2	2.8	-1.3	0.4
1989	I	1.9	2.2	0.3	3.8	-1.5	1.8
	II	5.9	3.2	-2.5	1.7	r-4.1	-4.0
	III	1.7	0.4	-1.3	6.4	r3.4	4.6
	IV	r-0.4	r-4.9	r-4.5	r7.3	r3.1	r7.7
	ANNUAL	2.6	3.2	0.6	r4.0	-0.7	1.4
Percent change from corresponding quarter of previous year							
1988	I	2.7	6.0	3.2	2.3	-1.6	-0.5
	II	2.1	7.3	5.0	2.4	-1.4	0.3
	III	2.3	7.2	4.8	2.6	-1.4	0.3
	IV	2.2	6.0	3.7	3.8	-0.5	1.5
	ANNUAL	2.3	6.6	4.2	2.8	-1.3	0.4
1989	I	2.2	5.5	3.2	3.2	-1.5	1.0
	II	3.1	4.4	1.2	3.8	-1.4	0.6
	III	2.7	2.8	0.0	4.5	-0.1	1.7
	IV	r2.2	r0.2	-2.0	r4.8	r0.2	r2.4
	ANNUAL	2.6	3.2	0.6	r4.0	-0.7	1.4

See footnotes following table 6.  
r=revised

March 7, 1990  
Source: Bureau of Labor Statistics

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

Year and quarter		Output per hour of all persons	Output (6)	Hours of all persons	Compensation per hour(1)	Real compensation per hour(2)	Unit labor cost
Indexes 1977=100							
1988	I	125.1	125.6	100.4	197.5	102.9	157.8
	II	125.9	126.4	100.4	200.5	103.3	159.3
	III	128.0	128.8	100.6	203.4	103.5	158.9
	IV	129.0	130.3	101.0	205.7	103.6	159.4
	ANNUAL	127.0	127.8	100.6	201.8	103.4	158.9
1989	I	130.0	131.8	101.3	207.2	103.0	159.3
	II	130.3	133.1	102.2	209.7	r102.7	160.9
	III	130.5	134.1	102.8	212.4	103.3	162.8
	IV	r133.1	135.4	101.7	r215.7	r103.9	r162.0
	ANNUAL	131.0	133.6	102.0	r211.2	103.2	161.2
Percent change from previous quarter at annual rate(5)							
1988	I	2.7	5.1	2.3	4.8	r1.4	2.1
	II	2.5	2.7	0.2	6.2	r1.7	3.7
	III	6.9	7.7	0.8	5.8	r0.8	-1.0
	IV	3.2	4.8	1.6	4.6	r0.3	1.4
	ANNUAL	3.1	5.2	2.1	4.8	0.7	1.7
1989	I	3.3	4.7	1.4	2.9	-2.4	-0.4
	II	0.7	4.0	3.3	4.9	r-1.1	4.2
	III	0.8	3.1	2.3	5.4	r2.5	4.6
	IV	r8.3	4.0	r-3.9	r6.3	r2.2	r-1.8
	ANNUAL	3.1	4.6	1.4	r4.7	r-0.1	r1.5
Percent change from corresponding quarter of previous year							
1988	I	3.4	6.4	2.9	4.0	r0.1	0.6
	II	2.3	4.9	2.6	4.7	0.8	2.4
	III	2.9	4.6	1.6	5.2	1.0	2.2
	IV	3.8	5.0	1.2	5.4	1.0	1.5
	ANNUAL	3.1	5.2	2.1	4.8	0.7	1.7
1989	I	3.9	5.0	1.0	4.9	0.1	0.9
	II	3.5	5.3	1.8	4.6	-0.6	1.0
	III	2.0	4.1	2.1	4.5	-0.2	2.4
	IV	3.2	4.0	0.7	r4.9	r0.3	r1.6
	ANNUAL	3.1	4.6	1.4	r4.7	r-0.1	r1.5

See footnotes following table 6.  
r=revised

March 7, 1990  
Source: Bureau of Labor Statistics

Table 6. Nonfinancial corporations: Productivity, hourly compensation, unit labor cost, 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 cost	Unit non-labor cost(7)	Total unit cost (8)	Unit profits (9)	Implicit price deflator (4)
Indexes 1977=100										
1988 I	114.6	141.2	123.2	190.9	99.4	166.6	187.8	171.9	127.0	166.5
II	114.7	142.8	124.5	193.1	99.5	168.4	188.9	173.6	129.1	168.2
III	115.1	144.3	125.4	195.5	99.5	169.9	191.0	175.2	127.5	169.5
IV	114.9	145.4	126.5	197.8	99.6	172.1	193.3	177.5	131.6	172.0
ANNUAL	114.7	143.5	125.1	194.1	99.4	169.3	190.3	174.6	128.8	169.1
1989 I	114.5	145.8	127.4	200.2	99.5	174.9	196.9	180.4	119.6	173.1
II	114.5	146.5	128.0	202.8	99.3	177.1	200.1	182.9	116.6	175.0
III	115.3	148.1	128.4	205.5	99.9	178.1	203.9	184.6	113.5	176.1
IV	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ANNUAL	114.6	147.0	128.2	204.0	99.7	178.0	201.9	184.0	112.5	175.5
Percent change from previous quarter at annual rate(5)										
1988 I	3.9	6.8	2.7	2.9	r-0.5	-1.0	1.1	-0.4	17.6	1.1
II	0.4	4.6	4.2	4.9	r0.4	4.5	2.5	3.9	6.8	4.2
III	1.3	4.3	2.9	4.9	r0.0	3.6	4.6	3.9	-4.7	3.1
IV	-0.4	3.2	3.6	4.8	r0.5	5.3	4.9	5.2	13.3	5.9
ANNUAL	2.3	6.0	3.6	4.3	0.2	1.9	2.1	2.0	4.7	2.2
1989 I	-1.7	1.0	2.7	4.9	-0.5	6.6	7.5	6.9	-31.7	2.8
II	0.1	2.0	1.8	5.4	r-0.6	5.3	6.7	5.7	-9.7	4.3
III	3.0	4.3	1.2	5.4	r2.5	2.3	7.7	3.8	-10.3	2.6
IV	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ANNUAL	0.0	2.5	2.5	5.1	0.3	5.2	6.1	5.4	-12.7	3.8
Percent change from corresponding quarter of previous year										
1988 I	3.8	7.4	3.5	3.9	0.0	0.1	1.5	0.5	7.5	1.1
II	2.8	6.6	3.8	4.5	0.6	1.7	1.4	1.6	5.4	2.0
III	1.8	5.4	3.5	4.6	0.4	2.8	2.2	2.6	-1.3	2.2
IV	1.3	4.7	3.4	4.4	r0.1	3.1	3.3	3.1	7.9	3.5
ANNUAL	2.3	6.0	3.6	4.3	0.2	1.9	2.1	2.0	4.7	2.2
1989 I	-0.1	3.2	3.4	4.9	0.1	5.0	4.9	5.0	-5.8	4.0
II	-0.2	2.6	2.8	5.0	-0.2	5.2	5.9	5.4	-9.7	4.0
III	0.2	2.6	2.3	5.1	0.4	4.9	6.7	5.4	-11.0	3.9
IV	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
ANNUAL	0.0	2.5	2.5	5.1	0.3	5.2	6.1	5.4	-12.7	3.8

See footnotes following table 6.  
r=revised

March 7, 1990  
Source: Bureau of Labor Statistics

**SOURCE:** Output data from the Bureau of Economic Analysis, U.S. Department of Commerce, and the Federal Reserve Board. Compensation and hours data from the Bureau of Labor Statistics, U.S. Department of Labor, 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 30 days after the close of the reference period; revisions appear 30 days later, and third revisions after an additional 60 days. In the business sector, the probability is 0.95 that the third publication (third revision) of a quarterly index of output per hour of all persons will differ from the initial value by between -1.8 and +2.1 index points. This interval is based on the performance of this measure between the second quarter of 1976 and the third quarter of 1988.

#### 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) Compensation per hour adjusted for changes in the Consumer Price Index for All Urban Consumers.
- (3) Unit nonlabor payments include profits, capital consumption allowances, interest, rental income of persons, and indirect taxes.
- (4) Current dollar gross product divided by constant dollar gross product.
- (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) Quarterly manufacturing output measures are based on the index of industrial production prepared monthly by the Board of Governors of the Federal Reserve adjusted by BLS to annual manufacturing output levels (gross product originating) from the National Income and Product Accounts prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce.
- (7) Unit nonlabor cost includes capital consumption allowances, interest, rental income of persons, and indirect taxes. For nonfinancial corporations, rental income of persons is zero by definition.
- (8) Total unit cost is the sum of labor and nonlabor costs.
- (9) Unit profits include corporate profits with inventory valuation and capital consumption adjustments.