

News

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PRODUCTIVITY AND COSTS Fourth Quarter and Annual Averages, 1989

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

	Fourth quarter	Annual averages 1988-1989
Business sector,.....	0.2	1.1
Nonfarm business sector.....	0.2	0.9
Manufacturing.....	3.2	2.8
Durable goods manufacturing.....	0.2	2.6
Nondurable goods manufacturing...	8.4	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 was unchanged and hours of all persons engaged in the sector declined 0.2 percent (seasonally adjusted annual rates). The increase in productivity was the smallest in a year, and the decline in hours was the first 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: Preliminary fourth-quarter 1989 measures (Seasonally adjusted annual rates)

Sector	Productivity	Output	Hours	Hourly compensation	Real	Unit labor costs
					hourly compensation	
Percent change from preceding quarter						
Business	0.2	0.0	-0.2	6.5	2.4	6.3
Nonfarm business	0.2	-0.2	-0.4	6.9	2.8	6.7
Manufacturing	3.2	-1.3	-4.4	7.2	3.1	3.9
Durable	0.2	-4.4	-4.6	8.1	3.9	7.8
Nondurable	8.4	4.0	-4.0	5.8	1.7	-2.4
Percent change from same quarter a year ago						
Business	1.1	2.6	1.5	5.7	1.1	4.6
Nonfarm business	0.6	2.2	1.6	5.7	1.1	5.1
Manufacturing	2.6	1.7	-0.9	4.8	0.2	2.1
Durable	2.4	0.3	-2.0	5.0	0.4	2.5
Nondurable	3.2	4.0	0.7	4.7	0.2	1.5

Hourly compensation increased at a 6.5 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 6.3 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 2.4 percent in the fourth quarter, compared with a 2.3 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 3.3 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 fell 0.2 percent and hours of all persons--employees, proprietors, and unpaid family workers--decreased 0.4 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 6.9 percent in the fourth quarter, or 2.8 percent when the increase in the CPI-U was taken into account. Unit labor costs increased 6.7 percent, compared with a 2.8 percent rise during the third quarter.

The implicit price deflator for nonfarm business output rose 3.9 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 3.2 percent seasonally adjusted annual rate in the fourth quarter of 1989. Output fell 1.3 percent and hours of all persons decreased 4.4 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 7.2 percent during the fourth quarter, or 3.1 percent when the increase in consumer prices was taken into account. Unit labor costs rose at a 3.9 percent annual rate in the fourth quarter of 1989, compared with a 4.6 percent increase during the third quarter.

Both durable and nondurable goods industries experienced productivity increases in the fourth quarter, but the increase in nondurable goods manufacturing was far larger--8.4 percent in nondurables versus 0.2 percent in durables (tables 4 and 5). Output declined in durables but increased strongly in nondurables; hours declined in both.

ANNUAL CHANGES, 1988-1989

Business

Business productivity increased 1.1 percent when the annual average for 1988 was compared with the average for 1989 (table B). This was the smallest gain since 1982. Output rose 3.4 percent in 1989, and hours of all persons engaged in the sector increased 2.3 percent. The increases in productivity, output, and hours were all smaller than the gains in 1988 (table C).

Table B. Productivity and costs: 1989 annual measures

Sector	Productivity	Output	Hours	Hourly compensation	Real	
					hourly compensation	Unit labor costs
Percent change in annual averages, 1988-1989						
Business	1.1	3.4	2.3	5.5	0.7	4.4
Nonfarm business	0.9	3.3	2.4	5.5	0.6	4.6
Manufacturing	2.8	3.7	0.9	4.3	-0.5	1.4
Durable	2.6	3.2	0.6	4.1	-0.7	1.4
Nondurable	3.1	4.6	1.4	4.6	-0.2	1.4

Hourly compensation increased 5.5 percent in 1989, compared with a 4.8 percent increase during 1988. Unit labor costs increased 4.4 percent during 1989, compared with a 3.0 percent increase one year earlier. Real hourly compensation edged up 0.7 percent in 1989, compared with a 0.6 percent gain in 1988.

The implicit price deflator for business output increased 3.9 percent in 1989, compared with a 2.9 percent increase in 1988. This was the largest increase in prices in the business sector since 1982 (table C).

Nonfarm business

Productivity increased only 0.9 percent in the nonfarm business sector during 1989, as output rose 3.3 percent and hours of all persons increased 2.4 percent. This was the smallest gain in the hourly output of goods and services in the nonfarm business sector since 1982.

Hourly compensation rose 5.5 percent in 1989, but rose only 0.6 percent when the increase in the CPI-U was taken into account. Unit labor costs increased 4.6 percent, compared with a 2.7 percent rise during 1988.

Table C. Annual changes in productivity and related measures, 1980-1989

Measure	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Business:										
Productivity.....	-0.3	1.5	-0.7	2.4	2.6	2.0	2.3	1.2	1.7	1.1
Output.....	-1.1	2.1	-3.1	4.2	8.4	4.2	3.1	4.2	4.9	3.4
Hours.....	-0.8	0.6	-2.4	1.8	5.7	2.2	0.8	3.0	3.2	2.3
Hourly comp.....	10.5	9.3	7.5	3.8	4.1	4.4	5.2	3.9	4.8	5.5
Real hourly comp.	-2.6	-0.9	1.2	0.6	-0.2	0.8	3.3	0.2	0.6	0.7
Implicit price def.	9.0	9.6	5.9	3.3	3.3	2.5	2.1	2.6	2.9	3.9
Nonfarm Business:										
Productivity.....	-0.4	1.1	-0.9	3.0	2.1	1.3	2.0	1.1	2.0	0.9
Output.....	-1.2	1.7	-3.3	5.0	8.3	3.9	3.0	4.4	5.4	3.3
Hours.....	-0.7	0.6	-2.4	2.0	6.0	2.6	0.9	3.2	3.4	2.4
Hourly comp.....	10.5	9.5	7.4	4.0	3.9	4.1	5.1	3.7	4.7	5.5
Real hourly comp.	-2.6	-0.7	1.1	0.7	-0.4	0.5	3.2	0.1	0.5	0.6
Implicit price def.	9.7	9.7	6.3	3.5	3.0	3.0	2.3	2.6	2.7	3.9
Manufacturing:										
Productivity.....	0.0	2.3	2.5	5.2	5.4	4.5	3.8	3.7	2.7	2.8
Output.....	-4.5	1.6	-6.1	6.4	12.2	3.8	2.3	4.3	6.1	3.7
Hours.....	-4.6	-0.7	-8.5	1.2	6.5	-0.7	-1.4	0.6	3.3	0.9
Hourly comp.....	11.7	9.7	8.9	2.5	3.3	4.9	4.5	2.7	3.6	4.3
Real hourly comp.	-1.6	-0.5	2.6	-0.7	-0.9	1.2	2.6	-1.0	-0.5	-0.5
Implicit price def.	8.4	8.9	5.1	1.1	0.7	-1.5	1.6	-0.2	n.a.	n.a.

n.a. -, Not available.

The implicit price deflator for nonfarm business output rose 3.9 percent in 1989, compared with a 2.7 percent increase one year earlier.

Manufacturing

Manufacturing productivity increased more rapidly in 1989 than in the more comprehensive business sectors reported above, growing at a substantial 2.8 percent. Output rose 3.7 percent and hours of all persons increased 0.9 percent. During 1988, productivity rose 2.7 percent, output rose 6.1 percent and hours increased 3.3 percent.

Hourly compensation of manufacturing workers increased 4.3 percent during 1989, but declined 0.5 percent when the increase in consumer prices was taken into account. This marked the third year in a row real hourly compensation declined for manufacturing workers. Unit labor costs rose 1.4 percent in 1989, compared with a 0.9 percent increase during 1988.

Both durable and nondurable goods industries experienced productivity increases in 1989. Productivity, output, and hours of all persons increased more rapidly in nondurable- than in durable-goods manufacturing.

Revised third quarter 1989 measures

Previous and revised productivity and cost measures for the third quarter are compared in table D for nonfinancial corporations. Current measures are little changed from those announced December 6, 1989.

Table D. Previously published and current measures for nonfinancial corporations, third quarter 1989
Percent change from previous quarter
(Seasonally adjusted annual rates)

Item	Produc- tivity	Output	Hours	Real			Unit profits	Implicit price deflator
				Hourly compen- sation	hourly compen- sation	labor costs		
Previous	2.9	4.2	1.3	5.3	2.9	2.4	-11.6	2.6
Current	3.0	4.3	1.2	5.4	2.9	2.3	-10.3	2.6

Next release date

The next issue of Productivity and Costs is scheduled for release at 10:00 AM EST, Wednesday, March 7, 1990, and will contain measures for nonfinancial corporations, 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	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	113.2	138.2	122.1	196.4	102.3	173.5	168.9
	II	112.6	139.3	123.8	199.1	102.5	176.9	168.8
	III	113.4	140.7	124.0	201.9	102.8	178.0	171.8
	IV	113.5	141.9	125.0	204.5	103.0	180.2	173.7
	ANNUAL	113.0	140.0	123.9	200.2	102.5	177.1	170.9
1989	I	113.8	143.6	126.2	206.9	102.8	181.9	174.7
	II	114.2	144.4	126.4	210.4	102.9	184.1	176.3
	III	114.7	145.6	127.0	212.8	103.5	r185.6	r176.5
	IV	114.7	145.6	126.9	216.2	104.1	188.4	175.4
	ANNUAL	114.2	144.8	126.8	211.3	103.3	185.0	175.8
Percent change from previous quarter at annual rate(5)								
1988	I	2.5	4.4	1.9	2.6	-1.0	0.1	4.2
	II	-2.1	3.3	5.5	5.7	1.1	8.0	-0.2
	III	3.1	4.0	0.9	5.8	1.0	2.6	7.1
	IV	0.2	3.4	3.2	5.2	0.7	5.0	4.6
	ANNUAL	1.7	4.9	3.2	4.8	0.6	3.0	2.7
1989	I	1.1	4.8	3.7	4.8	-0.6	3.7	2.4
	II	1.6	2.3	0.6	6.8	0.4	5.1	3.5
	III	r1.5	r3.5	1.9	4.7	2.3	r3.2	r0.4
	IV	0.2	0.0	-0.2	6.5	2.4	6.3	-2.3
	ANNUAL	1.1	3.4	2.3	5.5	0.7	4.4	2.8
Percent change from corresponding quarter of previous year								
1988	I	2.9	5.9	2.9	4.3	0.3	1.3	3.9
	II	1.7	5.4	3.6	5.1	1.1	3.3	1.4
	III	1.5	4.7	3.1	5.3	1.1	3.7	1.7
	IV	0.9	3.8	2.9	4.8	0.4	3.9	3.9
	ANNUAL	1.7	4.9	3.2	4.8	0.6	3.0	2.7
1989	I	0.5	3.9	3.3	5.4	0.6	4.8	3.4
	II	1.5	3.6	2.1	5.6	0.4	4.1	4.4
	III	1.1	3.5	2.4	5.4	0.7	4.2	r2.7
	IV	1.1	2.6	1.5	5.7	1.1	4.6	1.0
	ANNUAL	1.1	3.4	2.3	5.5	0.7	4.4	2.8

See footnotes following table 6.
r=revised

February 5, 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
	II	110.5	139.5	126.2	197.5	101.7	178.7	169.8
	III	111.5	141.1	126.6	200.2	101.9	179.6	172.1
	IV	112.0	142.8	127.5	203.0	102.3	181.3	176.3
	ANNUAL	111.1	140.3	126.3	198.7	101.8	178.8	172.2
1989	I	111.6	143.6	128.6	205.5	102.1	184.1	174.6
	II	111.9	144.6	129.2	208.3	101.9	186.1	176.5
	III	112.6	145.9	129.6	211.0	102.7	187.4	177.6
	IV	112.7	145.9	129.5	214.6	103.4	190.5	176.9
	ANNUAL	112.1	145.0	129.4	209.6	102.4	187.0	176.5
Percent change from previous quarter at annual rate(5)								
1988	I	2.8	4.8	2.0	2.5	-1.1	-0.3	3.6
	II	-1.6	4.4	6.1	5.4	0.8	7.1	-1.0
	III	3.3	4.6	1.2	5.4	0.7	2.0	5.4
	IV	1.9	4.8	2.8	5.9	1.4	3.8	10.1
	ANNUAL	2.0	5.4	3.4	4.7	0.5	2.7	2.7
1989	I	-1.3	2.4	3.7	4.9	-0.5	6.2	-3.7
	II	1.1	2.8	1.7	5.6	-0.7	4.5	4.2
	III	2.4	3.7	1.3	5.3	2.8	2.8	2.5
	IV	0.2	-0.2	-0.4	6.9	2.8	6.7	-1.4
	ANNUAL	0.9	3.3	2.4	5.5	0.6	4.6	2.5
Percent change from corresponding quarter of previous year								
1988	I	3.0	6.1	3.0	4.2	0.3	1.2	3.7
	II	1.8	5.7	3.8	4.9	1.0	3.1	1.3
	III	1.7	5.2	3.4	5.1	0.9	3.3	1.1
	IV	1.6	4.7	3.0	4.8	0.4	3.1	4.5
	ANNUAL	2.0	5.4	3.4	4.7	0.5	2.7	2.7
1989	I	0.6	4.1	3.5	5.4	0.6	4.8	2.6
	II	1.3	3.7	2.4	5.5	0.2	4.1	3.9
	III	1.0	3.4	2.4	5.4	0.7	4.4	3.2
	IV	0.6	2.2	1.6	5.7	1.1	5.1	0.4
	ANNUAL	0.9	3.3	2.4	5.5	0.6	4.6	2.5

See footnotes following table 6.
r=revised

February 5, 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	99.4	144.4
	III	141.1	r143.9	102.0	r206.1	100.3	r146.1
	IV	142.2	143.4	100.8	209.8	101.0	147.5
	ANNUAL	140.3	143.2	102.1	204.4	99.9	145.7
----- Percent change from previous quarter at annual rate(5)							
1988	I	2.2	4.6	2.3	5.6	1.9	3.3
	II	2.5	5.8	3.2	2.2	-2.3	-0.3
	III	4.7	7.1	2.4	4.3	-0.4	-0.3
	IV	2.2	5.1	2.9	5.7	1.2	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	-3.5	-1.0
	III	r1.2	r1.4	r0.1	5.9	r3.4	r4.6
	IV	3.2	-1.3	-4.4	7.2	3.1	3.9
	ANNUAL	2.8	3.7	0.9	4.3	-0.5	1.4
----- 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	0.1	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	r2.4	r3.3	0.9	4.4	-0.2	r2.0
	IV	2.6	1.7	-0.9	4.8	0.2	2.1
	ANNUAL	2.8	3.7	0.9	4.3	-0.5	1.4

See footnotes following table 6.
r=revised

February 5, 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	97.7	135.1
	III	148.3	150.4	101.4	202.7	98.6	136.7
	IV	148.4	148.8	100.2	206.7	99.6	139.3
	ANNUAL	146.5	149.6	102.1	200.5	98.0	136.9
Percent change from previous quarter at annual rate(5)							
1988	I	1.9	4.3	2.3	6.0	2.3	4.0
	II	2.3	7.7	5.3	-0.4	-4.8	-2.6
	III	3.2	6.8	3.4	3.3	-1.3	0.1
	IV	1.5	5.3	3.8	6.3	1.8	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	-4.4	-4.0
	III	1.7	0.4	-1.3	6.4	r3.9	r4.6
	IV	0.2	-4.4	-4.6	8.1	3.9	7.8
	ANNUAL	2.6	3.2	0.6	4.1	-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	r1.7
	IV	2.4	0.3	-2.0	5.0	0.4	2.5
	ANNUAL	2.6	3.2	0.6	4.1	-0.7	1.4

See footnotes following table 6.
r=revised

February 5, 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	102.6	160.9
	III	r130.5	r134.1	102.8	212.4	103.3	r162.8
	IV	133.2	135.4	101.7	215.4	103.8	161.8
	ANNUAL	131.0	133.6	102.0	211.1	103.2	161.2

Percent change from previous quarter at annual rate(5)							
1988	I	2.7	5.1	2.3	4.8	1.2	2.1
	II	2.5	2.7	0.2	6.2	1.6	3.7
	III	6.9	7.7	0.8	5.8	1.0	-1.0
	IV	3.2	4.8	1.6	4.6	0.1	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	-1.4	4.2
	III	r0.8	r3.1	r2.3	5.4	2.9	r4.6
	IV	8.4	4.0	-4.0	5.8	1.7	-2.4
	ANNUAL	3.1	4.6	1.4	4.6	-0.2	1.4

Percent change from corresponding quarter of previous year							
1988	I	3.4	6.4	2.9	4.0	0.0	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	r2.0	r4.1	r2.1	4.5	-0.2	r2.4
	IV	3.2	4.0	0.7	4.7	0.2	1.5
	ANNUAL	3.1	4.6	1.4	4.6	-0.2	1.4

See footnotes following table 6.
r=revised

February 5, 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	r148.1	128.4	205.5	100.0	r178.1	r203.9	r184.6	r113.5	176.1

Percent change from previous quarter at annual rate(5)											
1988	I	3.9	6.8	2.7	2.9	-0.7	-1.0	1.1	-0.4	17.6	1.1
	II	0.4	4.6	4.2	4.9	0.3	4.5	2.5	3.9	6.8	4.2
	III	1.3	4.3	2.9	4.9	0.2	3.6	4.6	3.9	-4.7	3.1
	IV	-0.4	3.2	3.6	4.8	0.4	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	-0.9	5.3	6.7	5.7	-9.7	4.3
	III	r3.0	r4.3	r1.2	r5.4	2.9	r2.3	r7.7	r3.8	r-10.3	2.6

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	0.0	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	r6.7	5.4	r-11.0	3.9

See footnotes following table 6.
r=revised

February 5, 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.