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PRODUCTIVITY AND COSTS Second Quarter 1993

The Bureau of Labor Statistics of the U.S. Department of Labor today reported revised productivity data—as measured by output per hour of all persons—for the second quarter of 1993. The revised seasonally-adjusted annual rates of productivity change in the second quarter were:

- 1.0 percent in the business sector, and
- 1.3 percent in the nonfarm business sector.

In both sectors, output and hours rose more rapidly in the second quarter than in the first; because hours increased more rapidly than output, productivity declined.

In manufacturing, productivity changes in the second quarter were:

- 5.2 percent in manufacturing,
- 7.7 percent in durable goods manufacturing, and
- 1.9 percent in nondurable goods manufacturing.

The productivity advance in manufacturing reflects a strong output gain in the durable goods industries. Output and hours in manufacturing, which includes about 20 percent of U.S. business-sector employment, tend to fluctuate more from quarter to quarter than in the business and nonfarm business sectors. Second-quarter measures are summarized in table A and appear in detail in tables 1 through 5.

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 independent indexes of industrial production prepared by the Board of Governors of the Federal Reserve System. See Technical Notes for further information on data sources (page 5).

These measures reflect the regular 3-year GDP revisions announced by the Bureau of Economic Analysis of the U.S. Department of Commerce on August 31. See Revised Measures, page 4. The revised measures are shown in appendix tables 1-5.

Table A. Productivity and costs: Revised second-quarter 1993 measures
(Seasonally adjusted annual rates)

Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Percent change from preceding quarter						
Business	-1.0	2.8	3.8	2.0	-0.9	3.1
Nonfarm business	-1.3	3.1	4.5	1.4	-1.5	2.8
Manufacturing	5.2	2.8	-2.3	3.3	0.4	-1.8
Durable	7.7	4.1	-3.4	2.3	-0.6	-5.0
Nondurable	1.9	1.1	-0.8	5.0	2.0	3.0
Percent change from same quarter a year ago						
Business	1.3	3.4	2.0	4.0	0.8	2.7
Nonfarm business	1.1	3.5	2.4	3.7	0.5	2.5
Manufacturing	5.2	4.3	-0.9	2.7	-0.4	-2.4
Durable	8.0	6.5	-1.4	2.6	-0.5	-5.0
Nondurable	1.5	1.3	-0.2	3.0	-0.1	1.5

Business

From the first quarter to the second quarter of 1993, business sector productivity decreased at a 1.0 percent annual rate, the second quarterly decline in succession. Output rose 2.8 percent and hours of all persons engaged in the sector increased 3.8 percent (seasonally adjusted annual rates). This was the largest increase in hours since the first quarter of 1989. During the first quarter of 1993, productivity had gone down 1.6 percent (as revised), as output and hours rose 0.5 and 2.1 percent, respectively (table 1).

Hourly compensation increased 2.0 percent during the second quarter of 1993, compared with a 3.2 percent rise in the first 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 3.1 percent annual rate during the second quarter. During the previous quarter, these costs had increased 4.9 percent.

Real hourly compensation, which takes into account changes in the Consumer Price Index for All Urban Consumers (CPI-U), declined at a 0.9 percent annual rate in the second quarter; it had fallen 0.6 percent in the first quarter of 1993.

The implicit price deflator for the business sector, which reflects changes in unit labor costs and unit nonlabor payments, increased 2.5 percent in the second quarter, compared with a 2.7 percent increase during the first quarter of 1993.

Nonfarm business

Productivity fell 1.3 percent in the nonfarm business sector during the second quarter of 1993 as output rose 3.1 percent and hours of all persons increased 4.5 percent. As in the more comprehensive business sector, this was the second productivity decline in a row, and the gain in hours was the largest since the first quarter of 1989. During the first quarter of 1993, productivity had fallen 1.8 percent (as revised) in the nonfarm business sector, reflecting gains of 0.7 percent in output and 2.6 percent in hours (table 2).

Hourly compensation increased at a 1.4 percent annual rate in the second quarter, compared with a 2.8 percent increase one quarter earlier. When the rise in the CPI-U is taken into account, real hourly compensation fell 1.5 percent in the second quarter. Unit labor costs rose 2.8 percent, compared with a 4.7 percent rise during the first quarter of 1993.

The implicit price deflator for nonfarm business output rose 2.4 percent in the second quarter, about the same as the 2.5 percent rise one quarter earlier.

Manufacturing

Productivity increased at a 5.2 percent seasonally adjusted annual rate in manufacturing in the second quarter of 1993, as output rose 2.8 percent and hours of all persons decreased 2.3 percent (seasonally adjusted annual rates). Productivity grew strongly in durable goods industries while posting a smaller gain among nondurable goods producers. Output gains in durable goods manufacturing were much greater than in nondurable goods industries, a pattern that has been evident for the last 6 quarters (tables 4 and 5).

Hourly compensation of all manufacturing workers increased 3.3 percent during the second quarter, compared with a 2.4 percent decline during the January-March period. Real hourly compensation rose 0.4 percent in the second quarter when the increase in consumer prices is taken into account. During the first quarter, real hourly compensation had declined 6.0 percent (seasonally adjusted annual rates).

Unit labor costs fell at a 1.8 percent annual rate in the second quarter of 1993, the sixth decline in the past 8 quarters. These costs had decreased 7.0 percent during the first quarter of 1993.

Table B. Previous and revised productivity and related measures
Quarterly percent change at seasonally adjusted annual rate

Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Second quarter 1993						
Business:						
Previous	-2.1	1.5	3.6	2.2	-0.7	4.4
Current	-1.0	2.8	3.8	2.0	-0.9	3.1
Nonfarm business:						
Previous	-2.5	1.7	4.3	1.6	-1.3	4.2
Current	-1.3	3.1	4.5	1.4	-1.5	2.8
Manufacturing:						
Previous	5.0	2.7	-2.2	4.7	1.7	-0.3
Current	5.2	2.8	-2.3	3.3	0.4	-1.8

Revised Measures

Current and previous measures for the second quarter of 1993 for the business, nonfarm business, and manufacturing sectors are compared in table B. The quarterly movements differ from those reported on August 10 based on information then available.

Output and compensation measures for business and nonfarm business are based on revised Gross Domestic Product (GDP) component measures published by the Bureau of Economic Analysis of the U.S. Department of Commerce on August 31 (BEA 93-38). These estimates reflect revisions to the national income and product accounts beginning with the first quarter of 1990. The BEA stated:

"Revisions are usually made each summer mainly to incorporate new source data and updated seasonal adjustment factors. [The revision] includes the revised quarterly estimates of GDP, corporate profits, and personal income ..."

The current BEA revisions did not affect manufacturing output measures, however compensation measures for manufacturing have been revised by BEA as part of the GDP revision. Appendix tables 1-5 show the results of these revisions. Revised measures for the nonfinancial corporate sector, usually available at this time, will be announced later by BEA and included in the next issue of Productivity and Costs.

Next release date

The next release of **Productivity and Costs** is scheduled for **10:00 AM EDT, Thursday, November 4, 1993**. Second-quarter measures for nonfinancial corporations and preliminary third-quarter measures for business, nonfarm business, and manufacturing will be released at that time.

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. 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 non-farm 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 domestic product (GDP) in constant 1987 dollars, less 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 78 percent of GDP in 1992. Nonfarm business, which also excludes farming, was about 77 percent of GDP in 1992.

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 metal industries; fabricated metal products; non-electrical 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, leather and leather products. Manufacturing accounted for about 19 percent of GDP in 1992. 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 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.

Nonfinancial corporate output is equal to GDP in constant 1987 dollars, less the 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 56 percent of GDP in 1992.

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: 202-523-1221; TDD phone: 202-523-3936; TDD message referral phone number: 1-800-326-2577.

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 1982=100								
1992 I	r114.3	r133.4	116.7	r152.3	r105.9	r133.3	r148.6	r138.3
II	r115.0	r134.5	117.0	r153.9	r106.1	r133.8	r150.0	r139.1
III	r116.2	r136.1	117.1	r156.3	r107.1	r134.5	r147.4	r138.7
IV	r117.3	r137.9	117.6	r158.0	r107.4	r134.7	r152.7	r140.6
ANNUAL	r115.6	r135.4	r117.1	r155.1	r106.7	r134.2	r149.6	r139.2
1993 I	r116.8	r138.1	118.2	r159.3	r107.3	136.3	r152.2	r141.6
II	r116.5	r139.0	119.3	r160.1	r107.0	r137.4	r152.8	r142.4
Percent change from previous quarter at annual rate (5)								
1992 I	r4.9	r2.9	-1.9	r5.9	r2.5	r0.9	r7.8	r3.3
II	r2.5	r3.4	r0.8	r4.2	r1.1	r1.6	r3.8	2.4
III	r4.3	r4.6	0.3	r6.3	r3.5	r1.9	r-6.8	r-1.2
IV	r3.8	r5.6	1.8	r4.6	r1.4	r0.8	r15.2	r5.6
ANNUAL	r3.4	r2.9	-0.5	r5.2	r2.1	r1.7	r3.3	r2.3
1993 I	r-1.6	0.5	r2.1	r3.2	r-0.6	r4.9	r-1.3	2.7
II	r-1.0	r2.8	r3.8	r2.0	r-0.9	r3.1	r1.5	r2.5
Percent change from corresponding quarter of previous year								
1992 I	r3.0	r1.8	-1.2	r5.1	r2.2	r2.1	r3.6	r2.6
II	r3.0	r2.3	-0.7	r5.0	r1.8	r1.9	r3.4	r2.4
III	r3.9	r3.4	-0.5	r5.4	r2.3	r1.5	r1.6	r1.5
IV	r3.9	r4.1	r0.2	r5.2	r2.1	r1.3	r4.7	r2.5
ANNUAL	r3.4	r2.9	-0.5	r5.2	r2.1	r1.7	r3.3	r2.3
1993 I	r2.2	r3.5	1.3	r4.6	r1.3	r2.3	r2.4	r2.3
II	r1.3	r3.4	r2.0	r4.0	r0.8	r2.7	r1.9	r2.4

See footnotes following table 5.
r=revised

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Source: Bureau of Labor Statistics

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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 1982=100									
1992	I	r112.5	r133.4	118.6	r151.0	r104.9	r134.2	r149.9	r139.3
	II	r113.3	r134.5	118.7	r152.8	r105.4	r134.8	r151.6	r140.2
	III	r114.3	r135.9	118.9	r155.0	r106.2	r135.6	r148.8	r139.8
	IV	r115.5	r137.9	119.4	r156.8	r106.6	r135.8	r154.4	r141.8
	ANNUAL	r113.8	r135.4	r118.9	r153.9	r105.8	r135.2	r151.1	r140.3
1993	I	r115.0	r138.2	120.2	r157.9	r106.3	r137.3	r153.9	r142.7
	II	r114.6	r139.2	r121.5	r158.4	r105.9	r138.3	r154.5	r143.5
Percent change from previous quarter at annual rate (5)									
1992	I	r4.0	r2.1	-1.8	r5.8	r2.4	r1.7	r6.0	r3.2
	II	r2.9	r3.3	r0.3	r4.8	r1.6	r1.8	r4.4	r2.7
	III	r3.6	r4.4	0.7	r6.0	r3.2	r2.2	r-7.2	r-1.1
	IV	r4.1	r6.0	1.8	r4.6	r1.4	r0.5	r16.1	r5.6
	ANNUAL	r3.2	r2.7	r-0.5	r5.2	r2.1	r2.0	r3.3	r2.4
1993	I	r-1.8	r0.7	r2.6	r2.8	r-1.0	r4.7	r-1.4	r2.5
	II	r-1.3	r3.1	r4.5	r1.4	r-1.5	r2.8	r1.7	2.4
Percent change from corresponding quarter of previous year									
1992	I	r2.8	r1.7	-1.1	r5.1	r2.2	r2.3	r3.5	r2.7
	II	r2.8	r2.1	-0.7	r5.1	r1.9	r2.2	r3.7	r2.7
	III	r3.5	r3.1	-0.4	r5.4	r2.2	r1.8	r1.6	1.7
	IV	r3.7	r3.9	0.3	r5.3	r2.2	r1.6	r4.5	r2.6
	ANNUAL	r3.2	r2.7	r-0.5	r5.2	r2.1	r2.0	r3.3	r2.4
1993	I	r2.2	r3.6	r1.4	r4.5	r1.3	r2.3	r2.6	r2.4
	II	r1.1	r3.5	r2.4	r3.7	r0.5	r2.5	r1.9	r2.3

See footnotes following table 5.
r=revised

September 9, 1993
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 1982=100							
1992	I	126.6	128.7	101.6	r145.7	r101.3	r115.1
	II	128.3	130.3	101.6	r147.6	r101.8	r115.1
	III	129.5	130.7	100.9	r149.2	r102.2	r115.2
	IV	131.7	132.8	100.9	r151.3	r102.9	r114.9
	ANNUAL	129.1	130.6	101.2	r148.6	r102.2	r115.1
1993	I	133.2	135.0	101.3	r150.4	r101.3	r112.9
	II	134.9	135.9	100.7	r151.6	r101.4	r112.4
Percent change from previous quarter at annual rate(5)							
1992	I	4.5	2.1	-2.3	r1.7	r-1.5	r-2.7
	II	r5.4	5.2	-0.1	r5.2	r2.1	r-0.1
	III	3.8	1.1	r-2.5	r4.4	r1.7	r0.6
	IV	7.0	6.8	-0.2	r5.8	r2.6	r-1.1
	ANNUAL	4.6	3.1	-1.4	r4.7	r1.7	r0.1
1993	I	4.9	6.6	1.7	r-2.4	r-6.0	r-7.0
	II	r5.2	r2.8	r-2.3	r3.3	r0.4	r-1.8
Percent change from corresponding quarter of previous year							
1992	I	4.1	2.6	-1.4	r4.7	r1.8	r0.6
	II	4.5	3.7	-0.7	r4.7	r1.5	r0.2
	III	4.1	2.4	-1.6	r4.6	r1.5	r0.5
	IV	5.2	3.8	-1.3	r4.3	r1.2	r-0.8
	ANNUAL	4.6	3.1	-1.4	r4.7	r1.7	r0.1
1993	I	5.2	4.9	-0.3	r3.2	r0.0	r-1.9
	II	5.2	4.3	r-0.9	r2.7	r-0.4	r-2.4
See footnotes following table 5. r=revised					September 9, 1993 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 1982=100						
1992 I	135.4	134.4	99.3	r143.3	r99.6	r105.8
II	138.5	136.8	98.8	r145.3	r100.2	r104.9
III	140.3	137.5	98.0	r146.9	r100.6	r104.7
IV	143.8	140.8	97.9	r149.7	r101.8	r104.1
ANNUAL	139.6	137.4	98.4	r146.5	r100.7	r104.9
1993 I	146.8	144.3	98.3	r148.3	r99.8	r101.0
II	r149.5	r145.7	r97.4	r149.1	r99.7	r99.7
Percent change from previous quarter at annual rate(5)						
1992 I	4.6	2.4	-2.0	r-0.5	r-3.7	r-4.8
II	9.4	7.4	r-1.9	r5.8	r2.6	r-3.3
III	5.3	2.0	r-3.1	r4.4	r1.7	r-0.8
IV	r10.4	9.8	-0.5	r7.9	r4.6	r-2.2
ANNUAL	6.6	4.1	-2.3	r4.7	r1.7	r-1.7
1993 I	8.6	10.4	1.6	r-3.9	r-7.4	r-11.5
II	r7.7	r4.1	r-3.4	r2.3	r-0.6	r-5.0
Percent change from corresponding quarter of previous year						
1992 I	5.2	2.9	-2.2	r4.6	r1.7	r-0.5
II	6.8	4.7	-2.0	r4.8	r1.7	r-1.9
III	6.3	3.5	-2.6	r4.6	r1.5	r-1.5
IV	7.4	5.4	-1.9	r4.4	r1.2	r-2.8
ANNUAL	6.6	4.1	-2.3	r4.7	r1.7	r-1.7
1993 I	8.4	7.3	-1.0	3.5	0.3	r-4.6
II	r8.0	r6.5	-1.4	r2.6	r-0.5	r-5.0
See footnotes following table 5.				September 9, 1993		
r=revised				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 1982=100							
1992	I	115.8	121.6	105.0	r150.6	r104.6	r130.0
	II	115.9	122.3	105.6	r152.3	r105.0	r131.5
	III	116.4	122.3	105.1	r154.0	r105.5	r132.4
	IV	117.1	123.1	105.2	r155.1	r105.4	r132.5
	ANNUAL	116.4	122.4	105.1	r153.2	r105.3	r131.6
1993	I	117.0	123.6	105.6	r155.0	r104.4	r132.5
	II	117.6	r123.9	105.4	r156.9	r104.9	r133.5
Percent change from previous quarter at annual rate(5)							
1992	I	4.5	1.7	-2.7	r5.2	r1.8	r0.7
	II	0.1	2.3	2.2	r4.8	r1.6	r4.6
	III	1.7	0.0	-1.7	r4.6	r1.8	r2.8
	IV	2.5	2.7	0.2	r2.8	r-0.4	r0.2
	ANNUAL	2.0	1.8	-0.1	r4.9	r1.8	r2.8
1993	I	-0.2	1.5	1.7	r-0.1	r-3.8	r0.0
	II	r1.9	r1.1	r-0.8	r5.0	r2.0	r3.0
Percent change from corresponding quarter of previous year							
1992	I	2.7	2.3	-0.3	r5.0	r2.1	r2.2
	II	1.4	2.4	1.0	r4.8	r1.6	r3.3
	III	1.2	1.0	-0.2	r4.8	r1.6	r3.6
	IV	2.2	1.7	-0.5	r4.3	r1.2	r2.1
	ANNUAL	2.0	1.8	-0.1	r4.9	r1.8	r2.8
1993	I	1.0	1.6	0.6	r3.0	r-0.2	r1.9
	II	1.5	r1.3	r-0.2	r3.0	r-0.1	r1.5
See footnotes following table 5.							
r=revised							
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Source: Bureau of Labor Statistics							

Note

No Table 6!

Original ~~did~~ NOT have either.

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 second published 30 days after the close of the reference period; revisions appear about 35 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 -2.0 and +2.0 index points. This interval is based on the performance of this measure between the second quarter of 1976 and the fourth quarter of 1992.

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.

Appendix 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 1982=100								
1990	I	110.2	133.5	121.2	137.3	103.4	124.6	138.9
	II	111.1	134.3	120.9	139.9	104.3	125.9	140.3
	III	110.8	133.3	120.3	141.8	104.0	127.9	139.6
	IV	110.5	132.1	119.6	143.5	103.5	129.8	140.2
	ANNUAL	110.7	133.3	120.5	140.6	103.8	127.1	139.8
1991	I	110.9	131.0	118.1	144.9	103.6	130.6	143.4
	II	111.6	131.5	117.8	146.6	104.2	131.3	145.1
	III	111.9	131.6	117.6	148.2	104.7	132.5	145.0
	IV	112.9	132.4	117.3	150.2	105.2	133.0	145.8
	ANNUAL	111.8	131.6	117.7	147.4	104.5	131.9	144.7
Percent change from previous quarter at annual rate(5)								
1990	I	1.5	3.7	2.1	7.2	-0.3	5.6	3.5
	II	3.5	2.5	-0.9	7.6	3.6	4.0	3.9
	III	-1.1	-3.0	-1.9	5.5	-1.2	6.7	-1.8
	IV	-1.1	-3.5	-2.5	4.9	-1.9	6.0	1.7
	ANNUAL	0.7	0.7	0.1	5.7	0.3	5.0	2.3
1991	I	1.6	-3.2	-4.7	4.1	0.3	2.4	9.4
	II	2.6	1.5	-1.1	4.8	2.5	2.2	4.7
	III	0.8	0.2	-0.6	4.6	1.8	3.8	-0.1
	IV	3.8	2.7	-1.1	5.3	2.0	1.5	2.3
	ANNUAL	1.0	-1.3	-2.3	4.9	0.6	3.8	3.5
Percent change from corresponding quarter of previous year								
1990	I	0.0	0.9	0.9	4.4	-0.7	4.4	3.4
	II	0.9	1.4	0.5	5.8	1.1	4.8	2.3
	III	1.0	0.8	-0.2	6.4	0.8	5.3	1.7
	IV	0.7	-0.1	-0.8	6.3	0.1	5.6	1.8
	ANNUAL	0.7	0.7	0.1	5.7	0.3	5.0	2.3
1991	I	0.7	-1.8	-2.5	5.5	0.2	4.8	3.2
	II	0.5	-2.1	-2.6	4.8	-0.1	4.3	3.4
	III	1.0	-1.3	-2.2	4.6	0.7	3.6	3.9
	IV	2.2	0.3	-1.9	4.7	1.7	2.5	4.0
	ANNUAL	1.0	-1.3	-2.3	4.9	0.6	3.8	3.5

See footnotes following table 5.

September 9, 1993

Source: Bureau of Labor Statistics

Appendix 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 1982=100								
1990	I	108.7	133.8	123.1	136.0	102.4	125.1	139.4
	II	109.5	134.6	122.9	138.4	103.2	126.4	141.0
	III	109.1	133.5	122.4	140.3	102.9	128.6	140.4
	IV	108.9	132.2	121.4	142.1	102.5	130.5	141.5
	ANNUAL	109.1	133.5	122.4	139.2	102.8	127.6	140.6
1991	I	109.5	131.2	119.9	143.6	102.7	131.2	144.9
	II	110.2	131.7	119.5	145.4	103.4	132.0	146.2
	III	110.5	131.8	119.3	147.1	103.9	133.1	146.5
	IV	111.4	132.7	119.1	148.9	104.3	133.7	147.8
	ANNUAL	110.3	131.8	119.5	146.3	103.6	132.6	146.2
Percent change from previous quarter at annual rate(5)								
1990	I	0.6	3.4	2.7	6.4	-1.1	5.7	2.9
	II	3.0	2.2	-0.8	7.3	3.3	4.2	4.8
	III	-1.5	-3.1	-1.7	5.6	-1.1	7.1	-1.7
	IV	-0.6	-3.7	-3.2	5.4	-1.4	6.0	3.2
	ANNUAL	0.4	0.6	0.2	5.5	0.1	5.1	2.5
1991	I	1.9	-3.0	-4.9	4.3	0.6	2.4	9.9
	II	2.7	1.5	-1.1	4.9	2.7	2.2	3.7
	III	1.0	0.4	-0.6	4.7	2.0	3.7	0.7
	IV	3.5	2.7	-0.8	5.1	1.7	1.5	3.5
	ANNUAL	1.1	-1.3	-2.4	5.0	0.8	3.9	4.0
Percent change from corresponding quarter of previous year								
1990	I	-0.2	0.8	1.0	4.1	-1.0	4.4	3.7
	II	0.8	1.4	0.6	5.6	1.0	4.8	2.5
	III	0.6	0.6	0.0	6.1	0.5	5.5	1.7
	IV	0.4	-0.4	-0.8	6.1	-0.1	5.7	2.3
	ANNUAL	0.4	0.6	0.2	5.5	0.1	5.1	2.5
1991	I	0.7	-2.0	-2.6	5.6	0.3	4.9	4.0
	II	0.6	-2.1	-2.7	5.1	0.2	4.4	3.7
	III	1.3	-1.2	-2.5	4.8	1.0	3.5	4.3
	IV	2.3	0.4	-1.9	4.8	1.7	2.4	4.4
	ANNUAL	1.1	-1.3	-2.4	5.0	0.8	3.9	4.0

See footnotes following table 5.

September 9, 1993

Source: Bureau of Labor Statistics

Appendix 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 1982=100							
1990	I	120.7	130.3	107.9	131.8	99.2	109.2
	II	120.6	130.2	108.0	133.8	99.8	111.0
	III	121.8	130.4	107.0	135.2	99.2	110.9
	IV	122.1	128.4	105.2	137.6	99.3	112.7
	ANNUAL	121.4	129.8	106.9	134.7	99.4	110.9
1991	I	121.6	125.4	103.1	139.2	99.5	114.5
	II	122.8	125.6	102.3	141.0	100.2	114.8
	III	124.4	127.6	102.6	142.6	100.7	114.7
	IV	125.2	128.0	102.2	145.1	101.7	115.9
	ANNUAL	123.4	126.7	102.6	141.9	100.5	115.0

Percent change from previous quarter at annual rate(5)							
1990	I	3.5	2.7	-0.8	4.8	-2.6	1.2
	II	-0.5	-0.3	0.2	6.2	2.3	6.7
	III	4.2	0.5	-3.6	4.2	-2.4	0.0
	IV	0.7	-5.9	-6.5	7.4	0.5	6.6
	ANNUAL	1.2	-1.0	-2.2	5.3	-0.1	4.1
1991	I	-1.5	-9.2	-7.9	4.7	0.9	6.2
	II	3.9	0.9	-2.8	5.3	3.0	1.4
	III	5.4	6.3	0.9	4.7	2.0	-0.7
	IV	2.7	1.3	-1.4	7.1	3.7	4.3
	ANNUAL	1.7	-2.5	-4.1	5.4	1.1	3.6

Percent change from corresponding quarter of previous year							
1990	I	0.2	-1.9	-2.0	4.1	-1.0	3.9
	II	-0.1	-1.6	-1.5	5.6	1.0	5.7
	III	2.2	0.1	-2.1	5.5	0.0	3.2
	IV	2.0	-0.8	-2.7	5.6	-0.6	3.6
	ANNUAL	1.2	-1.0	-2.2	5.3	-0.1	4.1
1991	I	0.7	-3.8	-4.5	5.6	0.3	4.9
	II	1.8	-3.5	-5.2	5.4	0.5	3.5
	III	2.1	-2.1	-4.1	5.5	1.6	3.3
	IV	2.6	-0.3	-2.8	5.4	2.4	2.8
	ANNUAL	1.7	-2.5	-4.1	5.4	1.1	3.6

See footnotes following table 5.

September 9, 1993
Source: Bureau of Labor Statistics

Appendix 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 1982=100							
1990	I	126.5	136.8	108.1	129.6	97.5	102.4
	II	127.3	137.5	108.0	131.5	98.1	103.3
	III	129.3	137.8	106.6	132.9	97.5	102.8
	IV	129.3	134.6	104.1	135.5	97.7	104.8
	ANNUAL	128.2	136.7	106.6	132.5	97.8	103.3
1991	I	128.8	130.7	101.5	137.0	97.9	106.4
	II	129.7	130.7	100.8	138.7	98.6	107.0
	III	132.0	132.8	100.6	140.4	99.2	106.4
	IV	133.9	133.6	99.8	143.5	100.5	107.2
	ANNUAL	131.0	132.0	100.7	139.8	99.1	106.7
Percent change from previous quarter at annual rate (5)							
1990	I	3.5	2.2	-1.2	3.4	-3.8	-0.1
	II	2.6	2.2	-0.4	6.2	2.2	3.5
	III	6.3	1.0	-5.0	4.3	-2.3	-1.9
	IV	-0.1	-9.0	-9.0	8.0	1.1	8.1
	ANNUAL	2.0	-1.5	-3.4	5.5	0.1	3.4
1991	I	-1.5	-11.2	-9.8	4.6	0.8	6.2
	II	2.8	0.1	-2.6	5.0	2.7	2.2
	III	7.5	6.6	-0.8	5.1	2.4	-2.2
	IV	5.9	2.3	-3.4	9.0	5.6	3.0
	ANNUAL	2.2	-3.5	-5.5	5.5	1.3	3.3
Percent change from corresponding quarter of previous year							
1990	I	0.6	-2.9	-3.5	4.3	-0.9	3.6
	II	0.6	-1.9	-2.5	5.9	1.3	5.2
	III	3.0	-0.1	-2.9	5.6	0.1	2.5
	IV	3.0	-1.0	-4.0	5.4	-0.8	2.3
	ANNUAL	2.0	-1.5	-3.4	5.5	0.1	3.4
1991	I	1.8	-4.4	-6.1	5.7	0.4	3.9
	II	1.8	-4.9	-6.6	5.4	0.6	3.6
	III	2.1	-3.6	-5.6	5.7	1.7	3.5
	IV	3.6	-0.8	-4.2	5.9	2.9	2.2
	ANNUAL	2.2	-3.5	-5.5	5.5	1.3	3.3

See footnotes following table 5.

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Source: Bureau of Labor Statistics

Appendix 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 1982=100							
1990	I	113.6	122.4	107.7	135.5	102.0	119.3
	II	112.3	121.3	108.0	137.7	102.7	122.6
	III	112.7	121.2	107.6	139.2	102.1	123.5
	IV	113.2	120.9	106.8	141.5	102.1	125.0
	ANNUAL	113.0	121.5	107.4	138.6	102.3	122.6
1991	I	112.8	118.8	105.4	143.4	102.5	127.1
	II	114.3	119.4	104.5	145.4	103.4	127.2
	III	115.0	121.2	105.3	147.0	103.8	127.8
	IV	114.6	121.1	105.7	148.7	104.1	129.8
	ANNUAL	114.1	120.1	105.3	146.1	103.5	128.0
Percent change from previous quarter at annual rate(5)							
1990	I	3.6	3.4	-0.2	7.1	-0.3	3.5
	II	-4.5	-3.6	1.0	6.5	2.5	11.6
	III	1.4	-0.1	-1.5	4.5	-2.1	3.1
	IV	1.7	-1.3	-3.0	6.9	0.0	5.1
	ANNUAL	0.1	-0.4	-0.5	5.4	0.0	5.4
1991	I	-1.4	-6.5	-5.1	5.3	1.5	6.9
	II	5.3	2.0	-3.2	5.7	3.4	0.3
	III	2.7	6.0	3.2	4.5	1.8	1.7
	IV	-1.6	-0.1	1.5	4.6	1.3	6.3
	ANNUAL	1.0	-1.1	-2.0	5.4	1.1	4.4
Percent change from corresponding quarter of previous year							
1990	I	-0.6	-0.4	0.2	4.1	-1.0	4.7
	II	-1.1	-1.2	0.0	5.4	0.8	6.6
	III	1.2	0.4	-0.8	5.6	0.0	4.4
	IV	0.5	-0.4	-0.9	6.3	0.0	5.7
	ANNUAL	0.1	-0.4	-0.5	5.4	0.0	5.4
1991	I	-0.8	-2.9	-2.2	5.8	0.5	6.6
	II	1.7	-1.5	-3.2	5.6	0.7	3.8
	III	2.0	-0.1	-2.1	5.6	1.7	3.5
	IV	1.2	0.2	-1.0	5.0	2.0	3.8
	ANNUAL	1.0	-1.1	-2.0	5.4	1.1	4.4

See footnotes following table 5.

September 9, 1993
Source: Bureau of Labor Statistics