

Internet address:	http://stats.bls.gov/lprhome.htm	USDL 98-193
Historical, technical information:	(202) 606-5606	TRANSMISSION OF THIS MATERIAL IS EMBARGOED
Current data:	(202) 606-7828	UNTIL 10:00 A.M. EDT
Media contact:	(202) 606-5902	THURSDAY, MAY 7, 1998.

PRODUCTIVITY AND COSTS
First Quarter 1998

The Bureau of Labor Statistics of the U.S. Department of Labor today reported preliminary productivity data--as measured by output per hour of all persons--for the first quarter of 1998. The seasonally-adjusted annual rates of productivity change in the first quarter were:

0.8 percent in the business sector and
0.2 percent in the nonfarm business sector.

These small productivity gains resulted from strong growth in both output and hours of all persons. Output grew at a 5.3 percent annual rate in both sectors. Hours at work increased 4.4 percent in the business sector and 5.0 percent in the nonfarm business sector. First-quarter measures are summarized in table A and appear in detail in tables 1 through 5.

In manufacturing, productivity changes in the first quarter were:

0.5 percent in manufacturing,
0.4 percent in durable goods manufacturing, and
0.6 percent in nondurable goods manufacturing.

Productivity growth in manufacturing in the first quarter of 1998 reflected a slower rate of increase in both output (1.8 percent) and hours of all persons (1.3 percent), at seasonally-adjusted annual rates, than in the fourth quarter of 1997. Output and hours in manufacturing, which includes about 18 percent of U.S. business-sector employment, tend to vary more from quarter to quarter than data for the more aggregate business and nonfarm business sectors

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.

Table A. Productivity and costs: Preliminary first-quarter 1998 measures
(Seasonally adjusted annual rates)

Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs

	Percent change from preceding quarter					
Business	0.8	5.3	4.4	4.2	3.7	3.4
Nonfarm business	0.2	5.3	5.0	4.1	3.5	3.8
Manufacturing	0.5	1.8	1.3	2.8	2.3	2.3
Durable	0.4	2.3	1.9	1.7	1.2	1.3
Nondurable	0.6	1.1	0.4	4.5	4.0	3.9
	Percent change from same quarter a year ago					
Business	2.0	4.4	2.3	4.3	2.8	2.2
Nonfarm business	1.9	4.4	2.5	4.1	2.6	2.2
Manufacturing	4.1	5.2	1.1	3.7	2.2	-0.3
Durable	6.0	7.7	1.6	3.4	1.9	-2.5
Nondurable	1.9	2.3	0.3	4.2	2.7	2.2

Business

From the fourth quarter of 1997 to the first quarter of 1998, business sector productivity increased at a 0.8 percent annual rate. Output and hours advanced 5.3 percent and 4.4 percent, respectively. During the fourth quarter of 1997, output had increased 4.8 percent, and hours of all persons engaged in the sector increased 3.2 percent (seasonally-adjusted annual rates); productivity rose 1.6 percent (table 1).

Hourly compensation increased 4.2 percent during the first quarter of 1998. 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 3.4 percent rate during the first quarter. This increase in unit labor costs was less than the 3.9 percent rise in the fourth quarter.

Real hourly compensation, which takes into account changes in the Consumer Price Index for All Urban Consumers (CPI-U), rose at a 3.7 percent annual rate in the first quarter. The first-quarter increase in real hourly compensation was the largest recorded since a 5.0 percent rise was posted in the first quarter of 1992.

The implicit price deflator for the business sector, which reflects changes in unit labor costs and unit nonlabor payments, rose just 0.3 percent in the first quarter. In the fourth quarter of 1997, the price of business output increased at an annual rate of 0.9 percent.

Nonfarm business

Productivity edged up 0.2 percent in the nonfarm business sector in the first quarter, as output increased 5.3 percent and hours of all persons went up 5.0 percent. During the fourth quarter of 1997, productivity had risen 1.4 percent in this sector, reflecting gains of 4.9 percent in output and 3.5 percent in hours (table 2). The first-quarter increase in productivity was the smallest since the third quarter of 1996, when output per hour declined 0.7 percent.

Hourly compensation increased at a 4.1 percent annual rate in the first quarter. When the rise in the CPI-U was taken into account, real hourly compensation rose 3.5 percent in the first quarter of 1998; it had increased 3.1 percent in the fourth quarter of 1997. Increases in both quarters were larger than at any time since the first quarter of 1992, when real hourly compensation rose 4.8 percent.

Unit labor costs rose 3.8 percent in the first quarter, the same as in the previous quarter. The implicit price deflator for nonfarm business output rose 0.7 percent in the first quarter, compared with a 1.0 percent rise one quarter earlier.

Manufacturing

Productivity increased at a 0.5 percent seasonally-adjusted annual rate in manufacturing in the first quarter of 1998, as output rose 1.8 percent and hours of all persons increased 1.3 percent. This was the slowest growth in manufacturing output per hour since it fell during the second and third quarters of 1993. In contrast, productivity increased at a rate of 4.3 percent in the fourth quarter of 1997, output grew 8.2 percent, and hours grew 3.8 percent (table 3). The durable and nondurable subsectors of manufacturing had similar growth rates in productivity in the first quarter, 0.4 and 0.6 percent, respectively. In durable goods manufacturing, output growth slowed to a 2.3 percent annual rate in the first quarter from 10.3 percent one quarter earlier. Hours worked in durable goods industries rose 1.9 percent in the first quarter of 1998. Nondurable goods manufacturing output rose 1.1 percent in the first quarter, and hours edged up 0.4 percent (tables 4 and 5).

Hourly compensation of all manufacturing workers rose 2.8 percent during the first quarter after increasing at a rate of 6.1 percent per year in the fourth quarter of 1997. Real hourly compensation in the manufacturing sector rose 2.3 percent in the first quarter of 1998; it had posted a 4.0 percent gain during the previous quarter.

Unit labor costs in manufacturing grew 2.3 percent in the first quarter of 1998, as unit labor costs of durable goods producers rose 1.3 percent, and those of nondurable goods producers grew at a 3.9 percent annual rate. Unit labor costs in total manufacturing recorded their largest increase since the third quarter of 1993, when they rose 3.6 percent.

Fourth-quarter and annual measures for nonfinancial corporations

Fourth-quarter and annual 1997 measures of productivity and costs also were announced today for the nonfinancial corporate sector (tables B, C, and 6). Output per all-employee hour rose 0.6 percent from the third to the fourth quarter of 1997 as output increased 4.9 percent and employee hours rose 4.3 percent. In the third quarter, productivity had increased 6.3 percent as output jumped 7.8 percent and all-employee hours rose 1.5 percent (seasonally adjusted annual rates). The sector includes all corporations doing business in the United States, except those classified as depository institutions, nondepository institutions, security and commodity brokers, insurance carriers, regulated investment offices, small business investment offices, and real estate investment trusts.

Table B. Nonfinancial corporations: Fourth-quarter 1997 productivity and cost measures
(Seasonally adjusted annual rates)

Period	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs	Unit profits	Implicit price deflator
Percent change from preceding quarter								
1997 IV	0.6	4.9	4.3	4.7	2.6	4.1	-11.0	0.4
Percent change from same quarter a year ago								
1997 IV	2.7	5.9	3.1	4.0	2.1	1.3	2.2	0.8

Hourly compensation increased 4.7 percent in the fourth quarter, and real hourly compensation rose 2.6 percent. Unit labor costs increased 4.1 percent in the fourth quarter, the largest increase since the first quarter of 1995 when they rose 5.6 percent. In the third quarter of 1997, unit labor costs had declined 1.9 percent. Total unit costs rose 2.4 during the fourth quarter after having dropped 1.9 percent during the third quarter. In the fourth quarter, unit profits fell 11.0 percent. Unit profits had risen 14.3 percent during the third quarter of 1997. The implicit price deflator for nonfinancial corporate output edged up 0.4 percent in the fourth quarter.

Productivity grew 2.6 percent in nonfinancial corporations in calendar year 1997. In 1996, productivity had grown 3.1 percent. Output grew faster in 1997, 5.7 percent, than it had one year earlier, when it grew 4.5 percent. Hours of employees in nonfinancial corporations grew 2.9 percent during 1997, compared with 1.4 percent one year earlier.

Table C. Nonfinancial corporations: Annual changes in productivity
and related measures, 1988-1997

Measure	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Productivity	1.7	-1.4	0.7	1.5	2.6	1.2	2.1	0.8	3.1	2.6
Output	5.3	1.6	1.0	-1.3	3.0	3.4	6.3	3.7	4.5	5.7
Hours	3.5	3.0	0.3	-2.8	0.4	2.2	4.1	2.9	1.4	2.9
Hourly compensation	4.0	2.5	5.2	4.6	4.6	2.1	1.8	2.3	3.5	3.8
Real hourly compensation	-0.2	-2.2	-0.2	0.3	1.5	-0.9	-0.8	-0.5	0.6	1.5
Unit labor costs	2.3	3.9	4.4	3.0	2.0	0.9	-0.3	1.5	0.4	1.1
Unit nonlabor costs	2.5	7.3	3.0	3.9	-2.9	-0.6	0.3	-0.2	-1.2	-1.7
Total unit cost	2.3	4.8	4.0	3.2	0.7	0.5	-0.2	1.1	0.0	0.4
Unit profits	8.1	-7.4	-1.5	-0.8	6.5	13.3	18.7	4.7	10.0	3.5
Implicit price deflator	2.9	3.5	3.5	2.9	1.2	1.7	1.8	1.5	1.2	0.8

The 1997 increase in hourly compensation was 3.8 percent, about the same as the 3.5 percent increase in 1996. Real hourly compensation rose 1.5 percent in 1997. It had increased 0.6 percent in 1996, after having fallen in the three previous years.

Total unit costs rose 0.4 percent in 1997, reflecting an increase of 1.1 percent in unit labor costs and a 1.7 percent drop in unit nonlabor costs. Unit profits for the year rose 3.5 percent; in 1996, they had posted a 10.0 percent gain.

REVISED MEASURES

Current and previous measures for the fourth quarter of 1997 for the business, nonfarm business, and manufacturing sectors are compared in table D. Some of the quarterly movements differ slightly from those reported on March 10, based on information then available.

Table D. 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
Fourth quarter 1997						
Business:						
Previous	1.8	5.0	3.2	5.5	3.4	3.7
Current	1.6	4.8	3.2	5.6	3.4	3.9
Nonfarm business:						
Previous	1.6	5.1	3.5	5.2	3.1	3.5
Current	1.4	4.9	3.5	5.2	3.1	3.8
Manufacturing:						
Previous	4.3	8.2	3.8	6.1	3.9	1.8
Current	4.3	8.2	3.8	6.1	4.0	1.8

Bureau of Labor Statistics measures of output for the manufacturing sectors have been revised back to 1949. These revisions reflect revised price deflators estimated by the Bureau of Economic Analysis of the U.S. Department of Commerce. The revisions also reflect revised shipments data from the Bureau of the Census of the Commerce Department for the years 1988 to 1992. Appendix tables 1 to 3 show the annual indexes of productivity and costs for the total, durable, and nondurable manufacturing sectors, respectively, for the years 1949-1997. The measures of manufacturing output used in the production of quarterly labor productivity and costs measures presented in this release are consistent with annual manufacturing output data released May 6, 1998, in "Multifactor Productivity Trends, 1995 and 1996" (USDL 98-187).

Next release date

The next release of Productivity and Costs is scheduled for 10:00 AM EDT, Thursday, June 4, 1998. First-quarter measures for nonfinancial corporations and revised measures for business, nonfarm business, and manufacturing will be released at that time.

TECHNICAL NOTES

Labor Hours: 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 paid hours of production and non-supervisory workers in nonagricultural establishments. Jobs rather than persons are counted. 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 76 percent of the value of GDP in 1992. Nonfarm business, which also excludes farming, accounted for about 75 percent of GDP in 1992.

Annual manufacturing indexes 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; 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, and leather and leather products.

Nonfinancial corporate output is an annual-weighted index constructed by excluding from GDP the following outputs: 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 52 percent of the value 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: 202-606-STAT; TDD phone: 202-606-5897; 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 1992=100									
1996	I	102.0	111.4	109.2	109.3	98.9	107.2	110.5	108.4
	II	102.8	113.2	110.1	110.8	99.3	107.8	111.0	108.9
	III	102.6	113.5	110.6	111.8	99.6	108.9	110.7	109.6
	IV	103.1	115.0	111.5	112.7	99.6	109.3	111.3	110.0
	ANNUAL	102.6	113.3	110.4	111.1	99.3	108.3	110.9	109.2
1997	I	103.5	116.6	112.7	113.8	100.1	110.0	111.6	110.6
	II	104.1	117.8	113.1	114.7	100.5	110.2	112.4	111.0
	III	105.0	118.8	113.1	115.9	101.1	110.4	112.9	111.3
	IV	r105.4	r120.2	114.0	117.5	101.9	r111.5	r111.6	111.5
	ANNUAL	104.5	r118.3	113.3	115.4	100.9	110.5	r112.1	111.1
1998	I	105.6	121.7	115.3	118.7	102.8	112.4	110.2	111.6
Percent change from previous quarter at annual rate(5)									
1996	I	3.1	2.8	-0.3	3.7	0.6	0.7	5.1	2.3
	II	3.1	6.6	3.4	5.5	1.7	2.3	1.8	2.1
	III	-0.7	0.9	1.6	3.6	1.2	4.4	-1.1	2.4
	IV	2.0	5.4	3.3	3.4	0.0	1.4	2.2	1.7
	ANNUAL	2.0	3.5	1.4	3.9	0.9	1.8	2.0	1.9
1997	I	1.6	5.9	4.2	4.1	1.9	2.5	1.2	2.0
	II	2.2	3.9	1.6	3.1	1.8	0.9	2.7	1.5
	III	3.5	3.6	0.1	4.2	2.2	0.7	1.8	1.1
	IV	r1.6	r4.8	3.2	r5.6	3.4	r3.9	r-4.3	0.9
	ANNUAL	r1.8	4.5	2.6	3.9	1.6	2.0	r1.1	1.7
1998	I	0.8	5.3	4.4	4.2	3.7	3.4	-4.9	0.3
Percent change from corresponding quarter of previous year									
1996	I	1.9	2.5	0.6	3.5	0.7	1.5	2.0	1.7
	II	2.5	4.2	1.7	4.0	1.1	1.5	2.4	1.8
	III	2.0	3.3	1.3	4.2	1.2	2.1	1.8	2.0
	IV	1.8	3.9	2.0	4.0	0.9	2.2	2.0	2.1
	ANNUAL	2.0	3.5	1.4	3.9	0.9	1.8	2.0	1.9
1997	I	1.5	4.7	3.1	4.1	1.2	2.6	1.0	2.0
	II	1.3	4.0	2.7	3.6	1.2	2.3	1.2	1.9
	III	2.3	4.7	2.3	3.7	1.5	1.3	2.0	1.6
	IV	r2.2	r4.5	2.3	r4.3	2.3	r2.0	r0.3	1.4
	ANNUAL	r1.8	4.5	2.6	3.9	1.6	2.0	r1.1	1.7
1998	I	2.0	4.4	2.3	4.3	2.8	2.2	-1.2	1.0

See footnotes following Table 6.
r=revised

May 7, 1998
Source: Bureau of Labor Statistics

Table 2. Nonfarm business sector:
and prices, seasonally adjusted

Productivity, hourly compensation, unit labor costs,

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 costs	Unit non- labor pay- ments (3)	Implicit price deflator (4)
Indexes 1992=100								
1996	I	102.1	111.7	109.4	109.1	98.7	106.9	111.0
	II	102.8	113.5	110.4	110.5	99.1	107.5	111.3
	III	102.6	113.8	110.9	111.4	99.3	108.6	110.9
	IV	103.1	115.3	111.9	112.3	99.3	109.0	111.4
	ANNUAL	102.6	113.6	110.7	110.8	99.1	108.0	111.2
1997	I	103.4	116.9	113.1	113.5	99.8	109.8	111.7
	II	104.0	118.0	113.5	114.4	100.2	110.0	112.4
	III	104.9	119.1	113.5	115.5	100.7	110.1	113.2
	IV	105.3	r120.5	114.5	117.0	101.4	r111.1	r112.1
	ANNUAL	104.3	r118.6	113.7	115.0	100.6	r110.3	r112.3
1998	I	105.3	122.1	115.9	118.1	102.3	112.2	110.7
Percent change from previous quarter at annual rate(5)								
1996	I	2.8	2.6	-0.3	3.9	0.7	1.0	4.6
	II	2.9	6.8	3.8	5.1	1.3	2.2	0.9
	III	-0.7	1.0	1.7	3.3	0.8	4.0	-1.4
	IV	1.9	5.4	3.5	3.4	0.0	1.5	2.0
	ANNUAL	1.9	3.5	1.6	3.8	0.8	1.9	1.4
1997	I	1.1	5.6	4.5	4.3	2.0	3.1	1.1
	II	2.3	3.8	1.5	3.2	1.8	0.9	2.3
	III	3.6	3.7	0.1	3.8	1.8	0.2	2.9
	IV	r1.4	r4.9	3.5	5.2	3.1	r3.8	r-3.9
	ANNUAL	1.7	4.5	2.7	3.8	1.5	2.1	1.1
1998	I	0.2	5.3	5.0	4.1	3.5	3.8	-4.7
Percent change from corresponding quarter of previous year								
1996	I	1.8	2.6	0.7	3.5	0.6	1.6	1.3
	II	2.3	4.2	1.8	3.9	1.0	1.6	1.5
	III	1.8	3.3	1.5	4.0	1.0	2.1	1.0
	IV	1.7	3.9	2.2	3.9	0.7	2.2	1.5
	ANNUAL	1.9	3.5	1.6	3.8	0.8	1.9	1.4
1997	I	1.3	4.7	3.4	4.0	1.1	2.7	0.6
	II	1.1	4.0	2.8	3.5	1.2	2.4	1.0
	III	2.2	4.7	2.4	3.7	1.4	1.4	2.1
	IV	2.1	r4.5	2.4	4.1	2.2	r2.0	r0.6
	ANNUAL	1.7	4.5	2.7	3.8	1.5	2.1	1.1
1998	I	1.9	4.4	2.5	4.1	2.6	2.2	-0.9

See footnotes following Table 6.
r=revised

May 7, 1998
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							
1996	I	r112.7	r115.8	102.7	110.8	100.2	r98.3
	II	r114.1	r118.3	103.7	112.0	100.4	r98.2
	III	r115.8	r119.9	103.6	112.9	100.6	r97.5
	IV	r116.9	r121.2	103.7	113.5	100.3	r97.1
	ANNUAL	r114.7	r118.8	103.6	112.1	100.3	r97.8
1997	I	r117.8	r123.0	104.4	114.7	100.8	r97.3
	II	r118.9	r124.5	104.7	115.4	101.1	r97.1
	III	r121.2	r126.4	104.3	116.4	101.5	r96.0
	IV	r122.5	r128.9	105.2	118.1	102.5	r96.5
	ANNUAL	r120.0	r125.7	104.7	116.1	101.5	r96.7
1998	I	122.6	129.4	105.6	119.0	103.1	97.0

Percent change from previous quarter at annual rate(5)							
1996	I	r5.5	r2.6	-2.7	2.4	-0.7	r-2.9
	II	r5.0	r9.0	3.8	4.7	0.9	r-0.4
	III	r5.9	r5.4	-0.4	3.1	0.7	r-2.6
	IV	r3.9	r4.5	0.6	1.9	-1.4	r-1.9
	ANNUAL	r4.7	r4.2	-0.5	3.2	0.2	r-1.4
1997	I	3.3	6.2	2.8	4.4	2.2	1.0
	II	3.8	4.9	1.1	2.6	1.3	-1.1
	III	8.0	6.1	-1.7	3.4	1.5	-4.2
	IV	4.3	8.2	3.8	6.1	r4.0	1.8
	ANNUAL	r4.6	r5.8	1.1	3.5	1.2	r-1.1
1998	I	0.5	1.8	1.3	2.8	2.3	2.3

Percent change from corresponding quarter of previous year							
1996	I	r4.7	r2.2	-2.4	3.3	0.5	r-1.3
	II	r4.6	r4.3	-0.3	3.5	0.7	r-1.0
	III	r4.8	r4.7	0.0	3.4	0.4	r-1.4
	IV	r5.1	r5.4	0.3	3.0	-0.1	r-1.9
	ANNUAL	r4.7	r4.2	-0.5	3.2	0.2	r-1.4
1997	I	r4.5	r6.3	1.7	3.5	0.6	r-1.0
	II	r4.2	r5.3	1.0	3.0	0.7	r-1.1
	III	4.7	r5.4	0.7	3.1	0.9	r-1.6
	IV	4.8	6.3	1.4	4.1	2.2	r-0.6
	ANNUAL	r4.6	r5.8	1.1	3.5	1.2	r-1.1
1998	I	4.1	5.2	1.1	3.7	2.2	-0.3

See footnotes following Table 6.

r=revised

May 7, 1998

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							
1996	I	r119.9	r126.8	105.7	109.7	99.2	r91.5
	II	r122.1	r131.1	107.3	111.0	99.5	r90.9
	III	r124.2	r133.2	107.3	111.7	99.5	r89.9
	IV	r125.3	r134.6	107.5	111.8	98.8	r89.3
	ANNUAL	r122.7	r131.4	107.1	110.9	99.1	r90.4
1997	I	r126.5	r137.7	108.8	113.1	99.4	r89.4
	II	r128.5	r140.4	109.3	113.7	99.6	r88.5
	III	r131.9	r143.8	109.1	114.4	99.7	r86.7
	IV	r134.0	r147.4	110.0	116.5	101.0	r86.9
	ANNUAL	r130.1	r142.3	109.4	114.3	99.9	r87.9
1998	I	134.1	148.3	110.5	117.0	101.3	87.2

Percent change from previous quarter at annual rate(5)							
1996	I	r8.1	r5.9	-2.1	1.4	-1.7	r-6.2
	II	r7.5	r14.2	6.2	4.7	0.9	r-2.6
	III	r6.9	r6.8	-0.1	2.6	0.2	r-4.0
	IV	r3.5	r4.3	0.7	0.5	-2.8	r-2.9
	ANNUAL	r6.3	r7.1	0.8	2.4	-0.5	r-3.7
1997	I	4.1	9.4	5.1	4.8	2.5	0.6
	II	6.2	8.1	1.8	2.1	0.7	-3.9
	III	11.0	10.2	-0.8	2.4	0.4	-7.8
	IV	r6.7	r10.3	3.4	r7.6	r5.4	r0.9
	ANNUAL	r6.0	r8.3	2.2	3.1	0.8	r-2.8
1998	I	0.4	2.3	1.9	1.7	1.2	1.3

Percent change from corresponding quarter of previous year							
1996	I	r6.0	r4.8	-1.1	2.4	-0.3	r-3.3
	II	r6.7	r8.0	1.3	2.9	0.0	r-3.6
	III	r6.7	r8.0	1.2	2.7	-0.3	r-3.8
	IV	r6.5	r7.7	1.1	2.3	-0.8	r-3.9
	ANNUAL	r6.3	r7.1	0.8	2.4	-0.5	r-3.7
1997	I	r5.5	r8.6	2.9	3.1	0.2	r-2.2
	II	r5.2	r7.1	1.9	2.5	0.1	r-2.6
	III	r6.2	r8.0	1.7	2.4	0.2	r-3.6
	IV	r7.0	r9.5	2.4	4.2	2.2	-2.6
	ANNUAL	r6.0	r8.3	2.2	3.1	0.8	r-2.8
1998	I	6.0	7.7	1.6	3.4	1.9	-2.5

See footnotes following Table 6.
r=revised

May 7, 1998
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							
1996	I	r105.8	r104.5	98.8	111.8	101.1	r105.7
	II	r106.5	r105.3	98.9	112.9	101.2	r106.1
	III	r107.7	r106.3	98.6	114.1	101.6	r105.9
	IV	r108.9	r107.5	98.7	115.3	101.9	r105.9
	ANNUAL	r107.1	r105.9	98.9	113.4	101.4	r105.9
1997	I	r109.7	r108.2	98.6	116.2	102.2	r106.0
	II	r110.0	r108.5	98.6	117.2	102.7	r106.6
	III	r111.3	r108.9	97.8	118.7	103.4	r106.6
	IV	r111.6	r110.3	98.8	119.8	103.9	r107.3
	ANNUAL	r110.6	r109.0	98.5	117.9	103.0	r106.6
1998	I	111.8	110.6	98.9	121.1	104.9	108.3

Percent change from previous quarter at annual rate(5)							
1996	I	2.5	-1.2	-3.6	4.0	0.8	1.4
	II	2.6	3.1	0.4	4.1	0.4	1.5
	III	4.8	3.8	-0.9	4.0	1.5	-0.7
	IV	4.3	4.6	0.3	4.3	1.0	0.1
	ANNUAL	2.8	r0.6	-2.2	4.1	1.1	1.3
1997	I	3.0	2.5	-0.5	3.3	1.1	0.3
	II	1.1	1.2	0.1	3.4	2.0	2.3
	III	4.8	1.5	-3.1	5.0	3.0	0.2
	IV	r1.2	r5.5	4.2	r3.8	1.7	r2.6
	ANNUAL	3.2	2.9	-0.3	4.0	1.6	0.7
1998	I	0.6	1.1	0.4	4.5	4.0	3.9

Percent change from corresponding quarter of previous year							
1996	I	r3.2	r-1.0	-4.1	4.5	1.6	r1.2
	II	r2.4	r-0.1	-2.5	4.3	1.4	1.9
	III	2.7	0.8	-1.8	4.2	1.2	1.5
	IV	3.5	2.5	-1.0	4.1	0.9	0.5
	ANNUAL	2.8	r0.6	-2.2	4.1	1.1	1.3
1997	I	3.7	3.5	-0.2	3.9	1.0	0.3
	II	3.3	3.0	-0.3	3.8	1.4	0.5
	III	3.3	2.4	-0.8	4.0	1.8	0.7
	IV	r2.5	r2.6	0.1	3.9	2.0	1.3
	ANNUAL	3.2	2.9	-0.3	4.0	1.6	0.7
1998	I	1.9	2.3	0.3	4.2	2.7	2.2

See footnotes following Table 6.
r=revised

May 7, 1998
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											
1995	I	102.9	112.3	109.2	105.1	97.7	102.2	99.8	101.6	135.2	104.6
	II	103.4	112.9	109.2	105.9	97.6	102.4	100.1	101.8	134.9	104.8
	III	104.7	114.9	109.7	106.6	97.8	101.9	99.0	101.1	145.5	105.1
	IV	105.4	115.9	110.0	107.5	98.0	102.0	99.1	101.2	147.3	105.4
	ANNUAL	104.1	114.0	109.5	106.3	97.9	102.1	99.5	101.4	140.8	105.0
1996	I	106.0	116.5	109.9	108.3	98.0	102.1	99.2	101.4	152.5	106.0
	II	107.1	118.7	110.8	109.7	98.3	102.4	98.4	101.4	154.7	106.2
	III	107.8	120.0	111.3	110.7	98.6	102.7	98.1	101.5	156.0	106.4
	IV	108.3	121.5	112.1	111.5	98.6	102.9	97.4	101.5	156.4	106.5
	ANNUAL	107.3	119.2	111.0	110.1	98.4	102.6	98.3	101.4	154.9	106.3
1997	I	108.8	123.3	113.3	112.6	99.0	103.5	97.0	101.8	157.9	106.9
	II	109.4	124.7	114.0	113.5	99.4	103.7	97.1	102.0	159.1	107.2
	III	111.1	127.1	114.4	114.7	100.0	103.2	96.6	101.5	164.5	107.2
	IV	111.3	128.6	115.6	116.0	100.6	104.3	95.9	102.1	159.8	107.3
	ANNUAL	110.2	125.9	114.3	114.2	99.9	103.7	96.6	101.9	160.3	107.2
Percent change from previous quarter at annual rate(5)											
1995	I	-3.3	0.0	3.4	2.1	-0.5	5.6	2.8	4.9	-18.1	1.8
	II	2.0	2.0	0.0	3.0	-0.3	1.0	1.0	1.0	-0.8	0.8
	III	5.2	7.2	1.9	2.9	0.7	-2.2	-4.2	-2.7	35.4	1.3
	IV	2.8	3.8	1.0	3.3	0.8	0.4	0.4	0.4	4.9	1.0
	ANNUAL	0.8	3.7	2.9	2.3	-0.5	1.5	-0.2	1.1	4.7	1.5
1996	I	2.4	2.0	-0.3	3.1	-0.1	0.7	0.6	0.7	15.0	2.4
	II	4.1	7.6	3.4	5.1	1.4	1.1	-3.1	0.0	5.8	0.7
	III	2.7	4.3	1.6	3.8	1.4	1.1	-1.4	0.5	3.5	0.9
	IV	2.1	5.2	3.1	3.0	-0.3	0.9	-2.8	0.0	1.0	0.1
	ANNUAL	3.1	4.5	1.4	3.5	0.6	0.4	-1.2	0.0	10.0	1.2
1997	I	1.7	6.1	4.3	4.0	1.8	2.3	-1.8	1.3	3.8	1.6
	II	2.4	4.7	2.3	3.2	1.8	0.8	0.5	0.7	3.2	1.1
	III	6.3	7.8	1.5	4.3	2.3	-1.9	-1.9	-1.9	14.3	0.2
	IV	0.6	4.9	4.3	4.7	2.6	4.1	-2.9	2.4	-11.0	0.4
	ANNUAL	2.6	5.7	2.9	3.8	1.5	1.1	-1.7	0.4	3.5	0.8
Percent change from corresponding quarter of previous year											
1995	I	-0.7	3.9	4.7	1.4	-1.4	2.2	-1.7	1.2	6.6	1.8
	II	0.3	3.5	3.1	2.1	-0.9	1.8	1.3	1.7	1.9	1.7
	III	1.5	4.3	2.7	2.5	-0.1	1.0	-0.5	0.6	6.7	1.3
	IV	1.6	3.2	1.6	2.8	0.2	1.2	0.0	0.9	3.6	1.2
	ANNUAL	0.8	3.7	2.9	2.3	-0.5	1.5	-0.2	1.1	4.7	1.5
1996	I	3.1	3.7	0.6	3.1	0.3	0.0	-0.6	-0.2	12.8	1.4
	II	3.6	5.1	1.5	3.6	0.7	0.0	-1.6	-0.4	14.6	1.3
	III	3.0	4.4	1.4	3.8	0.9	0.8	-0.9	0.4	7.2	1.2
	IV	2.8	4.8	1.9	3.8	0.6	1.0	-1.7	0.3	6.2	1.0
	ANNUAL	3.1	4.5	1.4	3.5	0.6	0.4	-1.2	0.0	10.0	1.2
1997	I	2.6	5.8	3.1	4.0	1.0	1.3	-2.3	0.4	3.5	0.8
	II	2.2	5.1	2.8	3.5	1.2	1.3	-1.4	0.6	2.9	0.9
	III	3.1	5.9	2.8	3.6	1.4	0.5	-1.5	0.0	5.5	0.7
	IV	2.7	5.9	3.1	4.0	2.1	1.3	-1.5	0.6	2.2	0.8
	ANNUAL	2.6	5.7	2.9	3.8	1.5	1.1	-1.7	0.4	3.5	0.8

See footnotes following Table 6.
r=revised

May 7, 1998
Source: Bureau of Labor Statistics

Appendix table 1. Manufacturing sector: Productivity, hourly compensation, and unit labor costs, 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
1949	33.2	26.3	79.2	8.3	48.8	24.9
1950	33.8	28.9	85.6	8.7	50.6	25.8
1951	33.4	30.8	92.2	9.6	51.7	28.6
1952	34.7	32.4	93.4	10.2	54.0	29.4
1953	35.8	35.2	98.2	10.8	56.6	30.1
1954	36.7	32.9	89.7	11.3	58.7	30.7
1955	38.3	36.3	94.7	11.7	61.2	30.5
1956	38.1	36.6	96.1	12.4	64.2	32.7
1957	38.9	36.8	94.6	13.2	65.8	33.9
1958	39.4	34.2	86.7	13.8	67.0	35.0
1959	40.2	37.2	92.6	14.3	69.0	35.6
1960	40.9	37.7	92.2	14.9	70.6	36.5
1961	42.2	37.9	89.8	15.3	72.0	36.4
1962	43.3	40.5	93.5	15.9	74.0	36.8
1963	45.1	42.6	94.5	16.4	75.2	36.4
1964	47.0	45.4	96.5	17.1	77.3	36.4
1965	48.0	49.0	102.1	17.5	77.7	36.4
1966	48.5	52.8	108.7	18.2	79.0	37.6
1967	50.5	54.6	108.1	19.2	80.8	38.1
1968	52.3	57.3	109.7	20.7	83.4	39.6
1969	53.0	58.8	111.0	22.2	85.0	41.9
1970	54.7	57.1	104.5	23.8	86.1	43.5
1971	58.3	58.6	100.6	25.3	87.5	43.4
1972	60.5	63.6	105.2	26.6	89.2	44.0
1973	62.1	68.7	110.5	28.6	90.5	46.1
1974	62.8	67.9	108.1	31.8	90.5	50.6
1975	64.7	63.0	97.3	35.6	93.0	55.1
1976	67.3	68.7	102.0	38.6	95.2	57.4
1977	69.7	74.0	106.2	42.0	97.2	60.3
1978	70.5	78.0	110.7	45.4	97.6	64.4
1979	70.1	79.1	112.8	49.8	96.2	71.1
1980	70.4	75.8	107.6	55.8	94.9	79.2
1981	71.4	76.4	107.1	61.3	94.6	85.9
1982	75.2	73.7	98.0	67.2	97.7	89.4
1983	77.9	77.1	99.0	69.0	97.2	88.7
1984	80.2	84.5	105.4	71.4	96.4	89.0
1985	83.2	87.1	104.7	75.3	98.1	90.5
1986	86.9	89.6	103.1	78.6	100.6	90.5
1987	89.2	92.7	103.9	80.8	99.8	90.6
1988	90.7	96.9	106.8	84.0	99.6	92.6
1989	90.8	97.4	107.2	86.8	98.2	95.5
1990	93.0	97.5	104.9	91.0	97.6	97.8
1991	94.9	95.4	100.6	95.7	98.6	100.9
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	102.0	103.4	101.4	102.9	99.9	100.9
1994	105.2	109.1	103.8	105.6	100.0	100.4
1995	109.6	114.1	104.1	108.7	100.1	99.2
1996	114.7	118.8	103.6	112.1	100.3	97.8
1997	120.0	125.7	104.7	116.1	101.5	96.7

See footnotes following Table 6.

May 7, 1998

Source: Bureau of Labor Statistics

Appendix table 2. Durable manufacturing sector: Productivity, hourly compensation, and unit labor costs, 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
1949	31.5	22.7	72.1	8.1	47.8	25.7
1950	33.4	26.8	80.4	8.5	49.7	25.6
1951	32.0	29.0	90.7	9.5	51.0	29.6
1952	33.5	31.2	93.0	10.2	53.8	30.3
1953	35.4	35.5	100.1	10.7	56.3	30.2
1954	35.4	31.4	88.5	11.2	58.5	31.6
1955	37.4	35.3	94.6	11.7	61.3	31.4
1956	35.7	34.5	96.8	12.5	64.2	34.9
1957	36.2	34.5	95.5	13.2	65.9	36.5
1958	35.8	30.2	84.4	13.9	67.7	38.9
1959	36.9	33.8	91.6	14.4	69.6	39.2
1960	37.0	33.8	91.4	15.0	71.2	40.6
1961	38.0	33.4	87.9	15.5	72.5	40.6
1962	39.6	36.8	92.8	16.1	74.7	40.6
1963	41.7	39.4	94.5	16.5	75.8	39.6
1964	43.4	42.2	97.2	17.2	77.8	39.6
1965	45.2	47.1	104.3	17.5	78.0	38.7
1966	46.0	52.1	113.3	18.3	79.1	39.7
1967	47.6	53.5	112.5	19.2	80.7	40.4
1968	49.3	56.2	114.1	20.7	83.4	42.0
1969	49.8	57.7	115.8	22.2	84.9	44.6
1970	50.6	54.0	106.7	23.9	86.3	47.1
1971	54.5	55.2	101.2	25.5	88.2	46.7
1972	57.5	61.6	107.1	26.8	89.9	46.6
1973	60.1	69.3	115.4	28.7	90.7	47.8
1974	59.9	67.9	113.4	31.8	90.5	53.1
1975	60.8	60.7	99.8	35.9	93.7	59.1
1976	63.3	66.1	104.4	39.0	96.2	61.6
1977	65.3	72.0	110.2	42.4	98.1	64.9
1978	66.1	77.2	116.7	45.5	97.9	68.8
1979	66.1	79.5	120.3	49.9	96.4	75.5
1980	65.9	74.6	113.2	56.1	95.6	85.2
1981	66.8	75.1	112.4	61.7	95.3	92.5
1982	69.3	69.8	100.7	67.8	98.5	97.8
1983	73.5	74.4	101.3	69.3	97.6	94.3
1984	77.5	85.5	110.4	71.3	96.2	92.0
1985	80.1	88.4	110.3	74.9	97.7	93.6
1986	84.3	90.6	107.5	78.7	100.7	93.3
1987	87.1	93.4	107.2	81.0	100.1	93.0
1988	89.3	99.3	111.2	83.7	99.3	93.8
1989	89.8	99.8	111.1	86.5	97.9	96.3
1990	92.0	98.8	107.4	90.5	97.2	98.5
1991	93.5	94.9	101.4	95.5	98.3	102.1
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	104.6	106.1	101.5	103.1	100.1	98.6
1994	109.5	114.9	105.0	105.5	99.9	96.3
1995	115.4	122.7	106.3	108.2	99.7	93.8
1996	122.7	131.4	107.1	110.9	99.1	90.4
1997	130.1	142.3	109.4	114.3	99.9	87.9

See footnotes following Table 6.

May 7, 1998

Source: Bureau of Labor Statistics

Appendix table 3. Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor costs, 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
1949	33.8	30.0	88.6	8.6	50.9	25.5
1950	34.1	31.5	92.5	9.0	52.5	26.5
1951	35.0	32.9	94.1	9.8	52.8	27.9
1952	36.0	33.8	93.9	10.3	54.4	28.5
1953	36.7	35.1	95.6	10.8	56.7	29.4
1954	38.2	34.9	91.3	11.3	59.2	29.7
1955	39.8	37.7	94.8	11.7	61.1	29.3
1956	41.3	39.3	95.1	12.4	64.0	30.0
1957	42.5	39.6	93.2	13.1	65.5	30.9
1958	43.8	39.3	89.9	13.7	66.3	31.2
1959	45.0	42.3	93.9	14.1	68.1	31.4
1960	46.2	43.1	93.3	14.7	69.9	31.9
1961	47.5	43.9	92.4	15.2	71.5	32.0
1962	48.3	45.6	94.4	15.7	73.1	32.5
1963	50.1	47.4	94.5	16.2	74.4	32.4
1964	52.2	49.9	95.6	16.9	76.5	32.4
1965	52.5	52.1	99.2	17.3	77.0	32.9
1966	53.1	54.5	102.7	18.0	78.1	34.0
1967	55.5	56.8	102.3	19.1	80.2	34.4
1968	57.6	59.8	103.9	20.5	82.7	35.6
1969	58.9	61.7	104.7	22.0	84.2	37.4
1970	61.3	62.2	101.5	23.6	85.4	38.6
1971	64.0	63.9	99.9	24.9	86.3	38.9
1972	66.1	67.8	102.6	26.1	87.8	39.6
1973	67.0	69.7	104.0	28.2	89.1	42.1
1974	68.8	69.4	100.9	31.5	89.5	45.7
1975	70.9	66.6	94.0	35.0	91.2	49.3
1976	73.5	72.6	98.7	37.8	93.1	51.4
1977	76.9	77.6	101.0	41.0	94.9	53.3
1978	78.2	80.2	102.6	44.5	95.8	57.0
1979	77.6	79.9	102.9	48.8	94.4	62.9
1980	77.8	78.0	100.2	54.4	92.7	69.9
1981	78.7	78.7	99.9	59.7	92.2	75.9
1982	82.7	78.1	94.4	65.8	95.7	79.6
1983	83.8	80.4	96.0	68.2	96.1	81.5
1984	85.0	84.1	98.9	70.8	95.7	83.3
1985	88.4	85.9	97.2	74.8	97.6	84.7
1986	90.9	88.5	97.4	77.8	99.6	85.5
1987	92.7	92.2	99.5	79.9	98.7	86.2
1988	93.5	94.5	101.0	83.7	99.2	89.5
1989	92.9	94.7	102.0	86.5	97.9	93.2
1990	94.6	96.0	101.5	91.1	97.8	96.3
1991	96.1	95.5	99.4	95.9	98.8	99.8
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	99.7	100.9	101.2	102.6	99.6	102.9
1994	101.3	103.5	102.2	105.5	99.9	104.2
1995	104.2	105.3	101.1	108.9	100.3	104.6
1996	107.1	105.9	98.9	113.4	101.4	105.9
1997	110.6	109.0	98.5	117.9	103.0	106.6

See footnotes following Table 6.

May 7, 1998

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 30 days after the close of the reference period; revisions appear 30 days later, and second revisions after an additional 60 days.

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 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.