USDL 99-239 TRANSMISSION OF THIS MATERIAL IS EMBARGOED UNTIL 10:00 A.M. EDT, THURSDAY, SEPTEMBER 2, 1999.

Internet address:

http://stats.bls.gov/lprhome.htm

Historical, technical

Current data: (202) 606-7828 Media contact: (202) 606-5902

## PRODUCTIVITY AND COSTS Second Quarter 1999

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 1999. The seasonally adjusted annual rates of productivity change in the second quarter were:

- 0.8 percent in the business sector and
- 0.6 percent in the nonfarm business sector.

In both sectors, changes in productivity were revised down compared with results reported on Aug. 5, reflecting downward revisions in output and upward revisions in hours of all persons. (See table C.)

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

- 4.8 percent in manufacturing,
- 8.2 percent in durable goods manufacturing, and
- 0.1 percent in nondurable goods manufacturing.

In total manufacturing, the change in productivity was revised downward slightly compared with the preliminary estimate. Output and hours in manufacturing, which includes about 17 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. Second-quarter measures are summarized in table A and appear in detail in tables 1 through 5; the differences between these measures and the preliminary second-quarter figures issued on Aug. 5 are shown in table C.

|Effective with the release of third-quarter data in November 1999, the |Productivity and Costs news release will be issued at 8:30 a.m. E.T. rather |than 10:00 a.m.

\_\_\_\_\_\_

\_\_\_\_\_\_

Table A. Productivity and costs: Revised second-quarter 1999 measures (Seasonally adjusted annual rates)

Sector	Produc- tivity	Output	Hours	Hourly compen- sation	Real hourly compen- sation	Unit labor costs
	Perce	ent change	from pr	receding qu	ıarter	
Business	0.8	1.9	1.0	5.4	1.8	4.5
Nonfarm business	0.6	1.8	1.2	5.1	1.5	4.5
Manufacturing	4.8	4.2	-0.6	6.1	2.5	1.3
Durable	8.2	7.0	-1.1	6.6	3.0	-1.5
Nondurable	0.1	0.4	0.2	5.4	1.8	5.3

	Pe	rcent change	from	same quarter	a year	ago
Business	3.0	4.5	1.4	4.7	2.5	1.6
Nonfarm business	2.8	4.5	1.7	4.3	2.2	1.5
Manufacturing	5.3	2.7	-2.4	4.5	2.3	-0.8
Durable	8.6	5.6	-2.7	4.2	2.0	-4.1
Nondurable	1.2	-0.8	-2.0	5.0	2.9	3.8

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.

#### Business

From the first to the second quarter of 1999, business sector productivity rose at a 0.8 percent annual rate, as output increased 1.9 percent and hours of all persons engaged in the sector increased 1.0 percent reflecting a larger increase in output, 4.9 percent, and an increase in hours of 0.9 percent (table 1).

The increase of 5.4 percent in hourly compensation in the second quarter of 1999 marked the fourth consecutive quarter that the measure grew more than 4.0 percent (seasonally adjusted annual rates). Hourly compensation includes wages and salaries, supplements, employer contributions to employee benefit plans, and taxes. Real hourly compensation, which takes into account changes in the Consumer Price Index for All Urban Consumers (CPI-U), increased at a 1.8 percent annual rate in the second quarter of 1999 after rising 3.6 percent in the first quarter.

Unit labor costs, which reflect changes in both hourly compensation and productivity, accelerated from a 1.1-percent rise in the first quarter of 1999 to a 4.5-percent growth rate in the second quarter. The second-quarter increase in unit labor costs was the largest since a 6.5-percent jump in the first quarter of 1993. The implicit price deflator for the business sector rose 1.3 percent in the second quarter of 1999 as a 4.4-percent drop in unit nonlabor payments offset part of the rise in unit labor costs.

#### Nonfarm business

Productivity in the nonfarm business sector increased 0.6 percent during the second quarter of 1999, as output increased 1.8 percent and hours of all persons rose 1.2 percent (table A). The increases in productivity and output were the smallest since the second quarter of 1998, when productivity increased 0.4 percent and output increased 1.7 percent (table 2).

Hourly compensation grew at a 5.1 percent annual rate in the second quarter of 1999, following a 4.4 percent increase in the first quarter. When the rise in the CPI-U is taken into account, real hourly compensation increased 1.5 percent in the second quarter of 1999.

In the second quarter of 1999, unit labor costs increased 4.5 percent, the largest increase since the first quarter of 1994, when they also rose 4.5 percent. Unit nonlabor payments fell 3.5 percent in the second quarter of 1999, and the implicit price deflator for nonfarm business output rose 1.6 percent (seasonally adjusted annual rates).

# Manufacturing

In the second quarter of 1999, productivity increased 4.8 percent in manufacturing, as output grew 4.2 percent and hours of all persons fell 0.6 percent (seasonally adjusted annual rates). The second-quarter increase in output per hour was due primarily to an 8.2 percent productivity gain in the durable goods sector, as output per hour increased only 0.1 percent in the nondurable goods sector (tables 3, 4, and 5). In durable goods, output rose 7.0 percent in the second quarter while hours of all persons dropped 1.1 percent. Nondurable goods manufacturing output rose 0.4 percent last quarter and hours increased 0.2 percent.

Hourly compensation of all manufacturing workers increased 6.1 percent during the second quarter of 1999, reflecting a 6.6 percent rise in hourly compensation in durable goods industries and a 5.4 percent increase in the nondurable goods sector. Real hourly compensation in the total manufacturing sector rose 2.5 percent in the second quarter, reflecting increases in durable and nondurable manufacturing of 3.0 and 1.8 percent, respectively.

Unit labor costs in manufacturing rose 1.3 percent in the second quarter of 1999. Trends in the two subsectors differed; unit labor costs in durable goods dropped 1.5 percent and those in nondurable goods rose 5.3 percent.

## Nonfinancial corporations

Preliminary second-quarter 1999 measures of productivity and costs also were announced today for nonfinancial corporations (tables B and 6). Productivity increased 2.7 percent during the second quarter, as output rose 3.7 percent and hours increased 1.0 percent (seasonally adjusted annual rates). The increases in output and hours were the smallest since the first quarter of 1996, when output rose 1.4 percent and hours were unchanged. Nonfinancial corporations include 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: Preliminary second-quarter 1999

productivity and cost measures (Seasonally adjusted annual rates)

Period	Produc- tivity	Output	Hours	Hourly compen- sation	Real hourly compen- sation	labor		Implicit price deflator			
		Percent	change	from pred	edina au	 arter					
1999 II	2.7	3.7		5.1			-5.9	1.0			
Percent change from same quarter a year ago											
1999 II	3.8	5.5	1.6	4.6	2.4	0.7	-0.9	0.2			

Hourly compensation rose 5.1 percent in the second quarter, after rising 4.9 percent in the first quarter of 1999. When the rise in the CPI-U is taken into account, real hourly compensation increased 1.5 percent in the second quarter of 1999, down from the 3.4-percent increase one quarter earlier (table 6).

Unit labor costs for nonfinancial corporations increased 2.3 percent in the second quarter of 1999, after declining 0.1 percent in the previous quarter. Unit nonlabor costs rose 1.3 percent in the second quarter, up from the 6.2 percent decline one quarter earlier. Unit profits fell 5.9 percent in the second quarter, after rising 13.4 percent in the first quarter of 1999. The implicit price deflator for nonfinancial corporate output rose 1.0 percent in the second quarter of 1999.

# Revised Measures

Current and previous measures for the second quarter of 1999 for the business, nonfarm business, and manufacturing sectors are compared in table C. The quarterly movements differ from those reported on Aug. 5 based on information then available. In the business and nonfarm business sectors, changes in output (which are based on information from the national income and product accounts prepared by the U.S. Department of Commerce) were revised down, leading to smaller increases in productivity and larger increases in unit labor costs than previously reported. Measures for the manufacturing sector reflect only minor revisions.

-----

Table C. Previous and revised productivity and related measures

Quarterly percent change at seasonally adjusted annual rate

Sector	Produc- tivity	Output	Hours	Hourly compensation	Real hourly compen- sation	Unit labor costs
		Second	quarter	1999		
Business:						
Previous	1.6	2.5	0.9	5.4	1.8	3.8
Current	0.8	1.9	1.0	5.4	1.8	4.5
Nonfarm business:						
Previous	1.3	2.4	1.1	5.1	1.5	3.8
Current	0.6	1.8	1.2	5.1	1.5	4.5
Manufacturing:						
Previous	4.9	4.2	-0.7	6.0	2.4	1.1
Current	4.8	4.2	-0.6	6.1	2.5	1.3

### Next release date

The next release of Productivity and Costs is scheduled for 8:30 AM EST, Friday, Nov. 12, 1999. Preliminary third-quarter measures for business, nonfarm business, and manufacturing will be released at that time along with revised historical measures for all sectors.

NOTICE: The Nov. 12, 1999, release of "Productivity and Costs" will incorporate a comprehensive, historical revision of the national income and product accounts produced by the Bureau of Economic Analysis, U.S. Department of Commerce. Beginning with that release, BLS also plans to incorporate the Consumer Price Index research series using current methods (CPI-U-RS) into its measure of real hourly compensation. Information on this series is available in "CPI research series using current methods, 1978-98," Monthly Labor Review, June 1999.

\_\_\_\_\_\_

#### TECHNICAL NOTES

Labor Hours: Hours data for the labor productivity and costs measures include hours for all persons working in the sector--wage and salary workers, the self-employed, and unpaid family workers. The primary source of hours and employment data is the BLS Current Employment Statistics (CES) program, which provides monthly survey data on the number of jobs held by wage and salary workers in nonfarm establishments. The CES also provides average weekly paid hours of production and nonsupervisory workers in these establishments. Average weekly paid hours of nonproduction and supervisory workers are estimated by the Office of Productivity and Technology. 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; nonelectrical machinery; industrial and commercial machinery and computer equipment; electronic and other electrical equipment; transportation equipment; instruments; lumber and lumber products; furniture and fixtures; stone, clay, and glass and concrete products; and miscellaneous manufactures. Nondurables include: Food and kindred products, tobacco products, textile mill products, apparel products, paper and allied products, printing and publishing, chemicals and chemical products, petroleum refining and related industries, rubber and plastic products, and leather and leather products.

Nonfinancial corporate output is an annual-weighted index 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

an	d arter	Output per hour of all persons	Output	of all persons	hour (1)	tion per hour (2)	labor costs		price			
					xes 1992=100							
1997	I		117.8	112.9	113.2	99.5	108.5		109.9			
	II	104.8	119.1		113.9	99.8	108.6		110.3			
	III	105.8	120.6	114.0	115.0	100.3	108.7	113.9	110.6			
	IV	106.0	121.7	114.7	116.6	101.2	109.9	112.5	110.8			
	ANNUAL	105.2	119.8	113.8	114.7	100.3	109.0	112.9	110.4			
1998	I	107.0	123.7	115.7	117.9	102.1	110.2	112.1	110.9			
	II	107.0	124.3	116.1	119.1	102.6	111.2	110.5	111.0			
	III	107.9	125.5	116.4	120.3	103.2	111.5	110.4	111.1			
	IV	109.0	127.7	117.2	121.5	103.8	111.5	110.7	111.2			
	ANNUAL	107.7	125.3	116.3	119.7	103.0	111.1	110.9	111.0			
1999	I	110.1	129.3	117.5	123.0	104.7	111.8	110.9	111.5			
	II				123.0 124.6				111.8			
Percent change from previous quarter at annual rate(5)												
1997	I	0.5	4.9	4.4	3.6	1.0	3.1	1.6	2.5			
	II		4.7	2.7	2.3	1.1	0.4	3.2	1.4			
	III	3.8	4.9	1.1	2.3 4.1	2.1	0.3	2.4	1.1			
	IV	0.9	3.6	2.6	5.4	3.5	4.4	-4.9	0.9			
	ANNUAL	1.5	4.6	3.1	3.6	1.2	2.1	1.0	1.7			
1998	I	3.6	7.1	3.3	4.8	3.7	1.1	-1.2	0.2			
	II	0.2	1.7	1.6	3.9	2.1	3.7	-5.5	0.3			
	III	3.1	4.0	0.9	4.1	2.4	1.0	-0.3	0.5			
	IV	4.3	7.3		4.2	2.4	-0.1	1.1	0.3			
	ANNUAL	2.4	4.6	2.2	4.4	2.8	2.0	-1.8	0.6			
1999	I	3.9	4.9	0.9	5.1	3.6	1.1	0.7	1.0			
	II	r0.8	r1.9	r1.0	5.4	1.8	r4.5	r-4.4	1.3			
		Percen			sponding qua							
1997	I	1.3	4.7	3.4	4.0	1.0	2.6	0.4	1.8			
	II		4.3	3.3	3.2	0.9	2.2	0.9	1.8			
	III	1.9	4.9	3.0	3.3	1.0	1.4		1.6			
	IV	1.8	4.5	2.7		1.9	2.0	0.5	1.5			
	ANNUAL	1.5	4.6	3.1	3.6	1.2	2.1	1.0	1.7			
1998	I	2.6	5.1	2.4	4.1	2.6	1.5	-0.2	0.9			
	II		4.3	2.1		2.9	2.4		0.6			
	III		4.1	2.1	4.5	2.9	2.5		0.5			
	IV		5.0	2.2		2.6	1.4		0.3			
	ANNUAL	2.4	4.6	2.2	4.4	2.8	2.0	-1.8	0.6			
1999	I	2.9	4 5	1.6	4.3	2.6	1 <i>A</i>	-1.1	0.5			
エンフフ	II		4.5 r4.5	1.4	4.3	r2.5	r1.4 r1.6		0.8			
	т.т	13.0	T-4.7	1.7	<b>4.</b> /	14.5	11.0	T - 0 . 0	0.0			

Table 2. Nonfarm business sector: Productivity, hourly compensation, unit labor costs, and prices, seasonally adjusted

Ye an	ar d arter	Output per hour of all persons	Output	persons	hour (1)	hour (2)	labor costs		price deflator (4)			
					xes 1992=100							
1997	I	104.1	117.9	113.3	112.9	99.2	108.5	112.8	110.0			
	II	104.5	119.2	114.1	113.6	99.5	108.7	113.7	110.4			
	III	105.4	120.6	114.4	114.6	99.9 100.7	108.7	114.6	110.8			
	IV	105.7	121.8	115.3	116.0	100.7	109.8	113.3	111.1			
	ANNUAL	104.9	119.9	114.3	114.3	99.9	108.9	113.6	110.6			
1998	I	106.5	123.9	116.3	117.4	101.6	110.2	113.1	111.2			
	II	106.6	124.4	116.7	118.5	102.1	111.1	111.6	111.3			
	III	107.3	125.6	117.1	119.7	102.7	111.5	111.5	111.5			
	IV	108.4	127.9	118.0	120.8	103.2	111.4	111.8	111.5			
	ANNUAL	107.2	125.5	117.0	119.1	102.5	111.1	112.0	111.4			
1999	I	109.4	129.4	118.3	122.1	104.0	111.6	112.5	111.9			
	II	r109.6	r130.0	118.7	123.6	r104.3	r112.8	r111.5	r112.3			
Percent change from previous quarter at annual rate(5)												
1997	I	0.0	4.5	4.5	3.8	1.2	3.8	1.8	3.1			
	II	1.7	4.5	2.8	2.3	1.1	0.5	3.2	1.5			
	III	3.5	4.8	1.2	3.7	1.7	0.2	3.4	1.4			
	IV	1.0	4.0	2.9	3.7 5.2	3.3	4.1	-4.4	0.9			
	ANNUAL	1.2	4.5	3.2	3.5	1.2	2.3	1.3	1.9			
1998	I	3.2	7.0	3.7	4.6	3.6	1.4	-0.8	0.6			
	II		1.7	1.4	3.9	2.0	3.5	-5.4	0.2			
	III	2.7	4.0	1.2	4.1	2.4	1.3	-0.3	0.7			
	IV	4.1	7.4	3.1	3.8	2.0	-0.4	1.2	0.2			
	ANNUAL	2.2	4.6	2.4	4.2	2.6	2.0	-1.4	0.7			
1999	I	3.6	5.0	1.3	4.4	2.9	0.8	2.4	1.3			
	II	r0.6	r1.8	r1.2		2.9 1.5			1.6			
		Percen				rter of prev						
1997	I	1.0	4.6	3.6	3.9	0.9	2.9	0.5	2.0			
	II		4.1		3.2	0.8	2.5		2.0			
	III	1.6	4.7	3.1	3.2	1.0	1.6	2.7	2.0			
	IV	1.6	4.4	2.8	3.7	1.8	2.1	0.9	1.7			
	ANNUAL	1.2	4.5	3.2	3.5	1.2	2.3	1.3	1.9			
1998	I	2.4	5.1	2.6	3.9	2.4	1.5	0.3	1.1			
	II		4.4	2.3	4.3	2.7	2.3		0.8			
	III	1.8	4.1	2.3		2.8	2.6		0.6			
	IV	2.6	5.0	2.3	4.1	2.5	1.5	-1.4	0.4			
	ANNUAL	2.2	4.6	2.4	4.2	2.6	2.0	-1.4	0.7			
1999	I	2.7	4.5	1.7	4 0	2.3	1.3	-0.6	0.6			
エフフフ	II		4.5 r4.5	1.7	4.0	2.3		r-0.6	1.0			
		following Ta						or 2 1000				

September 2, 1999

Source: Bureau of Labor Statistics

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

	Year	Output per		Hours	Compensa-	Real compensa-	Unit
	and quarter	hour of all persons	Output	of all persons	tion per hour (1)	tion per hour (2)	labor costs
			Ir	ndexes 1992=1	00		
1997	I	116.7	122.5	105.0	113.1	99.4	96.9
	II	118.0	124.5	105.5	114.1	99.9	96.7
	III	120.4	126.8	105.3	115.5	100.7	95.9
	IV	121.6	129.1	106.2	117.7	102.1	96.8
	ANNUAL	119.2	125.7	105.5	115.1	100.6	96.6
1998	I	122.1	129.9	106.4	118.8	102.8	97.3
	II	123.2	130.7	106.1	119.5	103.0	97.0
	III	124.6	130.8	105.0	120.4	103.3	96.6
	IV	126.2	132.4	104.9	121.4	103.8	96.2
	ANNUAL	124.0	130.9	105.6	120.0	103.3	96.8
1999	I	128.2	132.9	103.7	123.0	104.7	95.9
	II	129.7	134.2	103.5	124.8	r105.4	r96.3
		Percent ch	ange from pr	revious quart	er at annual ra	te(5)	
1997	I	4.1	7.2	3.0	4.3	1.7	0.2
	II	4.7	6.6	1.8	3.4	2.2	-1.2
	III	8.4	7.7	-0.6	5.0	3.0	-3.1
	IV	4.1	7.5	3.3	7.9	5.9	3.7
	ANNUAL	4.7	6.5	1.8	4.0	1.7	-0.7
1998	I	1.5	2.4	0.9	3.8	2.7	2.3
	II	3.7	2.5	-1.2	2.4	0.6	-1.2
	III	4.8	0.4	-4.1	3.1	1.5	-1.5
	IV	5.3	4.8	-0.5	3.5	1.7	-1.8
	ANNUAL	4.0	4.2	0.1	4.3	2.7	0.2
1999	I	6.3	1.6	-4.5	5.2	3.7	-1.1
	II	r4.8	4.2	r-0.6	r6.1	r2.5	r1.3
			from corres	sponding quar	ter of previous		
1997	I	4.2	6.7	2.4	3.6	0.6	-0.6
	II	4.2	5.9	1.6	3.4	1.0	-0.8
	III	5.0	6.3	1.2	3.9	1.6	-1.1
	IV	5.3	7.3	1.9	5.2	3.2	-0.1
	ANNUAL	4.7	6.5	1.8	4.0	1.7	-0.7
1998	I	4.6	6.0	1.4	5.0	3.5	0.4
	II	4.4	5.0	0.6	4.8	3.1	0.4
	III	3.5	3.2	-0.3	4.3	2.7	0.8
	IV	3.8	2.5	-1.2	3.2	1.6	-0.6
	ANNUAL	4.0	4.2	0.1	4.3	2.7	0.2
1999	I	5.0	2.3	-2.6	3.5	1.8	-1.4
エンフラ	II	5.3	2.3	r-2.4	r4.5	2.3	-1.4
		ິ່ງ.ວ	۷. <i>۱</i> 				-0.6

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

1997 I III I I I I I I I I I I I I I I I I	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25.0 27.3 31.0 33.4 29.2 33.8 35.8 38.7 41.6 37.5 44.6 47.4 ercent characteristics	136.9 140.3 144.6 148.3 142.5 149.6 151.3 153.1 156.3 152.6 157.1 r159.8		110.6 111.5 112.8 115.4 112.6 116.0 116.3 116.8 117.8	### tion per hour (2)  ### 97.2  ### 97.7  ### 98.3  ### 100.2  ### 98.4  ### 100.4  ### 100.2  ### 100.3  ### 100.5  ###	87.1 86.7 85.6 84.2 83.2 84.9 82.5 r82.2
1 11 17 ANNUA 1998 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25.0 27.3 31.0 33.4 29.2 33.8 35.8 38.7 41.6 37.5 44.6 47.4 ercent characteristics	136.9 140.3 144.6 148.3 142.5 149.6 151.3 153.1 156.3 152.6 157.1 r159.8	109.5 110.2 110.4 111.2 110.3 111.8 111.4 110.4 110.4 111.0	110.6 111.5 112.8 115.4 112.6 116.0 116.3 116.8 117.8	97.7 98.3 100.2 98.4 100.4 100.2 100.3 100.7 100.5 101.5 r102.3	87.6 86.1 86.5 87.1 86.7 85.6 84.2 83.2 84.9 82.5 r82.2
ANNUA  1998  I II II II II ANNUA  1999  I II II II ANNUA  1999  I II II II ANNUA  1998  I II	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	27.3 31.0 33.4 29.2 33.8 35.8 38.7 41.6 37.5 44.6 47.4 ercent characteristics	140.3 144.6 148.3 142.5 149.6 151.3 153.1 156.3 152.6 157.1 r159.8	110.2 110.4 111.2 110.3 111.8 111.4 110.4 111.0 108.7 108.3	111.5 112.8 115.4 112.6 116.0 116.3 116.8 117.8 116.7	97.7 98.3 100.2 98.4 100.4 100.2 100.3 100.7 100.5 101.5 r102.3	87.6 86.1 86.5 87.1 86.7 85.6 84.2 83.2 84.9 82.5 r82.2
ANNUA  1998  I I I ANNUA  1999  I II I I ANNUA  1999  I II I I ANNUA  1998  I II I I ANNUA  1998  I II I I I I I I I I I I I I I I I	I 1 1 1	331.0 33.4 29.2 33.8 35.8 38.7 41.6 37.5 44.6 47.4 ercent cha	144.6 148.3 142.5 149.6 151.3 153.1 156.3 152.6 157.1 r159.8	110.4 111.2 110.3 111.8 111.4 110.4 110.4 111.0	112.8 115.4 112.6 116.0 116.3 116.8 117.8 116.7 119.2 r121.1	98.3 100.2 98.4 100.4 100.2 100.3 100.7 100.5	86.1 86.5 87.1 86.7 85.6 84.2 83.2 84.9 82.5 r82.2
1998 I III III III III III III ANNUA	V 1 L 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I Pe	133.4 129.2 133.8 135.8 138.7 141.6 137.5 144.6 147.4 1	148.3 142.5 149.6 151.3 153.1 156.3 152.6 157.1 r159.8 	111.2 110.3 111.8 111.4 110.4 110.4 111.0 108.7 108.3	115.4 112.6 116.0 116.3 116.8 117.8 116.7 119.2 r121.1	100.2 98.4 100.4 100.2 100.3 100.7 100.5 101.5 r102.3	86.5 87.1 86.7 85.6 84.2 83.2 84.9 82.5 r82.2
ANNUA  1998  I II ANNUA  1999  I 1997  III II ANNUA  1998  I III II ANNUA  1998  I III II II III III III III III III	L 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I Pe	29.2 33.8 35.8 38.7 41.6 37.5 44.6 47.4 ercent cha	142.5 149.6 151.3 153.1 156.3 152.6 157.1 r159.8 	110.3 111.8 111.4 110.4 110.4 111.0 108.7 108.3	112.6 116.0 116.3 116.8 117.8 116.7 119.2 r121.1	98.4 100.4 100.2 100.3 100.7 100.5 101.5 r102.3	84.9 82.5 r82.2
1998 I I I I I I I I I I I I I I I I I I	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	33.8 35.8 38.7 41.6 37.5 44.6 47.4 ercent cha	149.6 151.3 153.1 156.3 152.6 157.1 r159.8	111.8 111.4 110.4 110.4 111.0	116.0 116.3 116.8 117.8 116.7 119.2 r121.1	100.4 100.2 100.3 100.7 100.5 101.5 r102.3	86.7 85.6 84.2 83.2 84.9 82.5 r82.2
1 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I 1 I 1 V 1 L 1 I 1 I 1 Fe	35.8 38.7 41.6 37.5 44.6 47.4 ercent cha	151.3 153.1 156.3 152.6 157.1 r159.8	111.4 110.4 110.4 111.0 108.7 108.3	116.3 116.8 117.8 116.7 119.2 r121.1	100.2 100.3 100.7 100.5 101.5 r102.3	85.6 84.2 83.2 84.9 82.5 r82.2
ANNUA  1999  1997  1997  ANNUA  1998  I II II II ANNUA  1999  I II	I 1 V 1 L 1 I 1 I r1	38.7 41.6 37.5 44.6 47.4 ercent cha	153.1 156.3 152.6 157.1 r159.8	110.4 110.4 111.0 108.7 108.3	116.8 117.8 116.7 119.2 r121.1	100.3 100.7 100.5 101.5 r102.3	84.2 83.2 84.9 82.5 r82.2
ANNUA  1999  I  1997  I  II  ANNUA  1998  I  II  I  ANNUA  1998  I  II  I  ANNUA	V 1 L 1 I 1 I r1	41.6 .37.5 .44.6 .47.4 	156.3 152.6 157.1 r159.8 ange from pr	110.4 111.0 108.7 108.3	117.8 116.7 119.2 r121.1	100.7 100.5 101.5 r102.3	83.2 84.9 82.5 r82.2
ANNUA  1999  1  1997  II  II  ANNUA  1998  I  II  II  ANNUA  1999  I	L 1 I 1 I r1 Pe	.37.5 .44.6 .47.4 	152.6 157.1 r159.8 ange from pr	111.0 108.7 108.3	116.7 119.2 r121.1	100.5 101.5 r102.3	83.2 84.9 82.5 r82.2
1999 I 1998 I I I I I I I I I I I I I I I I I I	I 1 I r1  Pe I I	44.6 47.4 ercent cha	157.1 r159.8 ange from pr	108.7 108.3	119.2 r121.1	101.5 r102.3	82.5 r82.2
1997 III II ANNUA  1998 III II II III III III III III III II	I r1 	4.4	r159.8 ange from pr	108.3	r121.1	r102.3	r82.2
1997 III IT ANNUA  1998 III IT ANNUA  1999 I	Pe I I	ercent cha	ange from pr				
1 11 17 ANNUA 1998 I 11 17 ANNUA 1999 I 1	Pe I I	ercent cha	ange from pr				
1 11 17 ANNUA 1998 I 11 17 ANNUA 1999 I 1	I		10.4				
ANNUA 1998 I II		7 (		5.8	3.8	1.2	-0.6
ANNUA 1998 I II I' ANNUA 1999 I	Т	7.6	10.4	2.6	3.2	2.0	-4.1
ANNUA  1998  I II I ANNUA  1999  I	<b>_</b>	12.1	12.8	0.6	4.6	2.6	-6.7
1998 I II I' ANNUA 1999	V	7.4	10.7	3.0	9.8	7.8	2.2
I II I	L	6.3	9.4	2.9	3.6	1.3	-2.6
ANNUA	I	1.3	3.5	2.2	1.9	0.9	0.6
1999 I	I	6.1	4.6	-1.4	1.1	-0.7	-4.7
ANNUA 1999 I	I	8.8	4.8	-3.7	1.8	0.2	-6.4
1999 I	V	8.6	8.6	0.0	3.3	1.6	-4.9
	L	6.4	7.0	0.6	3.7	2.1	-2.6
	I	8.6	2.1	-6.0	5.0	3.4	-3.4
1997	I	r8.2	r7.0	r-1.1	r6.6	r3.0	r-1.5
1997	Percen	ıt change	from corres		ter of previous	year	
1001	I	5.3	9.3	3.8	2.9	0.0	-2.3
I	I	5.3	8.1	2.6	2.7	0.4	-2.4
II	I	6.8	9.3	2.3	3.3	1.0	-3.3
I	V	7.8	11.1	3.0	5.3	3.4	-2.3
ANNUA:	L	6.3	9.4	2.9	3.6	1.3	-2.6
1998	I	7.0	9.3	2.1	4.8	3.3	-2.0
I	I	6.6	7.8	1.1	4.3	2.6	-2.2
II	I	5.9	5.9	0.0	3.6	2.0	-2.1
I.	V	6.1	5.4	-0.7	2.0	0.5	-3.9
ANNUA:		6.4	7.0	0.6	3.7	2.1	-2.6
1999	L	8.0	5.0	-2.8	2.8	1.1	-4.9
I	L	0.0	r5.6	r-2.7	r4.2	r2.0	r-4.1

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

	Year and	Output per hour of		Hours of all	Compensa- tion per	Real compensa- tion per	Unit labor
	quarter	all persons	Output	persons	hour (1)	hour (2)	costs
			In	ndexes 1992=1	00		
1997	I	109.8	108.8	99.0	116.2	102.1	105.8
	II	110.2	109.3	99.2	117.3	102.7	106.4
	III	111.3	109.7	98.6	118.9	103.6	106.8
	IV	111.3	110.7	99.5	120.3	104.4	108.1
	ANNUAL	110.7	109.6	99.1	118.2	103.3	106.8
1998	I	111.8	111.0	99.3	122.2	105.8	109.3
	II	112.0	111.0	99.1	123.7	106.6	110.4
	III	112.0	109.6	97.9	125.3	107.5	111.8
	IV	112.5	109.7	97.5	126.4	108.0	112.4
	ANNUAL	112.1	110.3	98.4	124.4	107.1	111.0
1999	I	113.3	109.9	97.0	128.2	109.1	113.1
	II	r113.3	r110.0	r97.1	r129.9	r109.6	r114.6
					er at annual ra		
1997	I	4.3	3.4	-0.9	4.7	2.1	0.4
	II	1.3	1.9	0.7	3.7	2.5	2.4
	III	4.2	1.7	-2.4	5.5	3.5	1.2
	IV	-0.1	3.6	3.7	4.9	3.0	5.0
	ANNUAL	3.0	3.1	0.1	4.5	2.1	1.4
1998	I	2.0	1.1	-0.9	6.7	5.7	4.6
	II	0.7	-0.2	-0.9	4.7	2.8	4.0
	III	0.1	-4.7	-4.7	5.3	3.6	5.2
	IV	1.5	0.2	-1.3	3.6	1.9	2.1
	ANNUAL	1.3	0.6	-0.6	5.3	3.6	3.9
1999	I	3.0	0.8	-2.1	5.8	4.3	2.7
	II	r0.1	r0.4	r0.2	r5.4	r1.8	r5.3
		Percent change	from corres		ter of previous	year	
1997	I	3.3	3.7	0.4	4.3	1.4	1.0
	II	3.2	3.4	0.2	4.2	1.9	1.0
	III	3.1	2.6	-0.5	4.6	2.3	1.5
	IV	2.4	2.6	0.2	4.7	2.8	2.2
	ANNUAL	3.0	3.1	0.1	4.5	2.1	1.4
1000	I	1 0	2 1	0 0	F 2	2.6	2 2
1998		1.8	2.1	0.2	5.2	3.6	3.3
	II	1.7	1.5	-0.1	5.4	3.7	3.7
	III	0.6 1.1	-0.1 -0.9	-0.7 -2.0	5.4 5.1	3.7 3.5	4.7 4.0
	ANNUAL	1.3	0.6	-0.6	5.3	3.6	3.9
1999	I	1.3	-1.0	-2.3	4.8	3.1	3.5
	II	r1.2	r-0.8	-2.0	r5.0	r2.9	r3.8

Table 6. Nonfinancial corporations: Productivity, hourly compensation, unit labor costs, unit profits, and prices, seasonally adjusted

a	ear nd uarter	Output per all- employee hour	Output	Employee hours	Hourly compensation (1)	compen- sation(2)	Unit labor costs	Unit non- labor costs(6)	Total unit costs (7)	Unit pro- fits (8)	Implicit price deflator (4)	
						1992=100						
1997	II III IV	108.9 109.5 111.0 111.4	124.3 126.2 128.7 130.2	114.1 115.2 115.9 116.9	111.8 112.4 113.6 115.1	98.2 98.5 99.0 99.8	102.6 102.6 102.3 103.3	97.3 97.1 96.4 95.7	101.2 101.2 100.7 101.3	156.6 157.3 161.7 155.7	106.3 106.3	
	ANNUAL	110.3	127.3	115.4	113.3	99.0	102.7	96.6	101.1	157.8	106.3	
1998	I II III IV	112.1 112.9 114.2 115.1	132.1 133.4 135.4 137.2	117.8 118.1 118.6 119.3	116.1 117.3 118.6 119.7	100.5 101.1 101.8 102.3	103.5 103.9 103.8 104.1	95.4 95.5 95.2 96.2	101.4 101.7 101.6 102.0	153.5 150.4 151.8 146.6	106.1 106.1 106.0	
1999	I II	116.5 117.3	139.5 140.7	119.7 120.0	121.2 122.7	103.2 103.6	104.0 104.6	94.7 95.0	101.6 102.1	151.3 149.0		
Percent change from previous quarter at annual rate(5)												
1997	I	1.5	5.9	4.3	3.5	0.9	2.0	-0.6	1.4	3.2		
	II	2.2 5.5	6.3 8.2	4.0 2.5	2.4 4.1	1.2 2.2	0.2 -1.3	-0.6 -3.1	0.0 -1.8	1.7 11.8		
	IV	1.2	4.8	3.5	5.3	3.4	4.0	-2.7	2.3	-14.1	-0.1	
	ANNUAL	2.5	6.1	3.6	3.5	1.1	1.0	-1.3	0.4	2.1	0.6	
1998	I II III IV	2.7 2.9 4.6 3.1	5.9 4.0 6.1 5.5	3.2 1.1 1.5 2.3	3.6 4.4 4.3 4.0	2.6 2.5 2.6 2.2	0.9 1.5 -0.3 0.8	-1.1 0.1 -0.9 4.0	0.4 1.1 -0.4 1.6	-7.7	-0.1 0.1 -0.4	
1999	I	5.0	6.7	1.6	4.9	3.4	-0.1	-6.2	-1.6	13.4	0.2	
	II	2.7	3.7	1.0	5.1	1.5	2.3	1.3	2.1	-5.9	1.0	
			Percent	change fr	om corres	ponding quar	rter of p	revious ye	ar			
1997	I II III IV	2.4 2.1 2.8 2.6	5.9 5.8 6.4 6.3	3.5 3.6 3.5 3.6	3.7 3.1 3.2 3.8	0.8 0.8 1.0 1.9	1.3 1.0 0.4 1.2	-1.4 -0.8 -1.2 -1.8	0.6 0.5 0.0 0.5	1.9 2.0 4.2 0.2	0.7 0.5 0.4	
1998	I	2.9	6.3	3.3	3.9	2.3	0.9	-1.9		-2.0		
1000	II		5.7	2.6	4.4	2.7	1.2	-1.7				
	III	2.8	5.2	2.3	4.4		1.5	-1.1	0.8			
	IV	3.3	5.4	2.0	4.1	2.5	0.7	0.5	0.7			
	ANNUAL	3.0	5.6	2.6	4.1	2.5	1.1	-1.0	0.6	-4.6	-0.1	
1999	I	3.9	5.6	1.6	4.4	2.7	0.5	-0.8	0.1	-1.4	-0.1	
	II	3.8	5.5	1.6	4.6	2.4	0.7	-0.5	0.4			

See footnotes following Table 6.

r=revised

September 2, 1999

Source: Bureau of Labor Statistics

SOURCES: Output data are from the Bureau of Economic Analysis and the Census Bureau of the U.S. Department of Commerce; the Bureau of Labor Statistics, U.S. Department of Labor; and the Federal Reserve Board. Compensation and hours data are from the Bureau of Labor Statistics and the Bureau of Economic Analysis.

RELIABILITY: Productivity and cost measures are regularly revised as more complete information becomes available. The measures are first published within 40 days of the close of the reference period; revisions appear 30 days later and second revisions after an additional 60 days. In the business sector, the third publication (second revision) of a quarterly index of output per hour of all persons has differed from the initial value by between -1.1 and +1.3 index points approximately 95 percent of the time. This interval is based on the performance of this measure between the fourth quarter of 1995 and the first quarter of 1999.

# 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.