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PRODUCTIVITY AND COSTS
Third Quarter 2000

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 third quarter of 2000. The preliminary seasonally-adjusted annual rates of productivity growth in the third quarter were:

3.2 percent in the business sector and
3.8 percent in the nonfarm business sector.

In both the business and the nonfarm business sectors, productivity increases in the third quarter were smaller than those recorded in the second quarter of 2000 (as revised).

In manufacturing, productivity increases in the third quarter were:

6.4 percent in manufacturing,
9.6 percent in durable goods manufacturing, and
2.0 percent in nondurable goods manufacturing.

The increase in manufacturing productivity was higher than the 5.7-percent rise reported for the previous quarter (as revised). 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. Third-quarter measures are summarized in table A and appear in detail in tables 1 through 5.

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 third-quarter 2000 measures
(Seasonally adjusted annual rates)

Sector	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs
Percent change from preceding quarter						
Business	3.2	3.0	-0.2	5.8	2.7	2.5
Nonfarm business	3.8	3.0	-0.8	6.4	3.2	2.5
Manufacturing	6.4	3.1	-3.0	6.7	3.5	0.3
Durable	9.6	6.0	-3.3	5.9	2.8	-3.4
Nondurable	2.0	-0.6	-2.6	8.1	4.9	5.9
Percent change from same quarter a year ago						
Business	4.8	6.1	1.2	5.0	1.5	0.2
Nonfarm business	5.0	6.1	1.1	5.1	1.6	0.1
Manufacturing	7.5	6.3	-1.2	5.0	1.5	-2.4
Durable	10.9	9.9	-0.9	4.8	1.3	-5.5
Nondurable	3.2	1.5	-1.6	5.3	1.8	2.0

Business

From the second quarter to the third quarter of 2000, business sector productivity increased at a 3.2 percent annual rate. Output rose 3.0 percent, while hours of all persons engaged in the sector declined 0.2 percent (seasonally adjusted annual rates). After revisions, second-quarter productivity in the business sector rose 6.9 percent, reflecting a 6.3-percent increase in output and a drop of 0.6 percent in hours (tables B and 1).

Hourly compensation increased at an annual rate of 5.8 percent during the third quarter of 2000, after increasing 7.0 percent during the second quarter. This measure includes wages and salaries, supplements, employer contributions to employee benefit plans, and taxes. Real hourly

compensation, which takes into account changes in consumer prices, increased 2.7 percent in the third quarter, after rising 3.2 percent in the second quarter of 2000.

Unit labor costs, which reflect changes in both hourly compensation and productivity, increased at a 2.5 percent annual rate during the third quarter. During the previous quarter, these costs were unchanged. The implicit price deflator for the business sector increased 1.7 percent in the third quarter and 2.4 percent in the second quarter.

Nonfarm business

Productivity rose 3.8 percent in the nonfarm business sector during the third quarter of 2000. The increase in labor productivity in the third quarter occurred as output rose 3.0 percent and hours of all persons fell 0.8 percent. This decline in hours was the largest since the first quarter of 1992, when hours fell 2.3 percent. In the previous quarter, productivity had risen 6.1 percent, as output grew 6.5 percent and hours increased 0.4 percent (table 2).

Hourly compensation increased at a 6.4 percent annual rate in the third quarter of 2000. This was the largest increase in this measure since the first quarter of 1992, when it increased 8.8 percent. When the rise in consumer prices is taken into account, real hourly compensation rose at a 3.2-percent annual rate during the July-September period. During the second quarter of 2000, real hourly compensation had risen 2.2 percent.

Unit labor costs increased 2.5 percent during the third quarter of 2000. In the second quarter, unit labor costs in the nonfarm business sector had declined 0.2 percent. The implicit price deflator for nonfarm business output rose 1.8 percent in the third quarter of 2000.

Manufacturing

Productivity increased 6.4 percent in manufacturing in the third quarter of 2000, as output grew 3.1 percent and hours of all persons dropped 3.0 percent (seasonally adjusted annual rates). A similar increase in labor productivity, 5.7 percent, was recorded in the previous quarter, reflecting increases in output and hours of 7.7 and 1.9 percent, respectively. In durable goods, productivity rose 9.6 percent in the third quarter, as output increased 6.0 percent and hours of all persons fell 3.3 percent. Productivity grew more slowly in nondurable goods, 2.0 percent, as hours fell faster than output. Output dropped 0.6 percent, and hours of all persons decreased 2.6 percent (tables 3, 4, and 5).

Hourly compensation of manufacturing workers increased an average of 6.7 percent during the third quarter, a more rapid rise than the 4.0-percent increase recorded in the previous quarter (seasonally adjusted annual rates). In the third quarter, hourly compensation grew 5.9 percent in durable goods and 8.1 percent in nondurable goods. When the increase in consumer prices is taken into account, real hourly compensation in total manufacturing rose 3.5 percent in the third quarter.

Unit labor costs increased 0.3 percent in the third quarter of 2000 after falling 1.6 percent in the second quarter of 2000. In the durable goods sector, unit labor costs in the third quarter fell 3.4 percent; these costs also had fallen in the previous three quarters. In contrast, unit labor costs in the nondurable goods sector rose 5.9 percent in the third quarter, following a 5.4-percent rise in the previous quarter.

Revised Measures

Current and previous measures for the second quarter of 2000 for the business, nonfarm business, and manufacturing sectors are compared in table B. In all these sectors, productivity, output, and hourly compensation increased faster than reported on Sept. 6, based on information then available. In all sectors, small revisions to real hourly compensation in the first and second quarters of 2000 were made as a result of incorporating the recalculated Consumer Price Index. In manufacturing, historical output has been revised for consistency with estimates published Sept. 21, 2000. (See Multifactor Productivity Trends, 1998, USDL 00-267.) Appendix tables 1-3 present annual indexes for the years 1949-99 for the manufacturing measures.

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 2000						
Business:						
Previous	6.5	5.9	-0.6	6.4	2.7	-0.1
Current	6.9	6.3	-0.6	7.0	3.2	0.0
Nonfarm business:						
Previous	5.7	6.1	0.4	5.3	1.7	-0.4
Current	6.1	6.5	0.4	5.9	2.2	-0.2
Manufacturing:						
Previous	5.4	7.3	1.9	3.3	-0.3	-2.0
Current	5.7	7.7	1.9	4.0	0.4	-1.6

Revised measures: Nonfinancial Corporations

Second-quarter 2000 productivity and cost measures for nonfinancial corporations also were revised to incorporate more recent information than was available on Sept. 6. Productivity, output, and hourly compensation were revised up, while hours growth was unchanged. Productivity grew at an annual rate of 5.4 percent, compared with the previously published growth of 5.0 percent (tables C and 6).

Table C. Nonfinancial corporations: Previous and revised productivity and cost measures

	Productivity	Output	Hours	Hourly compensation	Real hourly compensation	Unit labor costs	Unit profits	Implicit price deflator
			Second quarter		2000			
Previous	5.0	5.9	0.9	5.6	1.9	0.6	13.5	2.4
Current	5.4	6.4	0.9	6.1	2.3	0.6	11.3	2.3

The next release of Productivity and Costs is scheduled for 8:30 AM EST, Wednesday, Dec. 6, 2000. Third-quarter measures for nonfinancial corporations and revised third-quarter measures for business, nonfarm business, and manufacturing will be released at that time.

TECHNICAL NOTES

Labor Hours: Hours data for the labor productivity and cost 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 77 percent of the value of GDP in 1996. Nonfarm business, which also excludes farming, accounted for about 76 percent of GDP in 1996.

Annual indexes for manufacturing and its durable and nondurable goods components 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 53 percent of the value of GDP in 1996.

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: 202-691-5200; Federal Relay Service number: 1-800-877-8339.

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								
1998	I	109.7	126.8	115.6	117.1	102.9	106.7	110.3
	II	110.0	127.7	116.1	118.5	103.8	107.7	110.5
	III	110.6	128.9	116.6	120.0	104.7	108.5	110.7
	IV	111.6	131.0	117.4	121.4	105.5	108.8	110.9
	ANNUAL	110.5	128.6	116.4	119.3	104.3	107.9	110.6
1999	I	112.6	132.3	117.5	123.0	106.4	109.3	111.4
	II	112.8	133.1	118.0	124.5	106.9	110.4	111.8
	III	114.2	135.3	118.5	126.1	107.6	110.5	111.9
	IV	116.3	138.5	119.1	127.3	107.8	109.5	112.2
	ANNUAL	114.0	134.8	118.3	125.2	107.3	109.9	111.8
2000	I	116.7	140.3	120.2	128.4	107.7	110.0	113.0
	II	r118.7	r142.4	120.0	r130.6	108.5	110.0	r120.0
	III	119.7	143.5	119.9	132.4	109.2	110.7	120.1
	IV							
	ANNUAL							
Percent change from previous quarter at annual rate(5)								
1998	I	4.7	7.9	3.1	6.2	5.5	1.5	-1.5
	II	1.1	2.9	1.7	5.1	3.5	3.9	-4.2
	III	2.1	3.7	1.5	5.1	3.6	3.0	-1.9
	IV	3.9	6.8	2.8	4.8	3.2	0.9	0.2
	ANNUAL	2.7	5.0	2.3	5.3	3.9	2.5	-1.7
1999	I	3.3	3.8	0.5	5.2	3.6	1.9	1.8
	II	0.9	2.6	1.7	5.0	1.7	4.1	-3.5
	III	4.9	6.6	1.7	5.3	2.6	0.4	0.7
	IV	7.7	9.9	2.1	3.8	0.9	-3.6	9.0
	ANNUAL	3.1	4.8	1.6	5.0	2.9	1.8	0.0
2000	I	1.6	5.3	3.7	3.5	r-0.6	1.9	4.8
	II	r6.9	r6.3	-0.6	r7.0	r3.2	r0.0	r6.2
	III	3.2	3.0	-0.2	5.8	2.7	2.5	0.5
	IV							
	ANNUAL							
Percent change from corresponding quarter of previous year								
1998	I	3.2	5.8	2.5	4.5	3.1	1.2	0.9
	II	2.5	4.7	2.1	5.5	4.0	2.9	-2.4
	III	2.1	4.4	2.2	5.7	4.3	3.5	-3.3
	IV	2.9	5.3	2.3	5.3	4.0	2.3	-1.9
	ANNUAL	2.7	5.0	2.3	5.3	3.9	2.5	-1.7
1999	I	2.6	4.3	1.6	5.1	3.5	2.4	-1.0
	II	2.5	4.2	1.6	5.0	3.0	2.4	-0.9
	III	3.2	4.9	1.7	5.1	2.8	1.8	-0.2
	IV	4.1	5.7	1.5	4.8	2.2	0.7	1.9
	ANNUAL	3.1	4.8	1.6	5.0	2.9	1.8	0.0
2000	I	3.7	6.1	2.3	4.4	1.2	0.7	2.7
	II	r5.2	r7.0	1.7	r4.9	1.5	r-0.3	r5.1
	III	4.8	6.1	1.2	5.0	1.5	0.2	5.1
	IV							
	ANNUAL							

See footnotes following Table 6.

r=revised

November 2, 2000

Source: Bureau of Labor Statistics

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

price/ 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									
1998	I	109.3	127.1	116.3	116.4	102.3	106.5	117.4	110.5
	II	109.8	128.1	116.7	117.9	103.2	107.5	116.3	110.7
	III	110.3	129.2	117.2	119.4	104.2	108.3	115.8	111.0
	IV	111.2	131.4	118.1	120.8	104.9	108.5	115.8	111.2
	ANNUAL	110.2	129.0	117.1	118.6	103.8	107.7	116.3	110.8
1999	I	112.0	132.6	118.4	122.1	105.7	109.0	116.7	111.8
	II	112.1	133.4	118.9	123.6	106.1	110.2	115.7	112.2
	III	113.6	135.6	119.4	125.2	106.8	110.3	116.1	112.4
	IV	115.8	138.9	120.0	126.5	107.2	109.3	118.6	112.7
	ANNUAL	113.4	135.1	119.2	124.4	106.5	109.7	116.8	112.3
2000	I	116.3	140.7	120.9	127.8	r107.1	109.8	120.1	113.6
	II	r118.1	r142.9	121.0	r129.6	107.7	109.7	r121.8	r114.1
	III	119.2	144.0	120.8	131.6	108.6	110.4	122.0	114.6
Percent change from previous quarter at annual rate(5)									
1998	I	4.5	8.2	3.5	6.1	5.3	1.5	-1.4	0.4
	II	1.6	3.1	1.5	5.3	3.8	3.6	-3.8	0.7
	III	1.8	3.7	1.8	5.2	3.7	3.3	-1.8	1.3
	IV	3.6	6.8	3.1	4.5	2.8	0.8	0.2	0.6
	ANNUAL	2.6	5.1	2.4	5.1	3.7	2.4	-1.4	0.9
1999	I	2.6	3.6	1.0	4.5	2.8	1.8	2.9	2.2
	II	0.6	2.4	1.8	5.0	1.7	4.3	-3.1	1.5
	III	5.2	7.0	1.7	5.5	2.8	0.3	1.3	0.6
	IV	8.0	10.0	1.8	4.2	1.3	-3.5	8.9	1.0
	ANNUAL	2.9	4.8	1.8	4.8	2.7	1.8	0.4	1.3
2000	I	1.9	5.2	3.2	3.9	r-0.2	1.9	5.2	3.2
	II	r6.1	r6.5	0.4	r5.9	r2.2	r-0.2	r5.7	r2.0
	III	3.8	3.0	-0.8	6.4	3.2	2.5	0.8	1.8
Percent change from corresponding quarter of previous year									
1998	I	3.0	5.8	2.7	4.3	2.9	1.2	1.3	1.2
	II	2.5	4.8	2.3	5.3	3.8	2.8	-2.1	0.9
	III	2.1	4.6	2.4	5.7	4.2	3.5	-3.1	0.9
	IV	2.9	5.4	2.5	5.3	3.9	2.3	-1.7	0.8
	ANNUAL	2.6	5.1	2.4	5.1	3.7	2.4	-1.4	0.9
1999	I	2.4	4.3	1.8	4.9	3.3	2.4	-0.7	1.2
	II	2.2	4.1	1.9	4.8	2.8	2.6	-0.5	1.4
	III	3.0	4.9	1.9	4.8	2.6	1.8	0.3	1.2
	IV	4.1	5.7	1.6	4.8	2.2	0.7	2.4	1.3
	ANNUAL	2.9	4.8	1.8	4.8	2.7	1.8	0.4	1.3
2000	I	3.9	6.1	2.1	4.6	r1.4	0.7	3.0	1.6
	II	r5.3	r7.2	1.8	r4.9	1.5	-0.4	r5.2	r1.7
	III	5.0	6.1	1.1	5.1	1.6	0.1	5.1	2.0

See footnotes following Table 6.

r=revised

November 2, 2000

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							
1998	I	121.3	r128.6	106.0	115.2	101.2	95.0
	II	r123.0	r129.9	105.6	116.6	102.1	r94.8
	III	r125.6	r131.3	104.5	118.1	103.0	r94.0
	IV	r127.4	r133.2	104.5	119.4	103.7	r93.7
	ANNUAL	r124.3	r130.7	105.2	117.3	102.6	r94.4
1999	I	r129.5	r134.0	103.5	120.7	104.4	r93.2
	II	r131.1	r135.6	103.5	122.4	105.1	r93.4
	III	r132.5	r137.2	103.5	124.1	105.9	r93.7
	IV	r135.8	r139.6	102.8	125.5	106.4	r92.5
	ANNUAL	r132.2	r136.6	103.3	123.2	105.5	r93.2
2000	I	r138.4	r142.0	102.6	127.0	106.5	r91.8
	II	r140.3	r144.6	103.1	r128.2	r106.6	r91.4
	III	142.5	145.8	102.3	130.3	107.5	91.5
Percent change from previous quarter at annual rate(5)							
1998	I	r5.1	r5.2	0.1	6.8	6.0	r1.6
	II	r5.7	r4.0	-1.6	5.0	3.4	r-0.7
	III	r8.7	r4.3	-4.1	5.0	3.5	r-3.4
	IV	r5.9	r6.0	0.1	4.6	2.9	r-1.3
	ANNUAL	r6.2	r5.9	-0.3	5.3	3.9	r-0.8
1999	I	6.8	2.5	-4.0	4.5	2.8	-2.2
	II	4.8	4.9	0.1	5.7	2.5	0.9
	III	4.5	4.6	0.1	5.9	3.2	1.4
	IV	10.2	7.1	-2.8	4.6	1.7	-5.1
	ANNUAL	r6.3	r4.5	-1.7	5.0	2.9	r-1.3
2000	I	7.9	7.1	-0.7	4.6	r0.5	-3.0
	II	r5.7	r7.7	1.9	r4.0	r0.4	r-1.6
	III	6.4	3.1	-3.0	6.7	3.5	0.3
Percent change from corresponding quarter of previous year							
1998	I	r5.9	r6.9	0.9	4.4	3.0	r-1.4
	II	r6.3	r6.3	0.0	5.6	4.0	r-0.7
	III	r6.2	r5.5	-0.7	5.9	4.4	r-0.3
	IV	r6.4	r4.9	-1.4	5.3	4.0	r-1.0
	ANNUAL	r6.2	r5.9	-0.3	5.3	3.9	r-0.8
1999	I	r6.8	r4.2	-2.4	4.8	3.2	r-1.9
	II	r6.6	r4.4	-2.0	4.9	2.9	r-1.5
	III	r5.5	r4.5	-0.9	5.2	2.9	r-0.3
	IV	6.5	4.8	-1.7	5.2	2.5	-1.3
	ANNUAL	r6.3	r4.5	-1.7	5.0	2.9	r-1.3
2000	I	6.8	5.9	-0.8	5.2	2.0	-1.5
	II	7.0	r6.6	-0.4	r4.8	r1.4	r-2.1
	III	7.5	6.3	-1.2	5.0	1.5	-2.4

See footnotes following Table 6.
r=revised

November 2, 2000
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							
1998	I	129.6	r144.6	111.5	112.6	99.0	86.9
	II	r132.4	r147.1	111.2	113.8	99.6	r86.0
	III	r136.8	r150.7	110.2	115.1	100.4	r84.1
	IV	r139.7	r154.5	110.5	116.6	101.3	r83.4
	ANNUAL	r134.6	r149.2	110.8	114.5	100.1	r85.0
1999	I	r142.8	r155.6	109.0	118.1	102.2	r82.7
	II	r146.0	r159.1	109.0	120.1	103.1	r82.2
	III	r148.0	r162.5	109.8	121.9	104.0	r82.3
	IV	r151.6	r165.3	109.0	123.6	104.7	r81.5
	ANNUAL	r147.1	r160.6	109.2	120.9	103.6	r82.2
2000	I	r156.2	r170.0	108.8	124.8	r104.6	r79.9
	II	r160.4	r176.0	109.7	r125.9	r104.6	r78.5
	III	164.1	178.6	108.8	127.7	105.3	77.8
Percent change from previous quarter at annual rate(5)							
1998	I	r7.1	r8.8	1.6	6.2	5.4	r-0.8
	II	r8.7	r7.3	-1.2	4.2	2.6	r-4.1
	III	r14.2	r10.1	-3.5	4.6	3.1	r-8.4
	IV	r8.8	r10.2	1.3	5.3	3.7	r-3.2
	ANNUAL	r9.0	r9.6	0.5	5.2	3.8	r-3.5
1999	I	8.9	3.1	-5.4	5.4	3.7	-3.3
	II	9.4	9.3	-0.1	6.8	3.5	-2.4
	III	5.6	8.7	2.9	6.2	3.5	0.6
	IV	10.0	7.1	-2.7	5.7	2.8	-3.9
	ANNUAL	r9.3	r7.6	-1.5	5.6	3.4	r-3.4
2000	I	12.7	11.8	-0.8	3.9	r-0.3	-7.9
	II	r11.1	r14.9	3.4	r3.5	r-0.1	r-6.8
	III	9.6	6.0	-3.3	5.9	2.8	-3.4
Percent change from corresponding quarter of previous year							
1998	I	r8.2	r10.3	1.9	4.5	3.1	r-3.5
	II	r8.7	r9.5	0.8	5.5	4.0	r-2.9
	III	r9.5	r9.4	-0.1	5.7	4.2	r-3.5
	IV	r9.7	r9.1	-0.5	5.1	3.7	r-4.2
	ANNUAL	r9.0	r9.6	0.5	5.2	3.8	r-3.5
1999	I	r10.1	r7.6	-2.2	4.9	3.3	r-4.8
	II	r10.3	r8.1	-2.0	5.5	3.5	r-4.3
	III	r8.2	r7.8	-0.4	5.9	3.6	r-2.1
	IV	8.5	7.0	-1.4	6.0	3.4	-2.3
	ANNUAL	r9.3	r7.6	-1.5	5.6	3.4	r-3.4
2000	I	9.4	9.2	-0.2	5.7	r2.4	-3.4
	II	r9.8	r10.6	0.7	r4.8	r1.5	-4.6
	III	10.9	9.9	-0.9	4.8	1.3	-5.5

See footnotes following Table 6.

r=revised

November 2, 2000

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							
1998	I	r115.4	r113.9	98.7	118.3	104.0	r102.5
	II	116.0	113.9	98.2	120.1	105.1	r103.6
	III	r116.6	113.1	97.0	121.8	106.2	104.4
	IV	117.4	r113.3	96.6	122.7	106.6	104.6
	ANNUAL	r116.3	113.6	97.6	120.7	105.6	r103.8
1999	I	118.5	r113.8	96.1	123.7	107.1	104.4
	II	r118.1	113.6	96.2	124.9	107.2	105.7
	III	119.2	113.5	95.2	126.4	107.8	106.0
	IV	r122.2	115.5	94.5	127.2	107.8	r104.1
	ANNUAL	119.5	114.1	95.5	125.5	107.5	105.0
2000	I	r122.6	115.7	94.4	129.0	r108.2	105.2
	II	122.4	115.4	r94.3	r130.5	r108.5	r106.6
	III	123.0	115.2	93.6	133.1	109.8	108.2
Percent change from previous quarter at annual rate(5)							
1998	I	r2.9	r0.7	-2.1	7.6	6.8	r4.5
	II	r1.9	r-0.2	-2.0	6.2	4.7	r4.2
	III	r2.3	r-2.6	-4.9	5.7	4.2	r3.3
	IV	2.5	0.8	-1.7	3.1	1.5	0.6
	ANNUAL	r3.0	r1.5	-1.5	5.3	3.9	r2.3
1999	I	3.7	1.8	-1.8	3.2	1.6	-0.5
	II	-1.0	-0.8	0.3	3.9	0.7	r5.0
	III	3.7	-0.5	-4.0	4.9	2.2	1.2
	IV	10.5	7.3	-2.9	2.6	-0.2	-7.2
	ANNUAL	2.7	0.5	-2.1	4.0	1.9	r1.2
2000	I	1.3	0.7	-0.6	5.9	r1.7	4.5
	II	r-0.7	r-1.2	r-0.4	r4.6	r1.0	r5.4
	III	2.0	-0.6	-2.6	8.1	4.9	5.9
Percent change from corresponding quarter of previous year							
1998	I	3.5	3.1	-0.4	4.0	2.6	r0.4
	II	r3.7	r2.5	-1.2	5.5	4.0	r1.8
	III	r2.3	r0.6	-1.6	6.1	4.6	r3.7
	IV	r2.4	r-0.3	-2.7	5.7	4.3	r3.2
	ANNUAL	r3.0	r1.5	-1.5	5.3	3.9	r2.3
1999	I	r2.6	r-0.1	-2.6	4.6	3.0	r1.9
	II	r1.9	r-0.2	-2.0	4.0	2.0	2.1
	III	2.2	0.3	-1.8	3.8	1.5	1.5
	IV	4.1	1.9	-2.1	3.6	1.1	-0.5
	ANNUAL	2.7	0.5	-2.1	4.0	1.9	r1.2
2000	I	3.5	1.6	-1.8	4.3	r1.1	r0.8
	II	3.6	1.5	-2.0	r4.5	r1.2	r0.9
	III	3.2	1.5	-1.6	5.3	1.8	2.0

See footnotes following Table 6.
r=revised

November 2, 2000
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										
1998	I	112.3	132.4	117.9	115.2	101.2	102.6	100.5	102.0	150.4
	II	113.4	134.2	118.3	116.6	102.1	102.8	100.9	102.3	147.2
	III	114.9	136.6	118.9	118.0	103.0	102.7	100.2	102.1	151.4
	IV	115.8	138.6	119.6	119.3	103.7	103.0	101.6	102.6	144.5
	ANNUAL	114.2	135.5	118.6	117.4	102.7	102.8	100.8	102.2	148.3
1999	I	117.1	140.6	120.0	120.9	104.6	103.2	100.7	102.5	149.7
	II	118.2	142.5	120.5	122.4	105.1	103.5	101.4	103.0	147.5
	III	119.7	145.0	121.1	124.0	105.8	103.6	102.1	103.2	143.3
	IV	121.5	148.1	122.0	125.3	106.1	103.1	102.5	103.0	145.7
	ANNUAL	119.2	144.0	120.9	123.2	105.5	103.4	101.7	102.9	146.5
2000	I	122.3	150.4	122.9	126.1	105.8	103.1	103.3	103.1	150.9
	II	r124.0	r152.7	123.2	r128.0	r106.4	r103.3	r104.0	103.4	r155.0
Percent change from previous quarter at annual rate(5)										
1998	I	2.6	6.1	3.4	5.4	4.6	2.7	0.3	2.1	-14.7
	II	4.0	5.6	1.6	5.0	3.4	1.0	1.6	1.1	-8.3
	III	5.2	7.4	2.0	5.0	3.5	-0.2	-2.5	-0.8	11.9
	IV	3.4	5.9	2.5	4.4	2.8	1.0	5.5	2.2	-17.0
	ANNUAL	3.6	6.5	2.8	4.8	3.4	1.2	0.0	0.8	-5.3
1999	I	4.4	5.7	1.3	5.3	3.6	0.9	-3.5	-0.3	15.1
	II	3.8	5.5	1.7	5.0	1.8	1.2	3.0	1.7	-5.6
	III	5.1	7.2	2.0	5.4	2.7	0.3	2.6	0.9	-11.1
	IV	6.1	9.0	2.8	4.1	1.2	-1.8	1.9	-0.9	7.1
	ANNUAL	4.3	6.3	1.9	4.9	2.8	0.6	0.9	0.7	-1.2
2000	I	2.9	6.2	3.2	2.7	r-1.4	-0.2	3.0	0.7	14.9
	II	r5.4	r6.4	0.9	r6.1	r2.3	0.6	r2.6	r1.2	r11.3
Percent change from corresponding quarter of previous year										
1998	I	3.2	6.8	3.5	4.0	2.6	0.8	-0.1	0.5	-2.7
	II	3.8	6.7	2.8	5.0	3.5	1.1	-0.5	0.7	-5.2
	III	3.6	6.4	2.7	5.3	3.8	1.6	-0.6	1.0	-5.6
	IV	3.8	6.2	2.4	4.9	3.6	1.1	1.2	1.1	-7.7
	ANNUAL	3.6	6.5	2.8	4.8	3.4	1.2	0.0	0.8	-5.3
1999	I	4.2	6.1	1.8	4.9	3.3	0.7	0.2	0.5	-0.5
	II	4.2	6.1	1.9	4.9	2.9	0.7	0.5	0.7	0.2
	III	4.2	6.1	1.9	5.0	2.7	0.8	1.8	1.1	-5.4
	IV	4.8	6.9	1.9	5.0	2.4	0.1	0.9	0.3	0.9
	ANNUAL	4.3	6.3	1.9	4.9	2.8	0.6	0.9	0.7	-1.2
2000	I	4.5	7.0	2.4	4.3	r1.1	-0.1	2.6	0.6	0.8
	II	r4.9	r7.2	2.2	r4.6	1.2	-0.3	r2.5	r0.5	r5.1

See footnotes following Table 6.
r=revised

November 2, 2000
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 -1.7 and +2.3 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 second quarter of 2000.

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) The change for recent quarters is based on the Consumer Price Index for all urban consumers (CPI-U). The trend from 1978-1999 is based on the Consumer Price Index research series (CPI-U-RS).
- (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.

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	33.5	26.5	79.1	8.3	45.1	24.7
1950	34.0	29.1	85.5	8.7	46.8	25.5
1951	33.8	31.1	92.1	9.5	47.7	28.3
1952	35.2	32.9	93.3	10.2	49.9	28.9
1953	36.3	35.6	98.1	10.7	52.3	29.5
1954	37.3	33.4	89.6	11.2	54.2	30.1
1955	38.8	36.7	94.6	11.7	56.6	30.1
1956	38.6	37.1	96.0	12.4	59.3	32.1
1957	39.4	37.2	94.5	13.2	60.8	33.4
1958	40.0	34.7	86.6	13.8	61.9	34.4
1959	40.9	37.8	92.5	14.3	63.7	34.9
1960	41.8	38.5	92.1	14.9	65.2	35.6
1961	42.8	38.4	89.7	15.3	66.5	35.8
1962	44.2	41.2	93.4	15.9	68.3	36.0
1963	45.7	43.1	94.4	16.4	69.5	35.8
1964	47.4	45.7	96.4	17.0	71.5	36.0
1965	48.5	49.5	102.0	17.4	71.8	35.9
1966	49.1	53.3	108.6	18.2	73.0	37.1
1967	50.9	54.9	108.0	19.2	74.7	37.7
1968	52.7	57.7	109.6	20.7	77.2	39.2
1969	53.5	59.4	110.9	22.2	78.5	41.4
1970	54.2	56.5	104.4	23.7	79.5	43.8
1971	57.8	58.1	100.5	25.2	80.8	43.5
1972	60.3	63.3	105.1	26.5	82.3	43.9
1973	61.4	67.8	110.4	28.5	83.4	46.4
1974	61.2	66.1	107.9	31.6	83.4	51.7
1975	64.3	62.5	97.2	35.5	85.6	55.2
1976	67.0	68.2	101.9	38.4	87.8	57.4
1977	69.7	73.9	106.1	41.8	89.6	60.0
1978	70.4	77.8	110.6	45.2	90.6	64.2
1979	69.8	78.7	112.7	49.6	90.9	71.1
1980	70.1	75.3	107.5	55.6	91.7	79.3
1981	70.7	75.6	107.0	61.1	92.1	86.3
1982	74.2	72.7	97.9	67.0	95.4	90.2
1983	76.7	75.9	98.9	68.8	94.2	89.7
1984	79.4	83.7	105.3	71.2	93.6	89.6
1985	82.3	86.0	104.6	75.1	95.6	91.3
1986	85.9	88.5	103.0	78.5	98.1	91.4
1987	88.3	91.6	103.8	80.7	97.5	91.4
1988	90.2	96.1	106.6	84.0	97.9	93.1
1989	90.3	96.6	107.1	86.6	96.8	96.0
1990	92.8	97.3	104.8	90.8	96.6	97.8
1991	95.0	95.4	100.4	95.6	98.1	100.6
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.9	103.3	101.4	102.7	100.2	100.8
1994	105.0	108.7	103.6	105.6	100.8	100.7
1995	109.0	113.4	104.0	107.9	100.4	99.0
1996	112.8	116.9	103.7	109.3	99.0	96.9
1997	117.1	123.5	105.5	111.4	98.8	95.1
1998	124.3	130.7	105.2	117.3	102.6	94.4
1999	132.2	136.6	103.3	123.2	105.5	93.2

See footnotes following Table 6.

November 2, 2000

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	72.0	8.1	44.1	25.6
1950	33.3	26.7	80.3	8.5	45.9	25.6
1951	32.0	29.0	90.6	9.4	47.1	29.4
1952	33.9	31.5	92.9	10.1	49.7	29.9
1953	35.8	35.8	99.9	10.7	52.0	29.8
1954	35.8	31.7	88.4	11.2	54.0	31.2
1955	37.4	35.3	94.4	11.7	56.6	31.2
1956	35.8	34.6	96.6	12.4	59.3	34.7
1957	36.3	34.6	95.4	13.2	60.8	36.3
1958	36.0	30.3	84.2	13.9	62.5	38.6
1959	37.3	34.1	91.4	14.4	64.3	38.6
1960	37.7	34.4	91.3	15.0	65.7	39.7
1961	38.3	33.6	87.8	15.4	66.9	40.2
1962	40.2	37.2	92.7	16.0	68.9	39.9
1963	41.9	39.6	94.3	16.5	69.9	39.3
1964	43.4	42.1	97.0	17.1	71.8	39.5
1965	45.6	47.5	104.1	17.4	72.0	38.3
1966	46.3	52.4	113.1	18.2	73.0	39.3
1967	47.2	53.1	112.3	19.2	74.5	40.5
1968	49.4	56.3	113.9	20.6	77.1	41.8
1969	50.1	58.0	115.6	22.1	78.4	44.1
1970	49.8	53.1	106.5	23.8	79.6	47.7
1971	54.0	54.6	101.1	25.4	81.4	46.9
1972	56.6	60.5	107.0	26.6	82.8	47.1
1973	58.9	67.8	115.2	28.6	83.6	48.5
1974	57.2	64.8	113.3	31.6	83.3	55.3
1975	59.1	59.0	99.7	35.7	86.2	60.4
1976	62.5	65.2	104.3	38.8	88.6	62.0
1977	65.7	72.3	110.0	42.1	90.3	64.1
1978	66.6	77.7	116.5	45.3	90.8	67.9
1979	66.7	80.2	120.1	49.7	91.1	74.4
1980	66.7	75.4	113.1	55.9	92.2	83.8
1981	67.5	75.8	112.3	61.5	92.8	91.2
1982	70.1	70.5	100.6	67.5	96.2	96.3
1983	74.0	74.8	101.2	69.1	94.5	93.4
1984	78.5	86.5	110.2	71.0	93.4	90.5
1985	80.5	88.7	110.2	74.8	95.1	92.8
1986	84.7	90.9	107.3	78.5	98.1	92.6
1987	87.8	94.0	107.1	80.9	97.7	92.1
1988	90.0	99.8	110.8	83.7	97.6	93.0
1989	90.1	99.9	110.9	86.3	96.4	95.7
1990	92.5	99.3	107.3	90.3	96.1	97.7
1991	93.9	95.1	101.3	95.3	97.8	101.4
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	103.3	104.9	101.5	102.9	100.3	99.6
1994	108.0	113.0	104.7	105.6	100.8	97.8
1995	113.1	120.2	106.2	107.5	100.1	95.1
1996	118.1	126.6	107.2	107.3	97.2	90.9
1997	123.5	136.2	110.3	108.9	96.5	88.1
1998	134.6	149.2	110.8	114.5	100.1	85.0
1999	147.1	160.6	109.2	120.9	103.6	82.2

See footnotes following Table 6.

November 2, 2000

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	Compensa- tion per hour (1)	Real compensa- tion per hour (2)	Unit labor costs
1949	34.9	30.9	88.5	8.6	47.1	24.7
1950	35.2	32.5	92.5	9.0	48.6	25.6
1951	36.2	34.0	94.0	9.8	48.8	27.0
1952	37.2	35.0	93.9	10.3	50.4	27.6
1953	37.8	36.2	95.6	10.8	52.5	28.5
1954	39.4	36.0	91.3	11.3	54.8	28.8
1955	41.0	38.9	94.8	11.7	56.5	28.4
1956	42.6	40.6	95.1	12.4	59.2	29.1
1957	43.8	40.8	93.2	13.1	60.7	30.0
1958	45.1	40.5	89.8	13.6	61.3	30.2
1959	46.2	43.4	93.9	14.1	63.0	30.5
1960	47.5	44.3	93.2	14.7	64.7	31.0
1961	48.8	45.0	92.3	15.2	66.1	31.2
1962	49.8	47.0	94.4	15.7	67.6	31.5
1963	51.5	48.6	94.4	16.2	68.8	31.5
1964	53.7	51.3	95.5	16.9	70.8	31.5
1965	53.7	53.2	99.1	17.3	71.3	32.2
1966	54.2	55.6	102.7	18.0	72.3	33.3
1967	57.0	58.3	102.3	19.1	74.3	33.5
1968	58.6	60.8	103.8	20.5	76.5	35.0
1969	60.0	62.8	104.6	22.0	77.9	36.6
1970	61.7	62.6	101.5	23.6	79.0	38.2
1971	64.6	64.5	99.8	24.9	79.7	38.5
1972	67.6	69.3	102.5	26.1	81.0	38.5
1973	67.9	70.6	104.0	28.1	82.3	41.4
1974	69.8	70.4	100.9	31.3	82.6	44.9
1975	72.4	68.0	93.9	34.9	84.2	48.1
1976	74.2	73.2	98.7	37.7	86.0	50.7
1977	76.9	77.6	100.9	40.9	87.7	53.2
1978	77.8	79.8	102.6	44.4	89.1	57.1
1979	76.7	78.9	102.8	48.7	89.2	63.5
1980	76.5	76.6	100.1	54.3	89.5	70.9
1981	76.9	76.8	99.9	59.5	89.8	77.4
1982	80.3	75.8	94.4	65.6	93.4	81.6
1983	81.4	78.1	95.9	68.0	93.1	83.6
1984	82.9	81.9	98.8	70.7	92.9	85.2
1985	86.5	84.0	97.1	74.7	95.0	86.3
1986	89.1	86.7	97.3	77.7	97.1	87.2
1987	90.8	90.3	99.4	79.8	96.5	87.9
1988	92.2	93.0	100.9	83.7	97.6	90.7
1989	91.8	93.5	101.9	86.5	96.7	94.3
1990	94.0	95.4	101.4	91.0	96.9	96.8
1991	96.0	95.3	99.3	95.8	98.4	99.9
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.6	101.8	101.2	102.5	99.9	101.9
1994	102.5	104.7	102.1	105.4	100.5	102.8
1995	105.6	106.7	101.1	107.9	100.4	102.3
1996	108.6	107.6	99.0	111.8	101.2	102.9
1997	113.0	111.9	99.1	114.6	101.6	101.5
1998	116.3	113.6	97.6	120.7	105.6	103.8
1999	119.5	114.1	95.5	125.5	107.5	105.0

See footnotes following Table 6.

November 2, 2000

Source: Bureau of Labor Statistics