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PRODUCTIVITY AND COSTS Second Quarter 1987

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 second quarter of 1987. The seasonally-adjusted annual rates of productivity change in the second quarter were:

1.3 percent in the business sector,

1.4 percent in the nonfarm business sector,

3.3 percent in manufacturing,

2.9 percent in durable goods manufacturing, and

4.2 percent in nondurable goods manufacturing.

Second-quarter results show faster productivity advances than during the first quarter, as growth in hours slowed more than output. Hourly compensation and unit labor costs grew more rapidly than during the first quarter, and declines in real hourly compensation were smaller. Second-quarter measures are summarized in table: A and appear in detail in tables 1 through 5.

Business

Productivity increased at a 1.3 percent annual rate during the second quarter of 1987 in the business sector, as output rose 3.0 percent and hours of all persons engaged in the sector increased 1.7 percent (seasonally adjusted annual rates). During the first quarter of 1987, productivity had increased 0.5 percent (table 1). Although productivity grew more rapidly in the April-June period, output and hours increases were smaller than during the first quarter.

Hourly compensation increased at a 3.2 percent annual rate during the second quarter of 1987, compared with a 1.4 percent gain during the previous quarter. This measure includes wages and salaries, supplements, employer contributions to employee-benefit plans, and taxes. Unit labor costs, which reflect changes in hourly compensation and productivity, increased at a 1.9 percent annual rate during the second quarter, compared with a 0.9 percent increase during the first quarter.

Real hourly compensation, which takes into account changes in the Consumer Price Index for All Urban Consumers (CPI-U), declined at a 1.7 percent annual rate during the second quarter. During the first quarter, this measure declined at a 3.7 percent annual rate.

The implicit price deflator for business output, which reflects changes in unit labor costs and unit nonlabor payments, increased 3.7 percent in the first Digitized for FRASER and second quarters. Last year, this deflator rose 2.1 percent.

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Table A. Productivity and costs: Preliminary second quarter 1987 measures (Seasonally adjusted annual rates)

Sector	Produc- tivity	Output	Hours	Hourly compen- sation	Real hourly compen- sation	Unit labor costs
	Percent	change from	preceding	quarter		
Business	1.3	3.0	1.7	3.2	-1.7	1.9
Nonfarm business	1.4	3.2	1.8	2.9	-1.9	1.5
Manufacturing	3.3	1.7	-1.5	1.8	-2.9	-1.4
Durable	2.9	0.4	-2.4	1.4	-3.4	-1.4
Nondurable	4.2	3.9	-0.3	2.8	-2.0	-1.4
Pe	ercent cha	inge from sa	me quarter	a year a	go	
Business	0.3	2.8	2.5	2.8	-1.0	2.4
Nonfarm business	0.3	2.9	2.6	2.7	-1.1	2.4
Manufacturing	2.8	3.0	0.2	1.4	-2.3	-1.3
Durable	3.5	2.7	-0.7	1.1	-2.6	-2.3
Nondurable	1.8	3.5	1.6	2.1	-1.6	0.3

Nonfarm business

Productivity increased 1.4 percent in the nonfarm business sector during the second quarter of 1987, as output rose 3.2 percent and hours of all persons --employees, proprietors, and unpaid family workers--increased 1.8 percent. During the first quarter of 1987, productivity had increased 0.4 percent in this sector (table 2). As in the more comprehensive business sector, growth in output and hours slowed in the second quarter.

Hourly compensation increased 2.9 percent in the second quarter, but real hourly compensation fell 1.9 percent when the increase in the CPI-U was taken into account. During the first quarter, the comparable changes were 1.1 percent and -3.9 percent, respectively. Unit labor costs increased 1.5 percent, compared with a 0.8 percent rise during the first quarter of 1987.

The implicit price deflator for nonfarm business output rose 2.1 percent in the second quarter, compared with a 3.4 percent increase one quarter earlier.

Manufacturing

Productivity increased at a 3.3 percent seasonally adjusted annual rate in manufacturing in the second quarter of 1987, as output increased 1.7 percent and hours of all persons dropped 1.5 percent. Output growth slowed and hours declined in the second quarter of 1987, but productivity grew more rapidly than during the first quarter (table 3).

Hourly compensation of manufacturing workers increased 1.8 percent during the second quarter, compared with a 1.0 percent decline during the first quarter. Real hourly compensation declined 2.9 percent when the increase in the CPI-U was taken into account. During the first quarter, real hourly compensation fell at a 6.0 percent annual rate. No increase has occurred in manufacturing real hourly compensation in a year. Unit labor costs were down (1.4 percent annual rate) in the second quarter, compared with a 3.9 percent decline during the first quarter of 1987.

Both durable and nondurable goods industries experienced productivity increases in the second quarter, but growth was greater among nondurable goods producers (tables 4 and 5). Hours of all persons engaged in manufacturing declined in both subsectors.

Revised measures

The productivity and cost measures contained in this news release for business, nonfarm business, manufacturing, and nonfinancial corporations are based on the latest measures of output and hours available. Revised quarterly and annual output and compensation measures prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce are reflected in the productivity and cost measures for business, nonfarm business, and nonfinancial corporations. These new values were published by REA on July 24 as part of the regular revision cycle of the national income and product accounts and affect the last 3 years. For manufacturing, revised quarterly changes in output and related measures were computed by BLS to take into account the new annual output levels from BEA for 1984-1986. See appendix tables 1-6.

In addition, recent information on employment and average weekly hours of all persons engaged in these sectors is also incorporated in productivity and cost measures at this time. Historical tables are available on request from the BLS Office of Productivity and Technology, Division of Productivity Research, Washington, D.C. 20212; (202) 523-9261.

Productivity and cost measures also are available on diskettes formatted for use on IBM-compatible microcomputers using LOTUS 1-2-3. For ordering information, contact BLS Data Diskettes, 441 G Street NW, Room 2127, Washington, D.C. 20212; (202) 523-1090.

Next release date

The next release of productivity and cost measures is scheduled for 10:00 AM EDT, Monday, August 31, 1987. Preliminary second-quarter measures for nonfinancial corporations will be released at that time.

BLS Productivity and Cost Measures

Measures of productivity change for major sectors of the U.S. economy:

- Productivity and cost measures for U.S. business, nonfarm business, and manufacturing every quarter.
- Multifactor productivity and related measures for U.S. private business, private nonfarm business, and manufacturing, annually.

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Telephone:

For additional information about measures summarized in the news release, call Division of Productivity Research (202) 523-9261.

- 5 -TECHNICAL NOTES

Business sector output is equal to gross national product in constant 1982 dollars, less the rest-of-the-world sector, general government, output of nonprofit institutions, output of paid employees of private households, rental value of owner-occupied dwellings, and the statistical discrepancy in computing the national income accounts. Corresponding exclusions are also made in labor inputs. Business output has accounted for about 77 percent of gross national product in recent years.

Total manufacturing measures are computed by summing series prepared for the durable and nondurables goods sectors.

The durable sector includes the following 2-digit SIC industries: Primary metals; fabricated metal products; nonelectrical machinery; electrical machinery; transportation equipment; instruments; lumber and lumber products; furniture and fixtures; stone, clay, and glass products; and miscellaneous manufactures. The nondurable sector includes these 2-digit SIC industries: Textile mill products, apparel products, leather and leather products, printing and publishing, chemical and chemical products, petroleum products, rubber and plastic products, food, and tobacco products.

Manufacturing output has accounted for about 24 percent of gross national product in recent years.

Nonfinancial corporate output is equal to gross national product in constant 1982 dollars, less the rest-of-the-world sector, general government, unincorporated business, output of nonprofit institutions, output of paid employees of private households, rental value of owner-occupied dwelling, the output of corporations engaged in banking, finance, stock and commodity trading, and credit and insurance agencies, and the statistical discrepancy in computing the national income accounts. Nonfinancial corporate output has accounted for about 59 percent of gross national product in recent years.

The productivity and associated cost measures in this news release describe the relationship between output in real terms 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 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; mangerial skill; and the characteristics and effort of the work force.

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Table 1. Business sector: Productivity, hourly compensation, unit labor cost, and prices, seasonally adjusted

	Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensa- tion per hour(1)	Real compensa- tion per hour(2)	Unit labor cost	Unit non- labor pay- ments(3)	Implicit price deflator(4)
				Indexe	es 1977=100				
1986	I II IV	rl09.5 rl09.7 rl09.6 rl09.6	rl27.3 rl27.5 rl28.1 rl29.0	r116.3 r116.3 r116.9 r117.8	r180.7 r182.2 r183.6 r185.2	r100.1 r101.3 r101.4 r101.6	r165.0 r166.2 r167.5 r169.0	r163.1 r163.9 r165.7 r162.4	rl64.3 rl65.4 rl66.9 rl66.7
	ANNUAL	r109.5	rl28.0	r116.9	r182.8	r101.0	r166.9	r163.8	r165.8
1987	I II	r109.7 p110.0	r130.2 p131.1	rl18.7 pl19.2	r185.8 p187.3	rl00.7 pl00.3	r169.4 p170.2	r166.0 p168.8	r168.2 p169.7
			Perce	nt change fro	om previous qua	rter at annual	rate(5)	· · · · · · · · · · · · · · · · · · ·	
1986	I II III IV	r5.8 r0.6 r-0.3 r-0.1	r6.4 r0.7 r1.8 r3.0	r0.5 r0.1 r2.1 r3.1	r3.2 r3.5 r3.0 r3.6	rl.6 r4.8 r0.5 r0.9	r-2.5 r2.8 3.3 r3.7	r7.5 r2.1 r4.5 r-7.7	r0.9 r2.6 r3.7 r-0.5
	ANNUAL	rl.9	r3.3	rl.4	r3.9	r2.0	r2.0	r2.2	2.1
1987	I	r0.5 p1.3	r3.5 p3.0	r3.0 p1.7	rl.4 p3.2	r-3.7 p-1.7	r0.9 pl.9	r9.0 p7.1	r3.7 p3.7
			Percent	change from o	corresponding o	uarter of previo	ous year		
1986	I III IV	r2.8 r2.3 r1.3 r1.5	r4.2 r3.4 r2.7 r2.9	rl.3 rl.1 rl.5 rl.4	r4.8 r4.4 r3.7 r3.3	rl.7 r2.7 r2.0 r1.9	rl.9 r2.1 r2.4 r1.8	r2.8 r2.2 r2.4 r1.4	r2.2 r2.1 2.4 r1.7
	ANNUAL	rl.9	r3.3	rl.4	r3.9	r2. 0	r2.0	r2.2	2.1
1987	I	r0.2 p0.3	r2.3 p2.8	r2.1 p2.5	r2.8 p2.8	r0.6 p-1.0	r2.7 p2.4	rl.8 p3.0	r2.3 p2.6

See footnotes following table 6. r=revised

August 3, 1987

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

	Year and quarter	Output per hour of all persons	Output	Hours of all persons	Compensa- tion per hour(1)	Real compensa- tion per hour(2)	Unit labor cost	Unit non- labor pay- ments(3)	Implicit price deflator(4)
				Indexe	s 1977=100				
19 86	I	r107.7	r126.9	r117.9	r180.0	r99.7	r167.2	r164.7	r166.4
	II	r107.7	r127.1	rl18.0	r181.3	r100.8	r168.4	r165.2	r167.3
	III	r107.5	r127.6	r118.7	r182.6	r100.9	r169.8	r167.0	r168.8
	ŢV	r107.5	r128.5	r119.6	r184.4	r101.2	r171.5	r163.9	r168.8
	ANNUAL.	r107.5	r127.5	rl18.6	r182.0	r100.6	r169.3	r165.2	r167.8
1987	I	r107.6	r129.7	r120.6	r184.9	r100.2	r171.8	r167.4	r170.3
	II	p108.0	p130.8	p121.1	p186.2	p99.7	p172.5	p168.7	pl71.1
			Perce	nt change fro	m previous qu	arter at annual	rate(5)		
1936	I	r6.6	r6.4	r-0.2	r3.9	r2.3	r-2.6	r10.0	rl.6
	II	r0.1	0.6	r0.6	r2.9	r4.2	r2.8	rl.3	r2.3
	III	r-0.6	rl.7	r2.3	r2.8	r0.4	r3.5	r4.2	r3.7 .
	IV	r0.0	r2.9	r2.9	r4.0	rl.3	r4.0	r-7.2	r0.0
	ANNUAL	rl.6	r3.2	r1.6	r3.9	rl.9	r2.2	r2.4	r2.3
1987	. I	r0.4	r3.8	r3.4	rl.l	r-3.9	r0.8	r8.8	r3.4
	II	pl.4	p3.2	pl.8	p2.9	p-1.9	pl.5	p3.2	p2.1
	raik elitera raiksulj upiralja uliarana, ag.		Percent	change from o	corresponding of	quarter of prev	ious year		· · · · · · · · · · · · · · · · · · ·
1986	I	r2.3	r4.0	rl.7	r4.5	rl.4	r2.2	r3.2	r2.6
	II	rl.9	r3.3	rl.4	r4.1	r2.5	2.2	r2.3	r2.3
	III	rl.1	r2.6	rl.6	r3.6	rl.9	r2.5	r2.2	r2.4
	IV	rl.5	r2.9	rl.4	r3.4	r2.0	rl.9	rl.9	rl.9
	ANNUAL	rl.6	r3.2	rl.6	r3.9	rl.9	r2.2	r2.4	r2.3
1987	I	r-0.1	r2.2	r2.3	r2.7	r0.5	r2.8	rl.6	r2.4
	II	p0.3	p2.9	p2.6	p2.7	p-1.1	p2.4	p2.1	p2.3

r=revised p=preliminary

August 3, 1987

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

	Year and quarter	Output per hour of all persons	Output (6)	Hours of all persons	Compensa- tion per hour(1)	Real compensa- tion per hour(2)	Unit labor cost
			1	indexes 1977=1	.00		
1986	I	r127.6	r125.2	r98.1	r181.0	r100.3	r141.9
	II	r128.3	r125.1	r97.5	r182.1	r101.2	r142.0
	III	rl29.4	r126.1	r97.5	r183.1	r101.2	r141.5
	10	r129.9	r127.2	r97.9	r184.3	r101.2	r141.9
	ANNUAL	r128.8	r125.9	r97.8	r182.7	r100.9	r141.8
1987	I	r130.8	r128.4	r98.1	r183.9	r99.6	r140.6
	II	p131.9	p128.9	p97.7	p184.7	p98.9	p140.1
 -		Percent ch	ange from p	revious quart	er at annual	rate(5)	
1986	I	r4.9	r3.6	r-1.3	rl.8	r0.2	r-3.0
	II	r2.3	r-0.1	r-2.3	r2.5	r3.8	r0.2
	. III	r3.6	r3.2	r-0.4	r2.2	r-0.2	r-1.3
	IV	rl.4	r3.4	r2.0	r2.7	r0.0	r1.3
	ANNUAL	r3.7	r2.8	r-0.9	r3.3	rl.3	r-0.4
1987	I	r3.0	r3.8	r0.8	r-1.0	-6.0	r-3.9
	II	p3.3	pl.7	p-1.5	pl.8	p-2.9	p-1.4
		Percent change	from corre	esponding quar	ter of previou	us year	
1986	I	r5.0	r3.7	r-1.3	r4.4	rl.3	r-0.5
	II	r3.4	r2.5	r-0.9	r3.4	rl.8	r0.0
	III	3.3	r2.4	r-0.9	r2.9	rl.2	r-0.4
	IV	r3.0	r2.5	r-0.5	2.3	r0.9	r-0.7
	ANNUAL	r3.7	r2.8	r-0.9	r3.3	r1.3	r-0.4
1987	I	r2.5	r2.5	r0.0	rl.6	-0.7	r-1.0
	II	p2.8	p3.0	p0.2	p1.4	p-2.3	p-1.3

r=revised p=preliminary August 3, 1987

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

	Year and quarter	Output per hour of all persons	Output (6)	Hours of all persons	Compensa- tion per hour(1)	Real compensa- tion per hour(2)	Unit labor cost
			I	ndexes 1977=1	.00		
1986	Ī	r135.3	r133.7	r98.8	r179.9	r99.7	r132.9
	II	r135.9	rl33.1	r98.0	r180.8	r100.5	r133.1
	ΙΙΙ	r137.5	r134.1	r97.5	r181.6	r100.3	r132.0
	IV	r138.4	r135.4	r97.8	r183.1	r100.5	r132.3
	ANNUAL	r136.8	r134.1	r98.0	r181.4	r100.2	r132.6
1987	· I	r139.6	r136.6	r97.8	r182.2	r98.7	r130.5
	II	p140.6	p136.7	p97.2	p182.8	p97.9	p130.0
	• a · a · a · d · d · d · a · a · a · a ·	Percent ch	ange from p	revious quart	er at annual r	ate(5)	
1986	I	r7.0	r4.4	r-2.4	r1.2	r-0.4	r-5.4
	II	rl.5	-1.7	r-3.2	rl.9	r3.3	r0.4
	III	r5.0	r3.2	r-1.7	rl.7	r-0.7	r-3.1
	IV	r2.6	3.8	rl.1	r3.4	r0.7	r0.8
٠.	ANNUAL	r5.2	r3.2	r-1.8	r3.4	. 1.4	r-1.7
1987	i	r3.6	r3.6	r0.0	r-1.9	r-6.8	r-5.3
•	II	p2.9	p0.4	p-2.4	pl.4	p-3.4	p-1.4
		Percent change	from corre	sponding quar	rter of previou	s year	
19 86	I	r7.1	r5.0	r-2.0	r4. 9	rl.8	-2.0
	II	r4.9	3.0	r-1.8	r3.6	r2.0	r-1.2
	III	r4.6	r2.6	r-1.9	r2.8	rl.l	r-1.7
	IV	r4.0	2.4	r-1.5	r2.1	r0.7	r-1.9
	ANNUAL	r5.2	r3.2	r-1.8	r3.4	1.4	r-1.7
1987	I	r3.2	2.2	r-0.9	rl.3	r-0.9	r-1.8
	II	p3.5	p2.7	p-0.7	pl.1	p-2.6	p-2.3

r=revised p=preliminary August 3, 1987

Table 5. Nordurable manufacturing sector: Productivity, hourly compensation, and unit labor cost, seasonally adjusted

	Year and quarter	Output per hour of all persons	Output (6)	Hours of all persons	Compensa- tion per hour(1)	Real compensa- tion per hour(2)	Unit labor cost
·			I	ndexes 1977=1	.00		
1986	I II III IV	r115.8 r116.9 r117.3 r117.1	rll2.5 rll3.3 rll4.2 rll4.9	r97.2 r96.9 r97.3 r98.1	r182.7 r184.3 r185.8 r186.5	r101.2 r102.4 r102.7 r102.4	r157.8 r157.7 r158.4 r159.3
	ANNUAL	r116.8	r113.7	r97.4	r184.8	r102.1	r158.3
1987	I	r117.8 p119.0	rl16.1 pl17.2	r98.6 p98.5	r186.9 p188.1	r101.2 p100.7	r158.7 p158.1
		Percent ch	ange from p	revious quart	er at annual r	ate(5)	
1986	I III IV	rl.7 r3.9 rl.5 r-0.6	r2.3 r2.8 r3.1 r2.7	r0.5 r-1.0 r1.6 r3.3	r3.2 r3.6 r3.4 r1.5	rl.6 r5.0 r0.9 r-1.1	r1.4 r-0.2 r1.9 r2.1
	ANNUAL	rl.5	rl.9	r0.5	r3.3	r1.3	rl.8
1987	I	r2.1 p4.2	4.1 p3.9	rl.9 p-0.3	r0.7 p2.8	r-4.4 p-2.0	r-1.4 p-1.4
		Percent change	from corre	sponding quar	ter of previou	s year	
1986	I II III IV ANNUAL	rl.5 rl.2 rl.4 rl.6	r1.3 r1.6 r2.0 r2.7	r-0.2 r0.4 r0.6 r1.1	r3.7 r3.2 r3.3 r2.9	r0.6 r1.6 r1.6 r1.6	r2.2 r1.9 r1.8 r1.3
1987	I	rl.7 pl.8	r3.2 p3.5	rl.4 pl.6	r2.3 p2.1	r0.1 p-1.6	r0.6 p0.3

See footnotes following table 6. r=revised p=preliminary

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

	Year and quarter	Output per all- employee hour	Output	Employee hours	Hourly compensa- tion (1)	Real hourly compen- sation(2)	Unit labor cost	Unit non- labor cost(7)	Total unit cost (8)	Unit pro- fits (9)	Implicit price deflator (4)
					Indexes	1977=100					
1986	I	r109.8	r129.1	r117.6	r177.2	r98.2	r161.5	r180.7	r166.3	r129.7	r161.9
	II	r109.7	r128.8	r117.4	r178.4	r99.1	r162.6	r180.6	r167.2	r129.5	r162.7
	III	r109.9	r129.3	rl17.6	r179.5	r99.2	r163.2	r184.2	r168.5	r130.6	r164.0
	IV	r110.5	r130.4	r118.0	r181.0	r99.3	r163.8	r183.2	r168.7	r127.7	r163.8
	ANNUAL	r109.9	r129.4	r117.7	r178.9	r98.9	r162.8	r182.2	r167.7	r129.3	r163.1
1987	I	r109.7	r130.9	r119.3	r180.8	r98.0	r164.8	r184.1	r169.7	r132.2	r165.2
			Per	cent char	nge from p	revious qua	rter at a	nnual rate	e(5)	· · · · · · · · · · · · · · · · · · ·	
1986	1	r3.3	r4.4	r1.0	r3.5	rl.8	r0.1	r3.0	r0.9	r3.0	rl.l
	II	r-0.2	r-0.9	r-0.6	r2.6	r4.0	r2.9	r-0.2	r2.0	r-0.5	rl.8
	III	r0.9	rl.6	r0.7	r2.5	r0.0	rl.5	r8.2	r3.3	r3.3	r3.3
	VI	r2.1	r3.4	rl.3	r3.5	r0.8	r1.3	r-2.3	r0.3	r-8.5	r-0.5
	ANNUAL	rl.6	r2.6	rl.0	r3.5	rl.6	r1.9	r2.2	2.0	r-3.4	rl.5
1987	I	r-2.9	r1.5	r4.6	r-0.5	r-5.5	r2.5	r2.2	r2.4	r14.7	r3.5
	· 	D-40 with with Advisory Advisory was supplied	Perce	nt change	from corr	esponding q	uarter of	previous	year		
1986	I	r2.6	r4.1	r1.4	r4.3	rl.2	rl.6	rl.8	rl.7	r-1.7	r1.3
	II	rl.8	r2.7	r0.8	r3.9	r2.2	r2.0	rl.0	1.7	r-2.1	rl.4
	III	r0.7	rl.5	r0.8	r3.3	rl.6	r2.6		2.9	r-8.4	rl.7
	IV	rl.5	r2.1	r0.6	r3.0	rl.6	r1.5	r2.1	rl.6	r-0.8	rl.4
	ANNUAL	r1.6	r2.6	r1.0	r3.5	rl.6	rl.9	r2.2	2.0	r-3.4	rl.5
1987	· I	r0.0	rl.4	rl.5	r2.0	r-0.2	r2.1	r1.9	r2.0	rl.9	r2.0

r=revised p=preliminary August 3, 1987

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

RELIABILITY: Productivity and cost measures are regularly revised as more complete information becomes available. Preliminary results are published 30 days after the close of the reference period; revisions appear 30 days later, and second revisions after an additional 60 days. In the business sector, the probability is 0.95 that the third publication (second revision) of a quarterly index of output per hour of all persons will differ from the preliminary value by between -1.9 and +2.0 index points. This interval is based on the performance of this measure between the first quarter of 1976 and the second quarter of 1986

Footnotes, Tables 1-6

- (1) Wages and salaries of the employees plus employers' contributions for social insurance and private benefit plans. Except for nonfinancial corporations, where there are no self-employed, data also include an estimate of wages, salaries, and supplemental payments for the self-employed.
- (2) Compensation per hour adjusted for changes in the Consumer Price Index for All Urban Consumers.
- (3) Unit nonlabor payments include profits, capital consumption allowances, interest, rental income of persons, and indirect taxes.
- (4) Current dollar gross product divided by constant dollar gross product.
- (5) Quarterly changes: percent change compounded at annual rate from the original data rather than index numbers. Annual changes: percent change between annual average levels.
- (6) Quarterly manufacturing output measures are based on the index of industrial production prepared monthly by the Board of Governors of the Federal Reserve adjusted by BLS to annual manufacturing output levels (gross product originating) from the National Income and Product Accounts prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce.
- (7) Unit nonlabor cost includes capital consumption allowances, interest, rental income of persons, and indirect taxes.
- (8) Total unit cost is the sum of labor and nonlabor costs.
- (9) Unit profits include corporate profits with inventory valuation and capital consumption adjustments.

Appendix Table 1. Business sector: Productivity, hourly compensation, unit labor cost, and prices, seasonally adjusted

	Yenr and guarter	Output per hour of all persons	Output	Hours of all persons	Compensa- tion per hour(1)	compensa- tion per hour(2)	Unit labor cost	Unit non- labor pay- ments(3)	Implicit price deflator(4
				Imlexe	es 1977=100				
984	ï	r105.1	r117.1	111.4	r165.8	98.1	r157.8	r154.2	r156.5
	LI	105.6	rl19.1	rl12.8	r166.9	r97.8	r158.0	r156.9	r157.6
	T.E.C	105.5	r119.7	r113.4	r168.7	r98,0	r159.9	r156.6	r158.7
	IV	r105.9	r120.8	114.0	r170.3	r98.1	r160.8	r157.9	r159.8
	MINUAL	r105.6	r119.2	r112.9	r168.0	r98.0	r159.1	r156.5	r158.2
L 9 85	I	r106.5	r122.2	r114.7	r172.4	r98.5	r161.9	r158.7	r160.8
100	II	r107.2	r123.3	115.0	r174.6	98.6	r162.8	r160.4	r162.0
•	III	r108.2	r124.7	115.2	r177.0	r99.4	r163.6	r161.8	r163.0
	IV	r107.9	r125.3	rl16.1	r179.3	r99.7	r166.1	r160.2	r164.0
	ANNUAL	r107.5	r123.9	r115.2	r175.9	r99.1	r163.6	r160.3	r162.4
		·	Perce	nt change fro	om previous qua	rter at annual	rate(5)		
1984	I	r5.3	r12.9	r7.3	r5.6	0.3	r0.3	r9.5	r3.4
	II	r2.1	r7.3	r5.1	r2.7	r-1.3	r0.6	r7.3	r2.9
	III	r-0.4	rl.9	r2.3	r4.4	r0.8	r4.8	r-0.8	r2.8
	IV	rl.5	r3.5	r2.1	3.8	r0.4	r2.3	r3.4	r2.7
	ANNUAL	r2.5	r8.4	5.7	4.1	r-0.2	rl.5	r6.9	r3.3
1985	I	r2.2	r4.8	r2.5	r5.1	rl.7	r2.8	r2.0	r2.5
	II ·	r2.9	r3.8	rl.0	5.1	r0.6	r2.2	r4.4	3.0
•	III	r3.7	r4.4	0.7	r5.7	r3.3	rl.9	r3.5	r2.5
	ĬV	r-1.0	r2.2	r3.2	r5.1	rl.2	r6.2	r-4.0	r2.5
	ANNUAL	rl.8	r4.0	r2.1	r4.7	rl.1	r2.8	r2.4	r2.7
			Percent	change from	corresponding q	uarter of previ	ous year		
1984	I	r3.1	r10.2	6.9	3.8	-0.7	r0.6	r9.4	r3.5
	ΙĪ	r2.1	r9.1	6.8	3.8	-0.5	rl.6	r7.1	3.5
	III	r2.5	r8.1	r5.5	r4.5	r0.3	r2.0	r6.3	r3.5
	IV	r2.1	r6.3	4.2	r4.1	r0.0	r2.0	r4.8	r3.0
	ANNUAL	r2.5	r8.4	5.7	4.1	r-0.2	rl.5	r6.9	r3.3
1985	I	rl.3	r4.4	3.0	r4.0	r0.4	r2.6	r2.9	r2.7
	. 11	rl.5	r3.5	2.0	r4.6	r0.9	r3.0	r2.2	r2.7
	III	r2.5	r4.1	rl.6	r4.9	rl.5	r2.3	r3.3	2.7
	IV	rl.9	r3.8	rl.8	r5.3	rl.7	r3.3	rl.4	r2.6
	ANNUAL	rl.8	r4.0	r2.1	r4.7	rl.1	r2.8	r2.4	r2.7

See footnotes following table 6. r=revised

Source: Bureau of Labor Statistics August 3, 1987

Appendix Table 2. Nonfarm business sector: Productivity, hourly compensation, unit labor cost, and prices, seasonally adjuste

	Year ani quarter	Output per hour of all persons	Output	Hours of all persons	Compensa- tion per hour(1)	compensa- tion per hour(2)	Unit labor cost	Unit non- labor pay- ments(3)	Implicit price deflator(4)
				Indexe	s 1977=100				
1984	J	r104.1	r117.1	rl12.4	165.6	r98.0	r159.0	153.2	r157.0 *
	ΙΙ	r104.7	rl19.3	rl13.9	r166.8	r97.7	r159.3	r156.5	r158.3
	111	r104.6	r119.8	114.5	r168.6	97.9	r161.2	r156.9	r159.7
	IV	r104.8	r120.7	115.2	r170.2	r98. 0	r162.4	r158.5	r161.0 -
	ANNUAL	r104.6	r119.2	114.0	r167.8	r97.9	r160.4	r156.4	r159.0
1985	1	r105.2	r122.0	r115.9	r172.2	r98.4	r163.6	r159.5	r162.2
	11	r105.7	r123.1	116.4	r174.1	98.3	r164.7	r161.5	r163.6
	III	r106.4	r124.3	116.9	r176.2	r98.9	r165.7	r163.4	r164.9
	۲۷	r105.9	r124.9	r117.9	r178.3	r99.2	r168.3	r160.8	r165.7
	ANNUAL	r105.8	r123.6	r116,8	r175.2	r98.7	r165.6	r161.3	r164.1
		ena erroren etarrago erroren portuguara, en grande esperante esta del la Calenda de Calenda de Calenda de Cale La composição de Calenda de Cale	Perce	nt change fro	m previous qua	rter at annual :	rate(5)		
1984	I	r3.4	rll.l	r7.4	r5.5	r0.2	r2.1	r2.1	r2.1
	11	r2.4	r7.6	r5.2	r3.0	r-1.0	r0.7	r9.0	r3.5
	III	r-0.6	rl.8	r2.4	4.3	0.7	r4.9	r0.9	r3.5
	IV	rl.0	r3.1	r2.1	r3.9	r0.6	r2.9	r4.1	r3.3
	ANNUAL	r2.1	r8.3	6.0	r3.9	-0.3	rl.8	r5.5	r3.0
1985	I	rl.5	r4.3	r2.8	r4.8	rl.4	r3.2	r2.7	r3.0
	ĪĪ	rl.7	r3.4	rl.7	r4.5	r-0.1	2.7	r5.0	r3.5
	III	r2.6	r4.1	rl.5	r4.9	r2.5	r2.2	r4.9	r3.2
	IV	r-1.6	r2.0	r3.6	r4.9	r0.9	r6.6	r-6.3	r2.0
	ANNUAL	r1.2	r3.6	r2.5	r4.4	r0.8	r3.2	r3.2	p3.2
			Percent	change from o	corresponding q	uarter of previo	ous year	•	
1984	I	r3.2	r10.7	7.3	3.5	-0.9	r0.3	.8.3	r2.9
	11	r2.0	r9.2	7.1	r3.7	r-0.6	rl.7	r5.8	r3.1
	III	rl.6	r7.5	r5.8	4.3	0.1	r2.6	r3.8	r3.0
	IV	rl.5	r5.8	4.3	r4.2	r0.1	r2.6	r4.0	r3.1
	ANNUAL	r2.1	r8.3	6.0	r3.9	-0.3	rl.8	r5.5	r3.0
1985	I	rl.l	r4.2	3.1	r4.0	r0.4	r2.9	r4.1	r3. 3
	II	r0.9	r3.2	r2.2	r4.4	r0.6	r3.4	r3.2	r3.3
	III	rl.7	r3.8	r2.0	r4.5	rl.1	r2.8	. r4.2	r3. 3
	IV	r1.0	r3.5	r2.4	r4.8	rl.2	3.7	1.5	2.9
	ANNUAL	rl.2	r3.6	r2.5	r4.4	r0.8	r3.2	r3.2	r3.2

See footnotes following table 6, p=preliminary

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Appendix Table 3. Manufacturing sector: Productivity, hourly compensation, and unit labor $\cos t$, seasonally adjusted

						Real	
	Year and	Output per	Output	Hours	Compensa-	compensa-	Unit
	quarter	hour	(6)	of all	tion per	tion per	labor
		of all persons		persons	hour(1)	hour(2)	cost
	· • • • • • • • • • • • • • • • • • • •		I	ndexes 1977=1	.00		·····
1984	1	r116.2	rl14.6	r98.6	r165.6	r97.9	r142.4
	II	r117.1	r116.8	r99.8	r166.6	r97.6	r142.3
	III	r119.1	rl18.9	r99.8	r168.7	r97.9	r141.7
	IV	r120.0	rl19.6	99.7	r171.1	r98.5	r142.5
	ANNUAL	rl18.1	r117.5	99.5	r168.0	r98.0	r142.2
1985	I	rl21.5	r120.7	r99.4	r173.3	r99.0	r142.7
	II	r124.0	r122.1	98.5	r176.1	r99.5	r142.0
	III	r125.2	r123.2	r98.3	r178.0	r99.9	r142.1
	IV	r126.0	r124.1	r98.4	r180.2	r100.2	r143.0
	ANNUAL	r124.2	r122.5	r98.7	r176.9	r99.6	r142.4
		Percent ch	ange from p	revious quart	er at annual r	ate(5)	
1984	I	r8.9	r17.5	r8.0	r5.0	r-0.3	r-3.6
	II	r3.1	r7.9	r4.6	r2.6	r-1.4	r-0.5
	III	r6.9	r7.1	r0.2	r5.1	rl.4	r-1.7
	IV	r3.2	r2.7	r-0.6	r5.8	r2.4	r2.5
	ANNUAL	r5.5	r12.2	6.4	r3.4	r-0.8	r-1.9
1985	Ī	r4.9	r3.7	r-1.2	r5.3	rl.9	r0.3
	\$. II	r8.5	4.6	r-3.6	r6.7	r2.0	r-1.7
	III	r4.1	r3.5	r-0.5	r4.3	rl.9	r0.2
	IV	r2.6	r2.9	r0.4	r5.1	rl.1	r2.4
	ANNUAL	r5.1	r4.3	r-0.8	r5.3	rl.6	r0.2
		Percent change	from corre	sponding quar	ter of previous	s year	
1984	· I	r6.0	r15.8	r9.3	r2.2	r-2.1	r-3.5
	, II	r5.6	r14.0	r8.0	r3.0	r-1.3	r-2.5
	111	r5.0	r10.8	r5.6	r3.9	r-0.3	r-1.0
	IV	r5.5	r8.7	r3.0	r4.6	r0.•5	r-0.8
	ANNUAL	r5.5	r12.2	6.4	r3.4	r-0.8	r-1.9
1985	Ī	r4.5	r5.3	0.8	r4.7	rl.1	r0.1
	II	r5.9	r4.5	r-1.3	r5.7	rl.9	r-0.2
	III	r5.2	r3.6	r-1.5	r5.5	r2.0	r0.3
	īV	r5.0	r3.7	r-1.2	r5.3	rl.7	r0.3
	ANNUAL	r5.1	r4.3	r-0.8	r5.3	rl.6	r0.2

See footnotes following table 6. r=revised

August 3, 1987

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

					•	Real	
	Year and	Output per	Output	Hours	Compensa-	compensa-	Unit
(quarter	hour	(6)	of all	tion per	tion per	labor
		of all persons		persons	hour(1)	hour(2)	∞st
			I	ndexes 1977=1	.00		
1984	I	r117.1	rl15.6	r98.8	r164.3	r97.2	r140.3
	II	rl19.1	rl19.5	r100.3	r165.2	r96.7	r138.6
	III	r122.2	r123.3	r100.9	r166.9	r96.9	r136.6
	IV	r123.8	r125.2	r101.1	r169.1	r97.3	r136.5
	ANNUAL	r120.6	r120.9	100.2	r166.4	r97.1	r138.0
1985	I	r126.3	r127.2	r100.7	rl71.4	r97.9	r135.7
	II	r129.6	r129.2	99.8	r174.4	r98.5	r134.6
	III	r131.5	r130.7	r99.4	r176.6	r99.2	r134.3
	IV	r133.1	r132.2	r99.4	r179.4	r99.8	r134.8
	ANNUAL	r130.1	r129.9	r99.8	r175.4	r98.8	r134.9
	· - · · · · · · · · · · · · · · · · · ·	Percent ch	ange from p	revious quart	er at annual r	ate(5)	
1984	I	r14.7	r27.0	r10.7	r5.1	r-0.2	r-8.4
	II	r7.3	r14.1	r6.3	r2.1	r-1.9	r-4.9
	III	r10.6	r13.3	r2.4	r4.3	r0.7	r-5.7
	IV	. r5.5	r6.4	r0.9	r5.3	r1.9	r-0.1
	ANNUAL	r9.8	r19.6	8.9	r3.1	-1.1	r-6.1
1985	I	r8.4	r6.8	r-1.5	r5.7	r2.3	r-2.4
	II	r10.6	6.4	r-3.8	r7.1	r2.5	r-3.1
	III	r6.1	r4.6	r-1.5	r5.1	r2.7	r-1.0
	IV	r4.9	4.8	r-0.1	r6.4	r2.4	rl.4
	ANNUAL	r7.9	r7.4	r-0.4	r5.4	rl.8	r-2.3
		Percent change	from corre	sponding quar	ter of previous	year	
1984	I	r10.3	r23.5	rl2.0	rl.9	r-2.5	r-7.7
	II	r10.2	r22.2	r10.8	r2.6	r-1.6	r-6.9
	III	r9.4	r18.5	r8.3	r3.5	r-0.7	r-5.5
	IV	r9.5	r14.9	r5.0	r4.2	r0.1	r-4.8
	ANNUAL	r9.8	r19.6	8.9	r3.1	-1.1	r-6.1
1985	I	r7.9	r10.1	2.0	r4.4	r0.7	r-3.3
	II	r8.7	r8.2	r-0.5	r5.6	rl.8	r-2.9
	III	r7.6	r6.0	r-1.5	r5.8	r2.4	r-1.7
	IV	r7.5	5.6	r-1.7	r6.1	r2.5	r-1.3
	ANNUAL	r7.9	r7.4	r-0.4	r5.4	rl.8	r-2.3

r=revised

August 3, 1987 Source: Bureau of Labor Statistics

-17Appendix Table 5. Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor cost, seasonally adjusted

		labor cost, sea	sonally and	ustea		Real	
	Year and quarter	Output per hour of all persons	Output (6)	Hours of all persons	Compensa- tion per hour(1)	compensa- tion per hour(2)	Unit labor cost
			I	mdexes 1977=1	.00		
1984	I	r115.0	r113.2	r98.5	r167.7	r99.2	r145.9
	II	rl14.1	r112.9	99.0	r169.0	r99.0	r148.2
	III	r114.3	rl12.3	r98.2	r171.5	r99. 5	r150.0
	IV	r114.2	rll1.4	97.6	r174.1	r100.2	r152.5
	ANNUAL	rl14.4	r112.4	98.3	r170.6	r99.5	r149.1
1985	I	rl14.0	rll1.0	r97.4	r176.1	r100.5	r154.4
	II	r115.4	rl11.5	r96.6	r178.6	r100.8	r154.7
	III	r115.6	rl11.9	r96.8	r180.0	r101.0	r155.6
	IV	r115.3	rl11.9	r97.1	r181.2	100.8	r157.2
	ANNUAL	rl15.1	rl11.6	r97.0	r178.9	r100.8	r155.5
	***************************************	Percent ch	ange from p	revious quart	er at annual r	ate(5)	
1984	· I	r0.7	r4.8	r4.0	r4.2	r-1.0	r3.4
	II	r-3.1	r-1.0	r2.2	r3.2	r-0.8	r6.5
	III	r0.9	r-2.2	r-3.1	r5.9	r2.2	r4.9
	IV	r-0.5	r-3.2	r-2.7	r6.2	r2.8	r6.8
	ANNUAL	r-0.7	r2.1	2.8	r3.5	r-0.7	r4.2
1985	I	r-0.5	r-1.2	r-0.7	r4.6	rl.2	r5.2
	II	r5.1	rl.5	r-3.4	r5.9	rl.2	r0.8
	III	r0.7	rl.7	r0.9	r3.1	r0.8	r2.4
	īV	r-1.3	r-0.1	rl.2	r2.9	r-1.0	r4.2
	ANNUAL	r0.6	r-0.8	r-1.4	r4.9	rl.3	4.3
	· · · · · · · · · · · · · · · · · · ·	Percent change	from corre	sponding quar	ter of previous	s year	
1984	I	r0.2	r5.7	r5.6	r2.3	r-2.1	r2.1
	II	r-0.8	r3.2	4.0	r2.9	r-1.3	r3.8
	III	r-1.5	r0.2	rl.7	r4.1	r-0.1	r5.7
	IV	r-0.5	r-0.4	0.1	r4.9	r0.8	r5.4
	ANNUAL	r-0.7	r2.1	2.8	r3.5	r-0.7	r4.2
1985	I	r-0.8	r-1.9	r-1.1	r5.0	rl. 3	r5.9
	11	r1.2	r-1.3	r-2.5	r5.7	rl.9	r4.4
	III	rl.2	r-0.3	r-1.5	r5.0	1.5	r3.7
	IV	rl.0	r0.4	r-0.5	r4.1	r0.6	r3.1
	ANNUAL	r0.6	r-0.8	r-1.4	r4.9	rl.3	4.3

See footnotes following table 6. r=revised

August 3, 1987 Source: Bureau of Labor Statistics

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

	Year and quarter	Output per all- employee hour	Output	Employee hours	Hourly compensa- tion (1)	Real hourly compen- sation(2)	Unit labor ost	Unit non- labor cost(7)	Total unit cost (8)	Unit pro- fits (9)	Implicit price deflator (4)
Indexes 1977=100											
1984	I	r105.6	rl18.4	rl12.1	r163.7	96.8	r155.0	r170.1	r158.8	r135.9	
	II	r106.1	r120.7	113.7	164.8	96.5	r155.3	r172.1	r159.5	r142.4	157.5
	III	r105.8	r121.2	114.6	r166.5	96.7	r157.4	r175.4	r161.9	rl33.7	
	IV	r106.4	r122.7	rl15.3	r168.1	r96.8	r158.0	r176.8	r162.8	r134.2	r159.4
	ANNUAL	r106.0	r120.7	r113.9	r165.8	r96.7	r156.5	r173.6	r160.8	r136.5	r157.9
1985	I	r107.0	r124.0	rl15.9	169.9	97.0	r158.9	r177.5	r163.6	r132.0	
	II	r107.7	r125.4	rl16.4	r171.8	r97.0	r159.5	r178.7	r164.3	r132.2	
	III	r109.2	r127.4	rl16.6	r173.8	r97.6	r159.1	r177.5	r163.7	r142.5	
	IV	r108.9	r127.7	r117.3	r175.7	r97.7	r161.4	r179.4	r166.0	r128.7	r161.5
	ANNUAL	r108.2	r126.1	rl16.5	r172.8	r97.4	r159.7	r178.3	r164.4	r133.9	r160.7
	Percent change from previous quarter at annual rate(5)										
1984	I	r4.3	r12.1	r7.5	4.9	-0.4	r0.6	r-3.0	r-0.4	r24.8	
	II	r2.0	r7.9	r5.8	r2.8	r-1.2	0.7	r4.8	rl.8	r20.7	
	III	r-1.2	rl.9	r3.2	r4.2	r0.5	r5.5	7.9	r6.2	r-22.4	
	IV	r2.3	r4.9	r2.6	r4.0	r0.6	rl.6	r3.4	r2.1	rl.6	r2.1
	ANNUAL	r2.4	r9.1	r6.6	3.7	-0.5	rl.3	r-0.4	r0.8	r23.1	r2.8
1985	I	r2.2	r4.2	r2.0	r4.4	rl.0	r2.2	rl.5	r2.0	r-6.5	rl.1
	II	r2.8	r4.7	rl.8	r4.4	r-0.2	rl.5	r2.8	rl.8	r0.9	rl.8
	III	r5.7	r6.5	r0.7	r4.7	r2.3	r-1.0	r-2.7	r-1.4	r34.7	
	IV	r-1.3	r0.9	r2.2	r4.6	r0.7	r6.0	r4.2	5.5	r-33.4	r0.7
	ANNUAL	r2.1	r4.4	r2.3	r4.2	r0.6	r2.1	r2.7	r2.2	r-1.9	rl.8
Percent change from corresponding quarter of previous year											
1984	I	r3.3	rl1.5	r7.9	r3.2	-1.3	r-0.2	r-3.9	r-1.2	r56.7	r2.8
	II	r2.5	r10.3	r7.6	3.5	-0.8	rl.0	r-1.6	r0.3	r32.3	3.0
	III	rl.8	r8.3	6.4	r4.1	-0.1	r2.3	r0.6	r1.8	r12.3	r2.8
	IV	rl.8	r6.6	r4.7	r4.0	r-0.1	r2.1	r3.2	r2.4	r4.4	r2.6
	ANNUAL	r2.4	r9.1	r6.6	3.7	-0.5	rl.3	r-0.4	r0.8	r23.1	r2.8
1985	I	rl.3	r4.7	r3.4	3.8	0.2	r2.5	r4.4	r3.0	r-2.9	r2.4
	II	rl.5	r3.9	r2.4	r4.2	r0.5	r2.7	3.9	r3.0	r-7.1	rl.9
	III	r3.3	r5.l	rl.8	r4.4	r0.9	rl.l	rl.2	rl.l	r6.6	rl.7
	IV	r2.3	r4.1	rl.7	r4.5	r1.0	r2.1	rl.4	r1.9	r-4.1	rl.3
	ANNUAL	r2.1	r4.4	r2.3	r4.2	r0.6	r2.1	r2.7	r2. 2	r-1.9	rl.8

r=revised p=preliminary August 3, 1987