

News

U.S. Department of Labor
Bureau of Labor Statistics
Washington, D.C. 20212



FEB 12 1985

LIBRARY

Historical, technical
information: (202) 523-9261
Current data: (202) 523-1221 or 1208
Media contact: (202) 523-1913

USDL 85-41
For Release: 10:00 AM EST
Tuesday, January 29, 1985

PRODUCTIVITY AND COSTS Fourth Quarter and Annual Averages, 1984

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 fourth quarter of 1984 and the year as a whole. The increase from the third to the fourth quarter in the business sector including farms was at a 2.6 percent annual rate; without farms it was less at 1.7 percent. Manufacturing productivity showed a slight decline of 0.6 percent in the same period.

The business productivity gain in 1984 over 1983 of 3.6 percent was the largest since 1971 and the manufacturing increase at 4.7 percent was the largest since 1973.

The large increase in business productivity reflected the strongest gains in output and hours since the 1950's, as well as a substantial productivity advance in agriculture in 1984. The increase for business excluding farms was smaller in 1984 than in 1983.

The seasonally adjusted annual rates of productivity change in the fourth quarter for major sectors of the economy are:

2.6 percent in the business sector,
1.7 percent in the nonfarm business sector,
-0.6 percent in manufacturing,
-1.6 percent in durable goods manufacturing, and
0.9 percent in nondurables goods manufacturing.

Fourth quarter measures are summarized in tables A and appear in detail in tables 1 through 6.

CHANGES FROM THE THIRD TO THE FOURTH QUARTER OF 1984

Business

The 2.6 percent productivity advance in the fourth quarter of 1984 in the business sector reflected a 4.3 percent gain in output and a 1.6 percent rise in hours (seasonally adjusted annual rates). During the third quarter, productivity advanced only 0.6 percent in this sector. Business output rebounded strongly from the slower rate of gain during the third quarter, and a modest increase occurred in the rate of growth of hours of all persons (table 1).



Centennial
of Labor
Statistics

Table A. Productivity and costs: Preliminary fourth quarter 1984 measures
(Seasonally adjusted annual rates)

| Sector | Productivity | Output | Hours | Hourly compensation | Real hourly compensation | Unit labor costs |
|---|--------------|--------|-------|---------------------|--------------------------|------------------|
| Percent change from preceding quarter | | | | | | |
| Business | 2.6 | 4.3 | 1.6 | 4.1 | 0.3 | 1.5 |
| Nonfarm business | 1.7 | 3.9 | 2.2 | 3.5 | -0.3 | 1.8 |
| Manufacturing | -0.6 | 0.2 | 0.8 | 4.6 | 0.7 | 5.3 |
| Durable | -1.6 | 0.7 | 2.3 | 3.8 | -0.1 | 5.4 |
| Nondurable | 0.9 | -0.6 | -1.5 | 5.8 | 1.8 | 4.8 |
| Percent change from same quarter a year ago | | | | | | |
| Business | 3.0 | 7.1 | 3.9 | 4.1 | 0.1 | 1.1 |
| Nonfarm business | 2.2 | 6.3 | 4.0 | 4.2 | 0.2 | 1.9 |
| Manufacturing | 3.6 | 7.2 | 3.4 | 4.4 | 0.3 | 0.7 |
| Durable | 4.1 | 9.6 | 5.3 | 3.8 | -0.2 | -0.2 |
| Nondurable | 2.9 | 3.6 | 0.7 | 4.8 | 0.8 | 1.9 |

Hourly compensation, which includes wages, salaries, supplements, and employer contributions to employee-benefit plans, increased at a 4.1 percent annual rate, slightly less than the 4.4 percent gain during the third period. Real hourly compensation, which takes into account changes in the Consumer Price Index for All Urban Consumers (CPI-U), increased at an annual rate of 0.3 percent in the fourth quarter, compared with a 0.8 percent increase during the third quarter. Unit labor costs, which reflect the interaction of changes in hourly compensation and productivity, increased 1.5 percent in the fourth quarter.

The implicit price deflator, which measures price change for the goods and services comprising business output, rose at a 1.8 percent annual rate, compared with a 3.6 percent increase during the third quarter.

Nonfarm business

Productivity increased in the fourth quarter in nonfarm businesses, after having declined during the third quarter. The 1.7 percent increase in the October-December quarter reflected a 3.9 percent increase in output and a 2.2 percent rise in hours of all persons engaged in the sector. In the third quarter, productivity declined 1.1 percent and output increased only 0.7 percent

(table 2). Hourly compensation rose 3.5 percent in the fourth quarter, about the same rate of increase as during the second and third quarters. Unit labor costs increased only 1.8 percent in the fourth quarter, compared with a 4.7 percent rise during the third quarter. The difference in the rate of increase in unit labor costs in the third and fourth quarters, when hourly compensation movements were nearly identical, reflects the cost offsetting impact of productivity growth. Real hourly compensation declined 0.3 percent in the fourth quarter, compared with no change in the second and third quarters. The implicit price deflator for nonfarm business output posted a 2.5 percent increase during the fourth quarter. These prices went up 4.2 percent during the third quarter (seasonally adjusted annual rates).

Manufacturing

Productivity declined 0.6 percent in the fourth quarter in manufacturing because hours increased faster than output. This was the first quarterly decline since the fourth quarter of 1983 when the growth of output was also less than that of hours (table 3). During the third quarter of 1984, productivity grew 7.4 percent. Hourly compensation rose at a 4.6 percent annual rate in the fourth quarter, up from the 3.7 percent increase during the third period. After allowing for the change in the CPI-U, real hourly compensation rose 0.7 percent in the fourth quarter, compared with a 0.2 percent rise in the third.

The fourth-quarter decline in manufacturing productivity was confined to durable goods producers which fell 1.6 percent; in nondurables, productivity advanced 0.9 percent (tables 4 and 5).

Table B. Productivity and costs: Preliminary 1984 annual measures

| Sector | Productivity | Output | Hours | Hourly compensation | Real hourly compensation | Unit labor costs |
|------------------------------------|--------------|--------|-------|---------------------|--------------------------|------------------|
| Annual percent change, 1983 - 1984 | | | | | | |
| Business | 3.6 | 8.8 | 5.0 | 4.7 | 0.4 | 1.1 |
| Nonfarm business | 3.1 | 8.5 | 5.2 | 4.6 | 0.3 | 1.5 |
| Manufacturing | 4.7 | 11.7 | 6.7 | 3.6 | -0.6 | -1.0 |
| Durable | 5.4 | 15.0 | 9.1 | 3.1 | -1.1 | -2.1 |
| Nondurable | 3.6 | 7.0 | 3.3 | 3.8 | -0.4 | 0.3 |

SUMMARY OF ANNUAL PRODUCTIVITY AND COST MOVEMENTS: 1984

Business

Business productivity in 1984 was 3.6 percent higher than it was in 1983 (table B). This was the largest annual advance since 1971, when an identical increase occurred. However, the underlying conditions were quite different; in 1984, output increased at the fastest rate in more than 30 years (up 8.8 percent), and the gain in hours (5.0 percent) was the largest recorded in the series (which begins with data for 1947). In 1971, on the other hand, output grew modestly (3.0 percent), and hours declined (-0.5 percent). The rise in hours in 1984 reflected a 4.1 percent increase in employment combined with a 0.9 percent rise in average weekly hours, the largest increase in the length of the average work week in the series, which also begins with data for 1947.

Business employment averaged 83.9 million in 1984, up 3.3 million from 1983. Compensation per hour advanced 4.7 percent in 1984, somewhat faster than the rise during 1983. The improved productivity performance from 1983 to 1984 partly offset the increase in hourly compensation so that unit labor costs in 1984 rose 1.1 percent, compared with a 1.6 percent gain in 1983. Real hourly compensation was 0.4 percent higher in 1984 than in 1983, and the implicit price deflator rose 3.2 percent.

Nonfarm business

Productivity advanced 3.1 percent in nonfarm business in 1984 as output grew 8.5 percent and hours rose 5.2 percent. The increase in nonfarm output was the largest since 1950, and the gain in hours the greatest in the series. In 1983, productivity advanced 3.5 percent (table 2). Hourly compensation showed the smallest increase since 1965; the 4.6 percent advance in 1984 continued the trend toward smaller annual increases which began in 1981. Real hourly compensation increased 0.3 percent in 1984, compared with a 1.6 percent increase one year earlier. Unit labor costs moved up 1.5 percent in 1984, compared with a 1.4 percent gain in 1983. The implicit price deflator for nonfarm business output increased 3.1 percent in 1984. Nonfarm business employment, at 80.9 million, increased 3.3 million (or 4.3 percent) over 1983 levels. Average weekly hours matched the record growth rate of 1955 (0.9 percent).

Manufacturing

Output per hour of all persons increased 4.7 percent in manufacturing in 1984, the largest gain in more than 10 years. An 11.7 percent increase in output in 1984 (which equalled the gain of 1959) was more than double the increase of 1983; hours increased faster than in any year since 1951. The 6.7 percent increase in hours reflected a 5.7 percent gain in employment, and a 1.0 percent increase in average weekly hours. The manufacturing sector provided 20 million jobs in 1984, 1.1 million more than in 1983.

Hourly compensation of all persons engaged in manufacturing increased 3.6 percent, but declined 0.6 percent when the rise in the CPI-U is taken into account (table 3). The improved productivity gain in 1984 contributed to a decline in unit labor costs of 1.0 percent. Productivity, output, and hours all advanced more rapidly in durables than in nondurables in 1984 (tables 5 and 6).

REVISED THIRD QUARTER 1984 MEASURES

Nonfinancial corporations

The Bureau of Labor Statistics also reported revised measures for the third quarter of 1984 for nonfinancial corporations. As can be seen in table C, productivity declined more during the third quarter than had been reported on November 28, 1984, based on preliminary measures. Changes in productivity and related measures in this sector for 1983 and the first 3 quarters of 1984 are shown in table 6.

Table C. Preliminary and revised productivity and related measures for nonfinancial corporations, third quarter 1984
 Percent change from previous quarter at annual rate
 (Seasonally adjusted)

| Item | Productivity | Output | Hours | Hourly compensation | Real hourly compensation | Unit labor costs | Unit nonlabor costs | Unit profits |
|-------------|--------------|--------|-------|---------------------|--------------------------|------------------|---------------------|--------------|
| Preliminary | -2.1 | 0.6 | 2.7 | 3.3 | -0.3 | 5.5 | 6.2 | -11.7 |
| Revised | -2.5 | 0.2 | 2.8 | 3.2 | -0.3 | 5.9 | 8.0 | -14.5 |

TECHNICAL NOTES

Business sector output is equal to gross national product, less the rest-of-the-world sector, general government, output of paid employees of private households and nonprofit institutions, 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 nondurable 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 the following 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, foods, 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, less the rest-of-the-world sector, general government, unincorporated business, output of paid employees of private households and nonprofit institutions, rental value of owner-occupied dwellings, 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 contributions 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.

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 1977=100 | | | | | | | | | |
| 1983 | I | 102.2 | 106.9 | 104.7 | 160.2 | 99.0 | 156.8 | 139.8 | 151.0 |
| | II | 103.6 | 110.1 | 106.2 | 161.0 | 98.5 | 155.4 | 144.6 | 151.7 |
| | III | 104.3 | 112.5 | 107.9 | 161.8 | 98.0 | 155.1 | 147.9 | 152.7 |
| | IV | 104.7 | 114.7 | 109.5 | 164.2 | 98.4 | 156.8 | 149.1 | 154.2 |
| | ANNUAL | 103.7 | 111.0 | 107.1 | 161.7 | 98.4 | 156.0 | 145.5 | 152.4 |
| 1984 | I | 105.7 | 117.8 | 111.4 | 166.7 | 98.6 | 157.7 | 151.6 | 155.6 |
| | II | 107.0 | 121.0 | 113.0 | 167.5 | 98.2 | 156.5 | 157.2 | 156.7 |
| | III | 107.2r | 121.5r | 113.4r | 169.3r | 98.4 | 158.0r | 158.5r | 158.1r |
| | IV | 107.9p | 122.8p | 113.8p | 171.0p | 98.5p | 158.5p | 159.4p | 158.8p |
| | ANNUAL | 107.4p | 120.8p | 112.5p | 169.3p | 98.8p | 157.7p | 156.6p | 157.3p |
| Percent change from previous quarter at annual rate(5) | | | | | | | | | |
| 1983 | I | 2.1 | 4.4 | 2.2 | 4.4 | 4.1 | 2.2 | 10.2 | 4.6 |
| | II | 5.9 | 12.4 | 6.1 | 2.2 | -2.1 | -3.5 | 14.5 | 1.9 |
| | III | 2.8 | 9.3 | 6.4 | 2.0 | -2.1 | -0.8 | 9.5 | 2.5 |
| | IV | 1.4 | 7.8 | 6.2 | 6.1 | 1.6 | 4.6 | 3.1 | 4.1 |
| | ANNUAL | 2.7 | 4.4 | 1.6r | 4.3 | 1.1 | 1.6 | 6.3 | 3.0 |
| 1984 | I | 4.0 | 11.4 | 7.2 | 6.2 | 1.2 | 2.1 | 7.0 | 3.7 |
| | II | 4.9 | 11.2 | 6.0 | 1.9 | -1.8 | -2.9 | 15.4 | 2.9 |
| | III | 0.6r | 1.8r | 1.2r | 4.4r | 0.8r | 3.7r | 3.4r | 3.6r |
| | IV | 2.6p | 4.3p | 1.6p | 4.1p | 0.3p | 1.5p | 2.3p | 1.8p |
| | ANNUAL | 3.6p | 8.8p | 5.0p | 4.7p | 0.4p | 1.1p | 7.7p | 3.2p |
| Percent change from corresponding quarter of previous year(6) | | | | | | | | | |
| 1983 | I | 1.2 | -0.2 | -1.4 | 5.8 | 2.1 | 4.5 | 1.3 | 3.5 |
| | II | 3.3 | 3.4 | 0.1 | 4.6 | 1.3 | 1.3 | 5.5 | 2.6 |
| | III | 3.4 | 6.1 | 2.6 | 3.3 | 0.7 | -0.1 | 8.9 | 2.7 |
| | IV | 3.1 | 8.4 | 5.2 | 3.7 | 0.3 | 0.6 | 9.2 | 3.3 |
| | ANNUAL | 2.7 | 4.4 | 1.6r | 4.3 | 1.1 | 1.6 | 6.3 | 3.0 |
| 1984 | I | 3.5 | 10.2 | 6.5 | 4.1 | -0.4 | 0.6 | 8.4 | 3.0 |
| | II | 3.3 | 9.9 | 6.4 | 4.0 | -0.3 | 0.7 | 8.7 | 3.3 |
| | III | 2.7r | 8.0 | 5.1 | 4.6r | 0.4r | 1.9r | 7.1r | 3.6r |
| | IV | 3.0p | 7.1p | 3.9p | 4.1p | 0.1p | 1.1p | 6.9p | 3.0p |
| | ANNUAL | 3.6p | 8.8p | 5.0p | 4.7p | 0.4p | 1.1p | 7.7p | 3.2p |

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

January 29, 1985
Source: Bureau of Labor Statistics

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

| Year and quarter | Output per hour of all persons | Output | Hours of all persons | Compensation per hour(1) | Real compensation per hour(2) | Unit labor costs | Unit non-labor payments(3) | Implicit price deflator(4) |
|---|--------------------------------|--------|----------------------|--------------------------|-------------------------------|------------------|----------------------------|----------------------------|
| Indexes 1977=100 | | | | | | | | |
| 1983 | I | 101.6 | 106.7 | 105.1 | 160.1 | 99.0 | 157.6 | 151.9 |
| | II | 103.6 | 110.4 | 106.5 | 161.5 | 98.8 | 155.9 | 152.7 |
| | III | 104.1 | 112.7 | 108.2 | 162.4 | 98.3 | 155.9 | 153.8 |
| | IV | 104.4 | 115.2 | 110.3 | 164.0 | 98.2 | 157.1 | 155.2 |
| | ANNUAL | 103.4 | 111.2 | 107.5 | 162.0 | 98.6 | 156.6 | 153.4 |
| 1984 | I | 105.2 | 118.0 | 112.3 | 166.5 | 98.5 | 158.3 | 156.3 |
| | II | 106.6 | 121.0 | 113.6 | 168.0 | 98.5 | 157.6 | 157.3 |
| | III | 106.3r | 121.3 | 114.1 | 169.5 | 98.5 | 159.5r | 159.0r |
| | IV | 106.7p | 122.4p | 114.7p | 170.9p | 98.4p | 160.2p | 159.9p |
| | ANNUAL | 106.6p | 120.7p | 113.2p | 169.5p | 98.9p | 158.9p | 158.1p |
| Percent change from previous quarter at annual rate(5) | | | | | | | | |
| 1983 | I | 4.4 | 6.0 | 1.5 | 5.7 | 5.4 | 1.3 | 4.6 |
| | II | 8.1 | 14.3 | 5.7 | 3.5 | -0.8 | -4.2 | 2.2 |
| | III | 2.1 | 8.7 | 6.5 | 2.2 | -1.9 | 0.1 | 2.7 |
| | IV | 1.0 | 9.1 | 8.0 | 4.1 | -0.3 | 3.0 | 3.7 |
| | ANNUAL | 3.5 | 5.0 | 1.5 | 4.9 | 1.6 | 1.4 | 3.2 |
| 1984 | I | 2.9 | 10.3 | 7.2 | 6.1 | 1.0 | 3.1 | 2.8 |
| | II | 5.5 | 10.6 | 4.8 | 3.7 | 0.0 | -1.7 | 2.8 |
| | III | -1.1r | 0.7r | 1.8r | 3.6r | 0.0r | 4.7r | 4.2r |
| | IV | 1.7p | 3.9p | 2.2p | 3.5p | -0.3p | 1.8p | 2.5p |
| | ANNUAL | 3.1p | 8.5p | 5.2p | 4.6p | 0.3p | 1.5p | 3.1p |
| Percent change from corresponding quarter of previous year(6) | | | | | | | | |
| 1983 | I | 1.8 | 0.3 | -1.5 | 6.0 | 2.4 | 4.1 | 3.7 |
| | II | 4.3 | 4.1 | -0.2 | 5.4 | 2.0 | 1.1 | 2.8 |
| | III | 3.9 | 6.3 | 2.3 | 4.1 | 1.5 | 0.2 | 3.0 |
| | IV | 3.9 | 9.5 | 5.4 | 3.9 | 0.6 | 0.0 | 3.3 |
| | ANNUAL | 3.5 | 5.0 | 1.5 | 4.9 | 1.6 | 1.4 | 3.2 |
| 1984 | I | 3.5 | 10.6 | 6.9 | 4.0 | -0.5 | 0.4 | 2.9 |
| | II | 2.9 | 9.7 | 6.6 | 4.0 | -0.3 | 1.1 | 3.0 |
| | III | 2.1r | 7.6r | 5.4 | 4.4 | 0.2 | 2.3r | 3.4r |
| | IV | 2.2p | 6.3p | 4.0p | 4.2p | 0.2p | 1.9p | 3.1p |
| | ANNUAL | 3.1p | 8.5p | 5.2p | 4.6p | 0.3p | 1.5p | 3.1p |

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

January 29, 1985
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 (7) | Hours of all persons | Compensation per hour(1) | Real compensation per hour(2) | Unit labor costs |
|---|--------------------------------|------------|----------------------|--------------------------|-------------------------------|------------------|
| Indexes 1977=100 | | | | | | |
| 1983 | I | 109.1 | 98.4 | 90.2 | 162.7 | 149.1 |
| | II | 110.8 | 102.4 | 92.4 | 163.0 | 147.0 |
| | III | 113.4 | 107.2 | 94.6 | 163.5 | 144.1 |
| | IV | 113.1 | 109.6 | 96.9 | 164.6 | 145.5 |
| | ANNUAL | 111.6 | 104.4 | 93.5 | 163.4 | 146.4 |
| 1984 | I | 114.2 | 113.0 | 98.9 | 167.1 | 146.4 |
| | II | 115.3 | 115.4 | 100.1 | 168.3 | 146.0 |
| | III | 117.4r | 117.4r | 100.0 | 169.9 | 144.7r |
| | IV | 117.2p | 117.5p | 100.2p | 171.8p | 146.6p |
| | ANNUAL | 116.9p | 116.6p | 99.8p | 169.3p | 144.9p |
| Percent change from previous quarter at annual rate(5) | | | | | | |
| 1983 | I | 4.8 | 7.3 | 2.4 | 4.2 | -0.5 |
| | II | 6.4 | 17.1 | 10.0 | 0.6 | -5.5 |
| | III | 9.7 | 20.5 | 9.8 | 1.3 | -7.7 |
| | IV | -1.0 | 9.1 | 10.2 | 2.9 | 3.9 |
| | ANNUAL | 4.3 | 5.2 | 0.9 | 3.4 | -0.8 |
| 1984 | I | 3.7 | 12.9 | 8.8 | 6.2 | 2.3 |
| | II | 4.0 | 8.9 | 4.6 | 2.9 | -1.1 |
| | III | 7.4r | 7.1r | -0.2r | 3.7r | -3.4r |
| | IV | -0.6p | 0.2p | 0.8p | 4.6p | 5.3p |
| | ANNUAL | 4.7p | 11.7p | 6.7p | 3.6p | -1.0p |
| Percent change from corresponding quarter of previous year(6) | | | | | | |
| 1983 | I | 3.4 | -2.2 | -5.4 | 5.5 | 2.0 |
| | II | 4.3 | 2.4 | -1.8 | 3.6 | -0.6 |
| | III | 4.3 | 7.6 | 3.1 | 2.3 | -1.9 |
| | IV | 4.9 | 13.4 | 8.1 | 2.2 | -2.6 |
| | ANNUAL | 4.3 | 5.2 | 0.9 | 3.4 | -0.8 |
| 1984 | I | 4.7 | 14.8 | 9.7 | 2.7 | -1.9 |
| | II | 4.1 | 12.7 | 8.3 | 3.3 | -0.7 |
| | III | 3.5r | 9.5r | 5.8 | 3.9 | 0.4r |
| | IV | 3.6p | 7.2p | 3.4p | 4.4p | 0.7p |
| | ANNUAL | 4.7p | 11.7p | 6.7p | 3.6p | -1.0p |

See footnotes following table 6.

r=revised

p=preliminary

January 29, 1985

Source: Bureau of Labor Statistics

Table 4. Durable manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted(1)

| Year and quarter | Output per hour of all persons | Output (7) | Hours of all persons | Compensation per hour(1) | Real compensation per hour(2) | Unit labor costs | |
|---|--------------------------------|------------|----------------------|--------------------------|-------------------------------|------------------|--------|
| Indexes 1977=100 | | | | | | | |
| 1983 | I | 108.5 | 95.6 | 88.1 | 162.2 | 100.3 | 149.5 |
| | II | 110.8 | 100.1 | 90.4 | 162.2 | 99.2 | 146.5 |
| | III | 113.5 | 105.7 | 93.2 | 162.5 | 98.4 | 143.2 |
| | IV | 113.1 | 109.0 | 96.4 | 163.4 | 97.8 | 144.4 |
| | ANNUAL | 111.5 | 102.6 | 92.0 | 162.5 | 98.9 | 145.8 |
| 1984 | I | 115.1 | 113.9 | 98.9 | 165.8 | 98.1 | 144.0 |
| | II | 116.0 | 116.5 | 100.4 | 167.0 | 97.9 | 144.0 |
| | III | 118.2r | 119.3r | 101.0r | 168.1r | 97.7 | 142.2r |
| | IV | 117.7p | 119.5p | 101.5p | 169.6p | 97.7p | 144.1p |
| | ANNUAL | 117.5p | 118.0p | 100.4p | 167.7p | 97.8p | 142.7p |
| Percent change from previous quarter at annual rate(5) | | | | | | | |
| 1983 | I | 7.2 | 10.7 | 3.3 | 3.9 | 3.6 | -3.1 |
| | II | 8.7 | 20.5 | 10.9 | 0.1 | -4.1 | -7.9 |
| | III | 10.2 | 24.2 | 12.8 | 0.8 | -3.2 | -8.5 |
| | IV | -1.2 | 13.2 | 14.6 | 2.1 | -2.3 | 3.3 |
| | ANNUAL | 5.6 | 5.7 | 0.1 | 3.1 | -0.1 | -2.3 |
| 1984 | I | 7.2 | 18.9 | 10.9 | 6.1 | 1.1 | -1.0 |
| | II | 3.1 | 9.5 | 6.2 | 2.8 | -0.8 | -0.2 |
| | III | 7.9r | 10.2r | 2.1r | 2.6 | -0.9 | -4.8r |
| | IV | -1.6p | 0.7p | 2.3p | 3.8p | -0.1p | 5.4p |
| | ANNUAL | 5.4p | 15.0p | 9.1p | 3.1p | -1.1p | -2.1p |
| Percent change from corresponding quarter of previous year(6) | | | | | | | |
| 1983 | I | 4.7 | -3.8 | -8.1 | 5.5 | 1.8 | 0.7 |
| | II | 5.7 | 1.8 | -3.7 | 3.4 | 0.1 | -2.2 |
| | III | 5.5 | 8.5 | 2.9 | 1.8 | -0.8 | -3.5 |
| | IV | 6.1 | 17.0 | 10.3 | 1.7 | -1.6 | -4.2 |
| | ANNUAL | 5.6 | 5.7 | 0.1 | 3.1 | -0.1 | -2.3 |
| 1984 | I | 6.1 | 19.2 | 12.3 | 2.2 | -2.2 | -3.7 |
| | II | 4.7 | 16.3 | 11.1 | 2.9 | -1.3 | -1.7 |
| | III | 4.2r | 12.9r | 8.4r | 3.4 | -0.7 | -0.7r |
| | IV | 4.1p | 9.6p | 5.3p | 3.8p | -0.2p | -0.2p |
| | ANNUAL | 5.4p | 15.0p | 9.1p | 3.1p | -1.1p | -2.1p |

See footnotes following table 6.

r=revised

p=preliminary

January 29, 1985

Source: Bureau of Labor Statistics

Table 5. Nondurable manufacturing sector: Productivity, hourly compensation, and unit labor costs, seasonally adjusted(12)

| Year and quarter | Output per hour of all persons | Output (7) | Hours of all persons | Compensation per hour(1) | Real compensation per hour(2) | Unit labor costs | |
|---|--------------------------------|------------|----------------------|--------------------------|-------------------------------|------------------|--------|
| Indexes 1977=100 | | | | | | | |
| 1983 | I | 110.0 | 102.6 | 93.3 | 164.5 | 101.7 | 149.6 |
| | II | 110.9 | 105.7 | 95.3 | 165.1 | 101.0 | 148.8 |
| | III | 113.3 | 109.5 | 96.6 | 165.7 | 100.3 | 146.2 |
| | IV | 113.2 | 110.5 | 97.6 | 167.1 | 100.1 | 147.6 |
| | ANNUAL | 111.9 | 107.1 | 95.7 | 165.6 | 100.7 | 148.0 |
| 1984 | I | 112.8 | 111.7 | 99.0 | 169.5 | 100.3 | 150.2 |
| | II | 114.3 | 113.8 | 99.5 | 170.6 | 100.0 | 149.2 |
| | III | 116.2 | 114.6r | 98.6 | 172.7 | 100.4r | 148.7r |
| | IV | 116.4p | 114.4p | 98.3p | 175.2p | 100.8p | 150.5p |
| | ANNUAL | 115.9p | 114.5p | 98.9p | 172.0p | 100.3p | 148.4p |
| Percent change from previous quarter at annual rate(5) | | | | | | | |
| 1983 | I | 1.5 | 2.8 | 1.3 | 4.5 | 4.1 | 2.9 |
| | II | 3.4 | 12.5 | 8.8 | 1.4 | -2.8 | -1.9 |
| | III | 9.0 | 15.3 | 5.8 | 1.4 | -2.6 | -7.0 |
| | IV | -0.6 | 3.4 | 4.0 | 3.4 | -1.0 | 4.0 |
| | ANNUAL | 2.4 | 4.4 | 2.0 | 4.1 | 0.9 | 1.7 |
| 1984 | I | -1.3 | 4.4 | 5.8 | 5.8 | 0.8 | 7.2 |
| | II | 5.5 | 8.0 | 2.4 | 2.7 | -1.0 | -2.6 |
| | III | 6.5r | 2.6r | -3.7r | 5.1r | 1.5r | -1.4r |
| | IV | 0.9p | -0.6p | -1.5p | 5.8p | 1.8p | 4.8p |
| | ANNUAL | 3.6p | 7.0p | 3.3p | 3.8p | -0.4p | 0.3p |
| Percent change from corresponding quarter of previous year(6) | | | | | | | |
| 1983 | I | 1.4 | 0.1 | -1.4 | 6.2 | 2.5 | 4.7 |
| | II | 2.2 | 3.1 | 0.9 | 4.5 | 1.1 | 2.2 |
| | III | 2.7 | 6.2 | 3.5 | 3.2 | 0.6 | 0.6 |
| | IV | 3.3 | 8.4 | 4.9 | 2.7 | -0.6 | -0.6 |
| | ANNUAL | 2.4 | 4.4 | 2.0 | 4.1 | 0.9 | 1.7 |
| 1984 | I | 2.6 | 8.8 | 6.1 | 3.0 | -1.4 | 0.4 |
| | II | 3.1 | 7.7 | 4.5 | 3.3 | -0.9 | 0.2 |
| | III | 2.5r | 4.6r | 2.1 | 4.3r | 0.1r | 1.7r |
| | IV | 2.9p | 3.6p | 0.7p | 4.8p | 0.8p | 1.9p |
| | ANNUAL | 3.6p | 7.0p | 3.3p | 3.8p | -0.4p | 0.3p |

See footnotes following table 6.

r=revised

p=preliminary

January 29, 1985

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(8) | Total unit costs (9) | Unit profits (10) | Implicit price deflator (4) | |
|---|------------------------------|--------|----------------|-------------------------|-----------------------------|------------------|-------------------------|----------------------|-------------------|-----------------------------|--------|
| Indexes 1977=100 | | | | | | | | | | | |
| 1983 | I | 104.0 | 107.5 | 103.4 | 159.2 | 98.4 | 153.1 | 167.0 | 156.7 | 92.5 | 149.4 |
| | II | 105.8 | 111.4 | 105.2 | 160.6 | 98.2 | 151.7 | 165.1 | 155.2 | 111.8 | 150.2 |
| | III | 107.2 | 114.7 | 106.9 | 161.8 | 98.0 | 150.9 | 164.4 | 154.4 | 126.6 | 151.2 |
| | IV | 107.2 | 117.0 | 109.2 | 162.6 | 97.4 | 151.7 | 163.3 | 154.7 | 135.9 | 152.6 |
| | ANNUAL | 106.1 | 112.6 | 106.2 | 161.0 | 97.9 | 151.8 | 164.9 | 155.2 | 117.2 | 150.9 |
| 1984 | I | 108.1 | 120.2 | 111.2 | 164.8 | 97.5 | 152.5 | 162.0 | 155.0 | 143.2 | 153.6 |
| | II | 108.9 | 123.1 | 113.1 | 165.8 | 97.2 | 152.3 | 162.8 | 155.0 | 151.1 | 154.6 |
| | III | 108.2r | 123.1r | 113.8 | 167.1r | 97.1r | 154.5r | 165.9r | 157.5r | 145.3r | 156.1r |
| Percent change from previous quarter at annual rate(5) | | | | | | | | | | | |
| 1983 | I | 3.2 | 4.4 | 1.2 | 3.9 | 3.5 | 0.7 | -4.1 | -0.7 | 124.6 | 4.7 |
| | II | 7.5 | 15.1 | 7.1 | 3.5 | -0.8 | -3.7 | -4.5 | -3.9 | 112.8 | 2.3 |
| | III | 5.3 | 12.4 | 6.7 | 3.1 | -1.0 | -2.1 | -1.7 | -2.0 | 64.8 | 2.8 |
| | IV | -0.2 | 8.4 | 8.6 | 2.0 | -2.4 | 2.1 | -2.6 | 0.8 | 32.6 | 3.6 |
| | ANNUAL | 3.3 | 4.5 | 1.2 | 4.2 | 0.9 | 0.8 | 0.1 | 0.6 | 38.5 | 3.1 |
| 1984 | I | 3.6 | 11.6 | 7.7 | 5.7 | 0.7 | 2.0 | -3.2 | 0.6 | 23.4 | 2.7 |
| | II | 2.8 | 9.8 | 6.8 | 2.4 | -1.3 | -0.4 | 2.0 | 0.2 | 23.8 | 2.6 |
| | III | -2.5r | 0.2r | 2.8r | 3.2r | -0.3 | 5.9r | 8.0r | 6.5r | -14.5r | 3.9r |
| Percent change from corresponding quarter of previous year(6) | | | | | | | | | | | |
| 1983 | I | 1.8 | -1.1 | -2.8 | 5.4 | 1.7 | 3.5 | 3.3 | 3.5 | 3.5 | 3.5 |
| | II | 3.7 | 3.1 | -0.6 | 4.6 | 1.3 | 0.9 | 0.5 | 0.8 | 28.7 | 2.7 |
| | III | 3.8 | 6.3 | 2.4 | 3.6 | 1.0 | -0.2 | 0.0 | -0.2 | 46.3 | 3.0 |
| | IV | 3.9 | 10.0 | 5.9 | 3.1 | -0.2 | -0.8 | -3.2 | -1.5 | 79.8 | 3.3 |
| | ANNUAL | 3.3 | 4.5 | 1.2 | 4.2 | 0.9 | 0.8 | 0.1 | 0.6 | 38.5 | 3.1 |
| 1984 | I | 4.0 | 11.8 | 7.5 | 3.6 | -0.9 | -0.4 | -3.0 | -1.1 | 54.8 | 2.8 |
| | II | 2.9 | 10.5 | 7.5 | 3.3 | -1.0 | 0.4 | -1.4 | -0.1 | 35.2 | 2.9 |
| | III | 0.9r | 7.4r | 6.4 | 3.3 | -0.8 | 2.4r | 0.9r | 2.0r | 14.7r | 3.2r |

See footnotes following table 6.

r=revised
p=preliminary

January 29, 1985

Source: Bureau of Labor Statistics

Footnotes, Tables 1-6

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: Based on data covering the period from the first quarter of 1976 to the second quarter of 1984, the probability is 0.95 that the interval between -1.8 and 2.0 index points contains the revision of the index of productivity in the business sector from the first to the third quarterly publication of the estimate.

- (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) Nonlabor payments include profits, depreciation, interest, rental income, 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 changes: current quarter divided by comparable quarter a year ago. Annual changes: percent change between annual average levels.
- (7) Quarterly measures adjusted to annual estimates of output (gross product originating) from the Bureau of Economic Analysis, U.S. Department of Commerce.
- (8) Unit nonlabor cost includes depreciation, interest, and indirect taxes.
- (9) Total unit cost is the sum of labor and nonlabor costs.
- (10) Unit profits include corporate profit and inventory valuation adjustment.
- (11) The durable sector includes the following 2-digit SIC industries: Primary metal; 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.
- (12) The nondurable sector includes the following 2-digit SIC industries: Textile mill products; apparel products; leather and leather products; printing and publishing; chemicals and chemical products; petroleum products; rubber and plastic products; foods; and tobacco products.