



USDL - 73-11
FOR RELEASE: 11:00 A.M., E.S.T.
Tuesday, January 30, 1973

Bureau of Labor Statistics
W. M. Eisenberg (202) 961-3595
K. D. Hoyle (202) 961-2913
home: 333-1384

Productivity and Costs, Fourth Quarter 1972
and Annual Data for 1972

Fourth Quarter 1972

Productivity (output per man-hour) in the private economy rose at an annual rate of 5.3 percent in the fourth quarter of 1972 compared with 4.1 percent in the third quarter, the U. S. Department of Labor's Bureau of Labor Statistics announced today. The fourth quarter increase in productivity reflected an 8.9 percent rise in output associated with 3.4 percent increase in man-hours. The acceleration was a result of a sharp increase in farm productivity.

In the nonfarm sector, productivity increased by 4.3 percent, down somewhat from 6.6 percent in the third quarter, but well above the long-term trend rate over the last two decades.

Productivity increases in the manufacturing sector also slowed, rising 2.4 percent during the fourth quarter, compared with a 5.5 percent gain in the previous quarter.

Over the four-quarter period ending with the fourth quarter of 1972, the rates of change in output per man-hour were 4.2 percent for the private economy, 5.3 percent for the private nonfarm sector, and 4.0 percent in manufacturing.

Recent changes in productivity, hourly compensation, and unit labor costs at annual rates are summarized below.

Table A. Percent Change in Productivity and Costs at Annual Rates
(Preliminary seasonally adjusted data)

	3rd Quarter 1972 to 4th Quarter 1972	4th Quarter 1971 to 4th Quarter 1972
<u>Total Private</u>		
Output per man-hour	5.3	4.9
Compensation per man-hour	7.8	6.6
Unit labor costs	2.3	1.6
Real compensation per man-hour	4.0	3.0
<u>Private Nonfarm</u>		
Output per man-hour	4.3	5.3
Compensation per man-hour	7.4	6.8
Unit labor costs	3.0	1.4
Real compensation per man-hour	3.7	3.3
<u>Manufacturing</u>		
Output per man-hour	2.4	5.0
Compensation per man-hour	6.7	6.9
Unit labor costs	4.1	1.8
Real compensation per man-hour	3.0	3.4

The acceleration of growth of output per man-hour in the private sector was attributable to a substantial increase in output--from 6.5 percent in the third quarter to 8.9 percent in the fourth quarter. Man-hours also increased, but at a slower rate than output--up from 2.3 percent in the previous quarter to 3.4 percent in the fourth quarter.

In the nonfarm sector, the deceleration in productivity growth reflected the much sharper rise in man-hours which occurred in the fourth quarter--4.3 percent in contrast to 0.9 percent in the third quarter. Output continued to show a very high rate of gain--8.6 percent in the fourth quarter--but this was only moderately higher than the 7.5 percent increase in the third quarter.

Although the rate of increase of manufacturing output during this quarter was very strong--12.5 percent compared with 7.1 percent in the third quarter--there was an even greater jump in manufacturing man-hours--9.8 percent compared with a 1.6 percent rise in the third quarter. Therefore, the rate of increase in productivity slowed substantially from 5.5 percent to 2.4 percent in the fourth quarter. Compared with the fourth quarter of 1971, output per man-hour in manufacturing rose 5.0 percent.

During the fourth quarter, hourly compensation in the private sector increased 7.8 percent, up from 4.4 percent in the third quarter. The increase over the same period a year ago was 6.6 percent.

In the nonfarm sector, hourly compensation rose 7.4 percent in the fourth quarter compared with 6.1 percent in the third quarter. Since the fourth quarter of 1971, hourly compensation increased 6.8 percent.

In manufacturing the increase in the fourth quarter was somewhat less than in the nonfarm sector--6.7 percent. Over the period a year ago, the gain was 6.9 percent.

Real hourly compensation (hourly compensation adjusted for changes in the consumer price index) in the private economy rose 4.0 percent in the fourth quarter. This was a substantial increase over the less than one percent gain which occurred in the third quarter. Since the rates of increase in the CPI were about the same in both the fourth and third quarters, the differences in the gains in real hourly compensation reflected the increases in hourly compensation.

Since hourly compensation gains were somewhat greater than the productivity increases, unit labor costs in the private sector rose 2.3 percent. In the nonfarm sector, unit labor costs increased 3.0 percent after declining slightly in the second and third quarters. Unit labor costs in manufacturing increased 4.1 percent in the fourth quarter after declining in the two previous quarters.

The increase of unit nonlabor payments (which include capital consumption allowances, net interest, indirect business taxes, and profits) slowed in the private economy--3.3 percent compared with a 5.6 percent increase last quarter. In the nonfarm sector, unit nonlabor payments rose 0.4 percent--down from 4.7 percent in the third quarter.

The rise in prices as measured by the implicit price deflator (which reflects changes in unit labor cost, nonlabor costs, and profits) was 2.7 percent in the private economy in the fourth quarter and 2.1 percent in the nonfarm sector. These increases were slightly higher than those posted in the second and third quarters.

The strong demand for labor in the fourth quarter in the nonfarm sector, as expressed by the sharp rise in man-hours, was fairly widespread within the sector. The largest rise, however, was in manufacturing. (See table B.)

Table B.
Percent Change in Man-hours (Preliminary)
(percent change over previous quarter at annual rate)

Industry	1972 III	1972 IV	1972 Annual
Private nonfarm	0.9	4.1	2.7
Mining	-0.3	1.5	1.1
Construction	3.5	-5.0	2.2
Manufacturing	1.7	10.0	3.5
Transportation and public utilities	-1.3	4.1	1.6
Trade	1.5	3.9	3.4
Finance, insurance and real estate	2.8	3.6	3.9
Services	6.4	2.7	3.5
Other ^{1/}	-6.8	-1.5	-0.2

^{1/} Includes government enterprises, private households, proprietors, and unpaid family workers.

While most of the fourth quarter gain in nonfarm man-hours resulted from employment increases, the rise in manufacturing man-hours reflected marked increases in both employment and average weekly hours. This pattern was typical for the entire year as employment increased in each quarter in all three major sectors of the economy. However, it was only in manufacturing that increases in the length of the workweek was a consistent source of man-hours advances. (See table C.)

Table C. Percent Changes in Man-hours, Employment and Average Weekly Hours (preliminary)
(percent change over previous quarter at annual rate)

		<u>Man-hours</u>			<u>Employment</u>			<u>Average Weekly Hours</u>		
		Total pri- vate	Private non- farm	Manu- factur- ing	Total pri- vate	Private non- farm	manu- factur- ing	Total pri- vate	Private non- farm	Manu- fac- turing
1972	I	3.1	2.8	3.3	2.9	3.2	2.2	0.2	-0.4	1.0
	II	3.8	5.2	7.7	3.5	4.2	5.5	0.2	1.0	2.0
	III	2.3	0.9	1.6	2.8	1.4	1.4	-0.5	-0.5	1.0
	IV	3.4	4.1	9.8	3.8	3.9	7.7	-0.4	0.2	2.0

As a result of five quarters of marked increases, employment in the private economy and the nonfarm sector stands at record highs, after exceeding the 1969 peak in the first quarter of 1972. In contrast, manufacturing employment is still more than four percent below the 1969 peak, reflecting the larger employment adjustments made in this sector coupled with a longer lag before the upturn in hiring. (See table D.)

Table D.
Indexes of Employment
(1967 = 100)

		Private	Nonfarm	Manufacturing
1969	I	104.2	104.7	103.2
	II	105.0	105.6	103.8
	III	105.4	106.2	104.1
	IV	105.6	106.6	103.4
1970	I	105.6	106.6	102.5
	II	105.2	106.0	100.7
	III	104.7	105.7	99.1
	IV	103.9	104.9	95.3
1971	I	104.2	105.3	95.8
	II	104.3	105.3	96.0
	III	104.4	105.5	95.0
	IV	105.1	106.1	95.3
1972	I	105.8	106.9	95.8
	II	106.7	108.0	97.1
	III	107.5	108.4	97.5
	IV	108.5p	109.4p	99.3p

ANNUAL REVIEW OF PRODUCTIVITY AND COSTS

For the second successive year, private sector productivity increased at a faster pace than the long-term growth rate of 3.0 percent over the last two decades. Rising by 4.2 percent, the 1972 output per man-hour increase represented an improvement over the 1971 rate of 3.6 percent and was the best gain since 1966.

Although productivity increased both in 1971 and 1972, the gains reflected different underlying patterns. In 1971, output per man-hour improved mainly as a result of a decline in man-hours, with only a modest gain of 3.0 percent in output. In 1972, the gains resulted from both output increases and somewhat smaller man-hour increases. The man-hour increase which occurred in 1972 reflected both an increase in employment and

average weekly hours. In fact, a lengthened average workweek was posted for the first time since 1966.

Hourly compensation increased at a slower rate in 1972 than in the previous year. During 1972 the gain was 6.2 percent, in contrast to a 7.1 percent rise in 1971.

Real hourly compensation (hourly compensation adjusted by taking into account the rate of change of consumer prices) increased 2.9 percent. Although the gains in hourly compensation slackened somewhat, the rate of change in the consumer price index also slowed, so that increases in real compensation per man-hour were virtually the same in the two years.

Unit labor costs, which reflect the relationship between hourly compensation and output per man-hour, also increased more slowly in 1972 than they did in 1971. In 1972, the increase was 1.9 percent, down from 3.4 percent in 1971 and much smaller than the 4.9 percent annual rate for the 1965-70 period.

Price increases for the private sector slowed considerably to a moderate 2.6 percent rise, in contrast to a 4.3 percent increase in 1971.

In the nonfarm sector, productivity rose 4.7 percent in 1972, compared with 3.6 percent in 1971, reflecting an increase of 7.6 percent in output and 2.7 percent man-hours. The pattern was similar to that which took place in the total private economy. Similarly, increases in hourly compensation fell off somewhat--6.4 percent in 1972 compared with 7.1 percent in 1971. Unit labor costs rose 1.6 percent in 1972, compared with 3.4 percent in 1971.

Prices in the nonfarm sector decelerated even more than they did in the private economy--the rate of increase slowing to 2.1 percent, whereas the previous year experienced the same 4.3 percent gain as in the private economy.

Productivity in manufacturing gained less rapidly in 1972 than in the private economy and the nonfarm sector. Output per man-hour rose 4.0 percent, down from the 5.8 percent

increase in 1971. The higher gain in 1971, however, reflected in part the rebound from the auto strike which had its pronounced impact in the manufacturing sector. The 1972 increase is substantially greater than the long-term rate for manufacturing--3.0 percent over the last two decades.

Hourly compensation advances in manufacturing slowed somewhat from the pace registered in 1971--6.2 percent in 1972 compared with 6.8 percent in 1971.

Unit labor costs in manufacturing rose 2.1 percent in 1972, up from 0.9 percent in 1971, reflecting a greater slowdown in productivity than in hourly compensation.

Table 1. Total Private Economy: Output per Man-hour, Hourly Compensation, Unit Labor Cost, and Prices, Seasonally Adjusted, (Indexes 1967 = 100)

Year and quarter	Output per man-hour	Output	Man-hours	Compensation per man-hour <u>1/</u>	Real compensation per man-hour <u>2/</u>	Unit labor cost	Unit non-labor payments <u>3/</u>	Implicit price deflator <u>4/</u>
1971								
1st...	107.0	108.7	101.6	130.6	↓ 109.2	122.0	109.1	117.0
2nd...	107.6	109.7	101.9	132.5	109.7	123.2	110.4	118.2
3rd...	108.5	110.4	101.8	134.4	110.2	123.9	111.3	119.0
4th...	109.4	112.3	102.6	139.6 136.0	110.8	124.2	111.6	119.3
Annual Avg.	108.1	110.3	102.0	133.4	109.9	123.4	110.6	118.4
1972								
1st...	110.5	114.3	103.4	138.8	112.2	125.7	112.6	120.6
2nd...	112.2	117.1	104.4	140.7	112.9	125.5	114.3	121.1
3rd...	113.3	118.9	105.0	142.2	113.1	125.5	115.8	121.8
4th...	114.8p	121.5p	105.9p	144.9p	114.2p	126.3p	116.8p	122.6p
Annual Avg. <i>6</i>	112.7p	118.0p	104.7p	141.7p	113.1p	125.7p	114.9p	121.5p
<u>Percent Change Over Previous Quarter at Annual Rate <u>5/</u></u>								
1971								
1st...	7.5	8.7	1.2	9.2	5.8	1.7	10.5	4.7
2nd...	2.2	3.7	1.5	6.2	1.8	3.9	4.9	4.3
3rd...	3.2	2.5	-0.6	5.8	1.7	2.6	3.1	2.8
4th...	3.7	7.2	3.4	4.7	2.3	1.0	1.1	1.0
Annual Avg. <i>5%</i>	3.6	3.0	-0.6	7.1	2.7	3.4	6.0	4.3
1972								
1st...	3.9	7.0	3.1	8.7	5.1	4.6	3.6	4.2
2nd...	6.2	10.2	3.8	5.6	2.4	-0.6	6.0	1.7
3rd...	4.1	6.5	2.3	4.4	0.8 r	0.3	5.6	2.2
4th...	5.3p	8.9p	3.4p	7.8p	4.0 p	2.3p	3.3p	2.7p
Annual Avg. <i>5%</i>	4.2p	7.0p	2.6p	6.2p	2.9 p	1.9p	3.9p	2.6p
<u>Percent Change Over Previous Year <u>7/</u></u>								
1972								
1st...	3.2	5.1	1.8	6.3	2.7	3.0	3.2	3.1
2nd...	4.2	6.7	2.4	6.2	2.9	1.9	3.5	2.4
3rd...	4.5	7.7	3.1	5.8	2.6	1.3	4.1	2.3
4th...	4.9p	8.2p	3.1p	6.6p	3.0p	1.6p	4.6p	2.7p

See footnotes at end of table 4 p= preliminary r= revised

Jan 73

Table 2. Private Nonfarm Sector: Output per Man-hour, Hourly Compensation, Unit Labor Cost, and Prices, Seasonally Adjusted, (Indexes 1967 = 100)

Year and quarter	Output per man-hour	Output	Man-hours	Compensation per man-hour <u>1/</u>	Real compensation per man-hour <u>2/</u>	Unit labor cost	Unit non-labor payments <u>3/</u>	Implicit price deflator <u>4/</u>
1971								
1st...	105.8	108.7	102.8	128.8	107.8	121.8	109.5	117.1
2nd...	106.6	109.8	103.0	131.2	108.6	123.0	110.5	118.3
3rd...	107.3	110.5	103.0	132.9	108.9	123.8	111.3	119.1
4th...	108.5	112.7	103.8	134.5	109.6	123.9	111.3	119.1
Annual Ave.	107.1	110.4	103.2	131.8	108.7	123.2	110.7	118.4
1972								
1st...	109.9	114.9	104.5	137.4	111.1	125.0	112.2	120.2
2nd...	111.3	117.8	105.9	139.0	111.5	124.9	113.7	120.6
3rd...	113.1	120.0	106.1	141.1	112.1	124.8	115.0	121.1
4th...	114.3 p	122.5 p	107.2 p	143.6 p	113.2 p	125.7 p	115.1 p	121.7 p
Annual Ave.	112.1 p	118.8 p	105.9 p	140.3 p	112.0 p	125.1 p	114.0 p	120.9 p
Percent Change Over Previous Quarter at Annual Rate <u>5/</u>								
1971								
1st...	7.4	8.6	1.1	9.1	5.7	1.5	10.1	4.5
2nd...	3.2	4.1	0.9	7.5	3.0	4.2	3.7	4.0
3rd...	2.5	2.4	-0.2	5.2	1.1	2.5	2.9	2.7
4th...	4.7	8.1	3.3	4.9	2.6	0.3	-0.1	0.1
Annual Ave. <u>6/</u>	3.6	3.0	-0.6	7.1	2.7	3.4	6.1	4.3
1972								
1st...	5.2	8.1	2.8	9.1	5.5	3.8	3.5	3.7
2nd...	5.1	10.6	5.2	4.6	1.5	-0.5	5.2	1.5
3rd...	6.6	7.5 r	0.9	6.1	2.4	-0.4	4.7	1.4
4th...	4.3 p	8.6 p	4.1 p	7.4 p	3.7 p	3.0 p	0.4 p	2.1 p
Annual Ave. <u>6/</u>	4.7 p	7.6 p	2.7 p	6.4 p	3.1 p	1.6 p	3.0 p	2.1 p
Percent Change Over Previous Year <u>7/</u>								
1972								
1st...	3.9	5.6	1.7	6.7	3.0	2.7	2.5	2.6
2nd...	4.4	7.3	2.8	5.9	2.7	1.5	2.9	2.0
3rd...	5.4 r	8.6	3.0	6.2	3.0	0.8	3.3	1.7
4th...	5.3 p	8.7 p	3.2 p	6.8 p	3.3 p	1.4 p	3.4 p	2.1 p

See footnotes at end of table 4 p= preliminary r= revised

Table 3. Manufacturing Sector: Output per Man-hour, Hourly Compensation, and Unit Labor Costs, Seasonally Adjusted (Indexes 1967 = 100)

Year and quarter	Output per man-hour	Output <u>8/</u>	Man-hours	Compensation per man-hour <u>1/</u>	Real compensation per man-hour <u>2/</u>	Unit labor costs
1971						
1st...	112.6	106.3	94.4	128.2	107.3	113.9
2nd...	114.7	108.2	94.3	130.0	107.6	113.3
3rd...	115.3	107.9	93.5	131.2	107.6	113.8
4th...	115.1	108.7	94.5	132.2	107.8	114.9
Annual Ave.	114.4	107.8	94.2	130.5	107.5	114.0
1972						
1st...	116.6	111.1	95.3	135.9	109.9	116.5
2nd...	118.5	115.0	97.0	137.5	110.3	116.0
3rd...	120.1r	117.0	97.4	139.1r	110.6r	115.9
4th...	120.8p	120.5p	99.7p	141.4p	111.4p	117.0p
Annual Ave.	119.1p	115.9p	97.4p	138.6p	110.6p	116.4p
<u>Percent Change Over Previous Quarter at Annual Rate <u>5/</u></u>						
1971						
1st...	13.8	16.6	2.5	9.0	5.7	-4.2
2nd...	7.9	7.3	-0.5	5.7	1.2	-2.0
3rd...	2.2	-1.1	-3.2	3.7	-0.3	1.5
4th...	-1.0	3.0	4.1	3.1	0.8	4.2
Annual Ave.	5.8	1.7	-4.0	6.8	2.4	0.9
1972						
1st...	5.6	9.1	3.3	11.5	8.0	5.6
2nd...	6.6	14.8	7.7	4.8	1.5	-1.6
3rd...	5.5r	7.1	1.6r	4.9r	1.3r	-0.6
4th...	2.4p	12.5p	9.8p	6.7p	3.0p	4.1p
Annual Ave.	4.0p	7.5p	3.4p	6.2p	2.8p	2.1p
<u>Percent Change Over Previous Year <u>7/</u></u>						
1972						
1st...	3.6	4.5	0.9	6.0	2.4	2.3
2nd...	3.3	6.3	2.9	5.8	2.4	2.4
3rd...	4.1r	8.4r	4.2r	6.0r	2.8r	1.9
4th...	5.0p	10.9p	5.6p	6.9p	3.4p	1.8p

See footnotes at end of table 4 p= preliminary r= revised

Table 4. Nonfinancial Corporations: Output per Man-hour, Hourly Compensation, Unit Labor Costs, Unit Profits and Prices, Seasonally Adjusted
(Indexes 1967 = 100)

Year and quarter	Output per man-hour	Output	Man-hours	Compensation per man-hour <u>1/</u>	Real compensation per man-hour <u>2/</u>	Unit labor cost	Unit non-labor costs <u>9/</u>	Unit Profits <u>10/</u>	Implicit price deflator
1971									
1st...	110.6	110.7	100.1	129.2	108.1	116.9	124.7	76.6	112.4
2nd...	111.7	111.9	100.2	131.4	108.8	117.6	125.7	78.8	113.4
3rd...	113.1	112.5	99.4	133.5	109.4	118.0	128.2	76.9	113.9
4th...	114.0	114.6	100.6	134.7	109.8	118.2	129.4	74.5	113.9
Annual Ave.	112.5	112.5	100.0	132.4	109.1	117.7	126.9	76.6	113.4
1972									
1st...	115.8	117.8	101.7	137.9	111.5	119.1	127.9	78.1	114.8
2nd...	117.3	120.9	103.1	139.6	111.9	119.0	128.9	79.8	115.1
3rd...	118.7	122.7 _r	103.4	141.3	112.3	119.1 _r	128.6 _r	81.6 _r	115.4
<u>Percent Change Over Previous Quarter at Annual Rate <u>5/</u></u>									
1971									
1st...	10.7	12.8	1.9	8.2	4.9	- 2.2	- 1.5	82.3	4.0
2nd...	4.3	4.5	0.2	6.9	2.7	2.5	3.2	11.9	3.6
3rd...	5.0	1.9	- 2.9	6.7	2.2	1.6	8.3	- 9.2	1.9
4th...	3.0	7.9	4.7	3.7	1.4	0.6	3.6	- 11.8	0.0
Annual Ave.	4.7	2.7	- 1.9	7.2	2.8	2.5	5.3	7.8	3.6
1972									
1st...	6.6	11.5	4.6	9.8	6.2	3.1	- 4.5	20.9	2.9
2nd...	5.3	11.0	5.3	4.8	1.7	- 0.5	3.1	8.9	1.3
3rd...	4.7 _r	6.2 _r	1.5	5.1	1.4	0.3 _r	- 1.0 _r	9.4 _r	0.9
<u>Percent Change Over Previous Year <u>7/</u></u>									
1971									
1st...	4.7	0.6	- 4.0	8.2	3.1	3.3	6.7	6.6	4.4
2nd...	4.2	1.7	- 2.4	7.7	3.2	3.3	5.7	6.3	4.2
3rd...	4.0	1.8	- 2.1	6.8	2.5	2.8	6.6	6.0	4.0
4th...	5.7	6.7	0.9	6.4	2.8	0.6	3.3	13.0	2.4
1972									
1st...	4.7	6.4	1.6	6.7	3.1	2.0	2.6	2.0	2.1
2nd...	5.0	8.0	2.9	6.2	2.9	1.2	2.5	1.3	1.5
3rd...	4.9 _r	9.1 _r	4.0	5.8	2.6	0.9 _r	0.3 _r	6.1 _r	1.3

See footnotes at end of table

r= revised

FOOTNOTES, TABLES 1 TO 4

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

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 includes an estimate of wages, salaries and supplemental payments for the self-employed.

2/ Compensation per man-hour adjusted for changes in the Consumer Price Index.

3/ Nonlabor payments include profits, depreciation, interest, rental income and indirect taxes.

4/ Current dollar gross product divided by constant dollar gross product.

5/ Percent change compounded at annual rate from original data rather than index numbers.

6/ Percentage change of annual average.

7/ Current quarter divided by comparable quarter a year ago.

8/ Quarterly measures adjusted to annual estimates of output (gross product originating) from the Bureau of Economic Analysis, U. S. Department of Commerce.

9/ Unit nonlabor costs include depreciation, interest and indirect taxes.

10/ Unit profits include corporate profits and inventory valuation adjustment.

CHART 1. PRODUCTIVITY, HOURLY
 COMPENSATION, UNIT COSTS AND
 PRICES--TOTAL PRIVATE ECONOMY
 (PERCENT CHANGE FROM PRECEDING
 QUARTER AT ANNUAL RATE)

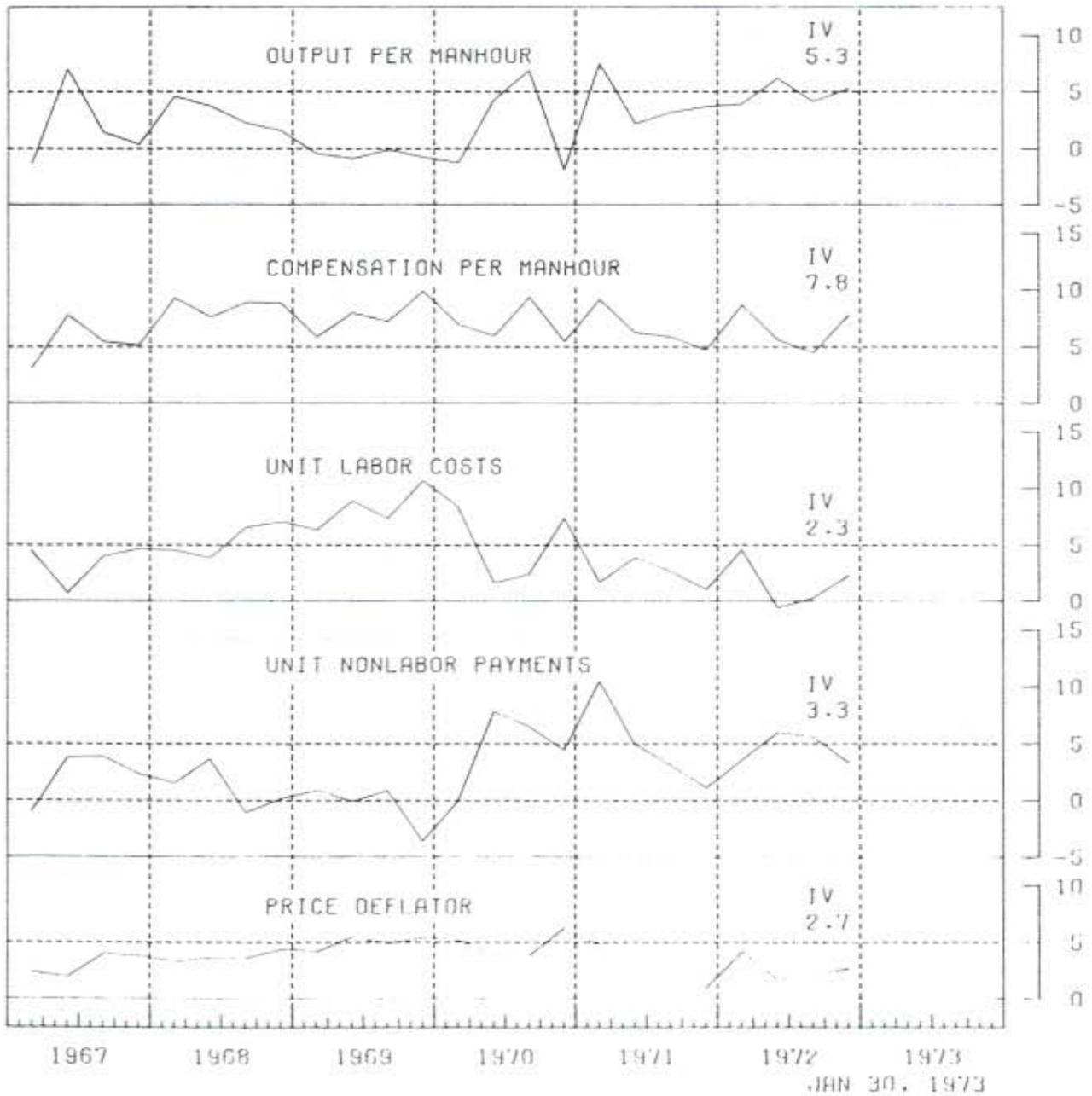


CHART 2. PRODUCTIVITY, HOURLY COMPENSATION, UNIT COSTS AND PRICES--PRIVATE NONFARM SECTOR (PERCENT CHANGE FROM PRECEDING QUARTER AT ANNUAL RATE)

