

# The Employment Cost Index: recent trends and expansion

*The 9.8-percent rise in compensation in 1981 matched the year-earlier level; coverage was extended to employees of State and local governments and index numbers for wages and compensation were published for the first time*

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After nearly a decade of developmental work, the Bureau of Labor Statistics Employment Cost Index (ECI) today tracks labor cost trends for nearly 88 million workers in the civilian nonfarm economy. There were two noteworthy expansions of the series in 1981—the inclusion of State and local government workers and the introduction of index numbers.

Last year, increases in the Employment Cost Index for private nonfarm workers were nearly the same as in 1980. (See tables 1 and 2.) The compensation index was up 9.8 percent in both years, while the wage and salary index increase of 8.8 percent in 1981 was slightly below the 9.0-percent increase in 1980. In contrast, the Consumer Price Index for Urban Wage Earners and Clerical Workers rose 12.5 percent in 1980 compared with 8.7 percent in 1981. Consequently, real wages increased slightly in 1981, while they fell in 1980. The last year prior to 1981 in which real wages increased was 1977.

All of the ECI compensation series published set record high increases in the first quarter of 1981.<sup>1</sup> However, in the remaining quarters of the year, compensation gains were generally below the pace set in the same periods in 1980. Legislated increases in the minimum wage and in the social security tax rate and earnings

ceiling pushed up the March gains. The social security changes accounted for 0.5 percentage point of the 3.6-percent rise in compensation for all private nonfarm workers during the first quarter.

Changes in social security and other legally required benefits often cause the first quarter compensation advance to be the largest of the year. However, in 1981 both the social security tax rate and earnings ceiling increases were higher than usual:

Year	Tax rate		Earnings ceiling	
	Level (in percent)	Percent increase	Level	Percent increase
1978 . . . . .	6.05	3.4	\$17,700	7.3
1979 . . . . .	6.13	1.3	\$22,900	29.4
1980 . . . . .	6.13	—	\$25,900	13.1
1981 . . . . .	6.65	8.5	\$29,700	14.7
1982 . . . . .	6.70	.8	\$32,400	9.1

While the overall wage and salary changes in 1981 were similar to those in 1980, the underlying patterns were quite different. Union and blue-collar workers' advances declined in 1981 relative to 1980, while white-collar and nonunion workers' accelerated over the same period.

One factor in the moderation of gains in the union sector was the relatively light bargaining year for major collective bargaining contracts (those covering 1,000 workers or more) in 1981. In addition, economic conditions led to wage concessions by unionized workers in

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the meatpacking, rubber, and automobile industries in manufacturing, and in airlines and the railroad and trucking industries in nonmanufacturing.<sup>2</sup>

Union workers' pay increases dropped from 10.9 percent in 1980 to 9.6 percent in 1981. Within the manufacturing sector, union wage gains fell to 8.9 percent in 1981 from 11.0 percent in 1980, and in nonmanufacturing, they declined from 10.8 percent in 1980 to 10.2 percent in 1981. (See table 3.)

The rate of compensation increase for blue-collar workers, which decelerated from 10.1 percent in 1980 to 9.6 percent in 1981, reflected the highly unionized composition of these occupations. Wage gains for blue-collar workers slowed even more than compensation gains, dropping from 9.6 percent in 1980 to 8.6 percent in 1981. This decline in overall blue-collar wage advances was noted in all series.

Manufacturing workers did not post the dampened compensation gains that blue-collar workers did. Their rate of compensation change was identical in 1980 and 1981, at 9.8 percent. However, the pace of manufacturing wage increases did decline noticeably in 1981 (8.7 percent) relative to 1980 (9.4 percent). The first quarter's movement accounts for the difference between the

compensation and wage and salary gains over the year. While there was a record 3.5-percent jump in compensation, the gain in wages and salaries was a moderate 2.2 percent. During the same quarter a year earlier, the increases were both 2.8 percent.

Both the durable and nondurable goods industries showed a pattern of deceleration of pay advances over the year which was similar to that for manufacturing as a whole.

In contrast to the slowdown evident in highly unionized sectors of the economy, nonunion workers and white-collar workers posted greater gains during 1981 than in 1980. Wages for nonunion workers rose 8.5 percent in 1981 compared with 8.0 percent the prior year. White-collar workers posted 9.1-percent wage gains in 1981, up from 8.7 percent in 1980. Similarly, white-collar compensation increases were higher in 1981 (10.1 percent) than in 1980 (9.5 percent).

Many of the year-to-year differences occurred because of record increases in first-quarter 1981. In that quarter, nonunion wage gains were 3.3 percent, up from 2.5 percent in 1980. White-collar workers received increases of 3.1 percent compared with 2.4 percent in first-quarter 1980. Within the white-collar group, catch-up increases

**Table 1. Employment Cost Index for compensation (wages, salaries, and employer costs for employee benefits), civilian nonfarm workers,<sup>1</sup> by occupation and industry group, December 1979-81**

[Not seasonally adjusted]

Series	Indexes (June 1981 = 100)									Percent changes for		
	1979	1980			1981				12 months ended	3 months ended	12 months ended	
	Dec.	March	June	Sept.	Dec.	March	June	Sept.	Dec.	Dec. 1980	Dec. 1981	
Civilian nonfarm workers <sup>1</sup>	—	—	—	—	—	—	100.0	102.6	104.5	—	1.9	—
Workers, by occupational group:												
White-collar workers	—	—	—	—	—	—	100.0	102.7	104.9	—	2.1	—
Blue-collar workers	—	—	—	—	—	—	100.0	102.3	104.1	—	1.8	—
Service workers	—	—	—	—	—	—	100.0	102.8	104.2	—	1.4	—
Workers, by industry division:												
Manufacturing	—	—	—	—	—	—	100.0	102.1	104.0	—	1.9	—
Nonmanufacturing	—	—	—	—	—	—	100.0	102.8	104.8	—	1.9	—
Services	—	—	—	—	—	—	100.0	104.4	107.1	—	2.6	—
Public administration <sup>2</sup>	—	—	—	—	—	—	100.0	104.3	106.0	—	1.6	—
Private nonfarm workers <sup>3</sup>	86.3	88.6	90.7	92.8	94.7	98.1	100.0	102.0	104.0	9.8	2.0	9.8
Workers, by occupational group:												
White-collar workers	86.3	88.7	90.8	92.6	94.5	98.3	100.0	101.8	104.0	9.5	2.2	10.1
Blue-collar workers	86.2	88.3	90.5	93.0	94.9	97.8	100.0	102.2	104.0	10.1	1.8	9.6
Service workers	86.2	89.9	90.8	92.7	94.3	99.3	100.0	101.9	103.1	9.4	1.2	9.3
Workers, by industry division:												
Manufacturing	86.3	88.7	90.5	92.6	94.7	98.0	100.0	102.1	104.0	9.8	1.9	9.8
Nonmanufacturing	86.3	88.6	90.8	92.9	94.7	98.2	100.0	102.0	103.9	9.8	1.9	9.7
State and local government workers	—	—	—	—	—	—	100.0	105.3	107.4	—	2.0	—
Workers, by occupational group:												
White-collar workers	—	—	—	—	—	—	100.0	105.7	107.8	—	2.0	—
Blue-collar workers	—	—	—	—	—	—	100.0	104.2	105.9	—	1.6	—
Workers, by industry division:												
Services	—	—	—	—	—	—	100.0	105.8	107.9	—	2.0	—
Schools	—	—	—	—	—	—	100.0	106.0	107.9	—	1.8	—
Elementary and secondary	—	—	—	—	—	—	100.0	106.3	108.3	—	1.9	—
Hospitals and other services <sup>4</sup>	—	—	—	—	—	—	100.0	105.0	107.8	—	2.7	—
Public administration <sup>2</sup>	—	—	—	—	—	—	100.0	104.3	106.0	—	1.6	—

<sup>1</sup> Excludes private household and Federal workers.

<sup>2</sup> Consists of legislative, judicial, administrative, and regulatory activities.

<sup>3</sup> Excludes private household workers.

<sup>4</sup> Includes, for example, library, social, and health services.

NOTE: Dashes indicate data not available.

**Table 2. Employment Cost Index for wages and salaries of civilian nonfarm workers,<sup>1</sup> by occupation and industry group, December 1979-81**

[Not seasonally adjusted]

Series	Indexes (June 1981 = 100)									Percent changes for		
	1979	1980			1981			12 months ended	3 months ended	12 months ended		
	Dec.	March	June	Sept.	Dec.	March	June	Sept.	Dec.	Dec. 1980	Dec. 1981	
Civilian nonfarm workers <sup>1</sup>	—	—	—	—	—	—	100.0	102.5	104.4	—	1.9	—
Workers, by occupational group:												
White-collar workers	—	—	—	—	—	—	100.0	102.6	104.7	—	2.0	—
Blue-collar workers	—	—	—	—	—	—	100.0	102.4	104.0	—	1.6	—
Service workers	—	—	—	—	—	—	100.0	102.5	103.6	—	1.1	—
Workers, by industry division:												
Manufacturing	—	—	—	—	—	—	100.0	102.1	104.0	—	1.9	—
Nonmanufacturing	—	—	—	—	—	—	100.0	102.7	104.5	—	1.8	—
Services	—	—	—	—	—	—	100.0	104.4	106.6	—	2.1	—
Public administration <sup>2</sup>	—	—	—	—	—	—	100.0	103.8	105.5	—	1.6	—
Private nonfarm workers <sup>3</sup>	87.5	89.6	91.5	93.5	95.4	98.0	100.0	102.0	103.8	9.0	1.8	8.8
Workers, by occupational group:												
White-collar workers	87.6	89.7	91.4	93.3	95.2	98.1	100.0	101.8	103.9	8.7	2.1	9.1
Professional and technical workers	86.3	89.2	90.8	93.2	95.3	98.2	100.0	103.3	105.5	10.5	2.1	10.7
Managers and administrators	88.3	90.6	92.0	93.5	94.7	98.6	100.0	101.6	102.8	7.2	1.2	8.6
Sales workers	88.9	88.5	90.7	92.2	94.8	96.2	100.0	98.0	101.9	6.7	4.0	7.5
Clerical workers	87.7	90.3	91.9	93.8	95.7	98.6	100.0	102.7	104.2	9.1	1.5	8.9
Blue-collar workers	87.4	89.3	91.6	93.8	95.7	97.7	100.0	102.3	103.9	9.6	1.6	8.6
Craft and kindred workers	87.8	89.3	91.4	94.0	96.1	97.8	100.0	102.9	104.3	9.4	1.4	8.5
Operatives, except transport	86.6	89.4	91.5	93.6	95.5	97.8	100.0	102.1	104.1	10.2	2.0	9.0
Transport equipment operatives	88.1	89.1	92.2	93.5	95.3	96.8	100.0	101.0	102.7	8.2	1.7	7.8
Nonfarm laborers	87.4	89.6	91.8	93.9	95.7	97.5	100.0	101.5	103.3	9.5	1.8	7.9
Service workers	87.7	90.8	91.9	93.4	94.8	99.2	100.0	101.8	102.7	8.1	.9	8.3
Workers, by industry division:												
Manufacturing	87.5	89.9	91.8	93.6	95.7	97.9	100.0	102.1	104.0	9.4	1.9	8.7
Durables	87.1	89.3	91.2	93.5	95.7	97.9	100.0	102.1	104.5	9.8	2.4	9.2
Nondurables	88.1	91.0	92.7	93.8	95.7	97.8	100.0	102.0	103.1	8.6	1.1	7.7
Nonmanufacturing	87.5	89.5	91.3	93.4	95.2	98.1	100.0	102.0	103.8	8.8	1.8	9.0
Construction	88.2	89.3	91.9	94.5	95.9	97.6	100.0	103.0	104.3	8.8	1.3	8.8
Transportation and public utilities	86.0	88.2	90.2	93.1	95.6	97.7	100.0	102.0	103.6	11.1	1.6	8.4
Wholesale and retail trade	88.2	90.5	92.2	93.6	95.1	98.2	100.0	101.3	102.3	7.8	1.0	7.6
Wholesale trade	87.2	89.7	92.1	93.0	95.9	98.5	100.0	102.0	103.4	10.0	1.4	7.8
Retail trade	88.6	90.8	92.2	93.8	94.8	98.1	100.0	101.0	101.9	7.0	.9	7.5
Finance, insurance, and real estate	86.7	87.1	89.4	91.2	93.1	95.7	100.0	98.3	102.3	7.4	4.1	9.9
Services	88.0	90.5	91.9	94.2	95.7	99.6	100.0	103.6	105.8	8.7	2.1	10.6
State and local government workers	—	—	—	—	—	—	100.0	105.0	107.0	—	1.9	—
Workers, by occupational group:												
White-collar workers	—	—	—	—	—	—	100.0	105.4	107.5	—	2.0	—
Blue-collar workers	—	—	—	—	—	—	100.0	103.9	105.5	—	1.5	—
Workers, by industry division:												
Services	—	—	—	—	—	—	100.0	105.5	107.6	—	2.0	—
Schools	—	—	—	—	—	—	100.0	105.7	107.7	—	1.9	—
Elementary and secondary	—	—	—	—	—	—	100.0	106.0	107.9	—	1.8	—
Hospitals and other services <sup>4</sup>	—	—	—	—	—	—	100.0	104.6	107.3	—	2.6	—
Public administration <sup>2</sup>	—	—	—	—	—	—	100.0	103.3	105.5	—	1.6	—

<sup>1</sup> Excludes private household and Federal workers.

<sup>2</sup> Consists of legislative, judicial, administrative, and regulatory activities.

<sup>3</sup> Excludes private household workers.

<sup>4</sup> Includes, for example, library, social, and health services.

Note: Dashes indicate data not available.

for managers and administrators in the first quarter, as well as the effect of an 8.1-percent rise in the minimum wage on sales and clerical workers, boosted the overall annual wage increase. While service workers also posted record gains for the first quarter, they showed little difference in gains over the entire year relative to 1980.

In nonmanufacturing, both compensation and wage advances were similar to those experienced in 1980. Compensation was up 9.7 percent in 1981 versus 9.8 percent in 1980, and the comparable wage increases were 9.0 percent and 8.8 percent, respectively. The component industries of nonmanufacturing, however, showed a variety of wage change patterns between the 2

years. Construction posted the same increase (8.8 percent) in both years, while finance, insurance, and real estate, and services—sectors with a high concentration of white-collar employees—showed a large acceleration of wage gains in 1981. Transportation and public utilities, and wholesale trade recorded sharp declines in the rate of increase from 1980 to 1981.

### State and local governments

Compensation of State and local government workers rose 5.3 percent in its September introductory quarter, compared with a 2.0 percent rise for private nonfarm workers. The difference between the two series was also

### The Employment Cost Index: a chronology

Development of a measure of change in total compensation (wages and benefit costs) began during the early 1970's when concerns about labor cost escalation became particularly acute. At that time, Federal policymakers indicated the need for a measure of labor cost trends which would:

- be timely and comprehensive, covering all types of workers and industries in the U.S. economy and all elements of employee compensation;
- be fixed-weighted so that it would be unaffected by employment shifts among occupations and industries with different wage and compensation levels; and
- have internally consistent subseries (for example, by occupation or industry) to provide insights into overall wage and compensation trends.

The Employment Cost Index was planned in stages to satisfy these needs, beginning with the development of its conceptual and statistical framework during 1971-74. The first publication of ECI statistics in June 1976 presented percent changes for 21

private nonfarm wage and salary series for the quarters ended December 1975 and March 1976. Series were added until trends for 35 private nonfarm wage and salary series were available for the first quarter of 1979. One year later, measures of changes in compensation (wages and salaries plus employer costs for employee benefits) were introduced for six private nonfarm series—total; white-collar, blue-collar, and service workers; and manufacturing and nonmanufacturing industries. Following the publication of the compensation series, the Office of Management and Budget designated the ECI as a "Principal Federal Economic Indicator." During the past year, the State and local government sector was added, and indexes were published for all series.

The Bureau publishes standard (fixed-base-period-employment weighted) ECI indexes (June 1981 = 100) of wages and salaries and of compensation for the civilian nonfarm economy and for a number of subgroups. In addition, special wage and salary indexes are calculated for broad regions, union status, and area size. The currently available ECI indexes and their inception dates are listed below.

#### ECI series

##### Indexes of compensation

Civilian nonfarm economy (8 series): total; white-collar, blue-collar, and service workers; manufacturing and nonmanufacturing industries, plus services and public administration. Beginning in *June 1981*.

Private nonfarm economy (6 series): total; white-collar, blue-collar, and service workers; manufacturing and nonmanufacturing industries. *December 1979*.

State and local government (8 series): total; white-collar and blue-collar workers; services, schools, elementary and secondary schools, hospitals and other services, and public administration. *June 1981*.

##### Indexes of wages and salaries

Civilian nonfarm economy (8 series): total; white-collar, blue-collar, and service workers; manufacturing and nonmanufacturing industries, plus services and public administration. *June 1981*.

Private nonfarm economy (23 series): total; white-collar (plus 4 subseries), blue-collar (plus 4 subseries),

and service workers; manufacturing, durables, nondurables, and nonmanufacturing (plus 7 subseries) industries. *September 1975*. Exceptions: Durable manufacturing, nondurable manufacturing, and retail trade are available from *September 1976*; salesworkers from *March 1977*; wholesale trade from *June 1977*; and finance, insurance, and real estate from *December 1978*.

State and local government (8 series): total; white-collar and blue-collar workers; services, schools, elementary and secondary schools, hospitals and other services, and public administration. *June 1981*.

##### Special indexes of private nonfarm wages

Four regions of the Nation. *September 1975*.

Union and nonunion workers. *September 1975*.

Union and nonunion workers by manufacturing and nonmanufacturing sectors. *September 1976*.

Metropolitan and nonmetropolitan areas. *September 1975*.

**Table 3. Employment Cost Index for wages and salaries of private nonfarm workers,<sup>1</sup> by bargaining status, region, and area size, December 1979-81**

[Not seasonally adjusted]

Series	Indexes (June 1981 = 100)									Percent changes for		
	1979	1980				1981				12 months ended	3 months ended	12 months ended
	Dec.	March	June	Sept.	Dec.	March	June	Sept.	Dec.	Dec. 1980	Dec. 1981	
Workers, by bargaining status:												
Union .....	86.4	88.4	90.8	93.5	95.8	97.4	100.0	102.7	105.0	10.9	2.2	9.6
Manufacturing .....	86.6	88.8	91.3	93.8	96.1	97.7	100.0	102.6	104.7	11.0	2.0	8.9
Nonmanufacturing .....	86.2	88.0	90.4	93.1	95.5	97.1	100.0	102.8	105.2	10.8	2.3	10.2
Nonunion .....	88.0	90.2	91.8	93.4	95.1	98.2	100.0	101.6	103.2	8.0	1.6	8.5
Manufacturing .....	88.4	91.0	92.3	93.4	95.4	97.9	100.0	101.7	103.3	7.9	1.6	8.3
Nonmanufacturing .....	87.9	89.9	91.5	93.4	95.0	98.3	100.0	101.6	103.2	8.1	1.6	8.6
Workers, by region:												
Northeast .....	88.4	90.6	92.5	94.2	96.0	98.3	100.0	101.7	104.4	8.6	2.7	8.8
South .....	87.3	89.7	91.4	93.2	94.9	98.0	100.0	101.9	102.8	8.8	9	8.3
North Central .....	87.6	89.7	91.6	93.3	95.3	98.1	100.0	101.6	103.3	8.8	1.7	8.4
West .....	86.0	88.2	90.4	93.5	95.3	97.9	100.0	103.2	105.1	10.8	1.8	10.3
Workers, by area size:												
Metropolitan areas .....	87.6	89.4	91.4	93.5	95.4	97.9	100.0	102.1	104.0	9.0	1.9	9.0
Other areas .....	87.0	90.1	91.5	92.9	95.1	98.3	100.0	101.8	103.1	9.4	1.3	8.4

<sup>1</sup> Excludes private household workers.

Note: The indexes for these series are not strictly comparable to those for the aggregate, occupational, and industry series. See G. Donald Wood, Jr., "Estimation procedures for the Employment Cost Index," pp. 40, in this issue.

dramatic for wages and salaries—5.0 percent compared with 2.0 percent. These differences can be explained by a concentration of wage and compensation changes for State and local government workers in the third quarter that does not occur in the private nonfarm sector.

One group that tends to receive annual increases during the September quarter is teachers. This is demonstrated by pay and compensation changes in schools, which rose 5.7 percent and 6.0 percent, respectively. Workers in elementary and secondary schools posted even larger gains in compensation (6.3 percent) and wages (6.0 percent).

The impact that teachers have in these gains is clear from the proportion of workers they represent within these industries. At the State and local level, they account for about one-fifth of total census employment. They make up roughly half of all workers in schools and about 60 percent of all workers in elementary and secondary schools.

Another concentration of pay and compensation increases in the third quarter is due to the timing of State and local jurisdictions' fiscal years. Many governments begin their fiscal year during the third quarter, and these jurisdictions frequently link compensation changes to the start of the fiscal year.

While these types of gains were not as large or as widespread as those for teachers, they were clearly greater than those in the private sector. For example, blue-collar State and local government workers posted an average compensation change of 4.2 percent, compared with only 2.2 percent for private nonfarm blue-collar workers.

The collection of wage and benefit data from establishments in State and local government is a major improvement of the ECI program. The addition of 13.3 million State and local government workers to the 74.5 million surveyed in the private nonfarm sector brings ECI coverage to nearly 88 million workers.<sup>3</sup> The ECI is the only source of quarterly measures of compensation change for all State and local government workers.

Initial data collection for the government units, begun in June 1980, was completed in January 1981; quarterly collection began in March 1981. The series was calculated and reviewed on a test basis for the March and June quarters. After all aspects had been assessed, the first percent changes, relating to the third quarter, were published. Statistics on civilian nonfarm workers (excluding Federal employees), which combine private nonfarm and State and local government data,<sup>4</sup> were also released at that time.

The method for measuring base-period cost and calculating quarterly change for establishments in State and local government is the same as that used for establishments in the private nonfarm sector. State and local government data are taken from 750 sample establishments. Data are collected for about five narrowly defined occupations in each sampled establishment. This results in a total of about 3,700 establishment-occupation observations. The specific jobs for which data are collected in each establishment are selected by the BLS representative who visits the establishment. The selection is based upon probability sampling and uses the establishment's job titles and employment. As in the private nonfarm sector, occupations are classified

based on categories used in the 1970 census, while each government unit is designated in an industry according to a 1972 Standard Industrial Classification defined by the U.S. Office of Management and Budget.

### Index numbers

The private nonfarm wage and salary index (June 1981=100) went from 64.0 in September 1975 to 103.8 in December 1981, an increase of 62.2 percent.<sup>5</sup> Most industry and occupation wage gains were closely clustered around the aggregate—white-collar workers, 59.4 percent; blue-collar workers, 66.2 percent; service workers, 61.7 percent; manufacturing workers, 65.3 percent; and nonmanufacturing workers, 60.7 percent.

The ECI industry and occupation indexes are standard Laspeyres indexes, similar to the Consumer Price Index in concept and form. The CPI compares what it would cost to purchase a fixed set of consumption items at current prices to what it would cost to purchase the same set of items at prices that existed in the reference period. The ECI compares what it would cost employers at current wages (or compensation costs) to hire a fixed set of labor inputs (employment in specific occupations in specific industries) to what it would have cost to hire the same set of labor inputs at reference-period wage or compensation levels.

Special wage and salary indexes are calculated for broad regions, and by union status and area size. The formula for these indexes cannot be expressed in a standard Laspeyres index number form, but they are a form of chain index. That is, each quarter the change in wages is estimated using a fixed set of employment weights based on that quarter's sample. The index is developed by taking the product of the quarterly relatives. Further explanation of ECI index techniques is given in the technical note on page 40 of this issue.

MUCH PROGRESS HAS BEEN MADE toward making the ECI the type of labor cost trend indicator it was designed to be. It is a comprehensive, fixed-weight measure with internally consistent subseries. Benefit costs in addition to wages are included, and worker coverage has been expanded to State and local governments. The introduction of standard Laspeyres indexes in December 1981 guarantees the fixed-weight nature of the industry and occupation subseries. In addition, the special indexes by bargaining status, region, and area size, while not fixed-base-period weighted, aid in analyzing wage and salary trends.

Long range objectives include introduction of additional compensation series, publication of benefit cost changes, and coverage of the Federal civilian work force.

### FOOTNOTES

<sup>1</sup> Data are collected for the pay period including the 12th day of the last month of each quarter—March, June, September, and December.

<sup>2</sup> For further information on collective bargaining in 1981, see George Ruben, "Organized labor in 1981: a shifting of priorities," *Monthly Labor Review*, January 1982, pp. 21-28.

<sup>3</sup> In the base year of 1970, there were 9.8 million State and local government workers and 58.3 million private nonfarm workers.

<sup>4</sup> All ECI series exclude farm and private household workers.

<sup>5</sup> Percent changes for any period can be calculated by dividing the

more recent quarter's index by the earlier index, subtracting 1 from the result, and then multiplying by 100. For example, the steps in the calculation of percent change for the private nonfarm compensation series from December 1980 to December 1981 are as follows:

- 1)  $\frac{\text{December 1981 index} = 104.0}{\text{December 1980 index} = 94.7} = 1.098$
- 2)  $1.098 - 1 = .098$
- 3)  $.098 \times 100 = 9.8 \text{ percent}$