

# Compensation Cost Trends in Private Industry and State and Local Governments

State and local government pay has increased more rapidly than private industry pay during some time periods and less rapidly during others. Some of this variation can be explained by differences in the industry and occupational mix of the two sectors. Nevertheless, over the long-term, pay in the two sectors has increased at about the same rate.

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The Employment Cost Index (ECI) is a fixed-employment-weighted index that tracks quarterly changes in labor costs (wages and salaries, and employer costs for employee benefits), free from the influence of employment shifts among occupations and industries. It is the only measure of compensation cost and wage and salary changes available for both private industry and State and local governments. Therefore, it uniquely permits comparisons of trends in compensation costs and wages and salaries in the private and government sectors.

Measures of wage and salary change have been available from the ECI since 1976 for private industry workers and since 1981 for State and local government workers. In the mid-1980s, after ECI data had been available for State and local government workers for several years, a BLS study compared wage and salary changes in private industry with those in State and local government.<sup>1</sup> The study found that while pay increases for State and local government workers substantially exceeded those for workers in private industry during the early

1980s, evidence suggests that over a longer period (1976-84), pay in the two sectors had increased at about the same rate. The study also found that when pay-change comparisons were made for similar groups of workers in the two sectors, pay increases were similar even over shorter periods of time.

After nearly 20 years of publishing wage and salary and compensation cost change data from the ECI, it is time again to compare pay changes in private industry and State and local governments. In general, this study confirms many of the findings of the earlier study, but also finds some important differences. The main conclusions of this study are:

- Although during certain periods, such as the 1980s, pay in private industry and State and local governments increased at substantially different rates, over the long term—20 or 25 years—pay gains in the two sectors are quite similar.
- During most of the 1981-98 period, pay increases of State and

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local government workers were closer to those of private sector service industry workers than to those of all private industry workers.

- During the 1980s, pay consistently rose faster in State and local governments than in private industry.
- Pay changes in private industry and State and local governments in the 1990s have differed substantially from those in the 1980s. During the 1990s, the rate of pay increase in both sectors slowed dramatically, but the slowdown was greater for State and local government workers so their pay increased less than private industry pay.

These conclusions, based on a review of wage and salary change data,<sup>2</sup> generally hold for compensation cost

change data as well. It should be noted that our analysis focuses primarily on wage and salary changes rather than on changes in the more comprehensive measure of labor costs—total compensation. The analysis was restricted because for several industry categories and occupational groups, wage and salary change data are available for a longer time period than are compensation cost change data. Data on benefit cost changes are available for even fewer industry and occupation series.

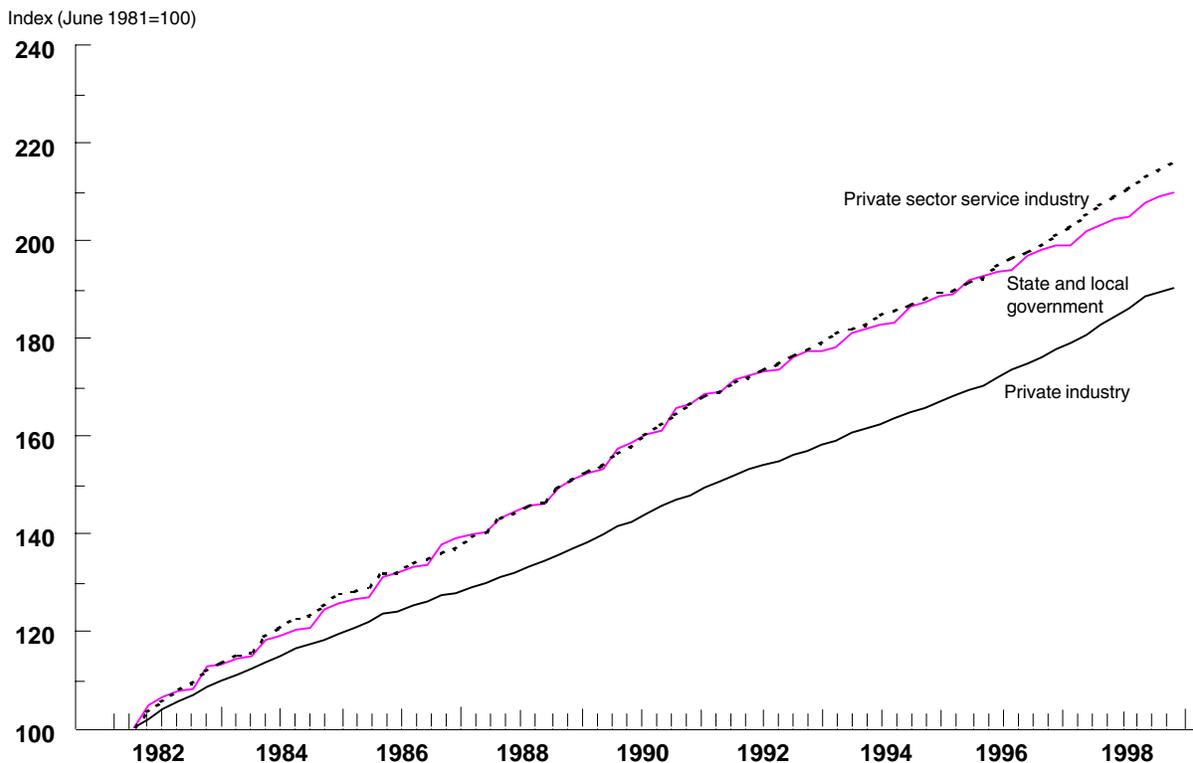
Chart 1 presents indexes of wages and salaries from June 1981 to March 1999 for three employee groups: All private industry workers, private sector service industry workers, and State and local government workers. The indexes show the cumulative percent change in wages and salaries from the base period (June 1981) to any subsequent reference point; an index level of 140, for example, means that wages and salaries increased 40 percent from the base period. What is striking about

the chart is how similar the cumulative percent change in wages and salaries in State and local governments was to that in the private sector service industry from 1981 until about 1997.

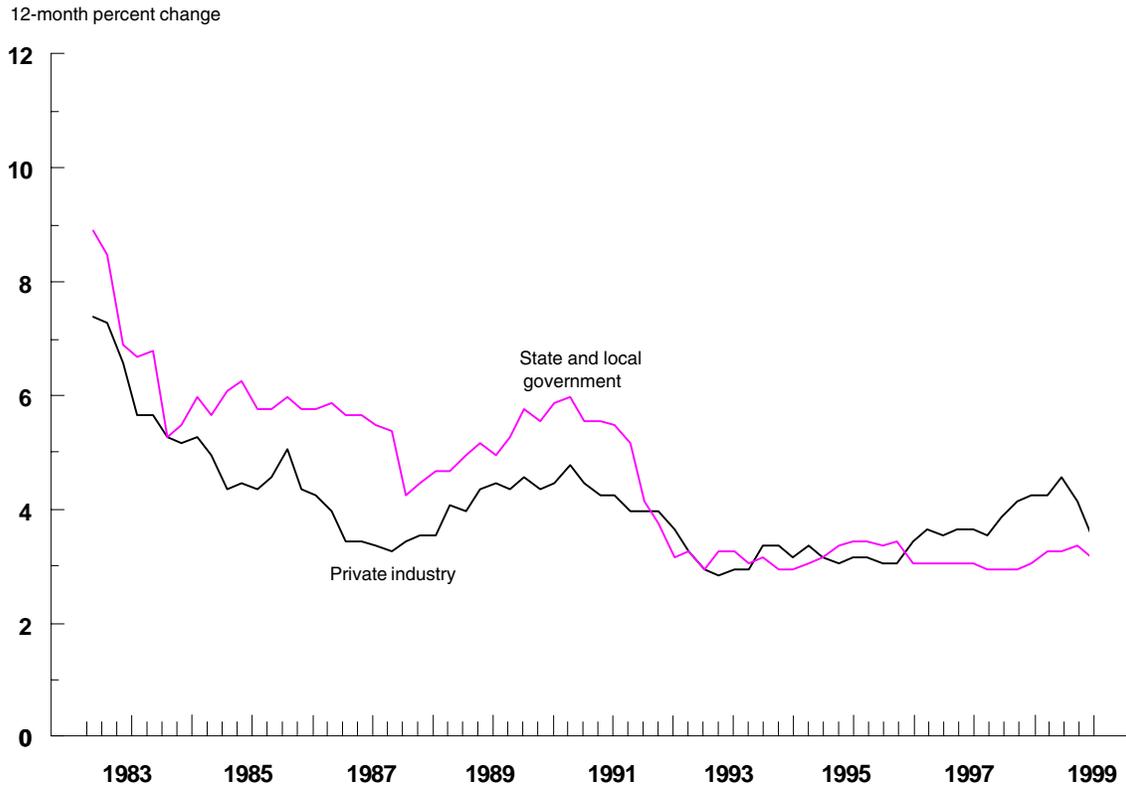
Pay change information for State and local government workers is not available from the ECI prior to June 1981. It is, however, possible to extend the period under review back 6 years by estimating the pay increase for State and local government workers during September 1975-September 1981 by assuming their pay increased at the same rate as private service industry workers' pay during that period.<sup>3</sup> Using that assumption, over the entire September 1975-98 period, pay in State and local government rose about 216 percent compared with about 205 percent in private industry.

Chart 2 presents another way of looking at the pattern of wage change for private industry and State and local governments. It shows 12-month

**CHART 1. Indexes of wages and salaries, private industry, private sector service industry, and State and local government, quarterly data, June 1981 - March 1999**



**CHART 2. Percent changes in wages and salaries, private industry and State and local government, quarterly data, June 1982 - March 1999**



**CHART 3. Percent changes in total compensation costs, private industry and State and local government, quarterly data, June 1982 - March 1999**

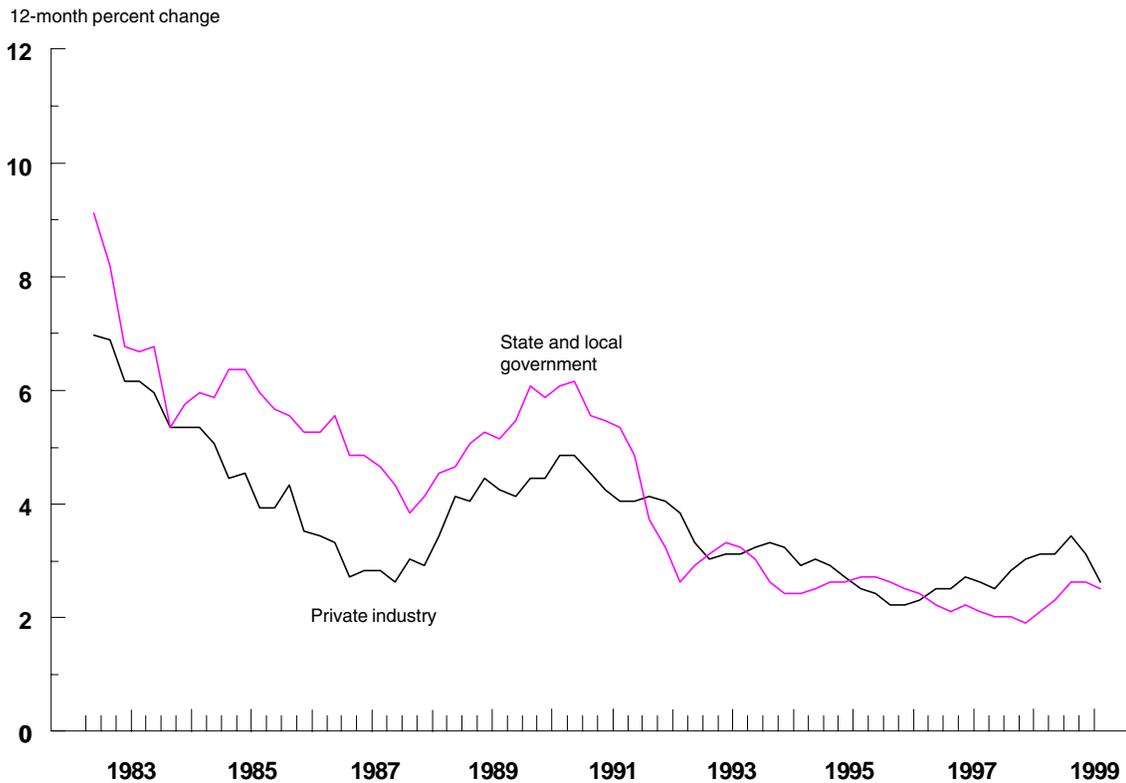


TABLE 1. Cumulative percent changes in wages and salaries, and distribution of employment by occupational group and industry category, private industry and State and local government, June to June, selected years

Occupational group and industry category	Cumulative percent change						Percent of employment (1990)	
	1981-91		1991-98		1981-98		Private industry	State and local government
	Private industry	State and local government	Private industry	State and local government	Private industry	State and local government		
All workers .....	54.2	73.6	24.4	22.1	91.9	111.9	100.0	100.0
Occupational group								
White collar .....	60.7 <sup>1</sup>	76.5 <sup>1</sup>	25.6 <sup>1</sup>	21.6	101.8 <sup>1</sup>	114.6 <sup>1</sup>	55.1	71.2
Professional specialty and technical .....	66.7 <sup>1</sup>	-	25.2 <sup>1</sup>	-	108.7 <sup>1</sup>	-	12.5	41.9
Executive, administrative, and managerial .....	61.1 <sup>1</sup>	-	26.8 <sup>1</sup>	-	104.3 <sup>1</sup>	-	10.5	10.9
Sales .....	50.5	-	24.6 <sup>1</sup>	-	87.5	-	13.1	.6
Administrative support, including clerical .....	60.2 <sup>1</sup>	-	25.9 <sup>1</sup>	-	101.6 <sup>1</sup>	-	19.0	17.8
Blue collar .....	45.2	61.5	22.4	21.4	77.7	96.0	29.8	8.2
Precision production, craft, and repair .....	47.4	-	22.6	-	80.7	-	11.6	3.1
Machine operators, assemblers, and inspectors .....	46.7	-	22.9	-	80.3	-	8.6	.7
Transportation and material moving .....	35.9	-	19.7	-	62.7	-	4.4	2.8
Handlers, equipment cleaners, helpers, and laborers .....	42.8	-	23.2	-	75.9	-	5.2	1.5
Service .....	52.5	68.3	22.8	24.6 <sup>1</sup>	87.3	109.8	15.2	20.6
Industry category								
Goods producing .....	48.4	-	23.3	-	83.0	-	27.5	-
Mining .....	-	-	-	-	-	-	0.8	-
Construction industry .....	39.3	-	21.0	-	68.6	-	5.6	1.3
Manufacturing .....	50.6	-	24.2	-	86.9	-	21.1	-
Service producing .....	58.5 <sup>1</sup>	-	24.7 <sup>1</sup>	-	97.7	-	72.5	-
Transportation, communication, and public utilities .....	44.2	-	24.6 <sup>1</sup>	-	79.7	-	6.4	3.3
Wholesale trade .....	62.7 <sup>1</sup>	-	25.5 <sup>1</sup>	-	104.3 <sup>1</sup>	-	6.8	-
Retail trade .....	47.1	-	23.4	-	81.6	-	21.6	-
Finance, insurance, and real estate .....	56.9 <sup>1</sup>	-	24.7 <sup>1</sup>	-	95.6 <sup>1</sup>	-	7.4	-
Service industries .....	73.5 <sup>1</sup>	77.5 <sup>1</sup>	25.7 <sup>1</sup>	21.9	118.1 <sup>1</sup>	116.4 <sup>1</sup>	30.3	62.8
Public administration .....	-	66.2	-	21.6	-	102.1	-	31.8

<sup>1</sup> Cumulative change exceeds the all-worker average.

NOTE: Due to rounding, components may not equal total. Dashes indicate that data are not available.

percent changes in wages and salaries in private industry and State and local governments. From 1982 to 1991, State and local government pay consistently increased more rapidly than private industry pay; from 1991 to 1996, the two sectors showed very similar rates of pay gain; and from 1996 to 1998, private industry pay rose faster than State and local government pay.

#### How the public and private sectors differ<sup>4</sup>

Differences in rates of wage change between private industry and State and local government workers are to be expected because the industry and occupational composition of their work forces differs.<sup>5</sup> As shown in table 1, white-collar occupations, especially professional specialty and technical occupations, are more common in State and local governments; professional specialty and technical occupations alone make up over two-fifths of State and local employment but only

about one-eighth of total employment in private industry. Similarly, service industry workers make up nearly two-thirds of State and local government workers but less than one-third of private industry workers. Workers in public administration, found only in governments, make up nearly one-third of State and local government employment.

The differences in occupation and industry employment distributions are important because, as also shown in table 1, there are substantial differences among industries and occupations in the short- and long-term rates of wage change. Among occupations, in both the 1981-91 and 1991-98 periods, white-collar occupations consistently showed larger pay increases than blue-collar occupations, although the differences between the two occupational groups were smaller in the 1991-98 period. Among industries, above-average increases were found in private sector service industries in both the 1981-91 and 1991-98 periods; State

TABLE 2. Percent changes in wages and salaries for private industry and State and local government workers, and the ratio of the two, June to June, selected years

Worker group and time period	Private industry	State and local government	Ratio of State and local to private
All workers			
1981-86 .....	27.9	35.8	1.29
1986-91 .....	20.6	27.8	1.35
1991-96 .....	15.9	15.5	.98
1996-98 .....	7.4	5.7	.77
1986-98 .....	50.1	56.0	1.22
1981-98 .....	91.9	111.9	1.12
White collar, excluding sales <sup>1</sup>			
1981-86 .....	32.5	37.0	1.14
1986-91 .....	22.7	28.9	1.27
1991-96 .....	16.4	15.3	.93
1996-98 .....	8.3	5.5	.66
1986-98 .....	54.7	56.7	1.04
1981-98 .....	104.9	114.6	1.09
Service			
1981-86 .....	36.9	37.1	1.01
1986-91 .....	26.7	29.5	1.10
1991-96 .....	17.0	15.6	.92
1996-98 .....	7.5	5.4	.72
1986-98 .....	59.3	57.8	.97
1981-98 .....	118.1	116.4	.99

<sup>1</sup> In State and local governments, this category is the same as white-collar workers, since there are very few government sales workers.

and local government service industries showed that pattern in the earlier period, but not in the later period.

Because of the differences in the industry and occupation mix of the workforce and in the pattern of pay changes by industry and occupation, any observed differences in pay increases between private industry and State and local governments might be explained by industry and occupation mix differences. In that case, comparisons between private industry and State and local governments should be restricted to narrowly defined industries and occupations.

For this analysis, however, it was not possible to compare wage changes in private industry with those in State and local governments by detailed industry and occupational group, because State and local government data for most of those groups are not published. As previously mentioned, many industries and occupations prevalent in private industry simply are not found in State and local governments, and vice versa.

The only published industry categories or occupational groups that are reasonably comparable between private industry and State and local governments and have data from the early 1980s are the service industry and the occupational group, white-collar workers, excluding sales.<sup>6</sup> (For State and local governments, there is no published group white-collar workers, excluding sales, because there are few sales workers in government; therefore, white-collar workers, excluding sales were assumed to be the same as white-collar workers.)

**TABLE 3. Average annual percent changes in wages and salaries, private industry and State and local government workers, selected periods, June to June, selected years**

Worker group	1981-91	1991-98	1981-98
All private industry .....	4.4	3.2	3.9
Private service industry .....	5.7	3.3	4.7
All State and local government .....	5.7	2.9	4.5
State and local service industry .....	5.9	2.9	4.6

**TABLE 4. Average annual percent changes in wages and salaries and total compensation, private industry and State and local government workers, March to March, selected years**

Compensation measure and industry	1985-91	1991-99	1985-99
<b>Wages and salaries</b>			
All private industry .....	3.8	3.2	3.5
Private service industry .....	4.9	3.3	4.0
All State and local government .....	5.1	2.9	3.8
State and local service industry .....	5.4	2.9	3.9
<b>Compensation costs</b>			
All private industry .....	4.2	3.3	3.6
Private service industry .....	5.3	3.3	4.1
All State and local government .....	5.5	2.9	4.0
State and local service industry .....	5.8	2.8	4.1

Table 2 breaks the 1980s and 1990s into subperiods, and provides information for the most comparable categories—white-collar workers, excluding sales, and the service industry.

The table shows that over the entire June 1981-98 period, pay changes were more similar between private industry and State and local governments when looking at either specific occupational or industry groups than when looking at all workers combined. In the case of the service industry, pay changes in private industry and State and local governments were virtually identical.

The closeness of the relationship found when looking at specific industries and occupation groups over the 1981-98 period breaks down when we look at decades—the 1980s clearly differ from the 1990s. There are also differences between the early and late years of each decade, but they appear to be smaller than the differences among decades. For example, during both 1981-86 and 1986-91, pay increases in State and local governments were larger than those in private industry, whereas in both 1991-96 and 1996-98 the reverse was true.

Table 3 brings into sharper focus the relationships we are looking at. It shows average annual percent changes, which simplifies comparing time periods of different lengths. Over the entire 1981-98 period, pay increases for State and local government workers were more closely related to increases of private service industry workers than to increases of all private industry workers. This relation-

ship also held during the 1980s. During the 1990s, however, when all pay increases were relatively low, pay gains of private service industry workers were more similar to those of all private industry workers than to those of State and local government workers.

### Evidence on compensation costs

As noted earlier, ideally, to make comparisons over time periods, we would want to look at trends in total compensation, rather than simply in wages and salaries. For several series, however, data on compensation cost changes are available for a shorter time period than are data for wage and salary changes. For the private service industry, for example, indexes of compensation cost change are available only from March 1985.

Does the measure of compensation used (and the time period covered) affect the results? Comparing chart 3 to chart 2 suggests that the conclusions reached when looking at compensation costs are much the same as those reached when looking at wages and salaries.

Table 4 also supports this conclusion. For the March 1985-91 period, compensation costs changes for all four categories studied were 0.4 percentage points higher than the corresponding wage and salary changes. The patterns of compensation cost changes for the March 1991-99 period and the entire March 1985-99 period were also consistent with that of the wage and salary changes.

Comparing the wage and salary portion of table 4 with table 3 also shows that starting the period of analy-

sis in March 1985 rather than June 1981 changes nothing of consequence. Of course, this finding should not be

extended too far—there are substantial differences in the relationships in the 1990s compared with the 1980s. ■

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<sup>1</sup>Richard E. Schumann, "State and Local Government Pay Increases Outpace Five-year Rise in Private Industry," *Monthly Labor Review*, February 1987, pp. 18-20.

<sup>2</sup>This analysis deals with changes in wages and salaries and compensation costs, not their levels.

<sup>3</sup>Further evidence (besides that shown in chart 1) supporting this approach to estimating ECI State and local government pay changes for 1975-81 is provided in Schumann, p. 20.

<sup>4</sup>One difference between the two sectors not addressed in this article is that in State and local governments pay changes are concentrated in the June-September period, rather than being more evenly spread throughout the year as in private

industry. Because of this difference, for this study the beginning and end month of every comparison is the same. Thus, June 1998 is the end date for the analysis where data were first available for June 1981 even though at the time this article was written, several more quarters of data were available.

<sup>5</sup>Schumann used the differences in industry and occupational mix between the two sectors to explain different rates of wage change. They were also used to explain differences in pay and benefit levels in Bradley R. Braden and Stephanie L. Hyland, "Cost of Employee Compensation in Public and Private Sectors," *Monthly Labor Review*, May 1993, pp. 14-21. Other articles that have compared private industry and State and local government pay include Michael A. Miller, "The

Public-private Pay Debate: What Do the Data Show?" *Monthly Labor Review*, May 1996, pp. 18-29; and John E. Buckley, "Pay in Private Industry and State and Local Governments, 1994," *Compensation and Working Conditions*, September 1996, pp. 22-26. Note that differences in pay and benefit levels do not necessarily mean there are differences in pay and benefit rates of change.

<sup>6</sup>Service occupations might also seem to be similar. However, those workers differ substantially between private and State and local government—State and local government service occupations include police and firefighters whereas in private industry, they are more likely to be janitors and cooks.

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