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DEBUNKING THE MYTH OF THE OVERCOMPENSATED PUBLIC EMPLOYEE

The Evidence

BY JEFFREY KEEFE

Executive summary

The research in this paper investigates whether state and local public employees are overpaid at the expense of taxpayers. This research is timely. Thirty-seven states are struggling with substantial budget deficits. Several governors have identified excessive public employee compensation as a major cause of their states' fiscal duress. The remedies they propose include public employee pay freezes, benefits reductions, privatization, major revisions to the rules of collective bargaining, and constitutional amendments to limit pay increases, each as a necessary antidote to the supposed public employee overpayment malady.

The data analysis in this paper, however, indicate that public employees, both state and local government, are not overpaid. Comparisons controlling for education, experience, hours of work, organizational size, gender, race, ethnicity and disability, reveal no significant overpayment but a slight undercompensation of public employees when compared to private employee compensation costs on a per hour basis. On average, full-time state and local employees are undercompensated by 3.7%, in comparison to otherwise similar private-sector workers. The public employee compensation penalty is smaller for local government employees (1.8%) than state government workers (7.6%).

There are, however, substantially different approaches to staffing and compensation between the private and public sectors. On average, state and local public-sector

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workers are more highly educated than the private-sector workforce; 54% of full-time state and local public sector workers hold at least a four year college degree compared to 35% of full-time private-sector workers. State and local governments pay college-educated labor on average 25% less than private employers. The earnings differential is greatest for professional employees, lawyers, and doctors. On the other hand, the public sector appears to set a floor on compensation. The compensation of workers with a high school education is higher for state or local government employees, when compared to similarly educated workers in the private sector.

Benefits are also allocated differently between private- and public-sector full-time workers in the United States. State and local government employees receive a higher portion of their compensation in the form of employer-provided benefits, and the mix of benefits is different from the private sector. Some benefits are more generous in the public sector, but it is a serious error to imagine that comparability requires that each and every element of compensation is the same. What is important when considering both the employer-provided benefits and direct pay is whether state and local government workers have a total compensation package that costs what they would receive if employed in the private sector. It is the total cost of the compensation package—not the mix of cash and benefits—that is important in making a comparison.

Public employers contribute on average 34.1% of employee compensation expenses to benefits, whereas private employers devote between 26.1% and 33.1% of compensation to benefits, depending on the employer's size. Public employers provide better health insurance and pension benefits. Health insurance accounts for 6.3% to 8.3% of private-sector compensation but 11.2% of state and local government employee compensation. Retirement benefits also account for a substantially greater share of public employee compensation, 8.1% compared with 2.8% to 4.8% in the private sector. Most public employees also continue to participate in defined-benefit plans managed by the state, while most private-sector employers have switched to defined-contribution plans, particularly 401(k) plans. On the other hand,

public employees receive considerably less supplemental pay and vacation time, and public employers contribute significantly less to legally mandated benefits.

A standard earnings equation produced a surprising result: full-time state and local employees are undercompensated by 6.3%. Full-time public employees, however, work fewer hours, particularly employees with bachelor's, master's, and professional degrees. A re-estimated total compensation equation controlling for work hours of full-time employees demonstrates that there is still a significant public-sector penalty of 3.7% in total compensation between full-time state and local employees and private-sector employees. At closer examination, the penalty disappears for local government employees, but remains for state workers who in 2009 had a 7.5% compensation penalty.

Introduction: The challenge to public employee compensation

Over the last year public employee compensation has become the focus of a highly charged controversy as states grapple with acute revenue shortfalls brought about by the most serious economic contraction and financial crisis since the Great Depression. The dire fiscal circumstances have unleashed a search for solutions. Some prominent public officials believe that excessive public employee compensation has contributed to the financial emergency, and they are mobilizing the public and legislatures to cut public employee pay, reduce benefits, modify collective bargaining procedures, privatize public services, and adopt constitutional amendments to cap public employee pay and pay increases into the future.

A sampling of public official condemnation raises important questions about state and local government employee compensation.

*"We have a new privileged class in America." "We used to think of government workers as underpaid public servants. Now they are better paid than the people who pay their salaries." ... "Who serves whom here? Is the public sector — as some of us have always thought — there to serve the rest of society? Or is it the other way around?"*¹

Governor Mitch Daniels of Indiana

“It used to be that public employees were underpaid and over-benefited. Now they are over-benefited and overpaid compared to their private-sector counterparts.”²

Governor Tim Pawlenty of Minnesota

There are “two classes of people in New Jersey: Public employees who receive rich benefits, and those who pay for them.”³

Governor Chris Christie of New Jersey

“Average government workers are now making \$30,000 a year more than the average private-sector worker.”⁴

Former Governor Mitt Romney of Massachusetts

“Almost every study says [government employee compensation levels] are between 17 and 24% higher. So we have to reflect the people we work for.”⁵

Mike Bouchard, Candidate for governor in Michigan

After an extensive search, we were unable to locate any evidence showing that average government workers earn \$30,000 a year more than average private-sector workers, nor could we find any recent studies that show public employees earn 17% to 24% more than private-sector employees. Regardless of whether the current, former, or aspirant governors’ claims are factual or not, are they nevertheless right? Are state and local public employees overpaid? Could excessive state and local government employee compensation be a major cause of the states’ financial problems? Are state and local taxpayers funding a new class of overpaid and richly benefited public workers? This research makes a systematic and deliberate assessment of public employee pay to answer whether state and local public employees are overpaid.

Comparing state and local public employees

To answer whether state and local public employees are overpaid, we need to ask two simple related questions: compared to whom? And compared to what? The standard of comparison for public employees is usually similar private-sector workers, with respect to education, experience, and hours of work. This standard is often enshrined in state legislation or civil service regulations.

Who is compared?

Ideally, we would compare workers performing similar work in the public sector with the private sector, but this is not always possible. There are too many critical occupations in the public sector, for example, police, fire, and corrections, without appropriate private-sector analogs. Even private and public teaching is significantly different. Public schools accept all students, while private schools are sometimes highly selective and may exclude or remove any poor performers, special needs, or disruptive students. Consequently, comparing workers of similar “human capital” or personal productive characteristics and labor market skills is considered the best alternative, and well accepted by labor economists. Analyses based on personal characteristics comparisons capture most of the important and salient attributes observed in the comparable work studies.

Prior research reveals that education level is the single most important earnings predictor. Education helps create work-relevant skills. People invest heavily in their own and their children’s education, by buying homes in communities with good schools and by paying or taking on debt to attend schools, colleges, and universities. Empirically, education is followed by experience in advancing earnings. People learn by doing and by working in a variety of job tasks as they advance through occupational levels. Most occupations reward experience, since experience is associated with more competent and complex performance, arising from on-the-job learning.

Other factors widely found to affect compensation include gender, race, ethnicity, and disability, although here productivity-related human capital differences are intermingled with labor market disadvantages stemming from historical patterns of discrimination. We control for all these factors in our study. When analyzing hours of work most studies exclude part-time workers, since their hours vary, they earn considerably less than comparable full-time workers, they are more weakly attached to the labor force, and they often lack benefit coverage. This study follows standard practice by focusing on full-time public- and private-sector employees, who represent over 81% of the nation’s labor force, and we control for hours worked per year. As is customary, we also exclude agricultural workers and the self-employed.

We are fortunate to be able to include a control for each sampled full-time worker's employer's organizational size, which is made possible by the Integrated Public Use Microdata Series (IPUMS) of the March Current Population Survey (CPS) data. An employer's organizational size greatly influences employee earnings. The basic wage gap due to organizational size is 35%. Large firms with more than 500 employees comprise less than one-third of 1% of all firms but provide jobs for nearly half of all private-sector employed persons (Oi and Idson 1999; U.S. BLS 2005). Large organizations on average employ more educated, experienced, and full-time workers, nonetheless even after accounting for these factors, large organizations pay a size premium (Troske 1999). When we include benefits in the comparison, the compensation premium grows. Whereas the private sector has a relatively small number of large organizations, the public sector has relatively few small organizations. In the IPUMS-CPS 2009 sample, over 93% of state and local full-time public employees work in organizations employing more than 100 employees.

What is compared?

Having decided who will be compared, the other question to be answered is what should be compared. This is a more complex issue than it initially appears. Comparing wages, which is standard practice, is insufficient, since employee compensation increasingly includes employer-provided benefits. Regardless of how employees are paid whether in wages or benefits, the essential issue in making a comparison is what does it cost a private- or public-sector employer to employ an employee. Employer costs may include not only wages, but paid time off for holidays, vacations, personal, and sick days; supplemental pay including overtime and bonuses; insurances particularly health insurance but also life and disability insurance; retirement plan contributions whether defined benefit or defined contribution, including 401(k) plans, and legally mandatory benefit contributions such as unemployment insurance, Social Security, Medicare, disability insurance, and workers compensation. Once we conclude that employer costs of employing an employee, rather than just wages, is what needs to be compared, the more difficult issue is finding the appropriate data to make the comparison.

To obtain wage and demographic data this study uses the Integrated Public Use Microdata Series (IPUMS) of the March Current Population Survey (CPS). The CPS is a monthly U.S. household survey conducted jointly by the U.S. Census Bureau and the Bureau of Labor Statistics. The March Annual Demographic File and Income Supplement is the most widely used source for earnings used by social scientists (King et al. 2009). For the purpose of comparability, the state and local data exclude the self-employed and part time, agricultural and domestic workers, and federal workers.

There is only one reliable source of benefit information in the United States: the Employer Costs for Employee Compensation (ECEC) survey, which is collected by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). The ECEC includes data from both private industry and state and local government employees and provides data for private employers by firm size. Larger employers, over 100 employees, are significantly more likely to provide employees with benefits, in part, because they can spread administrative costs over a larger group and for insurance purposes, they can more readily diversify risks over a larger group. State and local governments resemble larger size private employers. The compensation cost analysis will control for employer size in making comparisons.

Education level: The most important factor in determining earnings

State and local public employees are substantially more educated than their private-sector counterparts. Approximately 54% of state and local full-time public employees hold a bachelor's degree compared to 35% in the private sector. Higher educational levels are strongly associated with higher earnings in the labor market. **Table 1**, column 1 reports the returns to education in comparison to workers who have not completed high school from a standard human capital earnings equation. A high school graduate, all else equal, earns on average 28% more than someone without a high school diploma. The education premium jumps to 46% on average if the worker attended some college, and if the worker holds an associate's degree the

TABLE 1

Earnings returns and educational attainment for private-sector and state/local workforce

Highest degree earned	Earnings return to education compared	All private employers	Private, 1 to 99 employees	Private, 100 to 499 employees	Private, 500 and more employees	All state and local government
<i>Less than high school</i>	0%	6%	9%	6%	5%	2%
<i>High school</i>	28	29	33	30	27	19
<i>Some college</i>	46	19	19	18	19	14
<i>Associates</i>	56	11	9	11	11	10
<i>Bachelor's</i>	84	24	20	22	26	28
<i>Professional degree</i>	145	2	2	2	2	2
<i>Master's</i>	106	8	6	8	9	21
<i>Doctorate</i>	135	1	1	1	2	3
		100%	100%	100%	100%	100%
<i>Memo: College plus</i>		35%	29%	33%	38%	54%

SOURCE: Current Population Survey: IPUMS.

return to education increases to 56%. Completing college with a bachelor's degree yields an 84% premium, and a professional degree (law or medicine) increases average earnings by 145% compared to an individual without a high school diploma. A master's degree yields an average 106% pay premium, and a doctorate produces a 135% return.

The public sector employs more highly educated workers. As private-sector organizations become larger, they rely substantially more on educated labor. Smaller private-sector organizations use more workers with high school and less than high school educated workers than either larger private or state and local government. Only 2% of state and local government workers lack a high school education, whereas 6% of private-sector employees do not have a high school diploma, but the number falls to 5% when we examine private employers with 500 or more employees. Workers whose education ended with a high school diploma comprise 33% of the small private employers workforce, where as they account for only 19% of state and local government workers.

The returns to education, however, are not equally distributed between the private and public sectors in state

and local government. As a result of the relatively high level of unionization, the public sector has established a floor on earnings, allowing those with a high school education to be better compensated than their private-sector counterparts (Asher and DeFina 1999) (see **Table 2**). On the other hand, college educated private-sector employees earn considerably more than similarly educated public-sector employees.

A full-time worker on average employed by state and local government received an 11% lower annual earnings compared to the private-sector employees. However, when compared to total compensation, the public employment penalty declines to 2%. High school graduates with some college approached wage earnings equivalency between private and public sector. High school graduates earn \$36,640 on average working for state and local government compared to \$38,269 for workers employed by private employers, a public-employment wage penalty of 4%. However, when we examine total compensation, high school graduates received total compensation of \$53,880 on average working for state and local government compared to \$50,596 for workers employed by

TABLE 2

**Average earnings and total compensation
by education level in the United States:
Private sector compared to state and local government employees**

<i>Education</i>	Annual wage earnings			<i>Public penalty</i>
	<i>Private</i>	<i>Public</i>	<i>Compared</i>	
All workers	\$55,132	\$49,072	-\$6,061	-11%
<i>Less than high school</i>	29,135	24,378	- 4,757	-16
<i>High school</i>	38,269	36,640	- 1,630	-4
<i>Some college</i>	43,152	42,108	- 1,044	-2
<i>Associate's</i>	47,894	45,247	- 2,647	-6
<i>Bachelor's</i>	71,781	48,874	- 22,906	-32
<i>Professional degree</i>	152,733	88,629	- 64,105	-42
<i>Master's</i>	93,918	60,263	- 33,655	-36
<i>Doctorate</i>	119,878	88,625	- 31,253	-26

<i>Education</i>	Total compensation			<i>Public premium/penalty</i>
	<i>Private</i>	<i>Public</i>	<i>Compared</i>	
All workers	\$71,109	\$69,108	-\$2,001	-3%
<i>Less than high school</i>	38,918	36,407	- 2,511	-6
<i>High school</i>	50,596	53,880	3,284	6
<i>Some college</i>	56,279	61,210	4,930	9
<i>Associates</i>	62,162	65,165	3,003	5
<i>Bachelor's</i>	91,256	68,290	- 22,966	-25
<i>Professional degree</i>	192,977	121,192	- 71,785	-37
<i>Master's</i>	118,918	82,297	- 36,621	-31
<i>Doctorate</i>	151,875	120,642	- 31,233	-21

SOURCE: Current Population Survey-IPUMS.

private employers, a public employment compensation premium of 6%.

The compensation advantage reverses when we compare the college-educated labor force, with the private sector paying substantially higher wages. State and local workers with some college earn 32% lower wages and receive total compensation of 25% less than private-sector workers. The private-sector compensation premium jumps to 37% for a professional degree, 31% for a master's degree, and 21% for a doctorate. As we shall observe below, fewer average work hours in the public

sector will largely eliminate these large private-sector wage and compensation premiums.

The growing role of benefits in employee compensation costs

Benefits, once referred to as fringe benefits, account for an increasing portion of employee compensation. Benefit growth is partially fueled by the tax deductibility of health insurance payments and pension contributions, allowing employers to compensate employees without either the employer or employee paying income tax at the time of

compensation. Sometimes referred to as tax “efficient” compensation, the federal government foregoes \$300 billion annually in income tax revenue to subsidize these benefits (U.S. Congress, Joint Committee on Taxation 2006). Health insurance and pension benefits are particularly

attractive to middle- and upper-income employees, who face higher marginal income tax rates.

Organizational size is the single strongest predictor of employee benefit participation and compensation. For example, employee participation in retirement plans varies

TABLE 3

Distribution of compensation cost for private-sector and state and local workforce (Dec. 2009)

<i>Employer costs</i>	Private employers			Government state and local workers, all
	<i>Employees 1 to 99</i>	<i>Employees 100 to 499</i>	<i>Employees 500+</i>	
Total compensation	100.0%	100.0%	100.0%	100.0%
Wages and salaries	73.7	70.2	66.9	65.9
Total benefits	26.3	29.8	33.1	34.1
Paid leave	5.5	6.9	8.6	7.6
<i>Vacation</i>	2.8	3.5	4.5	2.9
<i>Holiday</i>	1.9	2.2	2.5	2.3
<i>Sick</i>	0.6	0.8	1.1	1.9
<i>Personal</i>	0.2	0.3	0.4	0.5
Supplemental pay	2.8	2.7	3.6	0.8
<i>Overtime</i>	0.8	1.1	1.0	0.4
<i>Shift differential</i>	0.1	0.3	0.5	0.1
<i>Nonproduction bonuses</i>	1.9	1.4	2.1	0.3
Insurance	6.7	8.6	9.0	11.6
<i>Life</i>	0.1	0.2	0.2	0.2
<i>Health</i>	6.3	8.0	8.3	11.2
<i>Short-term disability</i>	0.1	0.2	0.3	0.1
<i>Long-term disability</i>	0.1	0.1	0.2	0.1
Retirement and savings	2.5	3.4	4.8	8.1
<i>Defined benefit</i>	0.9	1.4	2.2	7.2
<i>Defined contribution</i>	1.6	2.0	2.6	0.8
Legally required	8.9	8.2	7.2	6.0
<i>Social Security</i>	6.1	5.9	5.8	4.7
<i>Medicare</i>	4.9	4.7	4.6	3.6
<i>Federal Unemployment Insurance</i>	1.2	1.2	1.2	1.0
<i>State Unemployment Insurance</i>	0.2	0.1	0.1	0.0
<i>Workers' Compensation</i>	0.7	0.6	0.3	0.2
<i>Workers' Compensation</i>	1.9	4.0	1.7	1.1

SOURCE: Bureau of Labor Statistics, Employer Costs for Employee Compensation, December 2009 unpublished detailed compensation data by employers size.

considerably by organization size. Organizations with one to 99 employees have employee pension participation rates of 38%, organizations with 100 to 499 employees have participation rates of 64%, and organizations with 500 or more employees, 81% of employees participation in retirement plans. The pattern is similar for health insurance benefits. Organizations with one to 99 employees have employee participation rates in medical insurance of 43%, organizations with 100 to 499 employees have participation rates of 61% and organizations with 500 or more employees, 71% of employees participate in medical insurance plans. This pattern is replicated for prescription drug and dental care plans (U.S. DOL BLS September 2009 Bulletin 2731).

Public-sector employees received more of their compensation in the form of benefits than private-sector workers. **Table 3** provides the distribution of employer costs of compensation in December 2009.

The Employer Costs for Employee Compensation (ECEC) survey provides the only valid and reliable estimate in the United States of benefit costs incurred by employers. It is conducted quarterly by the U.S. Bureau of Labor Statistics. The ECEC includes data from both private industry and state and local government employees and provides data for private employers by firm size. This study uses these ECEC sample estimates to calculate relative benefit costs for private and public employees on the state and local level. (Please see Data Appendix for a more detailed description.)

Benefits account for a portion of total compensation that range from 26.3% for small private employers, increasing to 31.5% for private employers with 100 or more employees, rising to 33.1% for private employers with 500 or more employees, compared to 34.1% for state and local government employees. The compensation data reveal considerable variation within the private sector by organization size and between the private sector and state and local government compensation. Public employees not only receive more of their compensation in benefits, but the mix of benefits is different among paid leave, supplemental pay, insurances, retirement security, and legally mandated benefits. While overall paid leave costs are similar, private-sector employees in larger organization receive more vacation pay while public employees receive greater

sick leave compensation. Holiday and personal time compensation is similar. Public employees receive less than one percent of compensation in supplement pay, whereas private sector employees in large firms gain 3.6% of their earnings from supplemental pay, particularly bonuses.

On the other hand, public employees receive considerably more of their compensation from employer-provided health insurance. Health insurance accounts for 6.3% to 8.3% of private-sector compensation but 11.2% of state and local government employee costs. Retirement benefits also account for a substantially greater share of public employee compensation, 8.1% compared to 2.5% to 4.8% in the private sector. As with all benefits, the differences between private and public employees' compensation costs shrink, as the private organizational comparison increases in size.

Legally required benefits account for a greater share of the small employers' compensation, as organizational size increases these benefits costs decrease in relative importance. In local and government employment, legally required benefits represent a substantially smaller share of benefit costs for several reasons. First, a nontrivial number of public employees do not participate in Social Security, which partially explains their higher pension costs. These employees are not eligible for Social Security benefit payments at retirement unless they chose to work in another job elsewhere that is covered by Social Security. Second, many state and local governments do not participate in the federal unemployment system. Third, since the state and local governments offer more stable employment they pay lower rates into the state unemployment insurance trust fund, because unemployment insurance contribution rates are partially experience rated.

In summary, state and local government workers receive more of their compensation in employer-provided benefits. Specifically, public employers contribute relatively more toward employee health insurance and retirement benefits costs. Public employee benefit costs, however, are relatively lower for supplemental pay and legally required benefits than those of private sector employees. To determine whether public employees are overpaid, the specific question that should be addressed is whether higher benefit costs more than offset the lower wages paid to state and local public employees. That is the question we turn to next.

TABLE 4

State and local public employee wage and total compensation estimated comparisons with state and local private-sector employees from standard earnings equations

	Wages	Total compensation
<i>Public employee</i>	-0.1403 ***	-0.0628 ***
<i>State government employee</i>	-0.1856 ***	-0.1072 ***
<i>Local government employee</i>	-0.1180 ***	-0.0406 ***

CONTROL VARIABLES: Education, experience, organizational size, gender, race, disability, year (IPUMS CPS).

* Probability estimate 0 is >.05.

** Probability estimate 0 is >.01.

*** Probability estimate 0 is >.0001.

SOURCE: Current Population Survey: IPUMS 2009 and Employer Cost of Employee Compensation, December 2009.

Assessing private and public relative pay and benefits

To assess private and public relative employment costs we will use the microdata from the IPUMS-CPS, which provide us with a sample of state and local employees with demographic characteristics, including full-time status, education level, years of experience, as a function of age, gender, race, employer organizational size, and industry. Compared to state and local private-sector employees, state and local government employees on average are slightly less experienced (21 years compared to 23 years); are more likely to be female (57% to 43%); work fewer hours (42.6 to 43.3); are more likely to be black (14% to 12%); are less likely to be Asian (3% to 6%); and are less likely to be Hispanic (10% to 13%).

The Employer Cost of Employee Compensation data allow us to calculate markup statistics to account for the benefit share of compensation by employer size and major occupation to calculate total employer compensation costs for each employee in the sample. (The markups are reported and the methodology is discussed in the Data Appendix.)

Table 4 reports the results of four standard earnings equations estimating state and local government employee earnings compared to similar private-sector employees. Column one provides estimates for employee wages. We find in column one that state and local public employees have wage earnings that are statistically significant 14.03% lower than all private-sector employees. In another estimate,

separating state and local employees, we learn that state government employees have wage earnings 18.56% less and local government employee 11.8% less than private-sector employees.

When we compare total compensation between state and local public and private employees, that earnings gap narrows, but does not disappear. Column two reports the estimates for total compensation. State and local public employees total compensation costs are 6.28% less than comparable private-sector employees. State employees receive total compensation of 10.72% less than private-sector employees, while local government employees earn statistically significant 4.06% less.

The analysis strongly indicates that state and local public employees are undercompensated by 4% to 11% in relation to comparable private-sector employees. Before concluding state and local public employees are undercompensated, however, we need to address hours of work. Most earnings equations, once the sample is limited to full-time employees, do not control for hours of work. In this sample, however, it is apparent that state and local full-time public employees work fewer hours that comparable private-sector employees (see **Table 5**). Overall, they work 2% fewer hours, however, among the higher paid, more educated workers it is 4% less for those with a bachelor's, 5% less for a those with a master's degree, and 7% fewer hours for those with professional degrees who work for state and local government.

TABLE 5

Comparison of annual hours of work between state and local private and public employees

Annual hours of work	Private	Public	Public to private
Average hours of work, all	2,197	2,156	-2%
<i>Less than high school</i>	2,098	2,051	-2
<i>High school</i>	2,150	2,092	-3
<i>Some college</i>	2,174	2,138	-2
<i>Associate's</i>	2,162	2,150	-1
<i>Bachelor's</i>	2,239	2,156	-4
<i>Professional degree</i>	2,520	2,338	-7
<i>Master's</i>	2,302	2,187	-5
<i>Doctorate</i>	2,415	2,357	-2

SOURCE: Current Population Survey: IPUMS 2009.

The earnings equations are re-estimated controlling for hours work. The coefficient estimates are reported in **Table 6**. The wage differences remain large and significant. On average public employee wage earnings are 11.47% less than comparable private-sector employees after controlling for hours worked. State government employees earn 15.57% less, while local government employees earn 9.46% less than similar private-sector employees. However, when we examine total compen-

sation the differences are greatly reduced. On average public employees receive 3.74% less compensation than comparable private-sector workers. State workers receive a 7.55% public employment compensation penalty compared to comparable public employees. On the other hand, local government workers obtain almost equal compensation with comparable private-sector employees; their estimated public-service compensation penalty is 1.84%.

TABLE 6

State and local public employee wage and total compensation estimated comparisons with state and local private sector employees from standard earnings equations controlling for annual hours of work

	Wages	Total compensation
<i>Public employee</i>	-0.1147 ***	-0.0374 ***
<i>State government employee</i>	-0.1557 ***	-0.0755 ***
<i>Local government employee</i>	-0.0946 ***	-0.0184 *

CONTROL VARIABLES: Hours of work, education, experience, organizational size, gender, race, ethnicity, and disability. (IPUMS CPS) .

* Probability estimate 0 is >.05.

** Probability estimate 0 is >.01.

*** Probability estimate 0 is >.0001.

SOURCE: Current Population Survey: IPUMS 2009 and Employer Cost of Employee Compensation, December 2009.

Conclusion: Are state and local public employees overpaid? No, they are slightly undercompensated

The earnings equation estimates indicate that public employees, both state and local government employees, are not overpaid and may be slightly undercompensated. When we make comparisons controlling for education, experience, hours of work, organizational size, gender, race, ethnicity, and disability, the public employment compensation penalty is relatively small, but there remains a significant difference between private and public employee compensation costs.

The data analysis also reveals substantially different approaches to staffing and compensation between the private and public sectors. On average, state and local public-sector workers are more highly educated than the private-sector workforce; 54% of full-time state and local public-sector workers hold at least a four-year college degree compared to 35% of full-time private-sector workers. For college educated labor, state and local governments pay salaries on average over 25% less than private employers. When we examine total compensation costs, college-educated public employees cost more than 20% less than similarly educated private-sector employees. The earnings differential is greatest for professional employees, lawyers, and doctors. These earnings differences may create opportunities for cost saving by reviewing professional outsourcing contracts to examine what work might be performed by lower cost public employees.

The public sector appears to set a floor on compensation particularly improving the compensation of workers with high school educations, when compared to similarly educated workers in the private sector. This result is due in part because the earnings floor has collapsed in the private sector (Lee 1999).

Benefits are allocated differently between private- and public-sector full-time workers. State and local government employees receive a higher portion of their compensation in the form of employer-provided benefits, and the mix of benefits is different than the private sector. Public employers underwrite 34.1% of employee compensation in benefits, whereas private employers devote 26.3% for small employers to 33.1% for large employers of their

compensation for benefits. Public employers provide better health insurance and pension benefits. Health insurance accounts for 7.4% of private sector compensation but 11.2% of state and local government employee costs, 50% greater share of employer costs. Retirement benefits also account for a substantially greater share of public employee compensation: 8.1% compared to the 3.7% in the private sector. Public employees also continue to participate in defined-benefit plans managed by the state (which many states have inadequately funded), while private-sector employers have switched to defined-contribution plans, particularly 401(k) plans. On the other hand, public employees receive considerably less supplemental pay and vacation time, and public employers contribute significantly less to legally mandated benefits.

A standard earnings equation produced a surprising result: full-time state and local employees are undercompensated by 6%. We observed, however, that public employees work fewer hours, particularly, employees with bachelor's, master's, and professional degrees. A re-estimated earnings equation controlling for work hours of full-time employees demonstrates that there remains a significant penalty of 3.7% in total compensation for full-time state and local employees when compared to similar private-sector employees.

Union status was omitted from this study and earnings comparisons, since it has been a focal point of the compensation controversy. This means that, in essence, we are statistically comparing unionized public sector workers with all private-sector workers—both union and nonunion—rather than with their union counterparts. Unionized private-sector workers have both better pay and higher benefits, of course, so our standard of comparison is very conservative.

Several governors, policy makers, and others have alleged that public employee unions and collective bargaining have produced an over-compensated workforce and that unions are the source of excessive compensation. It is a provocative hypothesis, but its main prediction has been falsified by the research reported in this study—state and local government employees are not excessively compensated. This finding has now been replicated nationally in two other studies (Schmitt 2010; Bender and Heywood 2010).

Alternately, high unionization rates may be a response to monopsony power exercised by government over many critical occupations, where employees have no viable labor-market alternatives to government employment. Additionally, it is well known that taxpayers do not want to pay higher taxes and exert considerable pressure on elected representatives to resist increases in compensation, creating a formidable incentive and opportunity to hold government pay below market. Unionization represents a viable legal response to employer labor market power. The pattern of state and local public employee unionization is consistent with broader global patterns of unionization. For example, a study of 27 developed countries found a pattern of public employee unionization consistent with that of state and local unionization (Blanchflower 2006). The study reports that union density is found to be negatively correlated with level of education in the private sector and positively correlated in the public sector, as we observe for state and local government workers. Rather than ask why highly educated public employees are unionized, a more important question for policy makers is why relatively less-educated and low-paid private-sector employees are inadequately represented by unions.

Public-sector workers' compensation is neither the cause, nor can it be the solution to a state's financial

problems. Only an economic recovery can begin to plug the hole in the states' budgets. Unfortunately, the states' own current budget balancing efforts may prolong the economic downturn by increasing unemployment and reducing demand for products and services. Thousands of state and local public employees will lose their jobs, and their families will experience considerable pain and disruption. Others will have their wages frozen and benefits cut. Not because they did not do their jobs, or their services are no longer needed, nor because they are overpaid. They too will join the list of millions of hard working innocent victims of a financial system run amuck. They do not deserve bullying or our ridicule and condemnation by elected officials and the media looking for scapegoats.

—*Jeffrey H. Keefe is associate professor of labor and employment relations at the School of Management and Labor Relations, Rutgers University, where he is conducting research on occupational and employment restructuring in telecommunications, meat processing, and public employment. He teaches courses on collective bargaining, negotiations, financial analysis, benefits and social insurance, and strategic research.*

Data Appendix

This study uses the Integrated Public Use Microdata Series (IPUMS) of the March Current Population Survey (CPS). The CPS is a monthly U.S. household survey conducted jointly by the U.S. Census Bureau and the Bureau of Labor Statistics. The March Annual Demographic File and Income Supplement is the most widely used source for earnings used by social scientists (King et al. 2009). This sample provides organizational size, a critical variable for our analysis of benefits. The sample is restricted to state and local employees and excludes federal employees, the self-employed, and part-time, agricultural, and domestic workers. The IPUMS-CPS identifies an employee's full-time status, education level, experience level as a function of age minus years of education plus five, gender, race, employers organizational size, and industry.

The IPUMS-CPS sample was selected for this analysis because the March CPS Annual File provides information on organizational size, not provided by the larger CPS sample in the Merged Outgoing Rotation Groups (MORG).

The Employer Cost of Employee Compensation (ECEC) data was used to calculate total compensation

costs. Because the survey's method of data collection is expensive, the sample is not sufficiently large enough to provide reliable state-level benefit-cost estimates. We would have preferred to analyze compensation costs by each state. The BLS did share their unpublished sample estimates for major occupations by organizational sizes for private employers. This study uses these ECEC sample estimates to calculate relative benefit costs for each private and public employee in the sample. The calculation was done by calculating the relative benefit mark-up for each private-sector employee based on the size of organization that employs the individual and the employee's occupation. State and local government employees' wages were similarly marked up using an occupational benefit weight calculated using the ECEC data. It is assumed that when employees share information about their earnings they do not distinguish paid time off from time worked in salary data. Therefore paid time off is not included in the mark-up. CPS wages also include supplemental pay (**Table A1**).

The IPUMS CPS sample for 2009 was used for the estimates. The sample size was 44,280 total observations and 8,737 public employee observations.

TABLE A 1

Markup adjustments to wages for benefits to calculate total compensation

	Benefit markups applied to CPS wages to calculate total compensation			
	Private Employers			State and local government
	1 to 99	100-499	500+	
All workers	1.2619	1.2935	1.3124	1.4004
Occupational Markups				
<i>Management, business, and financial</i>	1.2292	1.2413	1.2690	1.3454
<i>Professional and related</i>	1.2306	1.2417	1.2804	1.3644
<i>Sales and related</i>	1.2232	1.2584	1.2585	1.4487
<i>Office and administrative support</i>	1.2775	1.3248	1.3603	1.4853
<i>Service</i>	1.2211	1.3094	1.3738	1.5020
<i>Construction</i>	1.3507	1.4511	1.3918	1.4789
<i>Installation, maintenance, and repair</i>	1.2870	1.3522	1.3566	1.4239
<i>Production</i>	1.2995	1.3638	1.4000	1.4630
<i>Transportation and material moving</i>	1.3393	1.3669	1.3723	1.5399

SOURCE: BLS, Employer Cost of Employee Compensation, December 2009, unpublished data.

Endnotes

1. Politico quoted in “Gov. Daniels Bashes Public Employees as ‘A New Privileged Class.’” Pat Garofalo on June 7, 2010 at 11:16 am. <http://wonkroom.thinkprogress.org/2010/06/07/daniels-public-pay/>
2. “Gov. Pawlenty: Public employees are ‘over-benefited and overpaid’” Joe Kimball, April 30, 2010, 9:13 am. http://www.minnpost.com/politicalagenda/2010/04/30/17788/gov_pawlenty_public_employees_are_over-benefited_and_overpaid
3. Governor Chris Christie addresses the NJCM at the Annual Luncheon Meeting in Atlantic City. Transcript, <http://njcm.org/Conference2010>. New Jersey Conference of Mayors.
4. “Mitt Romney blames the U.S. budget deficit on overpaid government workers.” Posted on December 13, 2009 by <http://www.politicususa.com/en/Romney-Meet-The-Press>
5. “Bouchard says public employees overpaid, calls for Constitutional amendment to limit pay.” by Todd A. Heywood. June, 24, 2010. 11:01 am. <http://michiganmessenger.com/39034/bouchard-says-public-employees-overpaid-calls-for-constitutional-amendment-to-limit-pay>

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