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ARE MICHIGAN PUBLIC EMPLOYEES OVER-COMPENSATED?

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Executive summary

This paper investigates whether Michigan public employees are overpaid at the expense of Michigan taxpayers. The research is timely. Conservatives in some policy circles have long claimed that public workers earn substantially higher salaries and an even greater magnitude of benefits than private sector workers (Hohman 2010). Some elected officials are promoting public employee pay freezes and major benefits reductions as the antidote to the alleged overpayment problem and the key to reducing Michigan's budget deficit. Newly inaugurated Gov. Rick Snyder has said that public employee compensation at the state, local, and school levels must be judged in comparison with private sector employee pay (Egan 2011). This paper makes that comparison.

The research shows that state and local government employees (which includes school employees) in Michigan are not overpaid. Comparisons controlling for education, experience, organizational size, gender, race, ethnicity, citizenship, and disability reveal that public employees of state and local governments earn less than comparable private sector employees. On an annual basis, full-time state and local employee government employees in Michigan are undercompensated by approximately 5.3% compared with similar private sector workers. The compensation disadvantage of public employees is a smaller but insignificant 2.9% when annual hours worked are factored in. Full-time public employees, particularly employees with bachelor's, master's, and professional degrees, work fewer annual hours. Comparisons controlling for the difference in annual hours worked reveal no significant difference in total compensation between full-time local government

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employees and private sector employees. However, full-time state employees suffer a 7.15% compensation penalty relative to private sector employees.

These comparisons account for important factors that affect earnings, the most important of which is level of education. Because occupations in the public sector require much higher levels of education, Michigan public sector workers on average are more highly educated than private sector workers. Approximately 53% of full-time public sector workers in the state have at least a bachelor's degree, compared with 31% of full-time private sector workers. The public sector includes teachers, attorneys, engineers, and other highly skilled people, all of whom have at least a bachelor's degree. On average, Michigan state and local governments and school districts pay college-educated employees 21% less in annual total compensation than private employers. The earnings differential is greatest for professional employees, such as lawyers and doctors. On the other hand, the public sector appears to set a floor on compensation, which benefits less-educated workers. The 1% of state and local government workers without a high school diploma earn more than comparably educated private sector workers.

State and local government employees also receive a higher portion of their compensation in the form of employer-provided benefits, and the mix of benefits is different from that provided in the private sector. For example, in the public sector, 26.7% of total compensation is devoted to nonwage benefits, compared with 18.9% to 22.8% in the private sector. Public employers devote a larger share of their compensation packages to health insurance and pension benefits. Health insurance accounts for 12.9% of state and local government compensation but only 7% to 9.7% of private sector compensation. Retirement benefits account for 8% of public employee compensation but only 2.5% to 4.9% in the private sector. Social Security costs are less for public employers than for private employers because some public employees are not in the Social Security system. 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 somewhat less vacation time, and public employers contribute significantly less to legally mandated benefits financed through payroll taxes.

To summarize, while some benefits are more generous in the public sector, it would be wrong to surmise that comparability of the public and private sectors requires that every element of compensation is the same. What is important is this: Considering both the cost of employer-provided benefits and direct wages, state workers in Michigan earn less in annual or hourly compensation than they would earn in the private sector, while local workers face a wage penalty but no statistically significant penalty for overall compensation.

Introduction: The challenge to public employee compensation

Michigan Gov. Rick Snyder and others argue that public employee compensation must be comparable to private sector pay at the state, local, and school levels (Egan 2011). The belief that public employees are overpaid is an article of faith for some conservative policy advocates and elected officials. They are promoting public employee pay cuts and major benefits reductions as the antidote to the alleged overpayment of public employees and the key to reducing Michigan's budget deficit. Are they right? Does a balanced, systematic evaluation show that state and local government employees (a category which includes school and university employees) are overpaid to the detriment of Michigan taxpayers? This research seeks to methodically and deliberately answer that question.

To assess whether Michigan public employees are overpaid, we need to ask two simple and related questions: compared with whom and by what elements of compensation?

Usually, public employees are compared with private-sector workers with similar education, experience, and hours of work. However, while we ideally would use this standard of comparison, it is impossible to find private sector matches for the entire spectrum of public employees. Too many critical occupations in the public sector—for example, police, fire, and corrections—lack appropriate private-sector counterparts. Even public and private teaching are significantly different in character. Public schools accept all students, while private schools are sometimes highly selective and may

exclude or remove poor performing, special needs, or disruptive students.

Consequently, comparing workers of similar "human capital" (fundamental personal characteristics and labor market skills) is considered the best alternative. Analyses based on comparisons of personal characteristics and labor market skills capture the attributes shown by comparable work studies to have the most impact on compensation. Education level is the single most important earnings predictor. Education helps develop work-relevant skills. People invest heavily in their own and their children's education by paying for housing in communities with good schools and funding attendance at schools, colleges, and universities.

Experience follows education in advancing earnings. People learn by doing and by handling a variety of job tasks as they advance within occupations. Most occupations reward experience, since on-the-job learning delivers more competent and complex performance. Gender, race, ethnicity, and disability also affect compensation, through an intermingling of productivity-related human capital differences and 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 because they earn considerably less than comparable full-time workers, are more weakly attached to the labor force, and often lack benefit coverage. This study follows standard practice by focusing on full-time public and private sector employees (who represent over 80% of the state's labor force), and controls for hours worked per year. The study includes only year-round workers who have worked a minimum of 1,100 hours, which is often the minimum threshold to qualify for full employer-provided benefits.

We are fortunate to be able to include a control for the organizational size of each sampled full-time worker's employer by pulling compensation data from the Integrated Public Use Microdata Series of the Current Population Survey (IPUMS-CPS), a monthly survey of U.S. households conducted by the U.S. Census Bureau and Bureau of Labor Statistics (a more detailed description of the IPUM-CPS is provided in the Data Appendix). An employer's organizational size greatly influences employee earnings; it produces a wage gap of 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 employees (Oi and Idson 1999; U.S. Bureau of Labor Statistics 2005). While large organizations employ more educated and experienced full-time workers, they nonetheless pay a premium, even after accounting for these factors (Troske 1999). And the compensation premium grows when nonwage benefits are included. The private sector has relatively few large organizations, whereas the public sector has relatively few small organizations. More than 64% of Michigan private sector employees work in organizations with more than 100 employees, whereas 91% of public employees work in organization with more than 100 employees (U.S. Census Bureau 2006).

To summarize, our study compares workers of similar "human capital" and controls for personal characteristics found to affect compensation as well as for hours worked and size of employer. In addition to defining who will be compared, we must also define what should be compared. This is a more complex task than it may appear. Comparing wages is insufficient because employee compensation increasingly includes employer-provided nonwage benefits. Regardless of in the mix of wages and benefits, the essential feature for comparison is what it costs to employ someone. Employer costs may include not only wages but also paid time off for holidays, vacations, and 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 mandated benefit contributions such as unemployment insurance, Social Security, Medicare, disability insurance, and workers' compensation. These costs, rather than just wages, must be included in the cost of employing an individual worker.

However, the complexities don't end there: More difficult is finding the appropriate data to make the comparison.

This study uses wage and demographic data from the IPUMS-CPS March Annual Demographic File and Income Supplement, which is the source for earnings data most widely used by social scientists (King et al. 2009). To ensure comparability, the Michigan data excludes

self-employed, part-time, agricultural, and domestic workers. We enhance the reliability of the sample by expanding the number of observations by six additional years of data, covering 2004 through 2009.

There is only one reliable source of nonwage benefit information in the United States: the Employer Costs for Employee Compensation (ECEC) survey, which is collected by the Bureau of Labor Statistics. The ECEC includes data from both private industry and state and local government and provides data for private employers by firm size. Larger employers, those with more than 500 employees, are significantly more likely to provide employee benefits, in part because they can distribute administrative costs and insurance risks over a larger group. State and local governments resemble larger private employers. The compensation cost comparison that follows controls for employer size.

The most important factor in earnings: Education level

Public employees in the state of Michigan are substantially more educated than their private sector counterparts. Approximately 53% of full-time Michigan public employees hold a bachelor's degree, compared with 31% of full-time employees in the private sector. Teachers, attorneys, engineers, and other public sector workers in highly skilled positions tend to have graduate degrees as well. Higher levels of education are strongly associated with higher earnings in the labor market. **Table 1**, column 1 reports the returns to education in comparison with workers who have not completed high school.[1] A high school graduate, all else equal, earns on average 34% more than someone without a high school diploma. The education premium jumps to 48% on average if the worker attended some college, and increases to 68% if the worker holds an associate's degree. Completing college with a bachelor's degree yields a 99% pay premium, obtaining a master's degree yields a 122% pay premium, and earning a doctorate produces a 152% return. Earning a professional degree in law or medicine increases average earnings by 166% compared with failing to complete high school.

The public sector employs more highly educated workers. While private sector organizations rely substantially more on educated labor as they become larger, smaller

TABLE 1

Composition of private and public employment by education in Michigan

Highest degree earned	Earnings return to education compared *	Percent of total employment				
		All private employers	*Private 1 to 99 employees*	*Private 100 to 499 employees*	*Private 500 and more employees*	*State and local government*
Less than high school	0%	4%	7%	5%	3%	1%
High school	34	33	34	34	29	16
Some college	48	22	24	23	21	18
Associate's degree	68	10	9	13	9	11
Bachelor's degree	99	21	19	18	26	28
Professional degree	166	2	2	1	1	2
Master's degree	122	7	5	5	9	21
Doctorate	152	1	0	1	2	2
Total **		100	100	100	100	100
College and more		31%	26%	25%	38%	53%

* For all Michigan full-time workers, adjusted for gender, race, and other variables in a conventional earnings model. Comparison to 'less than high school.'
** Rows may not add up to 100% due to rounding.

SOURCE: Author's analysis of March Current Population Survey (Census) and Employer Costs for Employee Compensation Survey (BLS). See appendix for more information.

TABLE 2

Public and private pay comparison by education in Michigan, unadjusted for other variables

	Annual wage earnings		Difference (public over private)**	
Full-time*	***Private***	***Public***	***Dollars***	***Percent***
Less than high school	$29,480	$30,732	$1,253	4%
High school	37,372	34,349	-3,022	-8
Some college	40,268	42,814	2,546	6
Associate's degree	45,496	48,812	3,316	7
Bachelor's degree	70,065	51,687	-18,377	-26
Professional degree	137,436	75,173	-62,263	-45
Master's degree	80,546	71,641	-8,905	-11
Doctorate	106,431	90,451	-15,980	-15
All	$51,963	$52,275	$312	1%

	Total compensation		Difference (public over private)**	
Full-time*	***Private***	***Public***	***Dollars***	***Percent***
Less than high school	$36,488	$40,375	$3,887	11%
High school	46,269	44,751	-1,518	-3
Some college	49,415	55,448	6,033	12
Associate's degree	55,696	63,246	7,551	14
Bachelor's degree	84,392	66,363	-18,029	-21
Professional degree	164,724	94,707	-70,017	-43
Master's degree	96,505	90,765	-5,740	-6
Doctorate	127,722	114,355	-13,367	-10
All	$63,235	$67,046	$3,811	6%

* For full-time workers with 1,100 or more annual hours.

** For a more comprehensive measure of the public sector premium/penalty, see Table 4.

SOURCE: Author's analysis of March Current Population Survey (Census) and Employer Costs for Employee Compensation Survey (BLS). See appendix for more information.

private sector organizations employ more workers who lack more than a high school education than do larger private employers or state and local government. Only 1% of state and local government workers lack a high school education, compared with 7% of employees of private firms with less than 100 employees and 5% of employees of private firms with 100 to 499 employees.

The returns to education, however, are not equally distributed between the public and private sectors in Michigan. **Table 2** provides computations of the annual earnings of full-time workers in Michigan by educational attainment, comparing the wages and compensation of state and local government employees with private sector employees. These comparisons do not adjust for the many factors accounted for in more refined analyses presented later (such as experience, annual hours worked, race, gender, etc.). These comparisons do reflect the floor on earnings established in the public sector, which allows individuals without a high school education (1% of state/local workers) to earn more than their private sector

counterparts (Asher and DeFina 1999). On the other hand, college-educated public sector employees earn considerably less than similarly educated private sector employees.

As shown in Table 2, average annual wages of a full-time worker without a high school education are 4% higher in state and local government ($30,732) than in the private sector ($29,480). Furthermore, average total compensation for a full-time worker without a high school education is 11% greater in state and local government ($40,375) than in the private sector ($36,488). The earnings advantage in the public sector disappears for high school graduates but reappears for workers with some college or an associate's degree. High school graduates on average earn 8% less in annual wages ($34,349) working for state and local government than for private employers ($37,372), although their total compensation is only 3% lower in the public ($44,751) than the private sector ($46,269). Average wages for workers with some college or an associate's degree are 6% and 7% higher, respectively, in the public sector, while total compensation is 12% and 14% greater.

However, the earnings gap between public and private sector employees reverses for employees with a college education. On average, the private sector pays employees with college degrees substantially higher wages and compensation than does the public sector. State and local workers with a bachelor's degree make 26% less in salary and receive 21% lower total compensation than those in the private sector. There is an even greater gap for workers with post-graduate degrees: In state and local government, workers with a professional degree earn 45% less in salary and receive 43% lower total compensation, while those with a master's degree earn 11% less in salary and receive 6% lower total compensation. For those with a doctorate, the gap is 15% in salary and 10% in total compensation. As noted below, better nonwage benefits and fewer average work hours in the public sector will largely eliminate these large private sector wage gaps for college-educated labor.

The growing role of nonwage benefits in employee compensation costs

Nonwage benefits, once referred to as fringe benefits, account for an increasing portion of employee compensation costs. Nonwage 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; a practice 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, organizations with 1 to 99 employees have employee pension participation rates of 38%, while organizations with 100 to 499 employees have participation rates of 64%; in organizations with 500 or more employees, 81% of employees participate in retirement plans. The pattern is similar for health insurance benefits: Organizations with 1 to 99 employees have employee participation rates of 43%, while organizations with 100 to 499 employees have participation rates of 61%. In organizations with 500 or more employees, 71% participate in medical insurance plans. This pattern is replicated for prescription drug and dental care plans (Bureau of Labor Statistics 2009a).

Public sector employees received more of their compensation in the form of nonwage benefits than private sector workers. **Table 3** provides the distribution of employer costs of compensation in June 2010. 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 Bureau of Labor Statistics. The ECEC includes data from both private industry and state and local government and provides data for private employers by firm size. Our study uses these ECEC sample estimates to calculate relative nonwage benefit costs for private and public employees in Michigan. (A more detailed description is provided in the Data Appendix). Nonwage benefits costs range from 18.9% of total compensation for employees of small private companies (less than 50 employees) to 22.6% for employees of private companies with 100

TABLE 3

Percent of employer costs per hour worked for employee compensation: East North Central Census Division

Compensation component	Private industry						State and local government
	1-99 workers			*100 workers or more*			
	1-99 workers	1-49 workers	50-99 workers	100 workers or more	100-499 workers	500 workers or more	
Total compensation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
W-2 wages and salaries	80.6%	81.1%	79.4%	77.4%	77.2%	77.6%	73.3%
Base wages and salaries	73.2%	74.1%	70.9%	66.7%	67.6%	66.0%	65.4%
Paid leave	5.3%	5.1%	5.6%	7.6%	6.9%	8.2%	7.0%
Vacation	2.7	2.6	2.9	4.0	3.6	4.3	2.6
Holiday	1.8	1.8	1.9	2.4	2.3	2.5	2.0
Sick	0.5	0.5	0.5	0.8	0.7	1.0	1.8
Personal	0.2	0.2	0.3	0.4	0.4	0.4	0.6
Supplemental pay	2.1%	1.9%	2.9%	3.1%	2.7%	3.3%	0.9%
Overtime and premium	1.0	0.9	1.3	1.1	1.2	1.0	0.5
Shift differentials	0.1	0.0	0.1	0.5	0.4	0.6	0.1
Nonproduction bonus	1.1	0.9	1.5	1.4	1.1	1.8	0.3
Nonwage benefits*	19.4%	18.9%	20.6%	22.6%	22.8%	22.4%	26.7%
Insurance	7.7%	7.3%	8.6%	10.2%	10.3%	10.1%	13.3%
Life	0.1	0.1	0.1	0.2	0.2	0.2	0.1
Health	7.3	7.0	8.2	9.5	9.7	9.3	12.9
Short-term disability	0.1	0.1	0.2	0.3	0.3	0.3	0.1
Long-term disability	0.1	0.1	0.1	0.2	0.1	0.2	0.2
Retirement and savings	2.7%	2.5%	3.0%	4.6%	4.2%	4.9%	8.0%
Defined benefit	1.1	1.1	1.3	2.6	2.2	2.8	7.4
Defined contribution	1.5	1.5	1.6	2.0	1.9	2.1	0.6
Legally required benefits	9.0%	9.1%	9.0%	7.8%	8.3%	7.4%	5.4%
Social security	4.9	5.0	4.9	4.6	4.6	4.6	3.0
Medicare	1.2	1.2	1.2	1.1	1.1	1.1	1.0
Federal unemployment insurance	0.2	0.2	0.2	0.1	0.1	0.1	0.0
State unemployment insurance	0.9	0.9	0.9	0.6	0.7	0.5	0.2
Workers' compensation	1.1	1.8	1.8	1.9	1.4	1.8	1.1
Benefits**	26.8%	25.9%	29.1%	33.3%	32.4%	34.0%	34.6%

* CPS definition of benefits, which only includes benefits that are not included in W-2 wages, or workers' regular paychecks. Specifically, insurance, retirement, and legally required benefits are included. BLS categorizes paid leave and supplemental pay as part of benefits, but since those items are paid out in regular paychecks they are incorporated in the CPS measure of wages. That is why adjustments to the CPS to capture total compensation are made using nonwage benefits.

** BLS definition of benefits, which includes both nonwage benefits such as insurance, retirement, and legally required benefits, but also paid leave and supplemental pay, which BLS categorizes as benefits but CPS does not.

SOURCE: Author's analysis of March Current Population Survey (Census) and Employer Costs for Employee Compensation Survey (BLS). See appendix for more information.

or more employees, compared with 26.7% 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. However, large private sector employers most closely resemble public employers in the proportion of compensation devoted to nonwage benefits.

Compared with private sector employees, public employees not only receive more of their compensation in nonwage benefits, but also a different proportion of benefits spread among paid leave, supplemental pay, insurances, retirement security, and legally mandated benefits. Although overall paid leave costs are similar, public employees receive greater sick leave compensation while private sector employees in companies with 50 or more workers receive more vacation pay. And although holiday and personal time compensation is similar, public employees receive less than 1% of compensation in supplemental pay, whereas private sector employees in large organizations (500 or more workers) gain 3.3% 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 12.9% of state and local government employee costs but only 9.5% of employee costs in private organizations with 100 or more employees. Retirement benefits also account for a substantially greater share of public employee compensation costs: 8% compared with 4.6% in private organizations with 100 or more employees. This difference is partially offset by savings in the public sector because not all public employees are in the Social Security system (therefore employer payroll taxes are lower), as discussed below.

As with all nonwage benefits, the differences between private and public employees' compensation costs shrink as the private organization in comparison increases in size. Legally required benefits account for a greater share of small employers' compensation costs; as organizational size increases, these benefit costs decrease in relative degree. In local and government employment, legally required benefits represent a substantially smaller share of nonwage benefit costs for several reasons. First, some public employees do not participate in Social Security, which partially explains their higher pension costs.[2] These employees are not eligible for Social Security benefit payments at retirement unless they chose to work in another job that is covered by Social Security. Second, state and local governments do not participate in the federal unemployment system. Third, since state and local governments offer more stable employment than the private sector, they contribute proportionally less to the state unemployment insurance trust fund because an employer's unemployment insurance contribution rate is partially based on the extent to which the employer has tapped the fund.

In summary, state and local government workers receive more of their compensation in employer-provided nonwage benefits. Specifically, public employers provide a greater share of employee compensation in the form of health insurance and retirement benefits. Public employees receive a lesser share of their wages in the form of supplemental pay and consume less in costs for legally required benefits (financed through payroll taxes, such as worker compensation and unemployment insurance) than do private sector employees. Thus, to determine whether public employees are overpaid, this analysis asks whether higher nonwage benefit costs more than offset the lower wages paid to public employees in Michigan. That is the question we turn to next.

Assessing private and public relative pay and nonwage benefits

To assess relative public and private employee costs we will use the micro data from the IPUMS-CPS, which provides a sample of Michigan employees broken down by demographic characteristics such as full-time status, education level, years of experience, gender, race, disability, citizenship, employer organizational size, and industry. Compared with Michigan private sector employees, Michigan state and local government employees on average are more experienced (24 years compared with 21.7 years); are more likely to be female (59% compared with 43%); and work fewer weekly hours (42.6 compared with 43). Also, they are more likely to be black (13.5% compared with 11.2%) and less likely to be Asian (1.4% compared with 5%); or Hispanic (2.3% compared with 3%). Finally, public employees are more likely to be citizens (99% compared

with 94.7%), and less likely to be disabled (1.2% compared with 1.7%) (King et al. 2009).

The Employer Cost of Employee Compensation data allow us to use the statistics on the nonwage benefit share of compensation by employer size to calculate total employer compensation costs for each employee in the sample. **Table 4** reports the results of 12 earnings equations estimating Michigan state and local government employee earnings compared with similar Michigan private sector employees. Columns one and two provide estimates for employee wages. Column one shows that annual wage earnings of Michigan state and local government employees are a statistically significant 11.1% lower than those of comparable private sector employees. Annual wage earnings for state government employees are 15.25% lower and for local government employees are 8.93% lower than for private sector employees. Column two shows that hourly wages of Michigan public employees are 8.66% lower than those of comparable private sector employees (12.71% lower for state government employees and 6.55% lower for local government employees).

When we compare total compensation of Michigan public and private employees, the earnings gap narrows but does not disappear. Columns three and four report the estimates for total compensation costs. Column three shows that Michigan public employees' annual total compensation costs are 5.31% lower than those of comparable private sector employees, reflecting state employee compensation costs that are 9.67% lower and local government employee compensation costs that are 3.03% lower (although statistically insignificant).

When we compare hourly estimates, the total compensation gap narrows further. Michigan public employees cost 2.89% less than comparable private-sector workers. State government employees cost a statistically significant 7.15% less and local government cost 0.67% less than comparable private employees. In all estimates Michigan state government employees earn less than comparable private sector workers. The analysis strongly indicates that Michigan state public employees are under-compensated, earning between 7% to 10% less than comparable private-sector employees.

Conclusion: Michigan public employees are *not* overpaid

The earnings equation estimates indicate that Michigan public employees, both state and local government employees, are not overpaid. Local public employees are not under compensated, but state public employees are underpaid. When we make comparisons controlling for education, experience, hours of work, organizational size, gender, race, ethnicity, citizenship, and disability, there is

TABLE 4

Wage and compensation differentials in Michigan

2010 CPS	Employees' annual wages		Employees' hourly wages		Employees' annual total compensation		Employees' hourly total compensation	
Michigan public employee	-11.10%	***	-8.66%	***	-5.31%	**	-2.89%	
State government employee	-15.25	***	-12.71	***	-9.67	***	-7.15	**
Local government employee	-8.93	***	-6.55	**	-3.03		-0.67	
prob 0<.0001 *** <.01 ** <.05 *								

Observations = 10,515.

Note: Differential between all state or local public employees after controlling for demographic characteristics (full-time, education, years of economic experience, gender, race, citizenship, and organizational size). See data appendix for details.

SOURCE: Author's analysis of March Current Population Survey (Census) and Employer Costs for Employee Compensation Survey (BLS). See data appendix for more information.

no significant difference between private and local public employee compensation costs.

These comparisons account for the public sector's occupational categories, which require more educated employees, and its compensation practices, which favor a relatively higher proportion of nonwage benefits.

On average, Michigan public sector workers are more highly educated than private sector workers: 53% of full-time public sector workers have at least a four-year college degree, compared with 31% of full-time private sector workers. Michigan state and local governments pay significantly less than private employers for college-educated labor. These earnings differences, which are greatest for professional employees, lawyers, and doctors, may indicate opportunities for cutting costs by shifting some work now performed under professional outsourcing contracts to lower-cost public employees. As noted earlier, the public sector appears to set a floor on compensation, which enhances the earnings of workers without a high school education (about 1% of the public sector workforce) when compared with similarly educated workers in the private sector, where the earnings floor has collapsed (Lee 1999).

Nonwage benefits are allocated differently in the public and private sectors in Michigan. State and local government employees receive a higher portion of their compensation in the form of employer-provided nonwage benefits, and the mix of benefits is different from in the private sector. Public employers allot 26.7% of employee compensation costs to nonwage benefits, whereas private employers devote 18.9% to 22.8% of compensation to nonwage benefits. Public employers provide more of their compensation in health insurance and pension benefits. Health insurance accounts for 12.9% of state and local government compensation but only 7% to 9.7% of private sector compensation, even though total compensation for public employees still lags because of the pay gap. Retirement benefits also account for a greater share of public employee compensation costs: 8% compared with 2.5% to 4.9% in the private sector, although public sector employees save on Social Security payroll taxes because some of their employees are not covered. Public employees also continue to participate in defined-benefit plans managed by the state (and inadequately funded for more than a decade), 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 what some may consider a surprising result: full-time state and local employees are undercompensated by 5.31%. We observed, however, that public employees work fewer hours, particularly employees with a bachelor's, master's, or professional degree. An earnings equation controlling for work hours of full-time employees demonstrates that there is no significant difference in total compensation between full-time local government and private sector employees and a compensation penalty of 7.15% for state government employees when compared with private employees. When combined, the compensation penalty for state and local government workers, with hours of work factored in, is a statistically insignificant 2.9%.

In summary, simply comparing private and public employee nonwage benefits leads to an obvious but incorrect conclusion that public employees are overpaid (Hohman 2010). Table 2 in this paper shows that public employee wages on average are 1% higher than private sector wages, and public sector employee total compensation is 6% higher than private sector compensation. But such a comparison is misleading because it does not compare apples to apples: specifically, it does not control for the substantially higher level of education in the public sector. When we do make the appropriate comparisons, any premium disappears and instead a compensation penalty emerges for state public employees. Simple comparisons of private and public sector average wages are ill-informed, because the average Michigan public employee is considerably more educated than the average private sector worker. What policy makers need to focus on in this debate is comparable total compensation, controlling for education, experience, hours of work, and other characteristics that influence employee productivity. When we look at overall compensation we learn that Michigan public employees pay for their better nonwage benefits through lower wages and salaries than comparable private sector employees.

The estimates reported in this study are consistent with earlier research. Ballard and Funari (2009) report pay levels for state employees were less than private sector employees, on average, for every level of educational attainment, and state employees have not received a real wage increase since 2002. Additional, state employees accepted substantial increases in their health insurance premiums, deductibles, and co-pays, and new state employees since 1997 are covered by a defined-contribution plan that has saved the state $143 million through 2006 (Ballard and Funari 2009).

Union status was omitted from this study on earnings comparisons. 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 nonwage benefits, of course, so our standard of comparison is very conservative. It is alleged that public employee unions and collective bargaining have produced an overcompensated workforce. Eligible public employees are highly unionized in Michigan (approximately 60% of public employees are covered by a labor agreement). The Mackinac Center for Public Policy (see Hohman 2010) and others have alleged that unions are the source of excessive compensation. It is an interesting and provocative hypothesis, but its main premise has been refuted by the research reported in this study—state and local government employees are not excessively compensated. This finding has been replicated nationally by two studies (Schmitt 2010; Bender and Heywood 2010). Alternatively, 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.

Rather than a cause of excessive compensation, unionization is a counterbalance to downward pressure on compensation. It is well known that taxpayers oppose higher taxes and thus 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.

Additionally, the pattern of Michigan public employee unionization is consistent with broader global patterns of unionization, as shown, for example, by study of 27 developed countries (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 in Michigan. Possibly, a more important question for policy makers, rather than why highly educated public employees are unionized, 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 the state's financial problems. Only an economic recovery can begin to plug the hole in the state's budget. Thousands of Michigan public employees have lost their jobs, and more will follow, causing considerable pain and disruption for their families. Other public employees will have their wages frozen and benefits cut. Not because they did not do their jobs, nor because they performed services that 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 amok and an economy operating far below full employment. They do not deserve our condemnation.

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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. We are using the CPS database created by the Minnesota Population Center (King et al. 2009). This sample provides organizational size, a critical variable for our analysis of benefits. The sample is restricted to private sector and public sector 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, and race; and an employer's organizational size and industry. The IPUMS-CPS sample was selected for this analysis because the March CPS Annual File provides information on organizational size that is not provided by the larger CPS sample in the Merged Outgoing Rotation Groups (MORG).

The Employer Cost of Employee Compensation (ECEC) data, part of the National Compensation Survey, was used to calculate total compensation costs as a markup on wages. Because the survey's method of data collection is expensive, the sample is not sufficiently large enough to provide reliable estimates of state-level benefits costs. We would have preferred to analyze compensation costs by each state. The Bureau of Labor Statistics did share their unpublished sample estimates for 10 major occupations by organizational sizes for private employers and state and local government in the East North Central Census division. This study uses the ECEC sample estimates to calculate relative nonwage benefit costs for each private and public employee in the sample; it calculates the relative benefit markup for each private sector employee based on the size of the employing organization and the employee's occupation. State and local government employees' wages were similarly marked up by 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 markup. CPS wages also include supplemental pay in **Table A1**. Specifically, this is a markup of total compensation relative to W-2 wages.

The IPUMS-CPS sample for March 2005 to 2010 was used for the estimates, covering pay for 2004 through 2009. The sample size was 7,397 total observations and 1,156 public employee observations.

TABLE A1

Wage to compensation ratio in Michigan

	1 to 99	100-499	500+	Public
All workers	1.2310	1.2535	1.2624	1.3519
Management, business, and financial	1.1960	1.1967	1.2157	1.3084
Professional and related	1.2038	1.2064	1.2501	1.3251
Sales and related	1.1926	1.2433	1.2032	1.3699
Office and administrative support	1.2363	1.2776	1.3038	1.4531
Service	1.2150	1.2765	1.3494	1.4089
Construction	1.3151	1.4184	1.3476	1.4139
Installation, maintenance, and repair	1.2348	1.2967	1.3043	1.3756
Production	1.2714	1.2886	1.3006	1.3832
Transportation and material moving	1.3125	1.3370	1.3365	1.4199

SOURCE: Author's analysis of March Current Population Survey (Census) and Employer Costs for Employee Compensation Survey (BLS).

Endnotes

1. A standard earnings equation using CPS data for full-time workers in Michigan was estimated to produce the estimates of the returns to education.
2. The Social Security Act of 1935 excluded state and local workers from mandatory coverage. Legislation in the 1950s allowed states to elect voluntary coverage for their employees (Munnell and Soto 2007).

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