



Congressional Budget Office

## Testimony

# Costs of Federal Civilian Personnel: A Comparison With Private-Sector Employees, 2011 to 2015

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## Notes

Numbers in the text, tables, and figures of this testimony may not add up to totals because of rounding. For the same reason, the percentage differences shown in some of the tables may not correspond precisely to the dollar amounts shown.

Unless otherwise indicated, the numbers in the tables and figures apply to full-time, full-year workers.

Wages, benefits, and total compensation in this testimony were converted to 2015 dollars using the employment cost index.

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Chairman Enzi, Ranking Member Sanders, and Members of the Committee, thank you for inviting me to testify on the Congressional Budget Office's recent report comparing the compensation of federal and private-sector employees during the period from 2011 to 2015.<sup>1</sup> My statement today reprises the summary from that report.

The federal government employs about 2.2 million civilian workers—1.5 percent of the U.S. workforce—spread among more than 100 agencies in jobs that represent over 650 occupations. As a result, the government employs workers with a broad complement of talents, skills, and experience, and it competes with other government and private-sector employers for people who possess the mix of attributes needed to do the work of its agencies.

In fiscal year 2016, the government spent roughly \$215 billion to compensate federal civilian employees. About two-thirds of that total was spent on civilian personnel working in the Department of Defense, the Department of Veterans Affairs, or the Department of Homeland Security. Federal employees typically receive periodic increases in their wages on the basis of performance, longevity, and changes in private-sector pay. However, lawmakers eliminated annual across-the-board increases for most federal civilian workers in calendar years 2011, 2012, and 2013.

How does the compensation of federal civilian employees compare with that of employees in the private sector? The answer to that question is complicated by the fact that the federal and private-sector workforces differ in characteristics that can affect compensation, such as experience, education, and occupation. On the whole, federal workers tend to be older, more educated, and more concentrated in professional occupations than private-sector workers. To account for such differences, the Congressional Budget Office has used data for 2011 through 2015 reported by a sample of households and employers to estimate differences between the cost of wages and benefits for federal employees and the cost of wages and benefits for similar private-sector employees, defined as those having a set of similar observable characteristics. Specifically, in its analysis, CBO sought to account for differences in individuals' level of education, years of work experience, occupation, size of employer, geographic location (region of the country and urban or

rural location), veteran status, and various demographic characteristics (age, sex, race, ethnicity, marital status, immigration status, and citizenship). This testimony updates a 2012 CBO report that compared the compensation of federal and private-sector employees for the 2005–2010 period.<sup>2</sup>

Even among workers with similar observable characteristics, however, employees of the federal government and in the private sector may differ in other traits, such as motivation or effort, that are not easy to measure but that can matter a great deal for individuals' compensation. Moreover, substantial ranges of compensation exist in both the federal government and the private sector among workers who have similar observable attributes. Therefore, even within groups of workers who have such similarities, the average differences in compensation between federal and private-sector employees do not indicate whether particular federal employees would receive more or less compensation performing a similar job in the private sector.

CBO's analysis focuses on wages, benefits, and total compensation (the sum of wages and benefits). It is intended to address the question of how the federal government's compensation costs would change if the average cost of employing federal workers was the same as that of employing private-sector workers with certain similar observable characteristics.

## Wages

During the 2011–2015 period, the difference between the wages of federal civilian employees and those of similar private-sector employees varied widely depending on the employees' educational attainment. The extent of that variation is evident in the differences in wages for workers with a bachelor's degree (the most common level of education in the federal workforce), the least educated workers, and the most educated workers:

- Federal civilian workers whose highest level of education was a bachelor's degree earned 5 percent more, on average, in the federal government than in the private sector (see Figure 1).
- Federal civilian workers with no more than a high school education earned 34 percent more, on average, than similar workers in the private sector.

1. Congressional Budget Office, *Comparing the Compensation of Federal and Private-Sector Employees, 2011 to 2015* (April 2017), [www.cbo.gov/publication/52637](http://www.cbo.gov/publication/52637).

2. Congressional Budget Office, *Comparing the Compensation of Federal and Private-Sector Employees* (January 2012), [www.cbo.gov/publication/42921](http://www.cbo.gov/publication/42921).

- By contrast, federal workers with a professional degree or doctorate earned 24 percent less, on average, than their private-sector counterparts.

Overall, the federal government would have reduced its spending on wages by 3 percent if it had decreased the pay of its less educated employees and increased the pay of its more educated employees to match the wages of their private-sector counterparts.

Those estimates do not show precisely what federal workers would earn if they were employed in a comparable position in the private sector. The difference between what federal employees earn and what they would earn in the private sector could be larger or smaller depending on characteristics that were not included in this analysis (because such traits are not easy to measure). In addition, the estimated differences depend on how well the observable characteristics were measured in the samples of employees used by CBO and on other factors that are inherent in any statistical analysis.

The span between the wages of high- and low-paid employees was narrower in the federal government than in the private sector, even after accounting for employees' education and other observable traits. The narrower dispersion of wages among federal employees may reflect the constraints of federal pay systems, which make it harder for managers to reward the best performers or to limit the pay of poor performers.

## Benefits

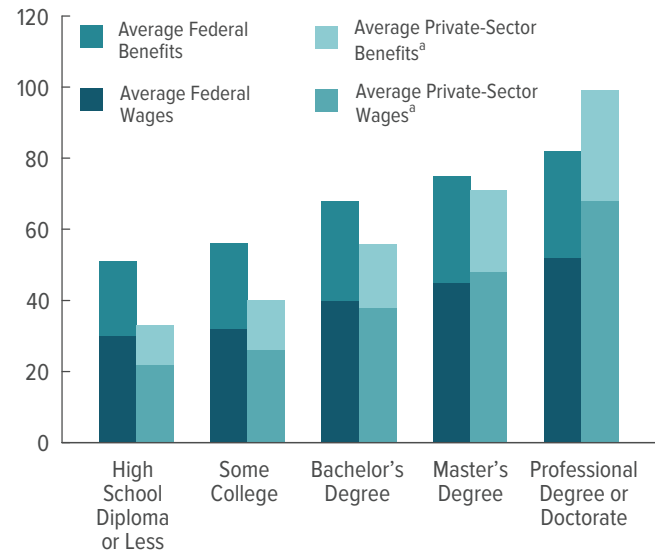
During the 2011–2015 period, the federal and private sectors differed much more with regard to the costs that employers incurred in providing current and future benefits—including health insurance, retirement benefits, and paid leave—than they did with regard to wages. Again, the extent of that difference varied according to workers' educational attainment:

- Average benefits were 52 percent higher for federal employees whose highest level of education was a bachelor's degree than for similar private-sector employees (see Table 1).
- Average benefits were 93 percent higher for federal employees with no more than a high school education than for their private-sector counterparts.

Figure 1.

### Average Compensation of Federal and Private-Sector Workers, by Educational Attainment

2015 Dollars per Hour



Source: Congressional Budget Office, using data for 2011 through 2015 from the March Current Population Survey, the Office of Personnel Management, and the National Compensation Survey.

The wages shown here include overtime pay, tips, commissions, and bonuses. The benefits shown here are measured as the average cost, per hour worked, that an employer incurs in providing noncash compensation.

a. Average wages and benefits for private-sector workers who resemble federal workers in occupation, years of work experience, and certain other observable characteristics that are likely to affect compensation.

- Among employees with a doctorate or professional degree, by contrast, average benefits were about the same in the two sectors.

On average for workers at all levels of education, the cost of benefits was 47 percent higher for federal civilian employees than for private-sector employees with certain similar observable characteristics, CBO estimates.

The most important factor contributing to differences between the two sectors in the costs of benefits is the defined benefit pension plan that is available to most

Table 1.

### Differences in Average Hourly Compensation Between Federal and Private-Sector Workers, by Educational Attainment

	Difference in 2015 Dollars per Hour			Percentage Difference		
	Wages	Benefits	Total Compensation <sup>a</sup>	Wages	Benefits	Total Compensation
High School Diploma or Less	\$8	\$10	\$18	34%	93%	53%
Bachelor's Degree	\$2	\$9	\$12	5%	52%	21%
Professional Degree or Doctorate	-\$16	-\$1	-\$18	-24%	-3%	-18%

Source: Congressional Budget Office, using data for 2011 through 2015 from the March Current Population Survey, the Office of Personnel Management, and the National Compensation Survey.

CBO compared average hourly compensation (wages, benefits, and total compensation converted to 2015 dollars) for federal civilian workers and for private-sector workers with certain similar observable characteristics that affect compensation—including occupation, years of experience, and size of employer—by the highest level of education that workers attained.

Positive numbers indicate that, on average, wages, benefits, or total compensation was higher in the 2011–2015 period for federal employees than for similar private-sector employees. Negative numbers indicate the opposite.

a. The numbers shown for total compensation may not equal the sum of the numbers for wages and benefits because of rounding to the nearest dollar and because of the composition of the samples used by CBO.

federal employees.<sup>3</sup> Such plans have become less common in the private sector. CBO's estimates of the costs of benefits are much more uncertain than its estimates of wages, primarily because the cost of defined benefit pensions that will be paid in the future is more difficult to quantify and because less-detailed data are available about benefits than about wages.

### Total Compensation

As with its components (wages and benefits), total compensation differed by varying degrees between the federal government and the private sector over the 2011–2015 period depending on workers' educational attainment:

- Among workers whose education culminated in a bachelor's degree, the cost of total compensation averaged 21 percent more for federal workers than for similar workers in the private sector.
- Among workers with a high school diploma or less education, total compensation costs averaged 53 percent more for federal employees than for their private-sector counterparts.

- Total compensation costs among workers with a professional degree or doctorate, by contrast, were 18 percent lower for federal employees than for similar private-sector employees, on average.

Overall, the federal government paid 17 percent more in total compensation than it would have if average compensation had been comparable with that in the private sector, after accounting for certain observable characteristics of workers.

### Comparison With CBO's Analysis of the 2005–2010 Period

Some of the differences between federal and private-sector compensation have changed since CBO's previous analysis of the issue, which covered the years from 2005 to 2010. For instance, the average total compensation of federal workers without a bachelor's degree exceeded that of their counterparts in the private sector by more between 2011 and 2015 than between 2005 and 2010. Conversely, relative to their private-sector counterparts, federal workers with a master's degree received less average total compensation during the 2011–2015 period than during the 2005–2010 period. The differences in total compensation by educational attainment changed because wages grew more quickly among less educated workers in the federal government than they did among workers in the private sector and because CBO adjusted

3. Defined benefit plans provide retirement income that is based on fixed formulas, and the amount of that income is usually determined by an employee's salary history and years of service.

its approach to determining who is a federal employee. (Except for that adjustment, both analyses used broadly similar approaches.)

Two significant policy changes have affected federal wages since 2010. First, lawmakers eliminated across-the-board salary increases for federal employees from 2011 to 2013, limiting the total increase from 2010 through 2015 to 2 percent. In contrast, salaries increased by about 10 percent in the private sector over the 2010–2015 period. However, in addition to the across-the-board increase of 2 percent, average federal hourly wages were boosted by a decrease in federal hiring—because recently hired federal employees typically have lower salaries than other federal employees—and by a temporary reduction in the number of hours worked by salaried federal employees.

Second, lawmakers increased the share of wages that workers first hired after 2012 must contribute to the federal defined benefit retirement plan. That change will gradually reduce the cost to the federal government of defined benefit pensions beginning in 2017, but it does not factor into this analysis because workers hired after 2012 have not yet accumulated the five years of service needed to receive those benefits.

### Scope of the Analysis

CBO's results apply to the cost of employing full-time, full-year workers. The analysis focuses on those workers—who accounted for about 94 percent of the total hours worked by federal employees from 2011 through 2015—because more-accurate data are available for them than for other workers. CBO measured the cost of employing those workers as the present value of providing compensation, some of which may be paid out in the future. (A present value is a single number that expresses a flow of current and future payments in terms of an equivalent lump sum paid today.) Thus, the cost of employing federal or private-sector workers includes an estimate of the cost of retirement benefits to be paid in the future to current employees. That present-value approach differs from the budgetary treatment of retirement benefits for federal workers; the cost of those benefits is recorded as federal outlays when people receive them rather than when the commitment to pay them is incurred.

CBO's analysis is limited to selected benefits (such as health insurance and paid leave) provided to federal and private-sector workers. The analysis excludes certain benefits some workers receive—for example, the above-market rate of return the federal government offers

its employees through the G Fund (one of the investment options in their retirement plan) and the stock options that some private-sector firms provide to their employees. In CBO's judgment, the benefits that are not included in this analysis are less costly, on average, than the benefits that are included.

A key consideration in setting compensation is the ability to recruit and retain a highly qualified workforce. But assessing how changes in compensation would affect the federal government's ability to recruit and retain the personnel it needs is beyond the scope of this analysis. Factors other than the amount of compensation can affect that ability. For example, greater job security tends to decrease the compensation that the federal government needs to offer, relative to compensation in the private sector, to attract and retain highly qualified employees. Conversely, the government's cost of total compensation for a federal employee includes a greater share of costs for retirement benefits, which workers may find less valuable than an equivalent amount of cash received today. If so, and if all other things are equal, that mix of compensation would tend to increase the total amount of compensation needed to pay federal workers relative to similar workers in the private sector.

This testimony reproduces the summary of *Comparing the Compensation of Federal and Private-Sector Employees, 2011 to 2015*, a report written by Justin Falk that CBO released in April 2017. In keeping with CBO's mandate to provide objective, impartial analysis, the testimony and report contain no recommendations.

Robert Arnold, Elizabeth Bass, Jordan Berne, Holly Boras, William Carrington, Heidi Golding, Jeffrey Holland, Nadia Karamcheva, Kim Kowalewski, Amber Marcellino, Carla Tighe Murray, Daniel Ready, Felix Reichling, Chayim Rosito, Stephanie Ruiz, John Seliski, and David Torregrosa provided comments on the report on which this testimony is based. Joseph Kile and Molly Dahl supervised that work, and Wendy Edelberg, Mark Hadley, and Jeffrey Kling reviewed it.

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