

BACKGROUNDER

No. 2694 | MAY 31, 2012

The Real Cost of Public Pensions

Jason Richwine, PhD

Abstract

Policymakers at every level of government are confronting the cost of fringe benefits for public-sector workers. The difficulty of placing an economic value on public employees' pensions, however, means that policymakers rarely know whether benefits are excessive, especially as interest groups take advantage of the confusion by advancing misleading arguments. This paper discusses how to properly calculate the cost of public defined-benefit pension benefits, compares the cost of these benefits to private-sector retirement plans, and refutes two of the most common arguments that public pension benefits are somehow modest.

The generosity of public-sector L pension benefits has come under increased scrutiny in recent years, as states and local governments search for ways to close their budget deficits. The intense battles over public-sector collective bargaining in Wisconsin and Ohio, for example, benefits for future retirees. Whether pension cutbacks are justified, however, depends crucially on whether existing benefits are excessively generous compared to those in the makers cannot know if total compensation in the public sector-including salaries, benefits, and job security—is at an appropriate market level without a proper understanding of pen-

assigning a cost to public-pension compensation is difficult. It requires reading actuarial reports for individual pensions, adjusting the cost estimates to reflect market interest rates, and converting those estimates to comparable private-sector investments. The complexity of the issue can be confusing for policymakers and voters. Adding to that confusion are public-pension advocates who have offered misleading data points

have been seen as conflicts over whether to reduce public-pension private sector. More broadly, policy-

sion costs. The problem, however, is that

TALKING POINTS

- Public-private pay comparisons inform some of the nation's most highly charged political debates at all levels of government.
- Comparisons face an "apples to oranges" problem, in that retirement benefits for public workers come mainly through traditional pension plans, while private-sector workers tend to have 401(k) plans.
- The difficulty of placing a cost on public pensions means that voters rarely know whether benefits are excessive or not. Proper cost estimates indicate, however, that most public pensions are much more generous than private-sector 401(k) payments.
- Taking advantage of the confusion, some public-sector advocates have used misleading and simplistic data in debates over the cost and generosity of pension benefits. A proper understanding of the real cost of public pensions, especially in comparison to private-sector plans, is the first step toward reform.

This paper, in its entirety, can be found at http://report.heritage.org/bg2694

Produced by the Domestic Policy Studies Department

The Heritage Foundation

214 Massachusetts Avenue, NE Washington, DC 20002 (202) 546-4400 | heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

that make pension compensation seem modest. Citing the average pension benefit or the amount that states contribute to their pension funds as indicative of the true cost of pension compensation are two of the most common examples.

This paper discusses how to properly calculate the cost of public defined-benefit pension benefits, compares these benefits to private-sector retirement plans, and rebuts two of the most common arguments claiming that the costs of public employees' pension benefits are modest.

The Difficulty of Valuing Public Pensions

About 87 percent of full-time state and local government workers are enrolled in a defined-benefit (DB) retirement plan. A DB plan is a traditional pension-a regular, fixed benefit based on tenure and some measure of past wages paid to workers after they retire and until they die. In contrast, the predominant retirement benefit now provided by private-sector employers is a defined-contribution (DC) plan, such as a 401(k) or 403(b) retirement plan. A DC plan is an account owned and managed by an individual worker. Many employers who offer DC plans make regular contributions to DC accounts as part of their employee benefits program, but no specific benefit is guaranteed. The employer cost is solely its annual contribution,

Valuing the annual employer cost of DC plans is easy: The amount that the employer deposits into a DC plan in a given year is the benefit to the employee. Valuing the cost of DB

plans, however, is much more complicated. Workers with DB plans will not receive benefits until they retire, and those benefits are determined by a formula based principally on years of service and salary near retirement. (The exact formula varies from plan to plan.)

It is impossible to know precisely how long any given public employee will work or what his average salary will be when he quits. For that reason, actuarial assumptions based on average quit rates and wage growth are necessary to estimate the cost of DB benefits.

STATE AND LOCAL PENSION FUNDS
ASSUME HIGH RATES OF RETURN
ON THEIR INVESTMENTS, TYPICALLY
AROUND 8 PERCENT, WHICH ARE
INAPPROPRIATE FOR ESTIMATING
THE COST OF BENEFITS THAT ARE
GUARANTEED TO BE PAID TO
RETIREES.

Estimating the costs of DB compensation also requires assumptions about discount rates and life expectancy. In a DB plan, the discount rate is an estimate of the growth rate of the investments that will be used to pay the retirement benefits. If the chosen discount rate is high—that is, the investments are expected to earn a high rate of return—then the cash that must be contributed each year can be lower than under lower discount rate assumptions.

Furthermore, unlike DC plans, the value of a DB pension to an individual depends on how long he lives. A guaranteed annual benefit is worth more to a person who lives until he is 80 than to a person who lives only until age 70. People obviously do not know how long they will live, and, in fact, often underestimate their probable longevity. For all of these reasons, determining the value of a DB plan for the average public worker is difficult.

Proper Cost Estimation. The key to making the employer cost of future DB pension benefits understandable is to express them as an annual accrual of benefits, much like employer contributions to DC pensions. Analysts want to know how much greater the average public worker's future pension will be if he works one more year in the present, less any contributions the worker himself makes to the pension fund that year.

Taking into account life expectancy, wages, quit rates, and many other factors, actuaries working for pension funds develop estimates of the "normal cost" of pensions, which is the amount of money that must be set aside to pay for the future pension benefits that have accrued during the year.

In the public sector, employers and employees usually each pay a portion of the total normal cost. However, as noted, DB plan administrators do not set aside one dollar in total contributions for every dollar in pension benefits that they must eventually pay. Instead, they assume a certain rate of return on their investments and then contribute an amount that they expect to grow to the proper level needed in the future.

The rate of return assumption is critical in determining the normal cost—the higher the rate of return, the lower the calculated normal

Bureau of Labor Statistics, "Employee Benefits Survey—Retirement Benefits: Access, Participation, and Take-Up Rates," March 2011, Table 2, http://www.bls.gov/ncs/ebs/benefits/2011/ownership/govt/table02a.htm (accessed May 9, 2012).

cost. Actual pension benefits stay the same regardless of the rate of return that is assumed. To illustrate, consider two hypothetical workers who are enrolled in separate plans but promised exactly the same retirement benefits. Now imagine that the first worker's plan assumes 8 percent returns, while the second worker's plan assumes 7 percent. The calculated normal cost would be lower in the first plan than in the second, even though the benefits to be paid are the same.

Clearly, the normal cost by itself is not sufficient to understand the cost of a pension benefit, since pension plan administrators can lower the projected costs simply by assuming higher returns. This is a key problem in estimating the cost of DB pensions.

State and local pension funds assume high rates of return on their investments, typically around 8 percent, which are inappropriate for estimating the cost of benefits that are guaranteed to be paid to retirees. A basic principle of financial economics is that liabilities must be discounted at a rate that reflects their risk.² Pension benefits to state and local government employees are virtually guaranteed to be paid therefore, the discount rate should be based on a virtually risk-free rate of return.

Plans cannot treat risky pension investments as risk-free any more than an individual investor could find an investment vehicle that guarantees above-market returns.³ Pension funds *might* achieve 8 percent average returns, but they *must* pay their promised pension benefits regardless. Thus, the normal cost to the pension provider reflects only part of the value of the benefit. Additional value comes from the guarantee that benefits will be paid even if the plan's investments do not generate the predicted returns.

Government actuaries insist that dubious concepts such as "time diversification" allow pension funds to treat their investments as essentially risk-free, 4 but finance economists reject these arguments.⁵ Nothing about the expertise of fund managers or the longevity of state governments can turn risky investments into risk-free investments.

Another way to think of the discount rate issue is from the perspective of a private-sector worker with a DC plan. If this worker wanted his 401(k) to generate safe guaranteed returns (instead of risky ones), he would need to invest in ultra-safe assets, such as government bonds, currently paying around 2.6 percent.⁶ Due to accounting assumptions, public-sector pensions provide, in effect, guaranteed average returns—on both employer and employee contributions—that are currently three to four times greater than what private workers are able to earn.

To express the cost of DB benefits in a form comparable to the cost of DC benefits, the published normal cost of public pensions must be adjusted upward to reflect the lower rate of return on a guaranteed

- 2. The classic theoretical paper is: Franco Modigliani and Merton H. Miller, "The Cost of Capital, Corporation Finance and the Theory of Investment," *American Economic Review*, Vol. 48, No. 3 (June 1958), pp. 261–297. For its application to modern pension funding, see Jeffrey R. Brown and David W. Wilcox, "Discounting State and Local Pension Liabilities," *American Economic Review*, Vol. 99, No. 2 (May 2009).
- 3. Put in more technical terms, imagine an investor who wants to buy a put option to sell his investment at a later date for the amount produced by an 8 percent annual return. The cost of that put option will be roughly the difference between earning 8 percent on the investment and earning the risk-free rate. For more, see Andrew G. Biggs, "An Options Pricing Method for Calculating the Market Price of Public Sector Pension Liabilities," *Public Budgeting & Finance*, Vol. 31, No. 3 (Fall 2011), pp. 94–118, http://www.aei.org/files/2011/09/21/biggs-public%20budgeting%20and%20finance-options%20pricing%20paper.pdf (accessed May 9, 2012).
- 4. Time diversification is the idea that stock market investments become less risky over time. Some government actuaries take this already dubious idea to the extreme, arguing that since state governments are timeless entities investing for the long haul, their otherwise risky investments can be treated as essentially risk-free. See, for example, Keith Brainard, "Public Pension Plan Investment Return Assumptions," National Association of State Retirement Administrators Issue Brief, March 2010, http://www.nasra.org/resources/InvReturnAssumption_Final.pdf (accessed May 9, 2012).
- 5. For time diversification specifically, see Zvie Bodie, "On the Risk of Stocks in the Long Run," *Financial Analysts Journal* (May/June 1995), pp. 18–22. For general arguments in favor of risk-adjusting pension liabilities, see Robert Novy–Marx and Joshua D. Rauh, "The Liabilities and Risks of State-Sponsored Pension Plans," *Journal of Economic Perspectives*, Vol. 23, No. 4 (Fall 2009), pp. 191–210; Andrew G. Biggs, "Understanding the True Cost of State and Local Pensions," American Enterprise Institute *State Tax Notes*, February 13, 2012, http://www.aei.org/article/economics/retirement/pensions/understanding-the-true-cost-of-state-and-local-pensions (accessed May 9, 2012); and Congressional Budget Office, "The Underfunding of State and Local Pension Plans," Economic and Budget *Issue Brief*, May 4, 2011, http://www.cbo.gov/doc.cfm?index=12084 (accessed May 9, 2012).
- 6. This is the average of the 10-year and 20-year bond rates. The current rates are listed in U.S. Department of the Treasury, "Daily Treasury Yield Curve Rates," http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield (accessed May 9, 2012).

investment, such as U.S. Treasury bonds. In other words, what is needed is not the normal cost assuming the 8 percent returns expected by many public pension plans, but the normal cost assuming the lower, risk-free rate. The employee contribution should then be subtracted from the adjusted normal cost to obtain the final cost of the pension benefit provided by employers to their workers.

Government pension actuaries often push back against the idea of using risk-free rates with the argument that pension funds have historically met their expected returns of around 8 percent.8 This argument ignores the standard warning about investing: "Past performance is not indicative of future results." But, in any case, financial economists who advocate risk-free discounting are not making projections about future returns or arguing for investing all pension assets in government bonds. Their point is simply that risk cannot be ignored when calculating the cost of guaranteed future benefits.

To summarize, establishing the cost of public employees' DB benefits is equivalent to asking: How large an employer contribution would a worker with a DC plan require to match the pension wealth accrued each year by the average public worker? Answering that question requires reading the actuarial report

published by each individual DB plan, finding the normal cost, adjusting the normal cost to reflect market rates, and finally subtracting the employee contribution.

THE TOTAL NORMAL COST
CALCULATION OF 12.4 PERCENT IS
BASED ON THE ASSUMPTION THAT
INVESTMENTS IN THE PENSION FUND
WILL GROW AT AN AVERAGE RATE
OF 7.9 PERCENT PER YEAR. IF THE
PENSION FUNDS DO NOT MEET THAT
REQUIREMENT, PROMISED BENEFITS
DO NOT CHANGE—TAXPAYERS
SIMPLY MAKE UP THE DIFFERENCE.

Example Calculation. The cost of average pension benefits provided to public-school teachers will serve as a good example calculation.9 According to the Public Plans Database maintained by the Center for Retirement Research at Boston College, the average normal cost of teachers' pensions in 2009 was 12.4 percent of wages, with employees contributing 5.7 percent of their wages to that total normal cost.10 In other words, government pension actuaries believe that pension benefits for teachers accrued in 2009 can be fully paid for if the equivalent of 12.4 percent of wages is invested in

the pension funds of each plan that year. Teachers themselves already contributed 5.7 percent of their wages, which was nearly half the total required.

However, the total normal cost calculation of 12.4 percent is based on the assumption that investments in the pension fund will grow at an average rate of 7.9 percent per year. If the pension funds do not meet that requirement, promised benefits do not change—taxpayers simply make up the difference. As described above, nearly all financial economists believe that pension liabilities should be discounted at risk-free rates of return to match the risk-free nature of accrued pension benefits. In 2009, the return on U.S. Treasury bonds was roughly 4 percent.11

When assuming a 4 percent rate of return rather than 7.9 percent, the total normal cost of teacher pensions will obviously be higher. But how much higher? Most public pensions do not publish sensitivity analyses of their funding costs at different interest rates. Help comes from a report on the Florida Retirement System (FRS) published by the actuarial firm Milliman, which calculated how the normal cost changes for FRS plans under different discount rates.12 The Milliman report analyzes eight different pension plans within the FRS, but the proportionate increase

^{7.} There is some debate among experts as to whether the U.S. bond yield is the best risk-free discount rate to use. The Congressional Budget Office, for example, adds one percentage point to the bond yield when discounting pension liabilities, on the assumption that bond yields should be lower due to their liquidity. This paper follows the academic economists in using the bond yield, but none of the conclusions would change if a slightly higher risk-free rate were used.

^{8. &}quot;Investment Return Assumptions for Public Funds: The Historical Record," Callan Associates, June 2010, http://www.nasra.org/resources/Callaninvreturn.pdf (accessed May 9, 2012).

^{9.} This calculation was first reported in Jason Richwine and Andrew G. Biggs, "Assessing the Compensation of Public-School Teachers," Heritage Foundation Center for Data Analysis Report No. 11-03, November 1, 2011, pp. 13-16, http://www.heritage.org/research/reports/2011/10/assessing-the-compensation-of-public-school-teachers.

^{10.} Ibic

^{11.} This is the average of the return on 10-year and 20-year bonds: U.S. Department of the Treasury, "Daily Treasury Yield Curve Rates."

^{12.} Robert S. DuZebe, "Study Reflecting Impact to the FRS of Changing the Investment Return Assumption to One of the Following: 7.5%, 7.0%, 6.0%, 5.0%, 4.0% and 3.0%," Milliman, March 11, 2011.

in costs when the discount rate is reduced is similar among the plans. This implies that the FRS data should provide reasonable approximations for other public pension plans.

Based on Milliman's data, the normal cost increases by a factor of 2.94 when the discount rate assumption is changed from 7.9 percent to 4 percent.13 This means that the risk-adjusted normal cost of teacher pensions in 2009 was approximately (12.4)(2.94) = 36.5 percent of wages. Subtracting the employee contribution of 5.7 percent yields a taxpayerprovided pension benefit to public workers of 30.8 percent of wages. Workers in large private-sector firms received average DC contributions from their employers of about 3.7 percent of wages in 2009.14 The difference in the annual cost of the retirement benefits is, obviously, quite large.

It is important to note that the cost of pension benefits is inversely correlated with the prevailing risk-free interest rate. The lower the return a private-sector individual can guarantee himself in the market-place, the greater the value of future pension payments becomes. Yields on U.S. Treasury bonds are currently at historic lows—the average of the

10-year bond and the 20-year bond was just 2.6 percent at the time of this writing. 15

PUBLIC-SECTOR ADVOCATES HAVE
MISLEADINGLY CLAIMED (A) THAT
THE COST OF A PUBLIC-SECTOR
DEFINED-BENEFIT PENSION IS
EASY TO MEASURE, AND (B) THAT
DEFINED-BENEFIT PENSIONS BY
THEIR PREFERRED MEASURE ARE
NOT REALLY GENEROUS. THESE
CLAIMS INVOLVE SIMPLE-SOUNDING
STATISTICS THAT DO MORE TO
CONCEAL THE REAL COST OF
PENSIONS THAN TO ILLUMINATE IT.

If the published normal cost and discount rate assumption of teacher pensions in 2012 were the same as in 2009, converting to a 2.6 percent discount rate would balloon the total normal cost to 42.3 percent, leading to an employer cost of 36.6 percent after subtracting the employee contribution. ¹⁶

Incorrect Cost Estimation Methods

It would be much easier for politicians and voters to make informed

decisions about public-sector compensation issues if an accurate but simpler approach to calculating the cost of DB plans were available. There is no simpler approach.

Nevertheless, public-sector advocates have misleadingly claimed (a) that the cost of a public-sector DB pension is easy to measure, and (b) that DB pensions by their preferred measure are not really generous. These claims involve simple-sounding statistics that actually do more to conceal the real cost of pensions than to illuminate it. This section discusses two of the most common misleading data points.

Whatever the Government Puts Into Its Pension Fund. A

recent series of papers published by left-leaning think tanks attempt to base the cost of DB pensions on whatever amounts that states and local governments contribute to their pension funds each year. This approach may seem reasonable at first glance. After all, the annual employer contribution to DC plans is equivalent to the cost of any retirement benefit those workers receive. Is the annual contribution made by government into pension plans also the same as the worker benefit? No. The employer set-aside for DB pension funding is

^{13.} The Milliman study does not provide a precise normal cost for a 7.9 percent discount rate. However, the figures it does provide demonstrate a nearly perfect log-linear relationship between the normal cost and the discount rate, making data interpolation simple and accurate.

^{14.} Bureau of Labor Statistics, "Employer Cost for Employee Compensation."

^{15.} U.S. Department of the Treasury, "Daily Treasury Yield Curve Rates."

^{16.} This calculation is based on the Milliman study of the Florida Retirement System discussed earlier.

^{17.} See, for example, Keith A. Bender and John S. Heywood, "Out of Balance," Center for State and Local Government Excellence, April 2010, http://www.slge.org/vertical/Sites/%7BA260E1DF-5AEE-459D-84C4-876EFE1E4032%7D/uploads/%7B03E820E8-F0F9-472F-98E2-F0AE1166D116%7D.PDF (accessed May 9, 2012); John Schmitt, "The Benefits of State and Local Government Employees," Center for Economic and Policy Research, May 2010, http://www.cepr.net/documents/publications/benefits-state-local-2010-04.pdf (accessed May 9, 2012); Sylvia A. Allegretto and Jeffrey Keefe, "The Truth About Public Employees in California: They Are Neither Overpaid Nor Overcompensated," Center on Wage and Employment Dynamics *Policy Brief*, October 2010, http://www.irle. berkeley.edu/cwed/wp/2010-03.pdf (accessed May 9, 2012); and Jeffrey Keefe, "Debunking the Myth of the Overcompensated Public Employee," Economic Policy Institute *Briefing Paper* No. 276, September 15, 2010, http://epi.3cdn.net/8808ae41b085032c0b_8um6bh5ty.pdf (accessed May 9, 2012). For an exception that criticizes this method, see Alicia H. Munnell, Jean-Pierre Aubry, Josh Hurwitz, and Laura Quinby, "Compensation: State-Local Versus Private Sector Workers," Center for State and Local Government Excellence, September 2011, http://www.slge.org/vertical/Sites/%7BA260E1DF-5AEE-459D-84C4-876EFE1E4032%7D/uploads/Comparing_Compensation12-082%281%29.pdf (accessed May 9, 2012).

not the same as the cost of the benefit, for several reasons.

First, pension set-asides include both payments to fund benefits accruing in the current year and payments toward unfunded liabilities from prior years. Only the former category should be counted as current compensation.

Second, because pensions are guaranteed by state law (and often by state constitutions), promised benefits must be paid at retirement regardless of how the employer has prepared for the expense. In lean times, states can reduce or skip their annual pension funding entirely, even as promised benefits stay the same. Claiming that a state's annual pension contribution is equivalent to pension benefits implies that benefits decrease drastically when states do not make their required contributions. In reality, the promised benefits are not changing at all-states are simply writing IOUs to their pension funds.

Third, the calculated cost of pensions each year depends crucially on assumptions about the rate of return on the plan's investments. As discussed, the higher the employer assumes the rate of return to be, the lower the annual set-asides for DB pensions need to be, even as the actual retirement benefit to workers stays at the same guaranteed level. In

other words, employers can reduce their required contributions—and, as a result, reduce the amount of pension-related compensation seemingly going to employees—simply by assuming a higher rate of return on their investments. Of course, the employer liability and the employee benefit stay the same no matter what rate of return is assumed.

Using employer contributions rather than actual benefits can lead to dramatically lower estimates of pension value. For instance, a recent analysis of public-sector compensation in New Jersey, published by the Economic Policy Institute,18 reported that public employees in New Jersey received pension-related compensation equal to about 10.9 percent of their wages in 2009. However, the 10.9 percent figure merely reflects New Jersey's annual contribution to its pension plan, without regard to the actual benefits that the state's public workers accrued that year.¹⁹

So how much does New Jersey's pension benefit actually cost? According to the Public Plans Database, the total normal cost of the New Jersey Public Employees' Retirement System is 10.02 percent of payroll, of which 5.5 percentage points are funded through employee contributions.²⁰ But the state assumes the plan will earn 8.25 percent per year in interest, which is

much higher than what a private-sector worker could achieve with a safe investment.

Using the risk-adjusted discount rate of 4 percent in place in 2009, the normal cost of New Jersey pensions rises to approximately 34.1 percent of wages, which, net of the 5.5 percent employee contribution, generates pension-related compensation equal to 28.6 percent of wages.21 In other words, the true cost of New Jersey pension benefits in 2009 was more than two and a half times higher than implied by the "whatever the government puts into its pension fund" method. Since returns on U.S. treasury bonds are now one to two percentage points lower than the 4 percent figure from 2009, pension benefits in New Jersey are currently even more costly. By contrast, DC benefits to New Jersey workers in large private firms were approximately 3.9 percent of wages in 2009.22

The Average Pension Payment.

Public-sector advocates often cite the average benefit paid out by a public-pension plan, which can appear modest in comparison to what a private-sector worker might expect to receive in retirement after a lifetime of work.

But the average payment to current retirees actually provides little information about pension

^{18.} Jeffrey H. Keefe, "Are New Jersey Public Employees Overpaid?" Economic Policy Institute *Briefing Paper* No. 270, July 30, 2010, http://www.frenchesgrove.org/hypocrisy/nj%20workers.pdf (accessed May 9, 2012).

^{19.} Due to acknowledged data limitations in the Economic Policy Institute paper, 10.9 percent is the average combined pension contribution made by New Jersey, New York, and Pennsylvania in 2009. Given that New Jersey has repeatedly skipped contributing to its pension fund—without cutting promised benefits—the employer contribution in the state is likely lower than 10.9 percent of wages.

^{20.} Public Plans Database, http://pubplans.bc.edu/pls/apex/f?p=1988:3:0 (accessed May 14, 2012). To access the normal cost data, select New Jersey and 2009; then look for "EE contribution rate" and "ER normal costs."

^{21.} The adjusted normal cost is again based on Milliman's FRS data. Milliman's data imply that changing the discount rate from 8.25 percent to 4 percent causes the normal cost to increase by a factor of 3.399.

^{22.} Keefe, "Are Public Employees Overpaid?" Table 3. As mentioned in footnote 19, this figure reflects employer contributions in New Jersey, New York, and Pennsylvania.

generosity. Included in the average are workers who had only short careers in public service and may have accrued retirement benefits elsewhere. If a worker is employed at three different companies over the course of his career, for example, he would not expect each individual company to provide for his entire retirement. The combined retirement benefits would hopefully be sufficient, but no individual period of employment would be expected to provide the full amount. Similarly, a worker employed in the public sector for only a few years would not earn a full pension from the state, nor would anyone expect him to.

Here is a real-world example of how misleading raw averages can be: The Teachers' Retirement System (TRS) in Illinois insists that the average teacher's DB pension "cannot qualify as 'too generous," since it is only around \$46,000 per year. ²³ One might assume, based on the TRS statement, that the average Illinois teacher who retires after a full career will collect \$46,000 per year in pension benefits. Not so. The \$46,000 average includes benefits paid to teachers who worked only part of their careers in public schools.

To get a sense of how much the raw average is skewing actual pension costs, consider the pension payments to full-career public workers. The 2011 TRS report shows that the average teacher who retired in the previous fiscal year after 35 to 39 years of service collects a pension benefit of \$68,496 per year, plus annual cost of living adjustments.²⁴

TAKING ADVANTAGE OF THE
INEVITABLE CONFUSION CAUSED BY
COMPLICATED PENSION RULES, SOME
PUBLIC-SECTOR ADVOCATES HAVE
USED MISLEADING DATA POINTS
IN DEBATES OVER THE COST AND
GENEROSITY OF PENSION BENEFITS.

Another problem with using average pension payments is that they necessarily include only current retirees. As pensions are made more generous over time, payments to older retirees drag down the average. A state government could theoretically double (or halve) the promised benefits for incoming workers without the average pension payment reflecting that change at all.

Conclusion

Properly estimating the cost of public-sector pensions may at first seem like something that only number-crunching bureaucrats need to worry about. On the contrary, pension-cost analysis informs some of the nation's most highly charged political debates occurring at all levels of government. Specifically, whether reducing public-employee benefits to help balance budgets is a

wise policy choice depends critically on whether current compensation for public workers is at appropriate market levels. If current compensation is too high, benefit reduction could be an excellent way to reduce budget deficits. If, on the other hand, current compensation is already too low, further cuts would be inadvisable.

Unfortunately, the existence of traditional DB pensions in the public sector makes proper comparisons difficult. The cost to the employer of a 401(k)-style DC plan is simply the amount of money contributed to the plan, but estimating the cost of DB plans requires a host of complicated actuarial calculations inaccessible to the average voter trying to make informed choices. Taking advantage of the inevitable confusion, some public-sector advocates have used misleading data points in debates over the cost and generosity of pension benefits. In reality, the average public pension is several times more generous than 401(k)-style plans in the private sector. A proper understanding of the real cost of public pensions, especially in comparison to private-sector DC plans, is the first step toward reform.

-Jason Richwine, PhD, is Senior Policy Analyst for Empirical Studies in the Domestic Policy Studies Department at The Heritage Foundation.

^{23.} Teachers' Retirement System of the State of Illinois, "Teacher Pensions Are Too 'Generous," http://trs.illinois.gov/subsections/press/FinancialMatters_ Investments.htm#teacherpensions (accessed May 9, 2012).

^{24.} Teachers' Retirement System of the State of Illinois, "Comprehensive Annual Financial Report for Fiscal Year Ending June 30, 2011," December 2011, p. 117, http://trs.illinois.gov/subsections/pubs/cafr/fy11/fy11cafr.pdf (accessed May 9, 2012).