



HOW HAVE PENSION CUTS AFFECTED PUBLIC SECTOR COMPETITIVENESS?

By *Laura D. Quinby, Geoffrey T. Sanzenbacher, and Jean-Pierre Aubry**

INTRODUCTION

The stock market crash of 2008 substantially reduced the funded status of state and local pensions, prompting many sponsors to cut benefit levels. Common changes have included increasing the normal retirement age, reducing the monthly benefit that workers will receive when they retire, requiring employees to contribute more to the pension fund, and reducing post-retirement cost-of-living adjustments. It is well known that pensions are a significant component of public sector compensation. Hence, without offsetting wage increases, recent pension cuts may make public sector employers less competitive in the labor market. This *brief* investigates whether such an effect has occurred.

The discussion is organized as follows. The first section describes several common pension reductions and outlines reasons why pension cuts may

affect worker recruitment and retention. The second section explains the methodology used to estimate the relationship between pension cuts and the labor-market competitiveness of public sector employment. The third section presents results from this exercise and finds that workers hired after benefit cuts had earned less in the private sector than similar workers hired before the cuts occurred. The final section concludes that pension cuts appear to reduce the ability of public sector employers to compete with private sector employers for workers. While future research should continue to explore this area, the finding does indicate that states and localities should at least consider how pension cuts might affect recruitment and retention.

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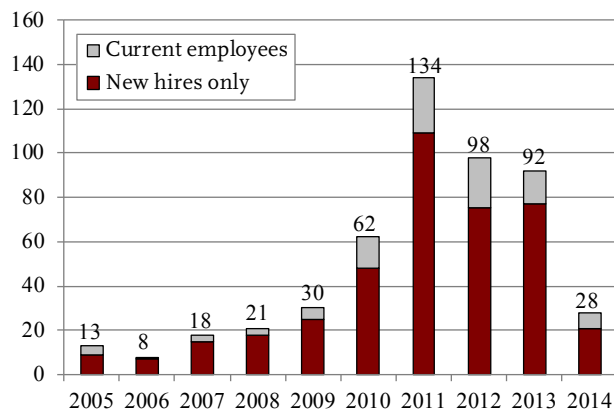
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PENSION CUTS AND WHY THEY MIGHT AFFECT RECRUITMENT AND RETENTION

In recent years, many state and local governments have altered their pension plans. Figure 1 tracks the number of benefit cuts made by the largest 160 pension plans on the *Public Plans Data Website* between 2005 and 2014 (the plans and years for which data on benefit cuts were available). Cuts were relatively uncommon before the stock market crash of 2008, but quickly became more prevalent as plan sponsors realized the extent of the deterioration in their funded ratio. Most, but not all, of the cuts applied only to new hires because many states consider future accruals of pension benefits for current workers to be contractual obligations that cannot be reduced.¹

FIGURE 1. NUMBER OF PLANS WITH BENEFIT CUTS BY EMPLOYEE GROUP, 2005-2014



Sources: Various Actuarial Valuation Reports (AVs) & Comprehensive Annual Financial Reports (CAFRs) (2005-2014).

To explain the types of benefit cuts, it is important to first describe how pensions work. The first step for an employee is to become vested in the plan, which typically occurs after a given number of years of service. Once vested, a worker's annual benefit is some percentage of annual salary, averaged over a set period (e.g., the last three years of employment) and multiplied by the years of service. The worker can choose to start collecting this full benefit at the plan's normal retirement age or earlier at a reduced level. After a retiree starts collecting benefits, most public sector pensions offer an annual cost-of-living adjustment (COLA).

Table 1 shows that cuts were made to all of these aspects of the pension benefit. In general, cuts for newly hired workers directly targeted benefits by increasing the normal retirement age and/or reducing the final-average-salary and benefit multiplier (the percentage of final-average-salary). Since it is often legally or politically challenging to reduce the benefits of current employees, cuts for this group target the COLA and/or require employees to contribute more of their salaries to help pre-fund the pension.²

TABLE 1. PERCENTAGE OF PLANS WITH BENEFIT CUTS BY TYPE OF CUT AND EMPLOYEE GROUP, 2005-2014

Type of benefit cut	New hires only	Current employees
Vesting/retirement age	52.5%	3.8%
Final-average-salary period	40.6	5.0
COLA	36.7	19.4
Benefit multiplier	32.5	3.8
Employee contributions	30.0	13.8

Sources: Various AVs and CAFRs (2005-2014).

At first blush, it seems clear that changes to reduce compensation, like those above, would hurt governments' ability to recruit and retain employees.³ However, the evidence to date is mixed. For example, one study showed that federal workers who earned positive performance reviews and high rates of promotion valued employer retirement savings plans.⁴ This finding suggests that pension reductions may hurt public employers' competitiveness in the labor market. Other studies have suggested that workers value pensions very little compared to wages, in which case benefit cuts might not hurt recruitment or retention in a meaningful way.⁵ Hence, the effect of recent pension reductions on public sector competitiveness remains an open question.

MEASURING THE EFFECT OF PENSION CUTS ON COMPETITIVENESS

To measure labor-market competitiveness, the analysis uses the private sector wages of workers entering and leaving the public sector.⁶ On the recruitment side, if private sector workers value pension benefits, then cuts to public sector pensions will discourage

them from switching sectors, and only workers with relatively few private sector opportunities will choose to join the public sector. On the retention side, the idea is that after a benefit cut, the workers who are most competitive for private sector jobs – and thus could earn more in those jobs – will find it beneficial to exit the public sector.⁷ Since most benefit cuts affect only new hires, the impact is likely to be greater on recruitment than retention.

Observing the private sector wages of workers entering and leaving the public sector requires tracking people over time. The *Current Population Survey* (CPS) is useful for this purpose, as it surveys a large sample of workers at eight points in time, with the fourth and eighth interviews occurring exactly one year apart. By looking at individuals across these two interviews, one can tell whether a worker switched from the private sector to the state/local sector (a new hire), or vice versa (a separator), over the course of the past year.⁸

ESTIMATING HOW BENEFIT CUTS ALTER COMPETITIVENESS

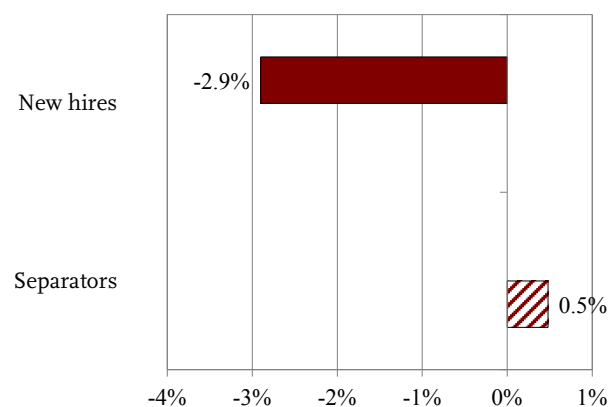
To determine the effect of benefit cuts on public sector competitiveness, the analysis examines how the average private sector wage of new hires and separators changed after the cuts were enacted.⁹ For example, if a public sector employer was recruiting workers earning \$50,000 in the private sector prior to pension cuts, but recruited workers earning \$45,000 after cuts, then the private sector wage of new hires dropped by 10 percent. If, prior to the cut, employees separating from the same public employer and moving to the private sector earned \$60,000, but after the cut earned \$66,000, then the private sector wage of separators increased by 10 percent. Both effects would suggest some loss of competitiveness on the part of the public sector.

Of course, states and localities that reduce pension benefits are often trying to ease broader budgetary pressures. So, they may implement other cost-saving personnel policies – such as wage freezes, reductions in hiring, and cuts to health insurance benefits – at the same time as pension cuts, making it difficult to pin down the effect of any pension reductions on competitiveness. Therefore, the *brief* uses a regression approach to isolate the impact of benefit cuts.

The dependent variable is the private sector wage of workers entering or leaving the sample of public sector employers. The independent variables include an indicator for whether the employer made a pension cut in the recent past, with controls for personal characteristics of the worker; the type of job they performed for the government; and cost-saving personnel policies that the employers may have implemented in the year that the worker switched sectors.¹⁰ The analysis assumes that less observable aspects of public sector employment – for example the motivation to do public service – did not change after benefit reductions.

The regression results for new hires and separators are displayed in Figure 2 (see Appendix Table A1 for full results). After cuts in pension benefits, the private sector wage of new hires declined by a statistically significant 2.9 percent. The private sector wage of separators increased, as expected, but the change was not statistically significant. Such a small change for separators is consistent with the fact that most benefit cuts affected only new hires. Taken together, the results imply that the public sector had trouble hiring and retaining the same type of workers it used to after a benefit cut.¹¹

FIGURE 2. ESTIMATED EFFECTS OF PENSION CUTS ON AVERAGE PRIVATE SECTOR WAGE OF NEW HIRES AND SEPARATORS



Note: The solid bar is significant at the 10-percent level.
Sources: Authors' estimates from the *Current Population Survey Outgoing Rotation Groups* (2005-2014); various AVs and CAFRs (2005-2014); and the *Medical Expenditure Panel Survey Insurance Component* (2005-2014).

CONCLUSION

State and local government employers around the country have responded to rising pension costs by reducing pension benefits, mainly for new hires. Cuts have included reducing benefit multipliers, extending the normal retirement age, reducing the generosity of cost-of-living adjustments, and increasing the employee contribution rate. The analysis suggests that these pension cuts hurt governments' ability to recruit workers when competing with the private sector, since the workers hired after benefit cuts had earned less in the private sector than similar workers hired before the cuts.

The results of this *brief*, however, should be interpreted with some caution. Fiscally stressed governments probably cut wages, hiring, and health insurance at the same time as pensions. The analysis tried to control for these factors, but the available data were not always very precise, and it is possible that additional personnel policies changed during the period that were not accounted for. While future research should continue to explore the effect of pension cuts, the results of this *brief* indicate that states and localities should at least consider how benefit cuts might affect worker recruitment and retention.

ENDNOTES

- 1 Munnell and Quinby (2012).
- 2 Another change, made by a handful of plans, adds a defined contribution (DC) component to the traditional defined benefit plan. Unlike the other reductions, it is unclear whether these new hybrid plans qualify as benefit reductions since workers – particularly the young and mobile – might prefer portable savings accounts to traditional pensions. Still, because plans often reduce defined benefit multipliers when adding a DC component, they may be viewed as cuts in many cases.
- 3 Such an anticipated effect, of course, assumes that pension cuts aren't offset by enhancements to wages or other aspects of compensation.
- 4 Ippolito (2002).
- 5 For example, see Fitzpatrick (2015).
- 6 The analysis assumes that most workers could switch sectors and earn wages based largely on their demographic characteristics, such as age and education. For example, a police officer could become a private security expert, a corporate lawyer could become a public defender, and an English teacher could enter the publishing industry.
- 7 Of course, if workers tend to leave a sector in order to earn greater compensation in the other sector, it is also possible that benefit cuts encourage workers to leave the public sector for lower private sector wages than they would have received if making such a switch in the past.
- 8 The *Current Population Survey Outgoing Rotation Files* are provided by the National Bureau of Economic Research. See Feenberg and Roth (2007) and Madrian and Lefgren (1999) for a careful discussion of the methodology used to merge individuals across interview months. The sample of new hires is large even during the Great Recession when some states and localities introduced hiring freezes.
- 9 The traditional measure of pension benefit generosity – the normal cost – generally understates the extent of benefit cuts for new hires and does not help in evaluating the generosity of hybrid plans because it does not include DC account balances.
- 10 The controls are designed to capture changes in wages, hiring, and employer-provided health insurance benefits relative to the private sector in the same state and year. The wage control measures the average state or local wage relative to the average private wage paid to workers with similar demographic characteristics (see Borjas, 2002; and Katz and Krueger, 2000). The hiring control measures the size of the state and local sectors relative to the size of the private sector. The health insurance controls include three variables: the difference in active employee and retiree coverage rates between the combined state and local sector and the private sector; and the total premium for family coverage charged by plans in the state and local sectors relative to the private sector. The *Medical Expenditure Panel Survey Insurance Component* (U.S. Agency for Healthcare Research and Quality, 2016) provided data on retiree health insurance coverage and the average level of premiums per enrolled employee. The public-use data aggregate individual-employer responses to the level of sector (state/local/private) and Census Division. Hence, the control variables for health insurance generosity are less precise than the other control variables used in the regression.
- 11 A related concern is that the effect of pension cuts simply reflects broad economic conditions caused by the Great Recession. Hence, the regression included a control for the national economy with a time trend.

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APPENDIX

TABLE A1. ESTIMATED EFFECTS OF PENSION CUTS AND OTHER FACTORS ON AVERAGE PRIVATE SECTOR WAGE OF NEW HIRES AND SEPARATORS

Variables	Log private wage
Effect of pension cut: new hires	-0.0288* (0.0168)
Effect of pension cut: separators ^a	0.0048 (0.0167)
Separator	0.0181 (0.0460)
Public wage relative to private wage: new hires	0.0034*** (0.0006)
Public wage relative to private wage: separators ^a	0.0037*** (0.0007)
Size of public sector relative to size of private sector: new hires	-0.0053*** (0.0014)
Size of public sector relative to size of private sector: separators ^a	-0.0013 (0.0014)
HI coverage in public sector relative to private sector: new hires	0.0012 (0.0012)
HI coverage in public sector relative to private sector: separators ^a	0.0017 (0.0016)
Retiree HI coverage in public sector relative to private sector: new hires	0.0003 (0.0009)
Retiree HI coverage in public sector relative to private sector: separators ^a	-0.0004 (0.0008)
Average HI premium in public sector relative to private sector: new hires	0.0472 (0.1293)
Average HI premium in public sector relative to private sector: separators ^a	-0.0138 (0.1573)
Male	0.1927*** (0.0168)
Black	-0.0874*** (0.0208)
College degree	0.5311*** (0.0243)
Age	0.0100*** (0.0006)

Variables	Log private wage
Police officer or firefighter	0.0213 (0.0388)
Teacher	-0.0688*** (0.0204)
Year	-0.0084 (0.0099)
Year squared	0.0003 (0.0005)
Constant	5.6965*** (0.0582)
Observations	9,377
Number of plans	135
R-squared	0.253
Pension fixed effects	Yes

^a The regression coefficients displayed sum the corresponding coefficient for new hires and the coefficient on a variable that measures the additional effect of the policy for separators.

Notes: "HI" stands for health insurance. Standard errors in parentheses are clustered at the state level. Statistically significant at the 10-percent (*) or 1-percent level (***).

Sources: Authors' estimates from the *Current Population Survey Outgoing Rotation Groups* (2005-2014); various AVs and CAFRs (2005-2014); and the *Medical Expenditure Panel Survey Insurance Component* (2005-2014).

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