Finding Common Ground In Pension Reform:

Lessons from the Washington State Pension System

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Table of Contents

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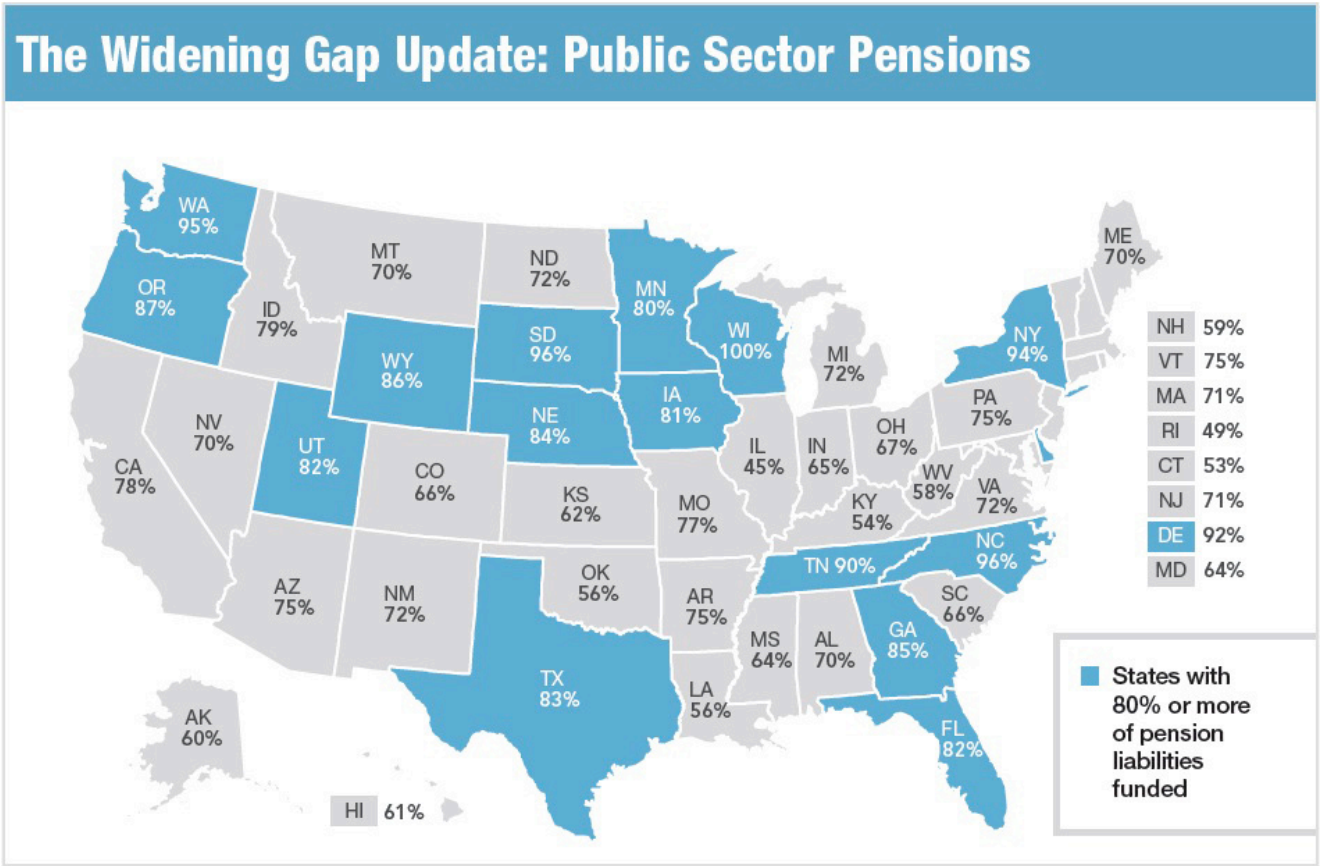
Introduction

In the wake of the economic recession, public pension plans have emerged as an increasingly salient and contested public policy issue. The debate over public pensions is driven in large part by the fact that many public retirement systems are significantly under-funded. For example, numerous estimates peg the national shortfall in public pension assets relative to liabilities at several trillion dollars.[1] Figure 1 displays state pension funding levels for the 2010 fiscal year, when 34 states had less than 80 percent of their pension liabilities funded.[2]

Given the pervasiveness of funding shortfalls, there have been proposals to shift public-sector pensions from defined benefit (DB) plans towards defined contribution (DC) plans which are, by definition, fully-funded.[3,4] However, this approach is not without controversy, as it shifts the future risk associated with investment returns earned on pension assets away from taxpayers and towards employees and raises questions about employee preferences for different types of pension plans and how reform might affect retirement security and workforce composition. In addition, moving towards a DC-type pension system does nothing, by itself, to address *existing* shortfalls.

Figure 1 State Pension Funding Levels



Source: Pew Center on the States, 2012.

The financial condition of teacher pension systems in particular has received attention from several recent reports.[5] The increased scrutiny devoted to teacher pension systems is not surprising considering teachers represent the largest segment of the public workforce (totaling over 3 million employees) and their pension systems are almost exclusively comprised of DB plans. In addition, high profile examples of how problems associated with teacher pensions systems can affect teachers, and thereby K–12 education service delivery, have been featured in the media. For example, the Chicago Public School District cited rising pension payments as a driver of fiscal woes that necessitated layoffs for more than 1,000 teachers in July 2013.[6]

As a form of compensation, pensions are used as a tool to attract and retain effective employees, and a question for any state considering pension reform is how restructuring compensation might affect the composition of its teacher workforce. Recent research in education finance has found that the proportion of compensation paid as retirement benefits may be too high and that the financial incentives embedded in some states' teacher pension plans may produce undesirable patterns of attrition.[7] The research shows that the deferred compensation from DB plans may not be highly valued by many teachers, implying that as a form of compensation, such pensions may be doing too little to attract talented people into teaching.[8] These findings suggest that at least in some states, compensation could be restructured to make the profession more attractive without necessarily increasing expenditures.

As states and localities across the nation consider the tradeoffs between DB and DC pension systems, it is important to gain insight into what implications pension reforms might have on workforce composition and teachers' retirement savings behavior. Moreover, it is also important to consider that strategies to improve pension systems may exist outside of the DB-DC binary.

In this brief, we report on the findings of research from Washington State, where since 1996 teachers have been enrolled in either a traditional DB plan or a hybrid DB-DC plan, and where teachers have been able to choose between the two plans during two periods of time.[9] This provides an unusual opportunity to study teachers' preferences for different types of pension plans as well as their savings behavior when enrolled in a plan with a DC component. We begin with an overview of the legislative history of Washington's teacher pension system as well as a description of the distinctive characteristics of the available pension plans. We then report on several key lessons from analyses of the State's teacher pension system.

Evolution of Teacher Pensions In Washington State

Legislation passed in 1995 replaced the state's traditional DB pension plan covering public educators (TRS2) with a new hybrid plan (TRS3) consisting of both DB and DC components. According to the analysis in the legislation's Final Bill Report, the creation of the hybrid pension plan grew out of findings from a survey of employees and employers. The state's survey found three prevailing concerns:

1. Employees felt that leaving service before age 65 would not yield a good return on their contributions;
2. Younger employees felt they were contributing to a plan from which they might not benefit;
3. A general sentiment that Plan 2 was paternalistic and inflexible in the form and timing of retirement benefits.

The stated intent of the legislation creating the hybrid plan was to balance flexibility with stability, increase employee control over investments, and to accommodate greater career mobility among employees (HB 1206, Laws of 1995). Among Washington teachers, two groups of enrollees have been able to choose between the two plans. The first group consists of teachers enrolled in the traditional DB plan who, between July 1996 and January 1998, were eligible to transfer to the new hybrid plan and receive a transfer bonus payment (75 percent of those eligible transferred).[10] The second group consists of teachers hired since July 2007 who have been able to choose between the hybrid plan and the traditional plan, which was reopened as an option to new hires.[11] A third (non-choice) group consists of teachers hired between July 1996 and July 2007 who were mandated into the TRS3 plan. For the purposes of this brief we refer to these three groups as the 1997 and the 2007 choice cohorts, and the mandated cohort.

Key features of TRS2 and TRS3 are outlined in Table 1 below. The primary difference between the two plans is that under TRS3 the defined benefit is half as large and each employee's contributions go into an individual DC account rather than the state's pension fund. There are several important differences in TRS3's DB component. First, the vesting period is longer: ten years vs. five years. Second, the TRS3 DB includes a protection against inflation.[12] Third, a teacher eligible for retirement can separate (i.e. leave the profession) and delay receiving benefits without losing eligibility for health care coverage.[13] The latter two differences allow for more

Table 1 Key Features of TRS2 and TRS3

	TRS2	TRS3	
Type	**Traditional DB**	**DB Component**	**DC Component**
Vesting Period	5 years	10 years	N/A
Employee Contributions	Set by legislature depending on status of pension fund [a]	N/A	5%–15% of salary (employee's choice)
Employer Contributions	Set by legislature depending on status of pension fund	Identical to TRS2 contributions	N/A
Annual Benefit	0.02 × Average Final Compensation × Service Credit Years [b]	0.01 × Average Final Compensation × Service Credit Years	Size of retirement account depends on contributions and investment performance.
Retirement Eligibility	65 yrs. of age, *or* 62 yrs. of age & 30 Service Credit Years (full benefit), *or* 55 yrs. of age & 20 Service Credit Years (reduced benefit)	65 yrs. of age, *or* 62 yrs. of age & 30 Service Credit Years (full benefit), *or* 55 yrs. of age & 10 Service Credit Years (reduced benefit)	Withdrawal ages and penalties for early withdrawal dependent on Federal tax rules.

[a] In the decade preceding 1997, the year in which employees enrolled in TRS2 could choose to switch to TRS3, the employee contribution rate averaged 6.6 percent, ranging between 6.9 percent and 6.03 percent. In the decade preceding 2008, employee contribution rates ranged between 0.15 percent and 4.26 percent.

[b] Average Final Compensation is based on a teacher's salary during the 60 highest-paid consecutive months of employment and Service Credit Years are indicated a teacher's total years of employment.

flexibility in separation and retirement timing, provided the accumulation of sufficient Service Credit Years, while the former requires a substantially longer tenure to earn access to employer-funded benefits.

As stated above, TRS3 enrollees have a menu of contribution rates from which to choose. The six different contribution plans, listed in Table 2, determine the percentage of salary automatically diverted to an individual's DC account each month. New hires who do not indicate a contribution rate preference within 90 days default into Plan A. Individuals who transfer from TRS2 into TRS3 are required to indicate a contribution plan up front as part of the transfer process. Since 2004, TRS3 members have been able to adjust their contribution rate plan in January of each year.[14]

Table 2 TRS3 Employee Contribution Rates by Plan and Age

	Contribution Plan Options					
Age Bracket	**A**	**B**	**C**	**D**	**E**	**F**
age < 35	5	5	6	7	10	15
35 ≤ age < 45	5	6	7.5	7	10	15
45 ≤ age	5	7.5	8.5	7	10	15

Lessons From Washington State

Pension Choice & Workforce Composition

Central to the debate over shifting pensions from tradition DB plans to DC plans are concerns over whether the change would be desirable to teachers and to what degree (if at all) such a change would impact the composition of the teacher workforce. These questions are approached using data on the pension choices of teachers in the 1997 and 2007 choice cohorts combined with rich administrative data sets describing teacher, school, and district-level characteristics.

At a basic level, our findings suggest that a significant proportion of teachers are willing to transfer from a traditional DB plan to a hybrid pension plan, and that a majority of newly hired teachers are willing to enroll in a hybrid plan rather than a traditional DB plan. Approximately 75 percent of teachers from the 1997 choice cohort transferred into the hybrid plan, and 60 percent of new hires in the 2007 choice cohort chose to enroll in the hybrid plan.

The introduction of a new type of pension plan might affect the composition of the workforce if the types of teachers who prefer the new type of plan are systematically different from those who prefer the traditional plan. We look more closely the determinants of teachers' pension choices by estimating a series of statistical models controlling for the relative financial value of TRS2 and TRS3, teacher characteristics, work environment, and locale. We find that teachers are responsive to the relative financial value of the plans, but that its influence is modest. Among the 1997 choice cohort, teachers who are younger, white, have more tenure, hold an advanced degree, or earn a higher salary are more likely to have transferred to TRS3. However, with the exception of age and male gender, teacher characteristics are not predictive of pension choice among the new hires in the 2007 choice cohort.

For a sub-set of teachers, a direct measure of employee productivity (value-added) is incorporated into the pension choice models. In both choice cohorts we find evidence that more effective teachers are more likely to choose the hybrid pension plan. In the 1997 choice cohort, teachers in the top quintile of effectiveness are 5 to 8 percentage points more likely to choose TRS3 than a teacher in the bottom quintile. In the 2007 choice cohort, a teacher in the top quintile is 8–10 percentage points more likely to choose TRS3 than a teacher in the bottom quintile, though the top three quintiles are not significantly different from one another. These findings provide suggestive evidence that more effective teachers do not find the hybrid pension plan to be less desirable (if anything the evidence suggests they find it more desirable).

More effective teachers do not find the hybrid pension plan to be less desirable.

Teacher Savings Patterns and Retirement Security

One reason that proposals to shift teacher's pensions towards DC systems are controversial is the concern that this shift will negatively impact the retirement security of teachers. Randi Weingarten, President of the American Federation of Teachers, has referenced this concern in opposing any movement away from defined benefit pension systems.[15] And recent empirical research would seem to buttress this concern; its findings suggest that in-service teachers place a relatively low value on additional retirement benefits and so might not set as much aside for retirement when given greater discretion.[16]

While there is not a precise definition of what constitutes setting aside "enough", the amounts set aside per teacher under TRS3 and TRS2 provide relevant points of comparison. Our findings show that the majority of teachers enrolled in TRS3 contribute at a level higher than the required minimum rate of 5 percent. This in turn suggests that: 1) previous estimates of how highly teachers value their retirement benefits may be understated;[17] and 2) the amount of compensation contributed in support of retirement income during a teacher's career is likely to be at least as high under TRS3 as the amount contributed in support of TRS2 benefits.

The amount of benefits ultimately provided by the DC component of TRS3 depends on each teacher's tenure, contribution level and investment returns. That teachers' retirement security may be reduced by shifting to DC pension systems is a valid concern because they bear the risk of uncertain returns instead of the state, but it is worth noting that the investment menu and default settings offered by TRS3 encourage investment in diversified index and mutual funds with low expense ratios and a transition towards more conservative investments as one

Teachers enrolled in Washington's hybrid plan are likely to have a level of retirement security that is comparable or greater than that provided by the traditional plan.

nears retirement.[18] In calculating potential retirement wealth accumulations under TRS2 and TRS3, we find that teachers enrolled in Washington's hybrid plan are likely to have a level of retirement security that is comparable or greater than that provided by the traditional plan.

Common Ground for Reform?

Current interest in teacher pension reform stems from the poor financial condition of many states' pension systems. The costs of these systems were not fully capitalized into the cost of education in the past, which is putting pressure on current finances, and policy-makers may want to reduce the likelihood of this occurring in the future. Moreover, there are concerns that many states' traditional defined benefit plans may not distribute compensation in a way that optimally attracts and retains the best teachers. Washington State's experience of creating a hybrid pension plan can provide useful information to policy makers dealing with these issues.

One implication of the experience in Washington State is that teacher pension systems can be reformed in a way that is attractive to both teachers and states. From the state's perspective, the anticipated costs associated with funding the two pension plans are similar. Yet, the long term financial risk associated with TRS3 is lower because when a member retires, the size of the DB annuity that the state is obligated to pay out is approximately half as large. Hence, if the pension fund's investments under-perform, the size of any unfunded liability will be smaller.[20] From the perspective of teachers the overall popularity of TRS3 is demonstrated by the proportions of teachers who voluntarily transferred to TRS3 (75 percent) or chose to enroll in TRS3 as new hires (60 percent).

A second implication of the experience in Washington state is that pension reform need not occur at the expense of teacher quality nor retirement security, two of the primary concerns about any movement towards DC pension systems. It appears unlikely that the introduction of TRS3 negatively altered the composition of the teacher workforce by making teaching less desirable to highly effective individuals. In fact, more effective teachers were slightly more likely to choose the hybrid plan. Regarding retirement security, we find that teachers enrolled in TRS3 are likely to obtain a level retirement security that is comparable or better than that provided by TRS2. That teachers' retirement security may be reduced by shifting to DC pension systems is a valid concern, but what has been demonstrated in Washington State is that this a challenge that can be overcome with a well-structured plan.

As unfunded pension obligations compete for many state's current education dollars, there is likely to be increasing pressure to enact reforms that will prevent the recurrence of such problems in the future. Given the stakes involved, pension reform is inevitably a contentious process, but our findings suggest that the debate around pension reform, which tends to be centered on the suitability of DB and DC pension systems for the teacher workforce, may be somewhat misguided. Our analysis demonstrates that a well-designed hybrid plan can create an environment under which teachers value the deferred compensation and are positioned to achieve a high level of retirement security. As stated by Alicia Munnell, Director of the Center for Retirement research at Boston College, "We should get away from the notion of DB and DC and think about what characteristics we want them to have."[21] Washington State did just that in the 1990's to the apparent benefit of both its teachers and its taxpayers.

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Endnotes

[1] For discussions of the financial status of public sector pensions, see Barro and Buck (2010), Pew Center on the States (2012), and Novy-Marx and Rauh (2011).

[2] Note that an 80 percent funding level is not itself a threshold of financial health, as it implies a shortfall of billions of dollars.

[3] See Beshears et al. (2011), Hess and Squire, (2010), and Olberg and Podgursky (2011).

[4] Under a defined benefit plan, an employee receives a monthly payment in retirement determined by a formula that typically accounts for years of service and end-of-career salary levels. A defined contribution plan functions in essentially the same way as a 401(k) pension or Individual Retirement Account (IRA), where the employer and/or employee contribute a percentage of salary to the employee's account and the assets are invested at the employee's discretion.

[5] See, for example, Johnson, Chingos, and Whitehurst (2013) and Zeehandelaar and Winkler (2013).

[6] http://www.chicagotribune.com:80/news/education/ct-met-cps-layoffs-20130719,0,4180625.story

[7] See, for example, Costrell and McGee's (2010) analysis of separation decisions under Arkansas's teacher pension system.

[8] Regarding the proportion of compensation paid as retirement benefits, see Fitzpatrick (2012). Regarding attrition patterns, see Costrell and Podgursky (2009) and (Koedel, Podgursky, & Shi, 2013)

[9] See Goldhaber and Grout (2014a, 2014b). These working papers are available at http://cedr.us/publications.html.

[10] Teachers who transferred to TRS3 by January 1998 received a transfer bonus payment equal to 65 percent employee contributions to TRS2 plus accrued interest (5.5 percent compounded quarterly).

[11] A teacher who does not make an active choice within 90 days is defaulted into the hybrid plan.

[12] With the accumulation of 20 or more Service Credit Years the defined benefit increases by approximately 3 percent during each year between separation and retirement.

[13] Under TRS2, a retirement-eligible teacher (at least 20 Service Credit Years and 55 years of age) must begin receiving retirement benefits immediately after separation to be eligible for health care coverage. Teachers who separate prior to being eligible for retirement do not qualify for any health care coverage under either plan.

[14] TRS3 members have always been able to change contribution-rate plans when changing employers.

[15] See Institutional Investor (2013). The American Federation of Teachers has resolved to urge its affiliates to support policies that encourage the retention of DB pension plans (see http://www.aft.org/about/resolution_detail.cfm?articleid=1610), and the National Education Association has expressed similar sentiments (https://www.nea.org/home/10622.htm).

[16] For example, Fitzpatrick (2012) finds that on average, Illinois teachers value a defined benefit upgrade at only 19 cents on the dollar in terms of the estimated cost of providing that additional benefit.

[17] Assuming that a teacher values an additional dollar voluntarily contributed to retirement at least as much as what would otherwise be taken home in income (i.e., $1 minus the marginal tax rate), we find 55 to 65 cents on the dollar to be a very conservative estimate of the average TRS3 teacher's valuation of an additional contribution to retirement. See Goldhaber and Grout (2014a) for more details on how these estimates are derived.

[18] TRS3 fund descriptions can be viewed at http://www.icmarc.org/washingtonstate/investments/fund-descriptions.html. Members who do not make an active investment choice are defaulted into the Retirement Strategy Fund that corresponds with their current age.

[19] To compare the accumulation of retirement wealth under TRS2 and TRS3, we calculate the rate of return on would need to earn on the DC assets in TRS3 in order equate the present values of the two plans, given different contribution rates and levels of tenure. See Goldhaber and Grout (2014a) for details.

[20] Similarly, if the pension fund's investments out-perform expectations the fund's surplus will be smaller under TRS3. Whether TRS3 ultimately results in greater or lesser costs to the state compared to TRS2 depends on investment returns. But just as the upside and downside of a wager are directly related to the amount risked, the magnitude of potential deficits and surpluses are smaller under TRS3.

[21] Institutional Investor. (2013, November). The 2013 Pension 40. *Institutional Investor*.