

INTRODUCTION TO “RETHINKING TEACHER RETIREMENT BENEFIT SYSTEMS”

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1. INTRODUCTION

Teacher retirement benefits are a large and growing component of teacher compensation.¹ Unlike teacher salaries, retirement benefits have been little studied until recently, despite their importance in school budgets. As with salaries, the key policy issues fall under two headings: teacher quality and education finance. This special issue is timely, as both of these dimensions of retirement policy are now on policy makers’ radar screens.

Specifically, as more states adopt performance-based salary structures (in part spurred by federal encouragement of new human resource policies) the question naturally turns to whether retirement benefits are also structured to maximize the quality of the teacher workforce. As Costrell and Podgursky (2009) show, teacher pension plans provide strong incentives to follow a specific career path that may be well suited to some but not others. Benefits are typically structured to “pull” teachers to work until their early or mid-fifties and then “push” them into retirement. Thus some teachers in their forties may find themselves better suited to a career change but hang on for their pension, while some in their fifties may still have good years to offer but retire prematurely. The impact on teacher quality (as compared, for example, to plans with a more age-neutral pattern of incentives) remains to be determined.

1. Retirement benefits include pensions and other postemployment benefits, notably retiree health insurance. Although we refer to “teacher” retirement systems, these systems include other education professionals as well—for example, principals, central office professionals, and counselors. Classified staff (e.g., secretaries, maintenance) may or may not be covered by the same plans.

At the same time, the fiscal impact of teacher pensions and retiree health insurance has suddenly burst into the news with the emergence of large unfunded liabilities that threaten to absorb large and growing shares of K–12 education budgets.² The confluence of these two developments raises this policy question: as the crisis in retirement benefit funding forces policy makers to consider reforms for fiscal reasons, is this also an opportune time to examine the consequences of these systems for school staffing and educator quality?

The research literature on teacher retirement benefits is remarkably slender. To be sure, there is a large literature in economics, dating back to the 1980s, studying the behavioral impact on retirement decisions of defined benefit (DB) pensions offered by private employers and Social Security. That literature, however, waned somewhat with the decline of private sector DB pensions, and teacher pensions never received much research attention.³ Teacher pensions now represent the primary remaining territory on the shrinking DB landscape (with educators outnumbering other state and local employees). Indeed, until recently many states continued to enhance DB benefits for teachers and other public employees.

To help address this gap in the literature, in February 2009 we organized a research conference, “Rethinking Teacher Retirement Benefit Systems,” hosted by the National Center on Performance Incentives (NCPI) at Vanderbilt University’s Peabody College.⁴ Papers were presented by authors with expertise on pensions in a variety of relevant disciplines, including economics, political science, law, and public policy.⁵ This special issue of *Education Finance and Policy* includes selected papers from that conference that have gone through a peer-review process. We served as guest editors for this issue, working closely with Tom Downes.

2. THE ARTICLES

Janet S. Hansen’s article, “An Introduction to Teacher Retirement Benefits,” provides a brief history of teacher pension plans and explains their general structure today. This includes their governance, legal environment, and benefit formulas as well as their fiscal health and financial accounting practices, as reported in national surveys. Hansen documents the divergence that has emerged between teacher and private sector plans, which are now

2. See, for example, Pew Center on the States (2010).

3. One notable exception is Furgeson, Strauss, and Vogt (2006).

4. NCPI is funded by the Institute of Education Sciences in the U.S. Department of Education. The Department of Education Reform at the University of Arkansas provided additional support. For an interpretive summary of the conference, including articles and commentaries not included in this special issue, see Hansen, Podgursky, and Costrell (2009).

5. Discussants and posted commentaries also included perspectives of the actuarial community, unions, and teacher pension plans.

predominantly defined contribution (DC). After providing an overview of the policy issues of fiscal sustainability, portability, and teacher workforce composition, Hansen proposes to move the debate beyond the familiar arguments over DB versus DC to a more fruitful discussion of objectives and plan design and to extend consideration to hybrids such as cash balance (CB) plans.

Robert L. Clark surveys the main non-pension retiree benefit in “Retiree Health Plans for Public School Teachers after GASB 43 and 45.” The title refers to a change in accounting requirements that now lead public employers to disclose the liability of retiree health plans (as had previously been required for pensions). This has recently brought to light large unfunded liabilities; unlike pensions, it has been rare for these plans to have any significant degree of pre-funding. The costs of retiree health benefits are increased by teacher pension plans that encourage early retirement, since retiree health insurance primarily bridges the years from retirement to Medicare eligibility at age 65. By examining each state’s actuarial reports, Clark documents the size of the liabilities and the wide degree of variation across states due to differences in the employer subsidy for premiums (from 0 to 100 percent), co-payments, and the like.

The next set of articles turns specifically to the structure of pension benefits and their implications for labor market behavior. Leora Friedberg and Sarah Turner review the labor economics literature mentioned above on the behavioral impact of DB pensions. Specifically, their article, “Labor Market Effects of Pensions and Implications for Teachers,” shows that it has been long established that incentives embedded in the pattern of pension wealth accrual under private DB systems have unmistakable effects on retirement decisions (although the effects on recruitment and early career behavior have been harder to discern). These effects have lowered and then raised the average age of retirement in the economy, as DB plans have waxed and waned in the private sector. Turning to teachers, from descriptive data on their relatively early retirement ages, Friedberg and Turner find indications that they also respond to pension incentives. They lay out a research agenda to gauge the behavioral response, with particular emphasis on indicators of teacher quality.

Robert M. Costrell and Josh B. McGee apply the previous literature’s empirical methods described in Friedberg and Turner to teacher data in Arkansas. Exploiting a newly constructed data set linking longitudinal administrative data to pension records, they are able to examine the behavioral response to the structure of pension benefits in “Teacher Pension Incentives, Retirement Behavior, and Potential for Reform in Arkansas.” They find that teachers respond to that system’s sharp pension incentives, much like other workers. Costrell and McGee then use their parameter estimates to simulate a cohort’s response to the elimination of early retirement and raising the service requirement for

normal retirement. They also simulate the response to replacing the DB system with a CB system of constant accrual. In both simulations, the responses involve the push and pull incentives, with the CB system predictably smoothing out the pattern of retirements.

Of course, not all teachers respond to fiscal incentives, since other factors are also important, but these teachers pay a price for doing so. Robert M. Costrell and Michael Podgursky estimate that price in “Distribution of Benefits in Teacher Retirement Systems and Their Implications for Mobility.” Specifically, this article provides quantitative measures of the degree of pension wealth redistribution from young job changers to career teachers, compared with a neutral system of constant accrual (such as a CB plan). It also quantifies the penalty in pension wealth for teachers who cross state lines instead of spending their full career in one system. In both cases the magnitudes are often quite large, redistributing approximately half a cohort’s net pension wealth and penalizing geographically mobile teachers hundreds of thousands of dollars.

The final three articles consider factors that frame any possible pension reform. The first is what teachers want. Michael DeArmond and Dan Goldhaber collected pertinent survey data in the state of Washington in 2006 linked to administrative records, and their analysis is reported in “Scrambling the Nest Egg: How Well Do Teachers Understand Their Pensions, and What Do They Think about Alternative Pension Structures?” Washington’s pension system is well suited to exploring these issues because it has multiple pension plans (depending on date of hire) and now has a hybrid structure, with both DC and DB components. Teachers were asked basic questions about which plan they were in (most of them answered correctly) and also hypothetical questions about how they would allocate additional benefits between DB and DC components. Younger teachers tilted more toward DC than did veterans.

The next article addresses the political dimension of teacher pensions and possible reforms. Frederick M. Hess and Juliet P. Squire examine several case studies in “‘But the Pension Fund Was Just *Sitting* There . . .’: The Politics of Teacher Retirement Plans.” The authors consider such political factors as the legislative temptation to push current costs off to the future and to address the interests of concentrated lobbies versus diffuse public interests. Hess and Squire examine the role of these factors in the pension politics of New Jersey, Oregon, and San Diego, California. They find that the impact of these factors differs subtly between the two issues identified in this issue: fiscal stewardship versus structural reform, with the former proving more tractable, especially in times of fiscal crisis.

The final article, Amy B. Monahan’s “Public Pension Plan Reform: The Legal Framework,” addresses the question of legal restrictions on legislative

changes to public pension plans. States have a variety of legal frameworks for pension protection, including contractual interpretations and constitutional provisions. The main substantive issue, however, is readily identified: future pension wealth accruals of current employees. In general there is no legal obstacle to adopting a new pension plan for new employees, and it is almost always legally impossible to abridge past accruals of current employees. The large middle ground is future accruals of current employees. Monahan recommends that state pension law be reformed along the lines of federal law, where protection is restricted to past accruals, allowing employers the same flexibility on future accruals that they already have on future salary increases, employment, and other benefits (such as health insurance).

3. KNOWLEDGE GAPS AND DIRECTIONS FOR FUTURE RESEARCH

The articles in this issue add significantly to the research base on teacher retirement benefits while highlighting the paucity of research and data on this important topic. We do know that the costs of these benefits represent a large and growing share of school district budgets and teacher compensation expenditures. Research in other sectors, and the limited research on public school teachers, does establish that pension systems have significant effects on the timing of retirements. However, we have very little evidence on how pension policies affect teacher quality. There are several challenges to fill this void.

The first is data. For policies with such significance for public expenditures, the publicly available data on teacher retirements and retirement benefits are remarkably limited. For example, very few states report even basic descriptive data on the retirement ages of active teachers, let alone important groups such as math and science teachers.⁶

While many state K–12 education departments have developed sophisticated longitudinal databases for teachers that permit the study of interdistrict mobility and exits, very few states have linked these records to retirement system data. Thus a state like Florida can report exit rates from public schools by experience or age of teachers, but we do not know whether these are retirements. All we know is that a teacher who was on a public school payroll in year t is not on the payroll in year $t + 1$. This is a serious limitation because exits and retirements are two different things. First, a teacher can separate without retiring. Many teachers make temporary or permanent exits from public

6. Data are reported on retirement ages, but that is simply defined as age of first pension draw. We do not typically know from these data whether such retirement immediately followed separation from service or whether separation occurred earlier and was followed by inactive status until reaching an age of pension eligibility.

school classrooms. The vast majority of these are not retirements. Second, a teacher can retire without separating. Most pension systems have provisions that allow retired educators to continue teaching either part or full time after retirement. Moreover, teachers also retire from one pension system and begin teaching in another.

Articles such as Costrell and McGee's show the value of such data for education policy research. By estimating models of teacher retirement behavior, researchers are in a position to simulate the workforce effects of policy changes.⁷ As more refined measures of teacher quality are developed (including classroom value added), it should be possible to estimate the effect of pension rule changes on the quality of the teaching workforce and ultimately on student achievement.

In addition, linking such databases across states will allow us to broaden our understanding of teacher labor markets. For example, there is considerable anecdotal evidence about teachers who draw pensions at relatively young ages (to avoid negative accrual) and then move across state lines to resume teaching in another system. Longitudinal data bases that link teacher records and retirement information will allow more precise estimates of these flows.

The second element of a pension research agenda is to focus on pension wealth, which captures both the annual pension payment and also the number of years it is collected. The articles in this issue highlight the importance of estimating the accrual of pension wealth. The complex rules and formulae in these systems can be distilled to a simple present value wealth measure. Yet there has been surprisingly little research on teacher retirement benefit systems that employs this approach, even though it is commonplace in retirement studies in other sectors. Pension wealth estimates have the value of bringing greater transparency to the incentives created by complex pension systems and how these incentives change over a teacher's work life.

Such estimates also provide a more complete measure of compensation for teachers. In surveying reports and studies issued by teacher pension systems, we almost never encounter pension wealth estimates for teachers at various points in their careers or calculations of the distribution of pension wealth among system members. Actuaries who prepare such reports are perfectly capable of presenting such statistics but are not typically asked to prepare them. This makes it all the more important for independent policy researchers to undertake such analyses.

7. One dimension that has been neglected in the studies to date is the interaction between pension wealth accrual of the teacher retirement system and of Social Security in those states where teachers are in both. Another complication is the interaction between pension wealth accrual and the accrual of wealth from retiree health benefits.

The penalties for educator mobility and potential remedies are important topics for further research. However, equally important, and to date largely unexplored, are incentives for school administrators, who tend to operate in larger regional or even national markets. The effect of these systems on recruitment and retention of school administrators is sufficiently important to justify separate studies focusing on this group.

A third element of a research agenda is the study of preferences of teachers and potential teachers, following up on DeArmond and Goldhaber's valuable contribution. Future studies should probe the knowledge and preferences of teachers in additional states. It is also important to examine various types of educators. This would include teachers who enter the profession through alternative routes, such as Teach for America, Troops to Teachers, New York Teaching Fellows, etc., as well as future teachers in the traditional supply pipeline, especially in fields such as science and math. Another important group is school administrators, particularly because superintendents are more likely to switch pension systems during a career. Charter school teachers and administrators are also of interest.

An underexploited method of ascertaining teacher preferences is to examine actual choices in systems where teachers have options, as in states that offer hybrid and supplemental plans. This can be harder than it may appear at first sight because the playing field between various options is not always level in present value terms. Still, the available choices could be studied while researchers press for better experimental options to be offered and evaluated.

A fourth challenge to a teacher pension research agenda is to develop the essential information for evaluating funding. In principle, annual reports of teacher pension funds (valuation studies) that are used to set required contribution rates address this issue. However, the sharp disagreement between financial economists and actuaries on the proper discount rate highlights the importance of getting independent, and more transparent, assessments of the viability of retirement systems.⁸ In fact, it is rare for annual pension reports to provide sensitivity analyses to give readers some understanding of the robustness of their estimates to alternative assumptions about returns, earnings growth, etc.⁹ Such analyses are essential to evaluating the common assertion that an 80 percent funding ratio is "good enough."

For policy purposes, it is imperative to develop models of teacher pension systems—behavioral and financial—that will permit simulations of alternative

8. See, for example, Brown and Wilcox (2009).

9. Novy-Marx and Rauh (2009) have begun to fill this gap by reverse engineering the undisclosed streams of pension payments inferred from the actuarial reports and applying discount rates for instruments of comparable risk and maturity to those of the liabilities.

reforms. For example, since current systems effectively redistribute pension wealth from younger, shorter-term teachers to older, longer-term ones, how can states move to a more neutral system without incurring excessive transition costs? Of particular importance will be the question of how the transition costs/savings depend on the implementation, for example, for new hires only or for some form of conversion of future accruals of existing employees.

Finally, to be policy relevant, researchers need to be aware of the rapidly changing environment. Even in the short period between the NCPI conference (February 2009) and this writing (June 2010), long-looming fiscal concerns have erupted into a full-blown crisis. Although it is possible that the crisis will pass without fundamental change (if the stock market booms), there are other factors that could increase the fiscal pressures. For example, GASB (the Governmental Accounting Standards Board) has served public notice that it intends to issue new standards on discount rates that go part way toward the recommendations of the finance economists and will likely raise the annual required contributions of plans with unfunded liabilities by substantial amounts.

The legal environment may also change. States that are under fiscal duress, already cutting benefits and raising the retirement age for new hires with little immediate fiscal relief, may well try to cut future accruals of current employees for greater savings. The legality of such proposed measures is already being vigorously debated in Illinois, a state that has previously been considered to have one of the strongest constitutional pension protections.

In sum, teacher retirement benefit systems are in a period of turbulence, with major changes likely in coming years. Given the stakes involved—for school budgets, educator staffing and quality, and ultimately, school performance—it is critical that such changes be informed by scholarly research in this area.

REFERENCES

- Brown, Jeffrey R., and David W. Wilcox. 2009. Discounting state and local pension liabilities. *American Economic Review: Papers and Proceedings* 99: 538–42.
- Costrell, Robert M., and Michael J. Podgursky. 2009. Peaks, cliffs, and valleys: The peculiar incentives of teacher retirement systems and their consequences for school staffing. *Education Finance and Policy* 4(2): 175–211.
- Furgeson, Joshua, Robert R. Strauss, and William B. Vogt. 2006. The effects of defined benefit pension incentives and working conditions on teacher retirement decisions. *Education Finance and Policy* 1(3): 316–48.
- Hansen, Janet S., Michael J. Podgursky, and Robert M. Costrell. 2009. Teacher retirement systems: Research findings. Available www.performanceincentives.org/conference/Final_ResearchBriefNCPIlayoutJuly20.pdf. Accessed 23 June 2010.

Novy-Marx, Robert, and Joshua D. Rauh. 2009. The liabilities and risks of state sponsored pension plans. *Journal of Economic Perspectives* 23: 191–210.

Pew Center on the States. 2010. *The trillion dollar gap: Underfunded state retirement systems and the roads to reform*. Washington, DC: Pew Charitable Trusts.