NEW Research

Win-Win: Pensions Efficiently Serve American Schools and Teachers

Webinar
October 25, 2017
Agenda

- Introductions
- Research Review
- Q&A
Webinar Logistics

- Attendees in listen only mode.
- Research, supporting materials at nirsonline.org.
- Questions welcome. Type question using “Question” function on control panel, and we will answer.
- Encourage distribution of information: @nirsonline using #teacherpension
- Audio, technical issues during webinar, please call contact GoToWebinar at 1-800-263-6317.
- Recording & replay of webinar will be available.
Speakers

Diane Oakley
Executive Director
National Institute on Retirement Security

Christian Weller
Professor of Public Policy at UMass-Boston
Senior Fellow, Center for American Progress
Why This Report?

- Frequent comparisons of defined benefit (DB) pensions to defined contribution (DC) retirement savings plans often focus only on wealth accumulation and downplay retirement income benefits.

- Misleading assertions that DB pensions do not offer incentives that help to retain teachers.

- Misleading claims the DB pensions force teachers to retire at early ages.

- Misleading reports that DB plans are not good for teachers.
Key Findings

1. DB plans help employers recruit and retain committed teachers so that schools benefit from teachers’ increasing effectiveness.

2. DB pensions better address obstacles to retirement income security by covering a majority of employees, with adequate savings and managing risk associated with retirement.

3. The public overwhelmingly supports DB pensions for teachers and acknowledges their retention effects.
Finding #1: DB Plans Give Employers An Effective Recruitment & Retention Tool

- DB pensions create meaningful economic incentives for effective teachers to stay as they defer part of compensation into the future.

- DB pensions also allow teachers to retire at a more predictable age helping the employer to manage turnover.

- While early retirement options create this predictability, teachers increase annual income by working until normal retirement.
Finding #1: DB Plans Effectively Recruit & Retain Teacher with Larger Benefits

Figure 1: *Annual wealth changes for teacher entering in 2017 relative to earnings, under DB pension and DC plan, constant normal cost*

Notes: All figures are in percent of payroll. See appendix for descriptions of the calculations.
Finding #1: Larger DB Benefits Are Effective Recruitment & Retention Tool

• Because DB pensions offer larger benefits later in a teacher’s career than earlier, these retirement benefits offer teachers an incentive to stay in their jobs. DB pensions thus serve as a retention tool.

• Lower turnover among teachers then translates into, on average, more effective teachers. Having good teachers in schools is a critical component to ensure student success.
# DB Plans Are Effective Recruitment & Retention Tool: Simulation Results

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Probability of improvement relative to DB plan</th>
<th>Ave ORage change</th>
<th>Change at 25(^{th}) percentile</th>
<th>Change at 75(^{th}) percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: random turnover and effectiveness changes, phased vesting</td>
<td>33.8</td>
<td>-2.5</td>
<td>-5.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Alternative 1: random turnover; random, high effectiveness, phased vesting</td>
<td>41.7</td>
<td>-1.3</td>
<td>-5.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Alternative 2: random turnover; no effectiveness change; phased vesting</td>
<td>20.3</td>
<td>-3.9</td>
<td>-7.6</td>
<td>-0.7</td>
</tr>
<tr>
<td>Alternative 3: random, high turnover; random effectiveness change; phased vesting</td>
<td>23.9</td>
<td>-5.5</td>
<td>-11.1</td>
<td>-0.4</td>
</tr>
<tr>
<td>Alternative 4: no turnover change; random effectiveness; phased vesting</td>
<td>84.2</td>
<td>1.8</td>
<td>0.6</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Notes: All figures are in percent. Changes are relative changes. Based on 1,000 iterations of simulation model described in the appendix.
DB plans result in more predictable retirement ages for teachers, so schools can plan for turnover.

Figure 6: Retirement age by defined benefit pension coverage

Notes: Retirement refers to full retirement. Retirement age for 1989 and 1992 calculated as the age during the survey year minus the difference between the survey year and the year of retirement. Retirement age for all other years is given by survey respondents. Retirement age refers only to head of households. Author's calculations based on Board of Governors. Federal Reserve System. Various Years. Survey of Consumer Finances. Washington, DC: Fed.
Finding #2: DB Pensions Overcome Obstacles To Retirement Income Security

• DB pensions help provide teachers with a decent standard of living in retirement, and do so more effectively than a DC plan. DB pensions:
  - increase participation in retirement savings plans.
  - boost retirement savings contributions.
  - manage risk and efficiently convert savings into retirement income.
DB Pensions Overcome Obstacles To Retirement Income Security: Participation

• Only 51.3% of private-sector workers had access to a retirement savings plan through their employer, however 82.4% of public workers were offered a plan.

• And, only 80% of private sector workers who had access to a plan, enrolled in a plan, while nearly 90% of public sector workers participated.
DB Pensions Overcome Obstacles To Retirement Income Security: Contributions

- DB pensions boost retirement savings contributions.
  - In the public sector, both employers and employees generally share the cost, with both making contributions to the plan. Median employee contribution equals 6-8 percent.
  - In comparison, private sector employees typically can choose how much to contribute in a DC plan or they can choose to not contribute at all.
DB Pensions Overcome Obstacles To Retirement Income Security: Risks

Figure 3: 20-year and 50-year stock market average real returns

-2% 0% 2% 4% 6% 8% 10% 12%

Month
Jan-21 Jan-31 Jan-41 Jan-51 Jan-61 Jan-71 Jan-81 Jan-91 Jan-01 Jan-11

Notes: Author's calculations based on R.J. Schiller, 2015.

Average earnings are the sum of capital gains and dividend payments relative to current prices. Changes are inflation adjusted.
DB Pensions help provide teachers with a decent standard of living in retirement, and do so more effectively than a DC plan.

Figure 4: **Wealth necessary for monthly inflation-adjusted retirement income of $1,000 when planning for average and maximum life expectancy**

<table>
<thead>
<tr>
<th>Wealth in $100,000s</th>
<th>Average life expectancy (DB pension)</th>
<th>Maximum life expectancy (DC plan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$159,273</td>
<td></td>
<td>$235,774</td>
</tr>
</tbody>
</table>

Notes: Author’s calculations based on E. Arias, M. Heron and J. Xu, 2016. The assumed nominal rate of return is 7.0 percent and the assumed inflation rate is 3.0 percent.
### Figure 5: Inflation-adjusted retiree income at select percentiles from 2010 to 2013

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Without DB</th>
<th>With DB</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th percentile</td>
<td>$10,240</td>
<td>$10,240</td>
</tr>
<tr>
<td>25th percentile</td>
<td>$19,276</td>
<td>$19,276</td>
</tr>
<tr>
<td>75th percentile</td>
<td>$43,575</td>
<td>$43,575</td>
</tr>
<tr>
<td>90th percentile</td>
<td>$108,939</td>
<td>$108,939</td>
</tr>
<tr>
<td>99th percentile</td>
<td>$325,665</td>
<td>$325,665</td>
</tr>
</tbody>
</table>

Possible Spillover Effects To More Savings

Households with DB pensions tend to end up with slightly more total marketable wealth—not counting wealth in DB pensions—relative to income in most years as compared to those without DB pensions near retirement, defined here as ages 55 to 64 years (Figure 7). This is surprising as households without DB pensions need a lot more wealth to achieve the same level of retirement security as households with DB pensions. Moreover, people with DB pensions also contribute, explicitly and implicitly through lower wages, to their DB pensions, making saving in other forms harder.

But, it is possible that DB pensions give people a sense of economic security that they wouldn't have without this retirement benefit. They can rest more easily, focus more on the long-term and thus save more for the future. People with DB pensions, for instance, had a 14.4 percent chance of having a planning horizon of more than five years in 2013, compared to 11.7 percent for people without a DB pension—a gap of more than 20 percent. And, people with DB pensions also indicated that they save regular or irregular amounts at a rate of 58.5 percent, compared to only 44.3 percent for people without DB pensions.

Households with DB pensions such as teachers not only have access to more effective ways to build retirement security, but they also build as much other wealth as households without DB pensions, possibly because of the economic security that DB pensions provide.

Figure 7: Wealth to income ratios for households without and with DB pensions, 1989 to 2013

- Without DB pensions
- With DB pensions

Notes: Author’s calculations based on Board of Governors, Federal Reserve System. Various Years. Survey of Consumer Finances. Washington, DC: Fed. Marketable wealth is the difference between retirement assets, other financial assets, real estate and business ownerships minus any debt. All dollar figures expressed in 2013 dollars.
Finding #3: The Public Overwhelmingly Supports DB Pensions For Teachers

Figure 8: 87% of Americans Say Pensions Are Good Tool to Recruit Teachers, Police, Firefighters

Are pensions a good way to recruit and retain qualified teachers, police officers and firefighters?

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Somewhat Agreed</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>61%</td>
<td>26%</td>
<td>6%</td>
<td>5%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Importantly, people inherently understand the value that DB pensions offer, as compared to DC plans. In 2017, 71 percent of Americans said that DB pensions do more to help people achieve a secure retirement than DC plans, 77 percent said that the disappearance of DB pensions made it harder to achieve the American Dream and 85 percent indicated that all workers should have a pension to be self-reliant in retirement.

People favor DB pensions because of professional management and thus presumably lower costs, better managed risks, and higher rates of return. They also value guaranteed streams of income in retirement.
Finding #3: The Public Overwhelmingly Supports DB Pensions For Teachers

Figure 9: Americans overwhelmingly maintain a favorable view of pensions.

How would you describe your overall view of traditional pension plans?

<table>
<thead>
<tr>
<th>Year</th>
<th>Favorable</th>
<th>Unfavorable</th>
<th>Don’t Know/Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>82%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>2015</td>
<td>83%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>2013</td>
<td>83%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>2011</td>
<td>81%</td>
<td>15%</td>
<td>4%</td>
</tr>
<tr>
<td>2009</td>
<td>87%</td>
<td>11%</td>
<td>2%</td>
</tr>
</tbody>
</table>

(Americans overwhelmingly maintain a favorable view of pensions.)
Conclusions

1. DB pensions allow schools to recruit and retain teachers, which increases teacher effectiveness in classroom over time.

2. DB pensions achieve a better level of retirement security for teachers than DC plans.

3. The long-term challenge of DB pensions is to maintain these crucial benefits on a sustainable basis.
Questions?

National Institute on Retirement Security
www.nirsonline.org