

## Highlights...

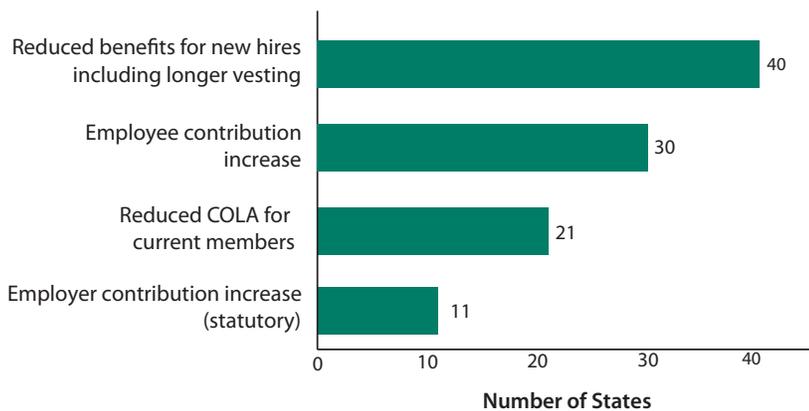
- Since 2008, 48 states have passed major pension reform, and many have undertaken more than one round of reform.
- The vast majority of these states have modified their existing defined benefit (DB) pension plans, which provide steady monthly income for life.
- The most common pension plan modifications are lower DB benefits for new hires including higher retirement ages, increased employee contributions, and Cost of Living Adjustment (COLA) reductions for retirees and existing workers.
- While no state has shifted to a defined contribution (DC) plan such as a 401(k) since 2005, 7 states have adopted a hybrid type of retirement arrangement that combines reduced DB pension benefits with a mandatory DC plan, or a “cash balance” plan that expresses its guaranteed benefits using DC plan features.
- Studies have found that adjusting DB benefits is the most cost efficient way to reform pensions and that shifting to DC accounts for new hires would lead to either greater cost to reach similar benefit levels or more significant benefit reductions.
- Most states that have studied the issue have concluded that continuing to provide retirement benefits via DB pension plans meets the joint interests of fiscal responsibility for employers and taxpayers, and retirement security for employees.

## ▶ MOST STATE PENSION REFORMS ARE AIMED AT MAKING DB PENSIONS MORE SUSTAINABLE

Since 2007, 48 states have undertaken significant reforms affecting state administered pensions. Many states have undertaken multiple rounds of reform. The three most common elements of reform are reduced benefits for new hires, increased required employee contributions, and reduced Cost of Living Adjustments (COLAs) for employees and existing retirees (Figure 1).

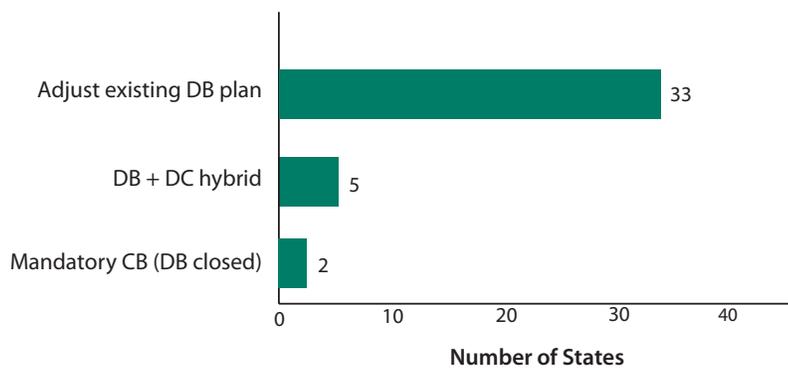
Generally states retained their existing DB platform, with 40 states reducing DB benefits for new hires. In addition, 30 states increased employee contributions. While 6 states limited legislation increasing contributions to only new hires, 24 states increased contributions for at least some existing employees. Employee contribution increases provide additional funds to pension plans and thus make up one of the largest sources of immediate savings from pension reform. Another source of pension reform cost savings came from adjusting the COLA provisions: 21 states reduced COLAs for current members.

Figure 1. Major Changes Enacted in State Level Pension Reforms, 2008-2013



Source: Author's analysis of data from the National Conference of State Legislatures. Changes affect some or all members of state-run plans in each state.

Figure 2. Changes to New Hire Benefits in State Level Pension Reform, 2008 – 2013



Source: Author's analysis of data from the National Conference of State Legislatures. Changes affect some or all members of state-run plans in each state.

The pension benefits of existing state and local employees have strong protections, with the degree varying under the laws and constitutions of each state.<sup>1</sup> This is one reason that revised benefit designs often apply to only new employees. Nonetheless, a number of states have made some changes in how benefits for existing employees are determined in existing DB plans—for example, changes in the average compensation used to calculate benefits, service credit purchasing rules, and COLAs.<sup>2</sup>

As of this writing, no state has broadly shifted from a DB pension to a DC-only retirement benefit since 2005. Several states have moved to a hybrid platform, either consisting of a combination of reduced DB benefits with a mandatory DC plan, or a cash balance plan.<sup>3</sup> A cash balance plan is a type of DB pension in which participants' benefits are expressed as a notional account balance that is eventually translated into lifetime income payments. The benefits are not expressed as a percent of final salary but rather, based on a given percentage of each year's pay that earns a specified interest rate guaranteed by the employer. To date, Rhode Island is the only state that has applied an entirely new benefit tier to existing public employees. The state entered court-ordered arbitration after unions sued to overthrow the measure.<sup>4</sup> As of this writing, a settlement is still pending.<sup>5</sup>

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## ▶ CLOSING A DB PENSION INCREASES UNFUNDED LIABILITIES

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Establishing a DC plan, or even a hybrid plan for new hires, does nothing to reduce existing unfunded liabilities. For example, the federal government still faces massive unfunded liabilities from its frozen DB plan, more than 25 years after it created a hybrid system for new hires.<sup>6</sup>

When a DB pension is closed to new members, this reduces the number of active members and their pension contributions over time. Ultimately, sound pension funding principles require that the employer increase contributions dedicated to paying off unfunded liabilities, until those liabilities are eliminated. Deferring these costs would be contrary to the cost-cutting rationale for pension reform.

An ongoing DB plan has a mixture of early-, mid-, and late-career members, enabling the pension portfolio to be diversified over a long investment horizon. When pension reforms cut off new entrants and their associated contributions, active member contributions will decline over time. In addition, the trustees and the professionals who manage the plan need to make adjustments such as shortening the investment horizon in line with the plan's now fixed obligations. For pension funds following accepted actuarial funding practices, one potential consequence of closing a plan to new entrants is that the time period for paying down existing unfunded liabilities may have to be shortened, depending on the demographic makeup of the plan. This means that liabilities have to be paid down faster, resulting in higher annual required contributions.

Another consequence is that closed plans will over time have to shift assets towards stable, more liquid investments, which have correspondingly lower investment returns. This in turn will raise the cost of funding promised benefits.<sup>7</sup> For this reason, state-level studies have found that closing off a DB pension plan could increase its unfunded liabilities by as much as one-half.

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## ▶ SUBSTITUTING DB PENSIONS WITH DC ACCOUNTS IS INEFFICIENT

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Proponents of 401(k) style accounts for public sector employees argue that they are both less risky for employers and less costly. DC accounts do indeed shift investment risk and market risk from employers to employees. Also, while a DB pension provides income to retirees for as long as they will live, in a DC account each retiree bears the risk of outliving their savings, which is called longevity risk.

Studies have shown that the inherent efficiencies of DB pensions compared to DC plans—higher returns, lower costs, and pooled longevity risk -- translate to significantly higher funding costs in a DC plan to provide a given level of retirement benefit and a high level of risk for individual employees. This means that for each taxpayer dollar spent on retirement benefits, a DC system yields substantially lower value compared to a DB system.

*Lower investment returns.* In general, 401(k) accounts generate lower investment returns than do DB pensions, which are professionally managed and can diversify their investment portfolios across a wider array of asset classes and invest over a much longer time horizon. Differences in asset allocation account for about 1 percentage point lower average annual returns in DC accounts than in DB pension funds during the 14 years ending in 2010, according to CEM Benchmarking.<sup>8</sup> This is consistent with a number of other studies on comparative returns in DB pensions and 401(k) accounts over the long term. Furthermore, research in behavioral finance has found that most individuals do not invest in a way that is appropriate for their risk tolerance and age.<sup>9</sup>

*Higher expenses/fees.* It is well documented that DC plan fees cost more than DB pensions, which have the advantage of economies of scale and centralized investment management. For instance, a study by Deloitte and the Investment Company Institute (ICI) calculates typical DC plan fees at 60 basis points (.6 percent) on an asset-weighted basis.<sup>10</sup> In contrast, researchers at Boston College find that fees average just 25 basis points (.25 percent) for public sector DB plans.<sup>11</sup>

*Individual longevity risk.* Retirement benefits that rely heavily on 401(k)s also require prudent workers to accumulate assets that will last beyond their average life expectancy, while DB plans pool longevity risk and thus need to

be funded only for the group's average life expectancy. In order to assure that workers will not run out of their retirement funds, a DC account requires a contribution rate 28 percent higher than a DB plan.<sup>12</sup> While individuals can theoretically obtain a lifetime incomes stream by purchasing life annuities from private insurance companies, these annuities are much more expensive than public DB pensions.

Because of these and other factors, providing comparable benefits through a DB pension costs 46 percent less than through a 401(k).<sup>13</sup> Conversely, providing the same retirement income through a 401(k) plan costs 83 percent more than it does through a DB pension.

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## STATES HAVE FOUND TRANSITIONING TO DC PLANS MAY REDUCE RISK BUT COST MORE

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In light of the above realities, public retirement systems that have seriously examined the cost of alternative plans have consistently found DC-centered arrangements to be significantly more costly than DB-centered arrangements for a given level of benefit. Studies indicate that incrementally modifying DB pension benefits to lower long-term costs and increasing contributions is the usually the most cost-efficient option. States that have carefully examined the complexities of pension reform since 2008 have not concluded that shifting to DC plans is the best course of action.

The Employee Retirement System of Texas (ERS) completed a comprehensive report in 2012 that considered multiple factors in designing pension reform, including the role of DB pensions in employee recruitment and retention, the value that pooled investing brings to both workers and the state, and the cost of freezing DB plans.<sup>14</sup> The ERS report noted that in many cases, the increased cost of freezing a DB plan, combined with the inefficiencies of DC plans described earlier in this brief, made it sensible to “modify the existing plan design instead of switching all employees to an alternative plan structure.”<sup>15</sup>

The Teacher Retirement System of Texas (TRS) also completed a detailed analysis of the costs and benefits of alternative retirement systems. The study projected incomes from individual DC accounts with the same contributions, using reasonable estimates of returns on worker selected investments. The study concluded that participants would have only a 50 percent chance of earning investment returns high enough to get 60 percent or more of the current DB plan benefit. Conversely, the study found that it would cost 12 to 138 percent more to fund a target benefit through alternative retirement systems. Individually directed DC accounts were found to be the most costly, and a DB system the least costly. Finally, the study estimated that freezing the DB pension could cause the liability to grow by nearly an estimated \$11.7 billion—49 percent higher than the current liability.<sup>16</sup>

In Minnesota, a 2011 study on switching to a DC plan for new hires found that it would decrease costs over the medium term and that it would dramatically increase costs in the short term. And over the long term, the DC plan would be less efficient than the existing DB system in cost-benefit terms.<sup>17</sup> The study estimated transition costs of \$2.8 billion for the state, due in large part to the impact of switching to more conservative investments in the frozen pension in order to cope with negative cash flow.

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## CONCLUSION

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Policy makers continue to weigh the pros and cons of different pension reform strategies, including how much risk and cost are acceptable, and how to balance employer and taxpayer costs with important human resource goals. At the same time, if public employers choose to reduce the risk they bear without providing sufficient funding for an adequate retirement benefit, the value of deferred compensation lost to employees will significantly exceed the value of employer savings. This may result in negative consequences for both workers' retirement security and employers' ability to recruit and retain desirable workers.

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<sup>1</sup> A. H. Munnell and L. Quinby, 2012 (Aug.), “Legal Constraints on Changes in State and Local Pensions,” *State and Local Pension Plans* No. 25, Center for Retirement Research at Boston College, Chestnut Hill, MA.

<sup>2</sup> Louisiana enacted a mandatory cash balance plan in 2012, but the state court ruled the law as unconstitutional on procedural grounds.

<sup>3</sup> NASRA, 2013 (Sep.), “State Hybrid Plans,” NASRA Issue Brief, NASRA, Washington, DC.

<sup>4</sup> T. White and T. Nesi, 2012 (Dec. 19), “Judge Orders Mediation in Pension Suit,” WPRI.com.

<sup>5</sup> T. Nesi, 2013 (Sep. 25), “Union Leader Sees RI Pension Suit Settlement Soon: Chafee Backs Negotiated Deal; Speaker Fox Worried,” WPRI.com.

<sup>6</sup> D. Oakley, 2012, “Federal Employees’ Retirement System and the Thrift Savings Plan,” National Institute on Retirement Security, Washington, DC.

<sup>7</sup> See, for instance, California Public Employee Retirement System (CalPERS), 2011, “Issue Brief: The Impact of Closing the Defined Benefit Plan at CalPERS,” CalPERS, Sacramento, CA.

<sup>8</sup> M. Heale, 2012 (Mar.), Presentation for the 2012 National Institute on Retirement Security Annual Policy Conference, Washington, DC.

<sup>9</sup> A. H. Munnell, J. Libby, J. Prinzivalli, and M. Soto, 2006, “Investment Returns: Defined Benefit vs. 401(k),” *CRR Issue Brief* No. 52, Center for Retirement Research at Boston College, Chestnut Hill, MA.

<sup>10</sup> Munnell, A.H. and A. Sunden, 2004, *Coming Up Short: The Challenge of 401(k) Plans*, Brookings Institution Press, Washington, DC.

<sup>11</sup> “Typical” in this case refers to the median, or 50<sup>th</sup> percentile, fee level. Deloitte and Investment Company Institute (ICI), 2011 (Nov.), “Inside the Structure of Defined Contribution/401(k) Plan Fees: A Study Assessing the Mechanics of the ‘All-In’ Fee,” Deloitte.

<sup>12</sup> A. H. Munnell, A.H. and M. Soto, 2007 (Nov.), “State and Local Pension Plans are Different from Private Plans,” *State and Local Pension Plans*, No. 1, Center for Retirement Research at Boston College, Chestnut Hill, MA.

<sup>13</sup> B. Almeida, and W.B. Forna, 2008 (Aug.), “A Better Bang for the Buck: The Economic Efficiencies of Defined Benefit Pension Plans,” National Institute on Retirement Security, Washington, DC.

<sup>14</sup> Almeida and Forna, op cit.

<sup>15</sup> Employees Retirement System of Texas (ERS), 2012 (Sep. 4), “Sustainability of the State of Texas Retirement Program—Report to the 82nd Texas Legislature,” ERS, Austin, TX.

<sup>16</sup> Ibid., p. 12.

<sup>17</sup> Teacher Retirement System of Texas (TRS), 2012 (Sep. 1), “Pension Benefit Design Study,” TRS, Houston, TX.