

**STATE AND LOCAL PENSIONS IN THE UNITED STATES**

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Virtually all full time public sector employees are covered employer provided pension plans and most are also covered by the national Social Security system. At the beginning of the twenty-first century, defined benefit plans remain the dominate type of retirement plan in the public sector. This is in stark contrast to the dramatic shift away from defined benefit plans and toward defined contribution plans in the private sector of the economy. However, public sector plans may be at a tipping point as an increasing number of pension state and local governments have begun offering the choice of a defined contribution plan or some type of hybrid plan to their employees. This paper provides a brief history of state and local pension plans in the United States and then assesses the current state of debate and reform of public plans.

Public sector pensions have a long history in the United States dating to the colonial days.<sup>1</sup> The Continental Congress created pension plans for its military personnel during the American Revolution, and the United States perpetuated these plans after the ratification of the Constitution. During the later part of the nineteen century, large municipalities began providing retirement plans for teachers, police, and firefighters. However, prior to 1900, there was still no pension plan for federal civil servants, and no state offered a retirement plan to its employees. This paper begins with an overview of the history of state and local pension plans from their establishment through the end of the twentieth century. The second section of the analysis provides an assessment of the modification and reforms of these plans at the beginning of the twenty-first century. The paper concludes with speculations on how state and local pension plans will evolve in the coming decade.

## **I. Development of State and Local Pension Plans: 1775 to 2000**

In 1911, Massachusetts became the first state to establish a statewide public employee pension plan.<sup>2</sup> By the mid-1970s, every state had developed a retirement plan covering their employees. The pace at which public pension plans spread throughout the country was relatively slow during the first third of the twentieth century and uneven with respect to coverage. Congress passed the Federal Employees Retirement Act in 1920, creating a comprehensive pension plan for federal civil servants. By 1930, more than twenty states maintained a pension plan for public school teachers, but only six states had a plan for their other employees.

This situation changed following the Great Depression, as the expansion of state plans accelerated dramatically. The passage of the Social Security Act in 1935, which initially excluded state and local workers from participating in Social Security, provided an impetus for the states to establish retirement plans for their employees. Between 1935 and 1955, more than twenty states established pension plans for their workers, and by the latter date all but four states had a plan for their school teachers.

The second half of the twentieth century saw the merger of many of the state employee plans with plans for public school teachers – and, in some cases, plans for local employees as well – into a single system. Such mergers took place in about half of the states, and they were accompanied by a general improvement in the retirement benefits of public sector workers. In general, public employees have lower turnover rates and longer career. Retirement plans tend to provide long career workers relatively generous retirement benefits. On average, a worker retiring with 30 years of service can expect a replacement ratio from their public pension of 55 to 60 percent. Combined with Social Security, long service public employees can expect to have sufficient income to maintain their standard of living into retirement.

This paper reviews the development of public sector retirement plans in the United States throughout the twentieth century and concludes by assessing the implications of the analysis for public pensions in the twenty-first century. The major challenge facing many state and local governments is the large unfunded liabilities associated with their retirement plans and the increasing cost of providing benefits to retirees. The financial status of public sector retirement plans is forcing many governments to reconsider their retirement plans in an effort to reduce the future cost of these plans.

### **Early Public Sector Pension Plans: 1775 to 1930**

Pensions for army and navy personnel date from the beginning of the American Revolution, and military pensions dominated the public sector pension landscape until well into the nineteenth century. Beginning in the middle of the nineteenth century, a few large cities established pension plans for their public safety workers and public school teachers, but by the beginning of the twentieth century, no state offered its employees a formal retirement plan. The public plans that were in place in 1900 remained limited to U.S. military personnel and workers in a few of the country's major municipalities. The organization and funding of these municipal plans were not coordinated between cities or at the state level, and several states began offering plans for teachers not covered by a local school district plan. As noted above, in 1911, Massachusetts became the first state to establish a retirement plan for its general state employees. A decade later, New York (1921) began covering its state employees, including its school teachers. Gradually, states began to consolidate local plans and more generally to expand coverage to school teachers. By 1930, 22 states had developed retirement plans for their teachers, and roughly 40 percent of the country's public school teachers were covered by a pension plan.

At the time, retirement benefits were often relatively meager, with mean replacement rates well below what they would become by the end of the century. To receive a benefit typically required long years of service, and benefits were often closely linked to worker contributions.

In addition to the plans state and local governments created for their employees, by the 1920s many counties and municipalities, often in conjunction with their state legislatures, had begun reevaluating their more general old-age assistance programs – that is plans for their citizens rather than their employees – which, dating back well into the nineteenth century, had typically been based upon the almshouse or poor farm. The 1920s proved to be a key decade in the public provision of broad-based old-age assistance in the United States. Although there were no such old-age retirement programs in place before 1923, by 1930, eleven states offered such plans, which were forerunners of the federal Social Security system, and many more states would do so in the 1930s. The Depression would serve as an important turning point for these programs.

### **The Great Depression: 1930 to 1940**

The early public sector pension plans were not based on sound actuarial principles; by modern accounting standards most were grossly underfunded. The Depression sorely tested public finances, especially at the state and local level. Put simply, cities across the country had trouble paying their bills. Many states were forced, either by law or court order, to assume or otherwise stand behind the liabilities of their municipalities. Despite this crisis in funding, during the 1930s, six states established new state employee retirement plans, and eight states established pension plans for their school teachers. This was the beginning of the surge in state

retirement plans that would continue over the next 25 years. It was spawned, in part, by public workers being excluded from Social Security.

While the number of public sector plans continued to grow during the depression, as the nation's economy continued its plunge, policymakers at the federal, state, and local levels became increasingly concerned, more generally, about the plight of older Americans and their lack of income in retirement. At the same time, the decline in tax revenues made it difficult to allocate public monies to programs for the elderly. Federal works programs were designed to create jobs for the unemployed, but with the unemployment rate over 20 percent for four consecutive years, policymakers hoped to move the elderly out of the labor force to make way for younger workers. The passage of the Social Security Act offered the possibility for workers to retire, thus making way for younger workers, and to have a guaranteed income for the rest of their lives. However, public employees were specifically excluded from coverage by Social Security.

### **World War II and the Subsequent Expansion of Public Pension Plans: 1940 to 1975**

Many important economic, political, and regulatory changes impacting public sector pension plans occurred during World War II and the ensuing years. Wartime wage and price controls altered compensation policies and made employee benefits, including pensions, a more attractive component of the overall worker compensation package. Shifts in collective bargaining rules allowed unions to negotiate directly for retirement plans. Since the public sector competed for workers with the private sector, what happened in private industry affected the compensation packages federal, state, and local governments provided for their workers. Taken together, these changes caused pension coverage to expand, with seventeen states

establishing plans for public employees during the 1940s and thirteen states adding plans for their public school teachers.

In addition, during the 1950s, 1960s, and 1970s all remaining states established pension plans for their public school teachers and other employees. In many states, the pension plans for teachers were merged with those for general state employees to create a uniform plan for public employees. Furthermore, in the 1950s, Congress passed a series of bills allowing public sector employees to participate in Social Security. Most states responded by including their employees in this federal retirement plan as well as providing their own pension plan. Thus, by the 1970s, every state offered its employees a pension plan, and most public sector employees were also covered by Social Security.

### **Maturing Public Plans: 1975 to Today**

Retirement plans for public school teachers were among the first public sector retirement plans in the United States. These plans began in the large cities, but early in the twentieth century, states began developing state-wide pension plans for their teachers. Some of the large city plans remained outside the state plans. In the latter half of the century, roughly half of the states consolidated their teacher retirement plans with the plans for general state employees. By the final third of the twentieth century, all states provided pension plans to their teachers and civil servants; however, the key features of many of these plans still differ from state to state. Over the past 25 years, public school teacher retirement plans in the United States have increased in generosity as benefit formulas have been increased, salary averaging periods have been reduced, and the normal retirement age has been lowered, though most of the increase occurred before 2000.

During the last quarter of the twentieth century, states routinely revised their retirement plans for state workers as well, typically increasing retirement benefits when they did so. As they did with their teachers during this period, the states increased the generosity parameters used to calculate benefits, lowered retirement ages, reduced the number of years of service required for retirement eligibility, and reduced vesting requirements, all of which tended to increase the generosity of the state plans. As with the teacher plans, these changes increased the replacement ratio for a typical worker with thirty years of service by about 10 percent.

The early history of state local pension plans shows that although the state plans generally came after the country's largest cities already had plans in place, many of those local plans were subsequently taken over by the states. Over the past 25 years, local retirement plans in the United States have increased in generosity, as benefit formulas have been increased, salary averaging periods have been reduced, and the normal retirement age has been lowered. Taken together, as with teachers and other state employees, these changes increased the replacement ratio for a typical worker with thirty years of service by about 10 percent.

### **Development of Social Security and Its Impact on State Retirement Plans**

When Social Security was first adopted in 1935, state and local governments and their employees were not allowed to participate in this national retirement plan. The exclusion of public sector employees served as a stimulus for governments to adopt their own retirement plans. The 1950 amendments to the Social Security Act required state and local workers who were not already covered by a public employee retirement plan to be included in Social Security. In 1954, Congress provided state and local workers (excluding policemen and firemen, for whom separate plans were in place at the time) with the option of joining the Social Security system.



Today, many state and local employees still remain outside of the Social Security system. According to one estimate, approximately 28 percent of all state and local public employees remain outside the system (Streckewald 2005). The majority of public employees who do not participate in Social Security are police officers, firefighters, and teachers. The members of these groups were typically among the first non-military public workers to receive pensions in the United States; thus, employees in these occupations typically were already covered by a retirement plan when Social Security was established (Clark et al. 2003). Nearly 75 percent of the public employees who remain outside the Social Security system reside in just seven states: California, Ohio, Texas, Massachusetts, Illinois, Colorado, and Louisiana. Currently, there are seven states whose general state employees are outside the Social Security system: Alaska, Colorado, Louisiana, Maine, Massachusetts, Nevada, and Ohio. State employees in Alaska were once included in Social Security; however, in 1980, Alaska withdrew its employees from the system. In addition to general state employees, teachers and some local public employees are not covered by Social Security in these states. Furthermore, even though general state employees are covered by Social Security, some teachers and local employees in California, Connecticut, Illinois, Kentucky, Missouri, and Texas do not participate in Social Security (Munnell 2005).

The history of state and local pensions is intertwined with the development of Social Security in the United States. In summary, the establishment of Social Security stimulated a surge in pension coverage in the public sector. When in the 1950s, public employers were allowed the option of entering the Social Security system, state and local governments faced the choice of entering the system and modifying their own employer pension plans or remaining outside the system and providing the entire retirement benefit for their workers through their own

plans. Most but not all state and local governments decided to enroll in Social Security. This decision is reflected in the benefits that public employers provide to their workers. Past changes in Social Security have affected public pension plans and future changes in this national plan will continue to influence the development of state and local plans.

### **Comparing Trends in Public Pensions to those in the Private Sector**

Prior to 1900, only a few large companies offered their employees any type of retirement benefits, but private sector pension coverage grew steadily in the early decades of the twentieth century. By 1929, 13 percent of private-sector, non-farm workers was covered by some type of retirement plan. (By that date 45 percent of state, local, and federal workers were covered.) During the Depression the percentage of private workers covered plummeted to around three percent by 1934, as companies abandoned their plans. A recovery began at the end of the 1930s, following the passage of the National Labor Relations Act, and with the onset World War II coverage rapidly expanded, reaching roughly 50 percent of the labor force by 1975 (approximately 60 percent of the prime-age full-time labor force), which is where it stands today. The segment of the private sector labor force that is covered by an employer-provided pension is not random; specifically, coverage is concentrated in the top half of the earnings distribution.

The mid-1970s marked the beginning of the Employee Retirement and Income Security Act (ERISA) era and the end of Social Security expansions. Although overall pension coverage stabilized after 1975, there has been a major trend in the private sector with firms moving away from defined benefit plans and toward defined contribution plans, especially 401(k) plans. This trend is in stark contrast to public sector retirement plans, the majority of which remain defined benefit plans. This divergence leads to a number of questions. For example, why have the

private and public sectors moved in different directions? Does the answer lie in the political process, or do economic issues dominate, or is it some combination of the two? Also, how has the decision about plan type influenced decisions about pension funding? What does funding strategy imply with respect to the burden of making up shortfalls when the stock market does not perform as expected?

## **II. Public Pensions in the Twenty-first Century: A Shift in Structure**

The history of state and local retirement plans shows that initially most public pensions began as money purchase or defined contribution plans while others began as awards to career employees given through special legislation enacted by the state legislature. By the middle of the century, these plans were shifting to traditional defined benefit pension plans until virtually all state retirement plans were defined benefit in nature. This trend paralleled the dominance of defined benefit plans in the private sector of the economy.

Beginning in the 1970s, employers in the private sector started terminating their defined benefit plans and converting them to defined contribution plan, especially 401(k) plans (Clark and McDermed, 1990; Gustman and Steinmeier, 1992; Ippolito, 1995). This process continued over the next 30 years until today, defined contribution plans are the dominate type of pension offered by private employers. In addition, many firms that have retained a defined benefit plan have converted their traditional plans to cash balance plans that in many ways are similar to defined contribution plans. In contrast, defined benefit plans remain the norm in the public sector; however, a number of states have shifted, in whole or in part, to defined contribution plans and many other states are making fundamental changes in the retirement plan.<sup>3</sup> In large

measure, these changes are in response to the rising cost of retirement benefits and concern over unfunded liabilities due to inadequate funding.<sup>4</sup>

Some states that have ended the universal coverage of state employees in defined benefit plans. Some of these states have closed their defined benefit plans to newly hired employees and now offer a defined contribution plan or a cash balance plan. A number of other states now offer employees the option of enrolling in either a defined benefit or a defined contribution plan and still others have developed combination plans that include coverage in a less generous defined benefit and mandatory coverage in a defined contribution plan. Still other states have recently established study commissions to review their retirement plans and make recommendations for changing their pension plans. Most of these changes and reforms have come in response to the large unfunded liabilities associated with public retirement plans and the increasing annual expenditures necessary to maintain them (Novy-Marx and Rauh, 2009; Brown and Wilcox, 2009).

### **States That Have Established Alternatives To Traditional Defined Benefit Plans**

Over the past decade, a number of states have terminated their traditional defined benefit plans or made major modifications to these plans. We have sorted these plans into three categories: states that do not offer defined benefit plans to new employees, states that offer their workers a choice between a defined benefit and defined contribution plan, and states that have developed combination plans. The discussion below is based on information obtained from the websites of the state plans (also see Snell, 2009).

*States that do not offer traditional defined benefit plans.* At the beginning of 2010, only three states did not offer some type of traditional defined benefit plans to new employees. These

states are: Alaska, Michigan, and Nebraska. However, Utah has enacted legislation that closes enrollment in its defined benefit plan to new hires beginning on July 1, 2011, after which Utah's State employees will be offered a choice of either a defined contribution plan or a hybrid plan. We briefly describe the changes that have been made in these states and the current plans for new employees.

**Alaska.** Effective July 1, 2006, Alaska mandated that all new state employees and teachers would enroll in a newly established defined contribution plan. Workers hired before this date continued in the existing defined benefit plan; however, employees who were not yet vested in the defined benefit plan were allowed to switch to the new defined contribution plan if they desired.<sup>5</sup> The employee contribution rate is 8.0 percent of salary while the public employer contributes 5.0 percent. The state contribution for teachers is 7.0 percent. There is a graded vesting schedule for state contributions which are fully vested after five years. Contributions go into accounts for each worker and investments decisions are made by the employee. The default option is a target date fund. Public employees in Alaska are not covered by Social Security.

**Michigan.** In 1997, Michigan shifted to a mandatory defined contribution plan for new employees. Participants in the existing defined benefit plan were given the opportunity to enroll in the defined contribution plan if they desired. The defined contribution plan is based on a state contribution of 4 percent of salary into an employee's account. Employees can choose to contribute between 0 and 12 percent of salary. The state will match an additional 3 percent of salary for a maximum state contribution of 7 percent. There is a graded vesting schedule for state contributions which are fully vested after four years. Contributions go into accounts for each worker and investments decisions are made by the employee. The default option is a target date fund. Michigan employees are covered by Social Security.

**Nebraska.** The Public Employee Retirement System retirement plan in Nebraska began in 1964 as a money purchase defined contribution plan. This plan was closed to new employees in 2003 and replaced by a new cash balance plan; existing workers were given the option of switching from the defined contribution plan to the new plan. The cash balance plan is funded by an employee contribution of 4.8 percent of salary. The state contribution is set at 156 percent of the employee contribution or approximately 7.5 percent of salary. State contributions become vested after three years of service. The state pension system manages the investment fund and credits employees with the Federal Mid-term interest rate plus 1.5 percent. However, participants are guaranteed at least a 5 percent annual return on their account balance. At retirement, the worker can purchase an annuity, receive a lump sum distribution, or specify periodic withdrawals. Nebraska employees are covered by Social Security.

**Utah.** Employees hired after July 1, 2011 will have a choice between a defined contribution plan and a combination plan with the hybrid plan being the default. The defined contribution plan will be based on a 10 percent employer contribution rate for most public employees. There is a four year vesting period for employer contributions. Employee contributions will be voluntary and immediately vested. The combination plan includes a defined benefit component with a formula of 1.5 percent of final average salary times years of service. The employer will contribute up to 10 percent of salary toward funding the defined benefit component. If additional funds are needed to equal the annual required contribution, then the employee will be required to contribute that percent of pay. If the annual required contribution is less than 10 percent of pay, the excess will be contributed into a 401(k) plan for the worker.

***States with optional defined contribution plans.*** A number of states have begun to allow some or all of their new employees the option of enrolling in a defined contribution instead of being required to participate in the state defined benefit plan.<sup>6</sup>

***Colorado.*** In 2006, Colorado established a defined contribution plan as an option for newly hired state employees. Employee contributions are 8 percent of salary and the employer contributes 10.15 percent. Fifty percent of employer contributions are immediately vested and these contributions are 100 percent vested after 5 years. The default investment is a balanced or target date fund. Public employees in Colorado are not covered by Social Security.

***Florida.*** In 2000, Florida established a defined contribution plan as an option to its existing defined benefit plan. Existing employees were given the choice of remaining in the defined benefit plan or shifting to the new defined contribution plan. Employer contributions are 9.0 percent of salary and employee contributions are not permitted. Public workers in Florida are covered by Social Security.

***Montana.*** In 1999, Montana established an optional defined contribution plan for new employees. Existing workers were given one year to decide whether they wanted to shift from the existing defined benefit plan to the new defined contribution plan. Employees contribute 6.9 percent of salary and the employer contributes 4.19 percent of salary into the individual's account. Employer contributions are vested after 5 years of service. Newly hired employees are automatically enrolled in the state defined benefit plan and have up to 12 months to elect to switch to the defined contribution plan. Montana public employees are covered by Social Security

**North Dakota.** In 1999, the state created an optional defined contribution plan for non-classified state employees. Three quarters of these workers are employees of the state universities. Newly hired employees have up to 6 months to elect to enroll in the defined contribution plan. Employees contribute 4.0 percent of salary into the defined contribution plan and public employers contribute 4.12 percent of salary. There is a graded vesting schedule for employer contributions with these contributions being fully vested after 4 years of service. Public employees in North Dakota are covered by Social Security.

**Ohio.** Between 1998 and 2002, Ohio developed an optional defined contribution pension plan its employees. Beginning in 2003, newly hired employees were eligible to enroll in the defined contribution plan. Current employees who were not vested in the existing defined benefit plan were given the option of transferring to the new defined contribution plan. Employees contribute 10.0 percent of salary and the employer contributes 14.0 percent of salary into the employee's account. Ohio public employees are not covered by Social Security.

**South Carolina.** In 2000 and 2002, South Carolina created optional defined contribution plans for existing and new state employees. Participants in the defined contribution plan have a mandatory contribution of 6.5 percent of salary and the employer contributes 9.24 percent of salary; however, only 5.0 percent goes into the employee's individual retirement account with the remainder going to the retirement system. South Carolina employees are covered by Social Security.

An important question is what proportion of employees who are given a choice of a pension plan choose to enroll in a defined benefit plan instead of the defined benefit plan. Olleman (2009) provides information on the enrollments rates in the defined benefit and the



defined benefit plans in these states. The percentage of newly hired public employees selecting the defined contribution plan ranged from 3 percent in the Ohio public employee retirement system to 26 percent for Florida employees. About one fifth of new employees in Colorado and South Carolina select the defined contribution plan compared to about one tenth of those in Montana, North Dakota, and Ohio teachers (see Table 1).

[Table 1]

A key point to remember is that the defined benefit plan is the default option in each of these states; thus if workers do not make active choices of which pension plan to enter, they are enrolled in the defined benefit plan. Table 1 shows that most employees are defaulted into the defined benefit plan. Evidence in the private sector clearly indicate that defaults have significant effects on pension outcomes (Madrian and Shea, 2001; Choi, Laibson, Madrian, and Metrick, 2004). Among those making an active pension choice a larger percentage opt for the defined contribution plan. For example, in Florida, more employees actively chose the defined contribution plan over the defined benefit plan as 26 percent of new employees elected the defined contribution plan and 19 percent chose the defined benefit plan.

Is the selection of a pension plan a one-time option for employees? In Montana, North Dakota, and Washington, new employees must decide which pension plan is their retirement option. Once the choice is made, workers must remain in this plan for the duration of their employment. Others states allow workers the opportunity to switch plans if their desire. In Colorado, public employees can change switch plans one time between their second year of service and their fifth year of employment. Ohio teachers and public employees in South Carolina who selected the defined contribution plan are allowed to move into the defined benefit

plan during their first five years of service. Florida allows a one-time change in pension plans at any time while Ohio public employees have up to three options of changing plans (Olleman, 2009).

***States with plans that have a mandatory defined contribution and a defined benefit component to their retirement plans.*** Some states have decided that the optimal retirement plan for their employees is a plan that includes a base defined benefit plan combined with a mandatory defined contribution plan. The defined contribution component is often funded entirely with employee contributions while the defined benefit part typically relies on employer contributions.

***Florida.*** In 2000, when Florida established an option defined contribution plan, existing employees were also given the choice of enrolling in a hybrid plan. This option was not given to new employees. Florida public employees are covered by Social Security.

***Georgia.*** In 2008, Georgia developed a hybrid retirement plan for its employees. Employees hired beginning in 2009 were required to enroll in the new plan while existing employees were given the option of switching for the old defined benefit plan into the new combination plan. The new hybrid plan has both a defined benefit and defined contribution component. The benefit under the defined benefit plan is 1.0 percent per year of service with an employee contribution of 1.25 percent of salary. Employees are also automatically enrolled in a 401(k) plan with a 90 day window to opt out. Workers that remain in the 401(k) plan must contribute at least 1.0 percent of salary. The employer will match the first 1.0 percent contribution and provide an additional 50 percent match on employee contributions between 1 and 5 percent of salary, for a maximum total employer match of 3 percent. Georgia public employees are covered by Social Security.

**Indiana.** For decades, Indiana has maintained a combination plan composed of a defined contribution plan funded with employee contributions and a defined benefit plan funded by employer contributions. There is a mandatory contribution for employees of 3.0 percent of salary that goes to an individual retirement account. The defined benefit component of the combined plan has a multiplier of 1.1 percent of final salary per year of service. Indiana public employees are covered by Social Security.

**Ohio.** Between 2000 and 2002, Ohio created a hybrid retirement plan consisting of a defined benefit component and a defined contribution component. Beginning in 2003, newly hired employees were eligible to enroll in the combined retirement plan that included both a defined benefit component and a defined contribution component. The defined benefit component has a benefit formula with a multiplier of 1.0 percent of salary per year of service for the first 30 years and 1.25 percent for all years over 30. Employees contribute 10.0 percent of salary and the employer contributes 14.0 percent of salary into the employee's account. Ohio public employees are not covered by Social Security.

**Oregon.** In 2003, Oregon established a combination plan composed of a defined contribution plan funded with employee contributions and a defined benefit plan funded by employer contributions. Employees are required to contribute 6.0 percent of salary into an individual account retirement saving plan. Public employers have the option of paying the employee contribution. The defined benefit component of the retirement system includes a generosity parameter of 1.5 percent per year of service. Vesting in this benefit requires 5 years of service. The state is responsible for funding the defined benefit component of the combination plan. Oregon public employees are covered by Social Security.

*Washington.* In 1998, Washington developed a combination plan for public school teachers composed of a defined contribution plan funded with employee contributions and a defined benefit plan funded by employer contributions. The defined benefit component of the combined plan is based on a multiplier of 1.0 percent per year of service and vesting requires 10 years of service. The defined benefit component is entirely funded by employer contributions. The defined contribution component is funded by employee contributions. The employee can select the level of contributions with options ranging from 5 to 15 percent of salary. Washington public employees are covered by Social Security.

The combination plan is mandatory for school teachers. In 2000, the state created a similar plan for state and local government and higher education employees; however, for these employees, the combination plan is optional. Workers not choosing to enroll in the hybrid plan participate in the defined benefit plan; however, the combination plan is the default option. Between 2002 and 2008, 63 percent of new hires opted to enroll in the defined benefit plan while 19 percent were placed in the combination plan by default and 18 percent actively enrolled in the combination plan (Olleman, 2009).

### **Modifying State Retirement Plans**

Concern over decline in pension trust funds and the cost of retirement benefits has led many states to legislate changes in their defined benefit plans. In addition, a number of states have appointed special commissions to review and evaluate their retirement systems and to make recommendations for modifying these plans. This section reviews some of changes that have been made to state plans and the recommendations of these recent study commissions for further modifications.

***Recent amendments to defined benefit retirement plans.***

Over the last 5 years, state governments have faced severe funding crisis, growing liabilities associated with their retirement plans, and declining funding ratios. In response, state legislatures have passed legislation aimed at reducing the current and future costs of these plans. While many states have considered shifting to defined contribution plans relatively few have converted their retirement plans. Instead, policy makers have attempted to achieve savings by modifying their plans to reduce future costs. In addition, some states have attempted to shift costs to employees by raising employee contribution rates. Snell (2010) provides a useful review of many of these changes.

In order to reduce future retirement benefits, a number of states have made adjustments to their benefit formulas and altered eligibility conditions. Changes included increasing the number of years in the salary averaging period and reducing the multiplier in the benefit formula. Louisiana (change made in 2005), Kansas (2007), North Dakota teachers plan (2007), and Rhode Island (2009) increased the number of years used to calculate final average; typically increasing this to 5 years. Rhode Island (2009) lowered the multiplier for some employees and reduced the maximum replacement ratio from 80 to 70 percent while Nevada (2009) lowered the generosity parameter from 2.67 percent per year of service to 2.5 percent.

Another cost reduction measure is to alter the eligibility conditions for receiving a retirement benefit. In 2009, New York, increased the minimum retirement age from 55 to 62. State increasing the criteria for normal retirement include: Colorado in 2006 switched from using the Rule of 80 to the Rule of 85, North Dakota teachers in 2007 changed from the Rule of 85 to the Rule of 90, and Louisiana teachers in 2005 increased the normal retirement age from 55 to 60. Rhode Island (2009), New Jersey (2007, 2008), Kentucky (2008), Nevada (2009), and Texas

(2009) made similar changes that required employees to have more years of service and/or retire at an older age.

Given the relatively short salary averaging period in most state plans, a sharp increase in salary near retirement can have a major effect on lifetime benefits and thus the cost of providing retirement benefits to certain workers. In an effort to limit this effect, Colorado (2006), Iowa (2006), Louisiana (2005), Kansas (2007), Nevada (2009) and Georgia (2009) adopted anti-spiking rules that capped the increase in salary that could be used in the calculation of final average salary. A number of other states have adopted a policy that limited or eliminated cost of living increases to retirees including Alaska, Colorado, Missouri, Kansas, Georgia, Iowa, and Kentucky. Finally, Mississippi (in 2007) increased the vesting period from 4 to 5 years, North Dakota teachers (2007) raised the vesting standard from 3 to 5 years, and New York (2009) imposed a vesting requirement of 10 years up from the previous 5 year requirement.

To further offset the increase in the cost of retirement benefits to public employers, some states have increased employee contributions. When it shifted from a defined benefit to a defined contribution plan, Alaska in 2006 increased the employee contribution rate to 8 percent of salary. Kansas (2007) raised the contribution rate for new employees from 4 to 6 percent of salary and New Hampshire (2009) increased the employee contribution rate for newly hired workers from 5 to 7 percent.

***Recommendations from commissions examining state retirement plans.*** States continue to evaluate the appropriateness of their retirement plans and the cost of maintaining the existing system. A key policy question is whether retirement systems that were the right plans for the late twentieth century are also the best plan for the twenty first century. In order to answer this question, legislators, policy analysts, public employees and tax payers must consider the

attractiveness of these plans to their employees, the cost to tax payers, and the impact of these plans on the state budgets. Many states have established study commissions to make recommendations for reform. Commissions typical reflect all of the stakeholders and interest groups impacted by retirement plans. They often have difficulty in reaching unanimous recommendations. The following briefly describes the recommendations of some recent study commissions.

**Colorado.** In 2010, the Board of Trustees for state retirement plan recommended a series of changes with the aim of improving the funded status of the plan. Some of the key policy recommendations altered the benefit formula. The Board made the following recommendations:

1. The final average salary in the benefit formula be based on 5 years instead of three.
2. The penalty for early retirement be increased so that the reduction would be actuarially fair.
3. The cost of living adjustment would be altered for many retirees.

<http://www.copera.org/pera/about/legislation/2010legislation.stm>

**Illinois.** The report of the commission appointed by the Governor clearly document substantial under funding of the public retirement plans in the state. However, the commission was unable to reach agreement on recommendation changes.

<http://www.illinois.gov/gov/pensionreform/>

**Iowa.** In November 2009, the Benefits Advisory Committee (BAC) of the Iowa Public Employees Retirement System (IPERS) made a series of recommendations to the State Legislature to deal with the long-term funding concerns facing the system.

The committee's recommendations to the Legislature include the following:

1. Increase the combined employer/employee contribution rate to 13.45% effective July 1, 2011. Under current law, the rate will be 11.45% on July 1, 2011.
2. Change the vesting requirement from the current four years to seven years.
3. Change the final average salary from the current high three years to five years.
4. Increase the early retirement reduction penalty from the current 3% to an average of 6% per year below age 65 for anyone retiring before they have earned the Rule of 88, or age 62 with 20 years of service or have reached age 65.

<http://iowahouse.org/2009/11/10/ipers-advisory-committee-makes-recommendations/>

**Massachusetts.** Public employees in Massachusetts are not covered by Social Security and the report of the study commission strongly recommended that the not seek to have their employees included in the Social Security system. The commission proposed that the period for averaging earnings be increased from 3 to 5 years and the benefit formula be modified to encourage later retirement. To provide greater benefit to workers leaving the system after only a short career, the commission proposed that the vesting period be reduced and that the interest credited to employee contributions be raised.

<http://www.mass.gov/legis/frsc.pdf>

**North Carolina.** A study commission appointed by the State Treasurer recommended that all state employees be given the option of selecting a defined contribution plan instead of enrolling in the current defined benefit plan. The commission also recommended that the defined benefit plan change one of the normal retirement ages from 30 years of service regardless of age to age 55 with 30 years of service. In addition, the commission suggested that the state adopt an automatic enrollment policy for its supplemental retirement plan.



**Ohio.** The Ohio Retirement Study Council has recommended that the averaging period used to determine final average salary be increased from 3 to 5 years and that the normal retirement age be increased. In addition, the Council proposed a modification in the cost of living adjustment and delaying the increase in the multiplier with years of service. Currently the multiplier rises from 2.2 percent per year of service to 2.5 percent after 30 years of service. The Council proposes that this increase occur after 35 years of service.

[http://orsc.org/uploadpdf/OPERS\\_board\\_approved\\_plan.pdf](http://orsc.org/uploadpdf/OPERS_board_approved_plan.pdf)

[http://orsc.org/uploadpdf/Updated\\_Comparative\\_Summary.pdf](http://orsc.org/uploadpdf/Updated_Comparative_Summary.pdf)

<http://orsc.org/>

**Rhode Island.** The study commission for Rhode Island has recommended that the state switch to a combination plan that retains a defined benefit component but adds a defined contribution component. Another major recommendation is to raise both the normal and early retirement ages so that workers would need to be age 65 with 10 years of service for normal retirement but could receive an actuarial reduced benefit at age 62.

<http://www.rilin.state.ri.us/Pension/>

**Vermont.** In December 2009, the commission evaluating the state retirement plans recommended that the state continue to provide a defined benefit plan and not transition to a defined contribution plan. The commission also proposed that the normal retirement age be increased from 62 or 30 years of service to 65 or the Rule of 90 and that the early retirement ages also be increased. In addition, the commission recommended that the averaging period be increased from 3 years to 5 years.

<http://www.vermonttreasurer.gov/retirement/retirement-commission-update>

### **III. State Retirement Plans In The Twenty-first Century**

Public sector pension plans are facing considerable economic, financial, and political pressures to reduce the increase in the cost of providing retirement benefits and to improve their funding ratios. After almost a century of expansion in coverage, increases in retirement benefits, and reductions in retirement ages, public sector pension are now confronted with the need to reform and reduce the retirement promises that are made to public employees. While no one can predict the future of public sector plans, one can consider potential factors that will determine, in part, how these plans continue to develop. First, analysts should consider likely changes in the Social Security system and how these changes might lead state and local leaders to modify public retirement plans. Second, one should assess the momentum for pension reform in the public sector and speculate on whether public sector pension plans will now follow pension trends that have been transforming pensions in the private sector for three decades.

#### ***Social Security Reform and Its Impact on Public Sector Pensions***

Between 1939 and 1983, coverage by Social Security was expanded to include virtually the entire labor force and benefits were steadily increased. Social Security now provides the basic foundation for retirement security for most American workers. Despite the development of Social Security, some state and local government employees remain outside this system. Under current law, the Social Security benefit formula is fixed so as to provide the same replacement rates for workers if they begin benefits at the normal retirement age; however, this implies that the replacement rate at every age declines with increases in the NRA. Current law also fixes payroll tax rates at their current level. In addition, the law mandates that Social Security benefits can be paid only from payroll tax revenues and from assets in the trust fund for Social Security.

Given the aging of the population and the decline in the ratio of workers to retirees, projections by the Office of the Actuary of the Social Security Administration indicate that the program is not sustainable in its current form. Estimates by the Office of the Actuary and similar estimates by the Congressional Budget Office indicate that over a 75 year time period, there was an actuarial deficit of about \$3 trillion, i.e. the present value of promised benefits exceeds the present value of project revenues by \$3 trillion. This shortfall can also be characterized as about 2 percent of payroll. Thus, raising the payroll tax by two percentage points (from 12.4 percent to 14.4 percent) would provide sufficient revenues over the next 75 for all promised benefits to be paid (Board of Trustees, SSA, 2010).

The long range financing problem facing Social Security has received considerable attention by economists, policy makers, and the national press over the last decade. Despite numerous studies, to date Congress has not addressed the problem. The basic options are clear: either future promised benefits must be reduced or taxes must be increased. Of course, there are many methods of cutting benefits and raising taxes. An array of options have been discussed and presented by various national commissions, scholars and study groups, and politicians. Which policies that are ultimately adopted will affect employer provided pension plans. As we consider the future of public sector pensions, we should include an assessment of potential changes in Social Security.

One method of reducing the growth of future benefits is to gradually increase the normal retirement age while holding the benefit formula constant. This change results in lower benefits at each age than currently promised and should encourage workers to delay retirement. Such a modification in Social Security is consistent with increasing life expectancy and in effect, tends to keep the relationship between taxes paid and lifetime benefits received relatively constant.<sup>7</sup>

An interesting question is how would public employers react to such a change in Social Security. Will state and local governments attempt to raise the normal retirement ages in their own plans to be consistent with rising Social Security retirement ages? Or will, public employers attempt to maintain the same retirement patterns of their employees by adopting policies to offset changes in the incentives in Social Security to retire at later ages? Already some states are raising normal retirement ages in their plans and Minnesota has pegged the normal retirement age in its retirement age to the Social Security normal retirement age. We anticipate that increases in the Social Security retirement ages will further stimulate states to increase the normal retirement age in their pension plans.

Future increases in Social Security payroll taxes will increase employment cost for those state and local governments whose employees are covered by Social Security. Will the higher cost of this federal retirement program reduce the willingness of governments to contribute to their own pension plans? If employer contributions are held constant as Social Security taxes are raised, the total cost of retirement programs are increased as is the total cost of hiring workers. Similarly, how will public employers react if Social Security benefits are cut and retirement incentives are reduced? Employers are concern about the retirement patterns of their employees and develop their compensation packages in order to achieve the desired size and age distribution of the work force. How to respond to changes in tax and benefit modifications in Social Security will be an important challenge to public human resource managers in the coming years.

A final change in federal policy that could dramatically affect pension decisions of some public employers is the potential shift in policy requiring all new employees to be covered by Social Security. Public pensions for workers not covered by Social Security tend to be more generous than those plans where employees are also covered by Social Security. Most national

commissions and study panel have recommended that coverage be made universal. Extending Social Security to all newly hired public employees would force policy makers in these states and localities to confront difficult choices about revising their own plans.

### **Will More Public Sector Plans Move Toward Defined Contribution Plans?**

Since the passage of ERISA in 1974, private employers have tended to shift away from defined benefit plans and there has been increasing utilization of defined contribution plans. Only in the past decade have public sector employers begun to move in the direction of adopting defined contribution plans. There are differences across sectors in terms of both employee bargaining power and economic fundamentals (especially worker mobility and earnings levels) that suggest why the public sector has remained more concentrated in defined benefit plans. For example, public-sector workers are more likely to be unionized, increasing their bargaining power, which leads to better compensation. There are also important differences between private- and public-sector workers in terms of average tenure and earnings. The Bureau of Labor Statistics estimates that median years of tenure in the private sector is 3.6 years, much lower than the 6.5 years for state workers and 7.1 years for local workers.<sup>8</sup> Legislation in the state and local retirement plan area has been much less stringent than the federal regulations that govern pension plans in the private sector. GASB rules are looser regarding funding and valuing liabilities. Are these fundamentals changing or are public employers beginning to feel the results of the aging of the population, rising pension costs, and the impact of the financial risk that was imbedded in their retirement plans?

In summary, financial pressures have pushed states to reconsider the generosity and structure of their retirement plans. It appears that increasingly states are willing to consider

adopting defined contribution plans, offering workers choices between a defined benefit or defined contribution plan, or developing some type of hybrid plan. Those states that are committed to retaining only the traditional defined benefit plan are making substantial changes in an effort to reduce costs. Many states are increasing the normal retirement ages, increasing years in the final average salary used to calculate benefits, and adopting anti-spiking rules, along with other plan modifications aimed at reducing the employer cost of providing these plans.

**Table 1. Pension Choice by New Employees<sup>1</sup>**

<b>State</b>	<b>DB by Default</b>	<b>Active DB Choice</b>	<b>Active DC Choice</b>
Colorado	39 %	43%	18%
Florida	55%	19%	26%
Montana	90%*	N/A*	10%
North Dakota	88%*	N/A*	12%
Ohio employees	82%	13%	3%
Ohio teachers	72%	14%	11%
South Carolina	80%*	N/A*	20%

Source: Olleman (2009).

\*Enrollments in defined benefit plans in these states are not report separately by whether there was an active enrollment or the employee was placed in the defined benefit plan by default.

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<sup>1</sup> These values are for the most recent reported year collected by Olleman (2009) with the exception of North Dakota whose states cover the period January 2001 to June 2008. Ohio public employees and teachers are also offered the opportunity to enroll in a combination plan. Two percent of employees and 4 percent of teachers in Ohio selected the combination plan.

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## ENDNOTES

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<sup>1</sup> Detailed histories of the establishment, growth and development of public pensions in the United States are provided in Clark, Craig, and Wilson (2003) and Clark, Craig, and Sabelhaus (2011 forthcoming)

<sup>2</sup> A few states had created pension plans for specific groups, such as teachers, before 1911; however, the Massachusetts' plan was the first comprehensive, state-level pension plan for civil servants.

<sup>3</sup> Munnell, et al (2008) argue that these changes are driven by political factors and not economic conditions. In particular, they assign the shifts to defined contribution plans to Republican control of the state government. They also report that plans that include teachers and ones that require employee contributions are less likely to have introduced defined contribution options. Munnell et al (2007) conclude that the continued dominance of defined benefit plans in the public sector is due to differences in the labor market and the public sector work force. Public employees tend to be older, have lower turnover rates, and are more unionized than comparable private sector workers.

<sup>4</sup> Many states also have large unfunded liabilities associated with retiree health plans. The cost of providing health insurance to retired state employees is rapidly rising. While public employees have established trust funds to help defray the future cost of paying pension benefits, virtually all public sector retiree health plans are funded on a pay-as-you-go basis. The rising costs of this benefit and the large unfunded liabilities are a major concern for many state and local governments (Clark and Morrill, 2010 forthcoming).

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<sup>5</sup> The Alaska Constitution prevented the state from lowering the benefits to current employees. Article XII, Section 7 states “Membership in employee retirement systems of the State or its political subdivisions shall constitute a contractual relationship. Accrued benefits of these systems shall not be diminished or impaired.”

<sup>6</sup> Over a longer period of time, many states have given university faculty and/or staff the option of enrolling in a defined contribution plan instead of the state retirement plan. This option was developed due to the greater mobility of faculty at public universities compared to the typical state employee. Initially, TIAA-CREF was the primary or sole provider in these plans; however, now many universities allow faculty to select among several plan providers. For example, North Carolina began allowing its faculty to opt out of the state retirement plan in 1971 and enroll in an optional retirement plan. No other state employees have this option.

<sup>7</sup> If one considers 1980 the base to begin adjusting for life expectancy increases, then the increase in NRA of 2 years by 2020, which would represent a 10 percent benefit cut at any given retirement age, is roughly consistent with increased longevity (again, average lifespan is rising about 1 year for every 20 calendar years). The increases in the normal retirement age adopted in 1983 are a part of why Social Security has been running annual surpluses in the past few years. Although current projections differ on exactly how much of the projected shortfalls could be eliminated by longevity-based benefit changes, adding another three years to the NRA in the 60 year period between 2020 and 2080 would go a long ways toward rectifying the expected shortfalls under any measure.

<sup>8</sup> Tenure data are available at [www.bls.gov/news.release/tenure.toc.htm](http://www.bls.gov/news.release/tenure.toc.htm).