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The Top Ten Advantages of Maintaining Defined Benefit Pensions

Legislation has been proposed in several states to replace state and local government defined benefit (DB) retirement plans with defined contribution (DC) plans. At issue is not whether state and local employees should have access to DC plans—many already do in conjunction with their DB plans or else through supplemental DC-type plans, which play a useful role in providing additional tax-deferred retirement savings.[1] Rather the issue is whether defined benefit plans should be eliminated and replaced with defined contribution plans.

While recognizing that DC plans are useful in providing supplemental retirement benefits, this paper discusses the advantages of maintaining state and local DB plans and argues against replacing them with DC plans. Eliminating the DB plan and switching to a DC plan is likely to be a lose-lose situation for governments, their employees, and taxpayers for many reasons. After briefly describing how DB and DC plans work, this paper will discuss the following 10 advantages of retaining DB plans:

- Retaining a DB plan is likely to cost state and local governments less over the short term. The long-term cost savings of switching to a DC plan are uncertain at best.
- Almost all state and local DB plans provide disability and survivor benefits as well as retirement income. Switching to a DC plan would require employers to obtain these benefits from another source, likely at a higher cost.
- DB plans enhance the ability of state and local governments to attract qualified employees and retain them throughout their careers. Switching to a DC plan would limit this ability, possibly producing or exacerbating labor shortages in key service areas by increasing employee turnover rates. Higher turnover rates result in increased training costs and lower levels of productivity that can, in turn, result in the need for a larger total workforce.

[1] Examples of DC-type plans available to state and local employees include governmental deferred compensation plans (also known as "457 plans") and 403(b) annuities. In addition, some state and local employees are also covered by 401(k) plans, if the plans were established before May 6, 1986. As reported by the Nationwide Retirement Education Institute in their 2004 report *America's Retirement Voice: Public Sector Retirement Yesterday, Today, and Tomorrow,* governmental 457 plans are in place for most large and mid-size cities and counties and all 50 states, covering approximately 3 million participants. According to a 2006 survey by the National Association of Government Defined Contribution Administrators (NAGDCA), 7.4 million governmental employees are eligible to participate in some form of defined contribution plan. This represents about half of current state and local government employees.

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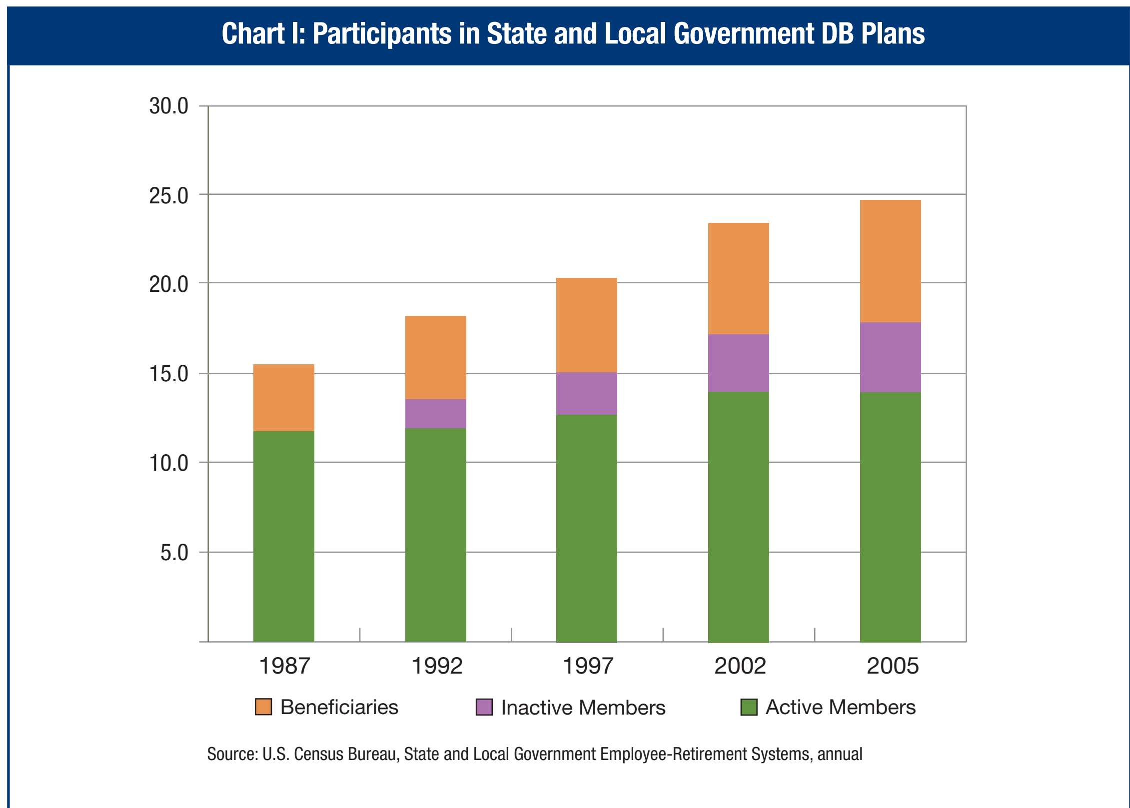
- DB plans help state and local governments manage their labor force by providing flexible incentives that encourage employees to work longer or retire earlier, depending on the circumstances. Switching to a DC plan would limit this flexibility and make these incentives more expensive for the employer.
- By pooling risk over a relatively large number of participants, DB plans lower the overall risk do to investment losses and participants outliving retirement benifits. Switching to a DC plan would require each individual to bear these risks alone, consequently requiring higher contributions than if the risks were pooled.
- DB plans earn higher investment returns and pay lower investment management fees, on average, than DC plans. Switching to a DC plan is likely to lower investment earnings used to finance retirement benefits and increase management costs, to the detriment of plan participants.
- DB plan investment earnings reduce future employer contributions. Switching to a DC plan would prevent state and local governments from reducing employer contributions through investment earnings, which currently fund over two-thirds of public retirement benefits.
- DB plans provide secure retirement benefits based on a person's salary and period of service. Switching to a DC plan is likely to result in lower and less secure retirement benefits for many long-term governmental employees, including firefighters, police officers, and teachers, who constitute over half of state and local government workers.[2] State and local employees who are without Social Security coverage would be put at even greater risk.
- DB plans help sustain state and local economies by providing adequate and steady retirement benefits for a significant portion of the workforce. Switching to a DC plan may slow state and local economies, since a large number of retirees would likely receive lower retirement benefits.
- DB plans provide benefits that help ensure an adequate standard of living throughout retirement. Switching to a DC plan likely would result in pressure on state and local governments to augment DC plan benefits and require increased financial assistance for retirees.

Background

State and local government retirement plans in the United States cover 14.1 million active employees (about 10 percent of the U.S. labor force) and 6.9 million retirees,[3] including teachers, police officers, firefighters, legislators, judges, and general employees. Ninety percent of state and local governmental employees are covered by defined benefit retirement plans.[4] Approximately 25 percent are not covered by Social Security, including close to half of public school teachers and about 70 percent of police officers and firefighters. State and local retirement plans paid annual benefits of $141 billion in 2005, averaging about $20,400 per retiree.[5] As of December 31, 2006, state and local plans had accumulated $3 trillion in assets, which were invested in a broadly diversified mix of equity and fixed-income securities.[6]

[2] U.S. Census Bureau, *Statistical Abstract of the United States 2004-2005* (Washington, DC: U.S. Government Printing Office, 2004), Table No. 454. Teachers, school employees, police officers, and firefighters constitute approximately 60 percent of state and local government employees.
[3] U.S. Census Bureau, *State and Local Government Employee-Retirement Systems,* Fiscal Year 2005, Table 5a. In addition to active employees and retirees, state and local plans also cover 3.8 million inactive members who are eligible for retirement benefits upon reaching retirement age. (www.census.gov/govs/www/retire05.html)
[4] U.S. Bureau of Labor Statistics, *Employee Benefits in State and Local Governments, 1998*. (Washington, DC: U.S. Government Printing Office, 2000), p. 5.
[5] U.S. Census Bureau, *State and Local Government Employee-Retirement Systems,* Fiscal Year 2005, Table 1. Average benefit calculated by the author and rounded to the nearest hundred dollars.
[6] Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States: Flows and Outstandings, Fourth Quarter 2006*, Table L-119. (www.federalreserve.gov/releases/z1/current/z1.pdf)



Since the mid-1990s, legislation has been proposed in several states to replace state and local DB plans with DC plans. The pace of these proposals increased from 2003 through 2006, partly due to equity market downturns in 2000 through 2002 that resulted in increased contribution rates for many DB plans, both public and private. Proponents of the change argue that switching to a DC plan would lower the government's cost of providing retirement benefits, thereby reducing state and local taxes. They also argue that DC plans would benefit public employees by giving them higher benefits through DC plan investment earnings and by making it easier for employees to take their benefits with them when they change jobs.

As this paper shows, it is likely that switching to a DC plan would increase retirement costs over the short-term and possibly over the long-term as well. In addition, recent studies indicate that retirement benefits provided though DC plans are, on average, significantly lower than those provided through DB plans. Moreover, while DC plans are useful for providing supplemental, tax-deferred retirement savings, replacing DB plans with DC plans could cause severe, unintended consequences:

- Governments could lose a valuable tool for attracting and retaining qualified employees;
- Public employees could lose a significant amount of retirement income, potentially affecting state and local economies; and
- Legislators could face additional pressure to increase DC retirement benefits and provide additional financial assistance for public-sector retirees.

Chart 2: Accumulated Assets and Annual Benefit Payments of State and Local Government DB Plans

Source: U.S. Census Bureau, State and Local Government Employee-Retirement Systems, annual

How DB Plans Work

In a typical DB plan, employers promise to pay retirement benefits based on an employee's period of service and final average salary. A typical benefit formula for state and local general employees is 2 percent times final average salary times years of service.[7] Under this formula, an employee who works 20 years and retires with a final average salary of $40,000 would earn an annual benefit of $16,000.

Eligibility for the benefit (i.e., vesting) usually requires employees to work for a minimum period of time, typically 5 years.[8] Upon retirement, the benefit is provided as a series of monthly payments over the retiree's lifetime (and the surviving spouse's lifetime if this option is selected by the member who, in return, receives a reduced benefit). Most state and local employees are in DB plans that provide cost-of-living adjustments as protection against inflation. In addition, most also provide disability and pre-retirement death benefits.

DB plan benefits are financed by contributions from the employer (and most often from employees as well) and investment income. Employee contributions are usually established at a fixed rate of pay, averaging a little over 4 percent for general employees and almost 7 percent for public safety employees and teachers.[9] Employer contributions are calculated so

[7] The "2 percent" portion of this benefit formula is referred to as the "benefit multiplier." Benefit multipliers vary, depending on occupation and Social Security coverage. According to the NASRA/NCTR 2003 Public Fund Survey, the median benefit multiplier is 1.85 percent for state and local employees covered by Social Security and 2.20 percent for those not covered by Social Security.
[8] National Education Association, *Characteristics of Large Public Education Pension Plans* (Washington, DC: National Education Association, 2004). The 88 statewide plans surveyed cover 9.4 million active workers. Fifty-seven percent of the plans had vesting periods of five years.
[9] Public Pension Coordinating Council, *2000 Survey of State and Local Government Employee Retirement Systems*, April 2000, Table VII-7. Employee contributions as a percentage of payroll averaged 4.2 percent for general employees, 6.8 percent for teachers, and 6.9 percent for public safety employees.

that, over the long-run (50 years or more), annual contributions plus expected investment earnings are enough to pay the promised benefits plus administrative expenses. These calculations are done by actuaries and designed to maintain employer contribution rates at a level percent of payroll, by smoothing short-term investment fluctuations and using other actuarial techniques.[10] Plan assets are invested in professionally managed, broadly diversified portfolios, with investment fees paid by the plan or employer. Retirement benefits are paid from accumulated contributions and investment earnings.

For employers, a key advantage of DB plans is that investment earnings reduce future employer contributions. In other words, employer and employee contributions generate investment earnings that, in turn, are used to pay benefits that would otherwise have to be paid from future employer contributions. From 1986 through 2005, state and local DB plan investments earned $2.26 trillion, reducing the need for additional employer contributions and taxpayer revenues.[11]

A potential disadvantage of DB plans is that when investment earnings are less than expected, additional employer contributions are required. However, it should be noted that the $2.26 trillion earned by state and local investments over the past 20 years includes investment losses that occurred in 2000 through 2002, as well as in 1987 and 1994.

For employees, a key advantage of DB plans is that they provide secure and predictable retirement income over their lifetimes based on pre-retirement earnings. A key disadvantage is that employees who do not remain employed long enough to become vested often lose their DB plan benefits, although employee contributions are nearly always returned with interest.

How DC Plans Work

In a DC plan, employers provide employees with individual investment accounts and promise to contribute a certain amount to the accounts ranging from 3.5 percent to 8 percent (or more) of pay while the employee is employed. Employees can also contribute to their accounts and decide how the assets are invested, choosing from a number of funds representing major investment categories. Investment management fees are paid from the employee's account, reducing the funds available to pay benefits. At retirement, the employee's benefit is paid solely from the contributions and investment earnings that have accumulated in the individual's account.

For employers, one advantage of DC plans is that the employer's contribution rate is fixed and unaffected by downturns in investment markets. Moreover, the employer has no financial liability for the employees after they retire, even if the DC accounts are insufficient to provide an adequate retirement benefit. (While this may be an advantage for private-sector employers, it is a disadvantage for state and local governments—and taxpayers—who may have to pay increased public financial assistance as a result.)

A disadvantage for employers is that DC plans may not be a strong incentive for attracting and retaining qualified employees, especially if competing employers are offering DB

[10] These smoothing techniques work well when investment fluctuations are moderate and short-lived.

[11] U.S. Department of Commerce, U.S. Census Bureau, through 1996, *Finances of Employee-Retirement Systems of State and Local Governments,* Series GF, No. 2, annual; beginning 1997, *State and Local Government Employee-Retirement Systems*, annual.

plans. Moreover, if employees' account balances are inadequate to provide retirement benefits when the employees intend to retire, employers can end up with a number of active employees who are not performing at peak productivity (also known as being "retired in place"). Another disadvantage is that, since the employer's contribution rate is fixed in a DC plan, upturns in the investment markets do not reduce the employer's contribution rate, as they do in DB plans.

For employees, one advantage of DC plans is that the vesting period is typically shorter than for DB plans. Six months to two years is typical.[12] Moreover, DC accounts are more "portable"—that is, easier to transfer if the employee changes jobs. A major disadvantage is that DC accounts are subject to investment risk and may not be enough to sustain employees throughout their retirement. Another disadvantage is that a high percentage of employees cash-out and spend some or all of their DC accounts when they change jobs, significantly reducing the amounts available to pay retirement benefits.[13]

The remainder of this paper describes the advantages of retaining DB plans.

Advantage 1: Retaining a DB plan is likely to cost state and local governments less over the short term. The long-term cost savings of switching to a DC plan are uncertain at best.

- **DC plans are costly to establish and maintain.** A DC plan must be designed, vendors must be selected, its operation must be monitored, and employees must be informed about plan features and available investments. Staff time is spent throughout this process, and the sponsoring government must pay legal and consulting fees. If a third-party administrator is not hired to operate the plan, the government must do this as well. Even if a third-party administrator is hired, the government will still have operating costs related to the DC plan, possibly ranging in the millions of dollars.

    - ❖ For example, the budget for the State of Florida's DC plan, established in 2000, totaled $89 million from FY 2001 through FY 2004. This includes $55 million to educate Florida's 650,000 government employees about the new plan.[14] As of 2004, approximately 3 percent of DB participants had chosen to transfer to the DC plan.[15]

- **Pension benefits currently promised to state and local employees and retirees may not be abandoned. Switching to a DC plan does not reduce accrued DB plan benefits already earned.** Most governmental DB plan benefits are protected by the state's constitution or statutes that prevent accrued benefits from being reduced. Consequently, when an alternative DC plan is established, current DB plan members remain in the DB plan but may be given the option to transfer to the new DC plan. For current DB plan members who elect the DC plan, the value of the member's accrued DB benefit is often transferred to the DC plan.[16]

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[12] However, some public-sector DC plans require 5 years of service (or more) for employees to completely vest in the employer's contributions.
[13] This is surprising since the cashed-out amounts are subject to income taxes. In many cases they are also subject to a 10 percent penalty tax on early distributions.
[14] Information provided by the Pension Protection Coalition, based on an analysis of the Florida Public Employee Optional Retirement Program's approved budgets and revenue collections. The analysis was done for the Coalition by the law firm of Olson, Hagel & Fishburn, LLP, January 18, 2005. The budgeted amounts exclude investment management fees paid by plan participants. Used with permission.
[15] Anya Sostek, "Pension Pendulum," *Governing Magazine*, March 2004: 28.
[16] If the member's accrued DB benefit is not transferred to the DC plan, it is maintained in the DB plan.

- **When given the option, most employees remain in the DB plan.** In most cases, only a small percent of employees elect to transfer from the DB plan to the DC plan.[17] To increase the number of employees who eventually enter the DC plan, some governments have restricted the DB plan to current employees and have required newly hired employees to join the DC plan.[18]

- **Even when new hires are required to join the DC plan, long-term cost savings for employers are uncertain and may take many years to realize.** When a DB plan is closed to new hires, it still covers current employees and retirees, and benefits continue to accrue to active employees as a result of their service. To the extent that plan assets are less than accrued liabilities, unfunded liabilities remain. For DB plans with unfunded liabilities, closing the DB plan to new hires will likely increase the employer's annual required contribution rate. Because new hires are not entering the plan, the cost of funding the liabilities is spread over a declining number of active members,[19] thereby increasing the employer's contribution rate as a percent of covered payroll. In addition, since a growing portion of plan assets must be used to pay benefits, a growing portion of assets will likely be held in short-term securities, thereby reducing investment returns.

    - ❖ For example, the Los Angeles County Employees Retirement Association (LACERA) estimated that the County's DB plan contribution rate would increase by 3.66 percent if employees hired after July 1, 2007, were required to join a DC plan. This would increase County contributions to the closed DB plan by $206 million in 2008. While the contributions would gradually decline over time, the County would have to wait until 2018 to see any savings in DB plan costs as a result of the change.[20]

- **In several cases, states have replaced (or have considered replacing) DC plans due to inadequacy of plan benefits or increased costs.**

    - ❖ In 1977, the North Dakota Public Employees Retirement System, originally established as a DC plan in 1966, was changed to a DB plan. Reasons given include the need to provide adequate retirement benefits and the need to attract and retain quality employees.[21]

    - ❖ In 2000, the State of Nebraska reviewed its two DC retirement plans for state and county workers and found that between 1983 and 1999 the DC plans' investment returns averaged only 6 percent compared with 11 percent for the state's DB plans. Recognizing these returns were inadequate to

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[17] Sostek, 2004. Three percent of employees covered by the DB plan elected to join the new DC plan in Florida, 6 percent in Michigan, and 2.5 percent in Ohio.
[18] National Association of State Retirement Administrators, "Overview of Plan Types." Of the 14 state retirement systems discussed in this paper, only two (Michigan and West Virginia) required newly hired employees to join the DC plan. The remaining systems offered DC plans as a voluntary alternative to the DB plan or offered a new plan that combined DB and DC plan features. Available on the NASRA web site (www.nasra.org).
[19] Governmental Accounting Standards Board, Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* (Norwalk, CT: Governmental Accounting Standards Board, 1994), p. 7. In situations where a DB plan is closed to new members, unfunded liabilities are amortized as a level percent of projected payroll, including projected decreases in the number of active plan members.
[20] Los Angeles County Employees Retirement Association, "Proposals to Close Public Defined Benefit Plans." (http://www.lacera.com/home/ProposalstoClosePublicDefinedBenefitPlans.html).
[21] North Dakota Legislative Council, Employee Benefits Program Committee, "Public Employees Retirement Programs – History," October 1998.

sustain retirement benefits, the state responded by creating a new hybrid plan for state and county workers, combining both DB and DC plan features.[22]

- In 2005, the West Virginia Legislature passed a law requiring teachers in the Teacher's Defined Contribution (TDC) Plan (created in 1991) to transfer into the State Teachers' Retirement System, a DB plan, effective upon approval by TDC plan members. According to the West Virginia Consolidated Public Retirement Board's actuary, the change would save the State $1.9 billion over the next 30 years, because lower employer contributions were required for the DB plan (4.3 percent of payroll) than for the DC plan (7.5 percent of payroll). State teacher representative also indicated the change would help prevent teachers from leaving their jobs.[23] In 2006, TDC plan members voted to merge with the DB plan. However, because the law required the transfer of vested DC assets, it was contested and overturned in circuit court.[24]

Advantage 2: Almost all state and local DB plans provide disability and survivor benefits as well as retirement income. Switching to a DC plan would require employers to obtain these benefits from another source, likely at a higher cost.

- **Almost all state and local DB plans provide disability and survivor benefits.** According to the U.S. Bureau of Labor Statistics, 97 percent of state and local government employees in DB plans have disability coverage through the plan and 93 percent may elect joint and survivor benefits.[25] These benefits are largely funded through contributions and investment earnings. Disability and survivor benefits are especially important for employees in hazardous occupations such as firefighters and police officers who may die or become disabled in the line of duty.

- **Few DC plans provide disability benefits. Moreover, DC plan survivor benefits are usually limited to the participant's account balance.** In the absence of a DB plan, employers would need to obtain disability and pre-retirement death benefits through commercial insurance or else would have to self-fund the benefits. Either of these options would result in additional administrative costs. If the benefits were obtained through commercial insurance, the employer's cost would also include the insurer's profit margin.

Advantage 3: DB plans enhance the ability of state and local governments to attract qualified employees and retain them throughout their careers. Switching to a DC plan would limit this ability, possibly producing or exacerbating labor shortages in key service areas by increasing employee turnover rates. Higher turnover rates result in increased training costs and lower levels of productivity that can, in turn, result in the need for a larger total workforce.

- **Employers offer retirement plans as a way to attract qualified employees and retain them so their skills and experience are used efficiently.** According to the Diversified

[22] Anya Sostek, p. 28.
[23] Jim Wallace, "Teacher pension bill has hurdles," *Charleston Daily Mail*, March 31, 2005.
[24] *Antony J. Barbario v. West Virginia Consolidated Public Retirement Board*, Civil Action 06-C-687, Circuit Court of Kanawha County, West Virginia.
[25] U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in State and Local Governments, 1998* (Washington, DC: U.S. Government Printing Office, December 2000), pp 94-98.

Investment Advisors' Report on Retirement Plans, most large employers see a tangible value in offering a defined benefit plan to their employees – despite the high costs sometimes associated with it. Fifty-eight percent of plan sponsors with 25,000 or more employees believe that their DB plans have a major impact on employee retention.[26]

- **DB plan provisions encourage employees to remain with an employer longer than DC plan provisions.** The vesting period for DB plans is typically longer (e.g., 5 years) than the vesting period for DC plans (e.g., 6 months to 2 years). Consequently, employees have a financial incentive to continue working for the employer at least until they vest. After that, DB plan benefit accruals based on continued service provide an additional financial incentive to remain.

- **Key governmental service areas, such as education and public safety, require skilled and dedicated employees to work in positions involving high levels of stress or physical activity or both.** Individuals with the skills and temperament to take on these roles usually have other opportunities in the labor market. DB plans provide strong incentives by rewarding long-term, dedicated service with a secure retirement.

Advantage 4: DB plans help state and local governments manage their labor force by providing flexible incentives that encourage employees to work longer or retire earlier, depending on circumstances. Switching to a DC plan would limit this flexibility and make these incentives more expensive for the employer.

- **Governments can use DB plan benefits as a way to manage their labor force by rewarding longer employment and encouraging retirement after a certain period of employment.** DB plan benefit formulas can be structured to provide incentives for longer employment by increasing the benefit multiplier after a certain period of service.

  - ❖ For example, the formula could provide benefits of 2.0 percent of final average earnings for the first 20 years of service and 2.2 percent for service over 20 years. To encourage retirement after a certain period of employment, DB benefit formulas can limit benefit accruals to a maximum percent of final average earnings or a maximum years of service. In this example, if the benefit accrual was limited to 62 percent of final average earnings, it would encourage employees to retire after 30 years of service. Other options, such as early retirement incentives (ERIs) and deferred retirement option plans (DROPs), are also available.

Advantage 5: By pooling risk over a relatively large number of participants, DB plans lower the overall risk do to investment losses and participants outliving retirement benifits. Switching to a DC plan would require each individual to bear these risks alone, consequently requiring higher contributions than if the risks were pooled.

- **DC plan participants must save enough to ensure they will not outlive their accumulated assets while protecting their funds against financial market fluctuations.** According to the Society of Actuaries RP-2000 mortality tables, 50 percent of U.S.

[26] "Majority of U.S. Companies That Offer a Pension Plan Say It Impacts Employee Retention," *Business Wire*, September 7, 2004.

males who reach age 65 will live to age 83, 10 percent will live to age 93, and about 1 percent will live to 100. Moreover, 50 percent of U.S. females who reach age 65 will live to age 85, 10 percent will live to age 96, and 2 percent will live to 100. To ensure their DC accounts will sustain them over their expected lifetimes, DC plan participants must save enough to ensure their benefits will be paid into their 90s.

- ❖ A 25 year old male would have to save 17 percent of his salary each year to age 65 in order to replace 75 percent of his pre-retirement income from age 65 to age 93 (assuming 7 percent annual investment returns). A 25 year old female would have to save 18 percent of her salary to assure 75 percent income replacement to age 96. However, if these longevity risks were pooled over a large enough group to allow the risks to be fully averaged, the required savings rate would fall to 13.6 percent of salary for both males and females.[27] Risk pooling is one of the main advantages of a DB plan.

- **In order to lower investment risk, DC plan participants usually shift a greater portion of their assets from stocks into bonds as they grow older. While this helps protect against equity market downturns, it also lowers likely investment return.** According to a 2004 Employee Benefit Research Institute study, 401(k) plan participants in their 20s invest 65 percent of their account balances in equities (including company stock) and 21 percent in fixed-income securities, on average. Participants in their 60s invest 49 percent in equities and 40 percent in fixed-income securities.[28] In contrast, large public retirement systems hold 60 percent of assets in equities, 29 percent in fixed-income securities, and the remaining 11 percent in other investments.[29] This pooling of assets allows DB plans to maintain a more diversified portfolio and helps to lower investment management fees.

- **By averaging longevity and investment risks over a large number of participants, DB plans lower the total costs of providing retirement benefits.** Instead of requiring contributions large enough to fund retirement benefits through each individual's maximum life expectancy, DB plans only need to fund benefits through the average life expectancy of the group. This lowers required contributions. Moreover, by spreading investment risk over a longer period, DB plans can maintain an investment mix that includes a higher percentage of equity investments. This increases likely investment returns, which further lower required contributions. In the example presented earlier in this section, if the pooling of funds could increase investment returns from 7 percent to 8 percent, then the required savings rate for the pooled participants would fall from 13.6 percent to 10.0 percent.[30]

[27] Gabriel, Roeder, Smith & Company, "The Advantages of Risk Pooling for Financing Retirement Benefits," *GRS Insight*, July 2006. (http://www.gabrielroeder.com/pubs/GRSInsight-2006-07.pdf)
[28] Sara Holden and Jack VanDerhei, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2004," *EBRI Issue Brief*, No. 272, August 2004. Employee Benefit Research Institute.
[29] Keith Brainard, *Public Fund Survey Summary of Findings for FY 2005*, National Associaiton of State Retirement Administrators, September, 2006, p. 5.
[30] Gabriel, Roeder, Smith & Company, "The Advantages of Risk Pooling for Financing Retirement Benefits," *GRS Insight*, July 2006. (http://www.gabrielroeder.com/pubs/GRSInsight-2006-07.pdf)

Advantage 6: DB plans earn higher investment returns and pay lower investment management fees, on average, than DC plans. Switching to a DC plan is likely to lower investment earnings used to finance retirement benefits and increase management costs, to the detriment of plan members.

- **On average, investment returns for DC plans are lower than for DB plans, resulting in significantly lower investment earnings over an individual's lifetime.** According to Boston College economist Alicia Munnell, DB plans outperformed DC plans by one percentage point annually, on average, between 1988 and 2004.[31] For a person contributing $5,000 to a DC plan each year for 40 years, the difference between an 8.0 percent annual return and a 7.0 percent return amounts to a loss of over $279,000.[32] Other studies show that individual, non-professional investors may underperform the market by as much as 2.0 percent annually.[33] The difference between an 8.0 percent annual return and a 6.0 percent return amounts to a loss of over $521,000.[34]

- **Administration and investment costs for DC plans can be more than four times higher than for DB plans. In DC plans, these costs are borne directly by individual plan participants through deductions from their DC accounts.** According to the Investment Management Institute, the operating expense ratio for DB plans averaged 31 basis points in 2003 (31 cents per $100 of assets) compared with 96 to 175 basis points for DC plans.[35] According to the Illinois Municipal Retirement Fund, the total annual administrative and investment cost for their DB plan amounted to 44 basis points in 1999. Had they switched to a DC plan, total annual administrative and investment costs could have increased up to 225 basis points, or up to $250 million more than the annual administrative and investment costs paid by the DB plan.[36]

- **Employees direct their own investments in a DC plan, usually selecting from among several funds that reflect major investment categories. Generally, employees have limited investment experience or training.** According to a 2007 study by Watson Wyatt Worldwide, many DC plan participants "don't start saving soon enough, don't save enough, and don't follow sound investment principles in managing their retirement assets." The study also found that assets are more effectively managed in DB plans, in part because plan administrators work with consultants and professional asset managers to set and implement investment goals.[37]

- **DC plan participants often cash-out and spend some or all of their DC accounts when they switch jobs. As a result, the accounts contain less money to earn investment returns and to pay benefits at retirement.** According to Alicia Munnell, more than half of DC plan participants withdraw funds from their DC accounts when they change jobs, removing between one-quarter and one-third of their total DC plan assets before they reached retirement.[38]

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[31] Alicia H. Munnell et al, "Investment Returns: Defined Benefit vs. 401(k) Plans," *Issue Brief*, Center for Retirement Research at Boston College, September 2006.
[32] Author's calculations.
[33] W. Michael Carter, Actuary. February 6, 1998. Letter comment on "Pension Liberation: A Proactive Solution to the Nation's Public Pension Systems." Letter is posted on the National Council on Teacher Retirement website (www.nctr.org).
[34] Author's calculations.
[35] Sean Collins, "The Expenses of Defined Benefit Pension Plans and Mutual Funds," *Perspective*, Vol. 9, No. 6, December 2003. DC plan expenses include 12-b1 marketing and distribution fees.
[36] Louis W. Kosiba, "The Defined Benefit vs. Defined Contribution Debate: The $250 Million Question," Illinois Municipal Retirement Fund, October 13, 1999, p. 2. IMRF serves over 360,000 active employees, inactive members, retirees and beneficiaries.
[37] Watson Wyatt Worldwide, *Pension Aspirations and Realizations: A Perspective on Yesterday, Today, and Tomorrow*, March 2007.
[38] Alicia H. Munnell and Annika Sunden, *Coming Up Short, The Challenge of 401(k) Plans*, (Washington, DC: Brookings Institution Press, 2004), p. 132.

Advantage 7: DB plan investment earnings help to reduce future employer contributions. Switching to a DC plan would prevent state and local governments from reducing future employer contributions as a result of investment earnings, which currently fund over two-thirds of public retirement benefits.

- **State and local governments have benefited from investment returns overall and many have used investment earnings to reduce employer contributions.** Over the long-term, an employer's cost of providing DB plan benefits depends on investment earnings. Although investment earnings can fluctuate sharply at times (as happened from 2000 through 2002), over the last 20 years state and local governments have substantially benefited from investment returns and have used the accumulated assets to lower employer contributions. As provided in governmental accounting standards, plan assets that are greater than plan liabilities are amortized to reduce employer contributions.[39] A 2002 survey of Michigan state and local government retirement systems shows that of 115 independent local government retirement plans surveyed, employer contributions for 102 (89 percent) were below the normal cost of benefits as a result of this amortization.[40]

- **Most of the money paid into state and local retirement plans comes from investment earnings.** Over the 20-year period from 1986 through 2005, state and local government investment earnings amounted to about $2.3 trillion, compared with employer contributions of $790 billion and employee contributions of $400 billion.[41] This means two out of every three dollars paid into state and local retirement plans over the last 20 years was received from investment earnings. According to a paper on state and local retirement plans prepared for the Wharton School's Pension Research Council: "**Setting aside all the other benefits to employers and employees of DB plans, contributions to public pension plans may be among the best investments a state or local government can make.**"[42]

Advantage 8: DB plans provide secure retirement benefits that are based on a person's salary and period of service. Switching to a DC plan is likely to result in lower and less secure retirement benefits for many long-term governmental employees, including firefighters, police officers, and teachers, who constitute over half of state and local government workers. State and local employees who are without Social Security coverage would be put at even greater risk.

- **Retirement benefits paid from DC plans are significantly less than those paid from DB plans.** The U.S. Congressional Research Service found that, for current older workers, DC-type plans will provide annual benefits of less than $5,000 for half the workers.[43] This is one-quarter of the $20,400 average annual benefits currently paid by governmental DB plans to state and local workers.

- **If average state and local retirement benefits fell from $20,000 to $5,000, it would mean a loss of approximately $106 billion in annual U.S. personal income.**[44] This loss would be felt by state and local economies, since many retirees remain in the

[39] Governmental Accounting Standards Board, Statement No. 27, p. 6.
[40] Gabriel, Roeder, Smith & Company, *2002 Michigan Public Employee Retirement Systems Survey,* (Southfield, MI: Gabriel, Roeder, Smith & Company, 2002).
[41] U.S. Department of Commerce, U.S. Census Bureau, through 1996, *Finances of Employee-Retirement Systems of State and Local Governments,* Series GF, No. 2, annual; beginning 1997, *State and Local Government Employee-Retirement Systems*, annual.
[42] Gary W. Anderson and Keith Brainard, "Profitable Prudence: The Case for Public Employer Defined Benefit Plans," Pension Research Council, Wharton School, University of Pennsylvania, 2004, p. 14.
[43] Patrick J. Purcell, "Retirement Savings and Household Wealth: A Summary of Recent Data," Washington, DC: Library of Congress, Congressional Research Service, December 11, 2003.
[44] Author's calculation based on $141 billion in annual pension benefits paid by state and local government retirement plans in 2005.

same location when they retire. These pension benefits are also, in most cases, subject to federal and state income taxes, thus resulting in a loss of tax revenues. Tax loses would also be seen in reductions of state sales tax revenues.

- **The change would have an even greater effect on the 25 percent of state and local government employees who are not covered by Social Security, including about half of school teachers and about 70 percent of police officers and firefighters.** When first enacted in 1935, Social Security excluded state and local employees, due largely to constitutional questions about the federal government's right to tax state and local governments. In 1950, Congress amended Social Security to allow state and local governments to voluntarily elect coverage. By then, however, half of the largest state and local plans had already been established, including many plans for teachers and public safety employees.[45] These DB plans provide benefits that compensate for the lack of Social Security coverage. Replacing them with defined contribution plans would put members at even greater risk, since they would not have Social Security benefits to fall back on.

Advantage 9: DB plans help sustain state and local economies by providing adequate retirement benefits for a significant portion of the workforce. Switching to a DC plan would likely slow state and local economies, since a large number of retirees would likely receive lower retirement benefits.

- **Public DB plans have a substantial impact on state and local economies.** For example, a 2006 economic impact study by the Perryman Group found that the $5.4 billion in annual benefits paid by the Teacher Retirement System of Texas (TRS) to approximately 250,000 retired teachers and beneficiaries generates $9.9 billon in total economic activity within the state. Moreover, as a result of TRS's strong investment performance, the overall return on state (and therefore taxpayer) contributions is significant: every $1 of state funds contributed to TRS leads to $7.85 in total spending in the Texas economy."[46]

- **The overall economic value added by the investment income of state and local DB plans over what would otherwise have been earned in DC plans is estimated to be about $200 billion annually, or 2.0 percent of U.S. Gross Domestic Product.**[47] In essence, state and local retirement plans act as financial engines, using employer and employee contributions to generate investment income that, when paid as retirement benefits, bolsters state and local economies by $200 billion a year. State and local retirees purchase a wide range of goods and services with their retirement income. These purchases, in turn, promote employment and create additional economic demand, generating additional economic activity. As a result of this multiplier effect, the economic activity generated by the higher investment earnings amounts to 2.0 percent of U.S. Gross Domestic Product. As a growing number of state and local employees retire, this percentage will likely increase.

[45] Olivia S. Mitchell, et al, *Pensions in the Public Sector*, (Philadelphia, PA: University of Pennsylvania Press, 2001) p. 13.
[46] The Perryman Group, *Beyond the Classroom: The Impact of Pension Benefits Paid by the Teacher Retirement System of Texas (TRS) on Business Activity in Texas, Its Regions, Metropolitan Areas, and Counties*, July 2006.
[47] Anderson and Brainard, p. 14.

Advantage 10: DB plans provide benefits that help to ensure an adequate standard of living throughout retirement.

Switching to a DC plan would likely result in pressure on state and local governments to augment DC plan benefits and require increased financial assistance for retirees.

- **If DC plan benefits are less than what is needed to ensure an adequate standard of living during retirement, continued pressure will be placed on state and local governments, legislators, and taxpayers as retirees outlive their retirement income.** Since DC benefits are not indexed to inflation, extended periods of even modest inflation will mean almost constant pressure for some form of additional financial support for retirees, who would make up a growing portion of the electorate. When DC plan benefit improvements are granted, they will be paid from current government revenues and will not be offset by investment earnings.

Conclusion

This paper addresses the question, "Should state and local government defined benefit plans be eliminated and replaced with defined contribution plans?" It concludes that such a move would have significant, long-term, detrimental effects on state and local governments, their employees, their economies, and ultimately the taxpayers.

In the final analysis, the real question is, "How can state and local governments efficiently provide secure, sufficient, and sustainable retirement benefits for their employees?" To answer this question, retirement benefits should be viewed in total, including benefits from Social Security, defined benefit plans, defined contribution plans, and individual savings. No single source alone is sufficient, but together they can be used to provide effective and efficiently funded retirement income. Eliminating defined benefit plans would only intensify future problems rather than provide solutions.

Instead, decisions should be based on a clear understanding of the goals that current plan design is intended to achieve for the various stakeholders, including the employer sponsoring the plan, plan participants, and taxpayers. Retirement plan design represents a significant public policy. Therefore, the plan sponsor contemplating changes must understand the policy implications of current plan design as well as any new proposals.

Success is most likely to happen after careful analysis. With proper analysis and an understanding of the needs of a changing population, fine-tuning the basic pension plan design can produce excellent results for all – sponsors, employees, retirees, and taxpayers.

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