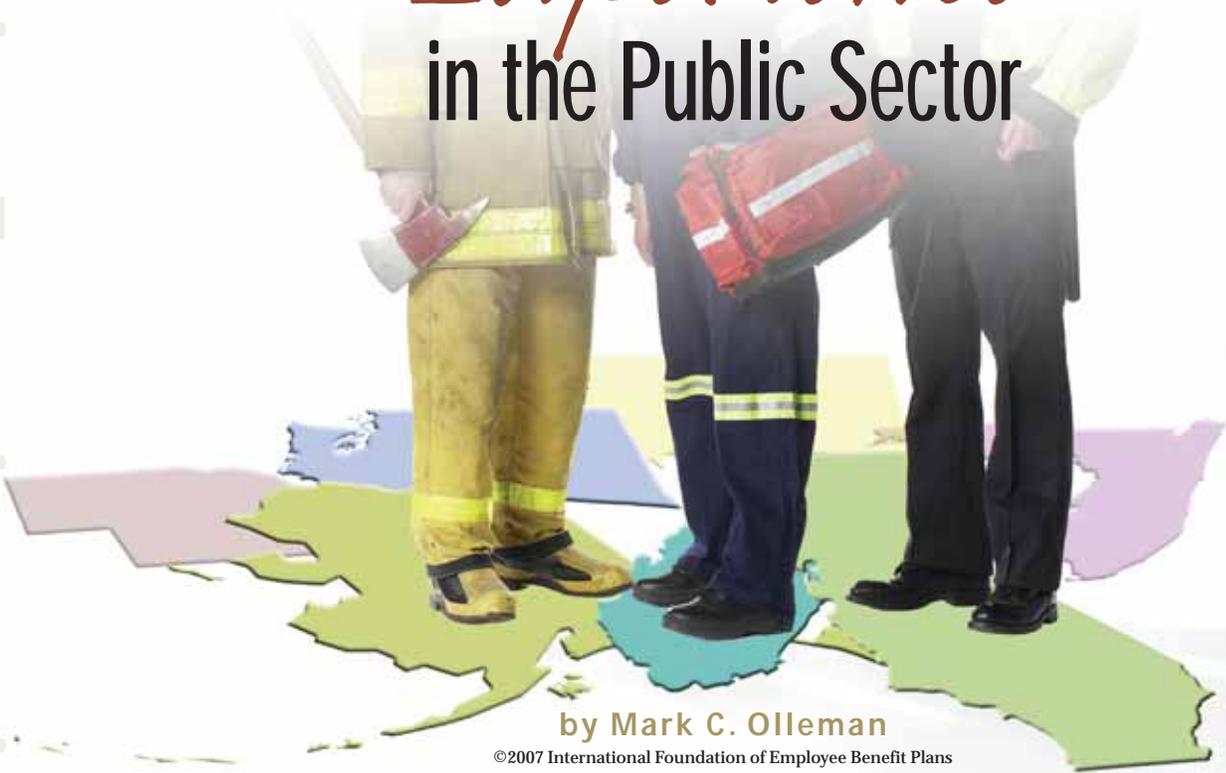


*What can we learn from the defined contribution (DC) retirement experience of government plans? Do public employees want the choices that DC plans provide? Will DC members earn competitive investment returns and accumulate adequate retirement assets? Will DC members be able to make those assets last a lifetime? Can DC plans protect against premature death and disability? Are DC plans a solution for governments struggling under the burden of unfunded obligations in their defined benefit plans? This article focuses on the growing body of experience from states sponsoring DC plans that addresses these questions.*

# Defined Contribution *Experience* in the Public Sector



by Mark C. Olleman

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**M**ost private employers provide a DC plan or no retirement plan at all. DC plans put choice and responsibility in the hands of the employee. As retirement dollars accumulate, the employee chooses how to invest them. When employees leave employment, the account balance goes with them and they choose how to manage it to provide retirement income.

On the other hand, 90% of government employees are covered by a defined benefit (DB) plan providing few choices, but a stable monthly payment for the rest of their lives. The state or trustees decide how assets will be invested and the employer takes responsibility to make sure the employees receive payments for the rest of their lives. DC plans are generally a supplemental source of retirement income for public employees. However, in the last six years a growing number of states have begun letting their employees choose between a DB and a DC plan. This is perhaps the ultimate choice: Do public em-

ployees want the choices a DC plan provides, or do they prefer the security of monthly payments guaranteed to last a lifetime?

### Do Public Employees Choose DB or DC Plans?

Many people believe DC plans are more attractive to new employees than DB plans. Is this true? The new employees of six systems in this article chose between a DB and a DC plan. Their experience indicates public employees prefer DB plans. As shown in Tables I through VI, the percent of new employees electing DC plans ranges from 3.3% in the Ohio Public Employee Retirement System (PERS) to 21% in Florida. The South Carolina experience in Table II shows that election rates may vary widely between groups. Of the higher education employees in South Carolina, 32% to 34% elected DC plans, whereas only 11% to 14% of all other employees elected DC plans. This may indicate more university employees expect to be mobile.

It should be noted that many members elect DB plans by "default." These members never submit an election and are placed in the DB plan. No study has analyzed the reasons for this behavior, but many of these members must be aware that no decision is the same as a decision for the DB plan. Washington State experience supports this. Washington is the only state where the DB plan is not the default. Table VII shows that in the Washington PERS, 63% of members have chosen an all-DB plan (Plan 2) over the default of a combined DB and DC plan (Plan 3).

We do not know how the choices members make will change in the future. The recent stock market decline of 2000 to 2002 has certainly influenced many members. No doubt factors such as the future of the stock market and the experiences of people retiring with only DC plans will influence future member choices.

Tables I through VII summarize the experience of systems allowing their members to choose between DB and DC plans. Ohio and Washington State members also have the choice of a "combined" plan where employer contributions fund a DB plan and employee contributions fund a DC plan. Washington State members do not have the option of an all-DC plan.

### Can Meaningful Death and Disability Benefits Be Provided in a DC Environment?

Yes, meaningful death and disability benefits can be provided in a DC environment, but they require supplemental contributions. One criticism of DC plans has been that they provide the same account balance in all circumstances. In fact, one of the primary obstacles DC proponents in California encountered recently was that if a DC plan was adopted, police and firefighters who put their lives in danger to protect the public would not be provided any extra protection if they died or became disabled. Let's look at what some retirement systems with DC plans have done.

In Florida, where members choose between a DB and a DC plan, disabled members can choose to surrender their DC account balance and receive the same disability benefits as provided by the DB plan. This raises a question: Where does the money to finance this benefit come from? The answer is that the employer pays a separate charge, and a side account is maintained to finance the difference between the cost of the disability benefits and the dollar amount of the DC accounts surrendered by the members. If DC members die in Florida, their death benefit is the DC account balance. Montana PERS has a similar provision where 0.30% of DC member pay is set aside to finance long-term disability benefits.

Alaska has a different approach. Alaska public employees hired after July 1, 2006 all go into a DC plan. Here the occupational death and disability benefit is 40% of salary until normal retirement (50% of salary for the occupational death of police and fire members). In the case of occupational disability, the employer continues both the employer and employee contributions to the defined contribution account until the member reaches normal retirement. In the case of occupational death, contributions continue until the end of the year of death. At normal retirement age the 40% (or 50%) of salary benefit stops, and the member, or survivor, receives the DC account. Employers make contributions into a separate fund to finance the extra benefit not provided by the DC account.

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### Bonus Term

**Public employee retirement system (PERS)**—An organization providing a formal program of retirement benefits for employees of states, provinces or their political subdivisions.

*Excerpted from Benefits and Compensation Glossary, 11th edition (International Foundation).*

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**Florida Retirement System (FRS) Defined Contribution vs. Defined Benefit Elections  
Effective Date July 1, 2002**

**Transition: 3.5% of existing members chose the DC plan at inception (2002-2003)**

**Newly Hired FRS Member Elections**

<b>Year</b>	<b>DB by Default</b>	<b>DB Active Enrollment</b>	<b>DC Active Enrollment</b>
9/02-6/03	87%	5%	8%
7/03-6/04	74%	11%	16%
7/04-6/05	63%	17%	21%
7/05-6/06	60%	19%	21%

**Actively Employed FRS Members, June 30, 2006**

	<b>DB</b>	<b>DC</b>	<b>Total</b>
Members	610,992	66,684	677,676
% of Total	91%	9%	100%

**Do Employees Earn More When They Choose Their Own Investments?**

This is a key question. Experience indicates the average employee directing his or her own investments earns lower investment returns than a statewide DB system. The central equation of funding retirement benefits is:

$$\text{Benefits} + \text{Expenses} =$$

$$\text{Contributions} + \text{Investment Earnings}$$

Ultimately, the retirement benefits provided by a system cannot be larger than contributions and investment earnings less expenses. Benefits cost less if investment earnings are increased. To put it simply, investment earnings are extremely important. Here is the experience of two states.

Nebraska's state and county employees hired between 1964 and 2003 had only a DC plan. During the same period Nebraska maintained separate DB plans for its school employees, state judges and state patrol. Over the 20 years leading up to 2002, the average return in the DB plans was 11%, and the average return in the DC plans was between 6% and 7%. This is a huge difference! Why? One reason is that nearly 50% of DC member contributions were invested in the stable value fund. The stable value fund was the default for members not making a specific investment election.

Although the stable value fund is very conservative and the investor's balance will not decrease, the investor also has

**Table II**

**South Carolina Retirement Systems—  
Percent New Hires Electing Defined Contribution  
Effective Dates July 1, 2001 to July 1, 2003 Varying by Group**

<b>Year</b>	<b>Higher Ed.</b>	<b>K-12 Schools</b>	<b>State Agencies</b>	<b>Overall</b>
7/04-6/05	32%	14%	11%	17%
7/05-6/06	34%	14%	12%	18%

**Table III**

**Montana Public Employee Retirement System—  
Percent New Hires Electing Defined Contribution  
Effective Date July 1, 2002**

7/04-6/05	9%
7/05-6/06	10%

**Table IV**

**Colorado Public Employee Retirement Administration  
(PERA) New Member Elections  
January 3, 2006 to September 13, 2006  
Effective Date January 1, 2006**

	<b>Count</b>	<b>Percentage</b>
Elected DB	1,525	55%
Default to DB	910	33%
Elected PERA DC	139	5%
Elected State DC	199	7%

a lower expected rate of return. Partially due to this, employees were receiving a replacement ratio of their preretirement income closer to 30%, rather than the projected 50-60%. Nebraska has since decided

that employees hired on or after January 1, 2003 will go into a hybrid DB plan.

West Virginia had a similar experience. Teachers hired between 1991 and 2005 had only a DC plan. Teachers hired after

July 1, 2005 will go into a DB plan instead. One of the reasons is that average DC returns have lagged DB returns as shown in Table VIII on page 24.

During these six years the DB plan outperformed the DC plan in both the best and worst markets. The only year the average DC return was higher was 2003. Over the six-year period the average DB return was 2.74% higher.

### How Can Investment Education Help?

Clearly investment education is critical if employees are expected to direct their own investments. However, people are busy and many employees do not want to spend their time learning about investments. As an example, although Nebraska had an active investment education program, nearly 50% of member contributions were still invested in the default stable value fund.

Systems that allow members to choose between DB and DC plans have a built-in advantage when it comes to investment

*Continued on next page*

education. Members who choose DC plans usually want to learn how to manage their retirement assets. For example, the DC members in Florida, Ohio PERS and Montana PERS, where members get a choice, have only between 5% and 12% of their assets in stable value or money market investments. Many states provide extensive information over the Web including interactive Web models and videos. Florida provides free access to independent financial planners over the phone or at financial planning workshops around the state. Members who choose to be in a DC plan are more likely to take advantage of educational opportunities and achieve their goals than members who are forced into a DC plan.

### Can DC Members Earn as Much as DB Plans?

DC members have many investment disadvantages compared to DB plans. DC members are part-time investors. DB plans are managed by full-time, highly trained professionals. DB plans have investment options that are generally not available to DC members, such as real estate, private equity and hedge funds. DC

Table V	Ohio Teachers New Member Elections July 1, 2001 to August 2006	
	Effective Date July 1, 2001	
	Count	Percentage
Default to DB	64,837	67%
Elected DB	13,637	14%
Elected State Teachers DC	9,718	10%
Elected Combined Plan	4,521	5%
Elected Alternative University DC Plan	3,436	4%

Table VI	Ohio PERS New Member Elections January 1, 2004 to August 2006	
	Effective Date January 1, 2003	
	Count	Percentage
Default to DB	106,681	83.5%
Elected DB	14,009	11.0%
Elected DC	4,165	3.3%
Elected Combined Plan	2,973	2.3%

members lack the bargaining clout of a multibillion dollar pension fund. Does this mean DC members cannot earn the same investment returns as DB plans? No, DC members can earn exactly the same returns. Washington State Plan 3 has an investment option called *total allocation portfolio* (TAP). The TAP is continuously managed and rebalanced by the Washington State Investment Board. The TAP mirrors the investments in the state DB plan; it is a fairly aggressive balanced fund intended for long-term investing. Since its investments mirror the state DB plan, it earns the same returns as the state DB plan. Washington has made the TAP the default investment option for Plan 3, and approximately 70% of the members' DC assets are in the TAP option. It is ironic that DC members may need to give up their ability to choose their own investments in order to earn returns as large as DB plans.

### Do DC Plans Solve Funding Problems?

In 1991 the West Virginia Teachers' poorly funded DB plan was closed to new members. All new hires were put into a

DC plan. This funding solution overlooked some important considerations:

- New members do not start with any unfunded obligation.
- Projected contributions for new members were worth more than the projected DB costs for those members.
- No unfunded obligations for existing members are reduced when new members go into a DC plan.

As a result, the loss of new members made it more difficult to finance the unfunded obligations of the West Virginia Teachers' Retirement System.

In 2003 West Virginia studied whether teacher retirement should be returned to a DB plan. Another factor in the decision was that 4,500 members who transferred from the DB to the DC plan in 1991 found it hard to retire after the bear market of 2000-2002. Add to this the lower average returns that were earned on the DC member accounts, and the state decided that starting in 2005 all new hires would go into the DB plan to save money. After studying the issue, the state decided that if you fund a DB plan properly, it would be less expensive than a DC plan providing equivalent benefits. The state is showing discipline to

achieve this proper funding with extra contributions of \$266 million in fiscal year 2006 and \$295 million in fiscal year 2007.

West Virginia projects a \$1.2 billion savings in the first 30 years due to moving new entrants from the DC to the DB plan. This relies on an assumed return of 7.5%. The legislature asked what return would be needed to break even. The answer was 6.0%. In order for the DB plan to save money, a projected return better than 6.0% was needed. The employer cannot avoid funding risk with a DB plan, but changing to a DC plan does nothing to take care of unfunded obligations.

### What Has DC Experience in the Public Sector Shown Us?

There are many questions that can be addressed using DC experience in the public sector. When given the choice, public employees have overwhelmingly chosen DB over DC plans. There are models showing how death and disability protection can be provided in a DC environment, but they require supplemental contributions. Employees managing their own accounts earn less on average than DB assets but, as Washington State shows, this can be overcome if the choice of how to invest the DC assets is given to the state. Changing from a DB plan to a DC plan does not solve funding problems.

In the final analysis, it's a question of accumulation and distribution. The accumulation of contributions and investment earnings determines available retirement income. A plan that maximizes investment earnings maximizes the benefits provided by contributions. Public employees are choosing plans that provide lifetime distributions. This article focuses on experience, and there is not yet much experience on how many DC members have been able to make their assets last a lifetime. This will be important information. The distribution phase and the loss of longevity risk pooling in retirement is probably the hardest obstacle for DC plans to overcome. The consequences of outliving one's assets are severe.

There are many unanswered questions. If the markets stay strong, will more public employees choose DC plans? How many employees can be adequately educated and empowered to navigate the risks of

Table VII

### Cumulative Washington PERS Member Elections From Inception in 2002 to 2006

Plan 2 All DB	Plan 3 Combined DB and DC (Default)
63%	37%

Table VIII

### West Virginia Teachers' DC Returns Compared to DB

Year Ending June 30	DC Plan	DB Plan
2001	-2.60%	-0.25%
2002	-3.76%	-2.94%
2003	4.84%	4.75%
2004	8.83%	15.08%
2005	6.33%	10.56%
2006	6.73%	9.55%
Six-Year Average	3.39%	6.13%

preretirement accumulation and postretirement distribution? There is still much to be learned from the future experience of DC plans in the public sector. Although it will be interesting to observe, I hope the retirement needs of the members are well served by the experience. **B&C**

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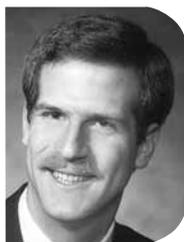
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