

Letter from Thomas J. Cavanaugh, F.S.A., Senior Consultant & Actuary

We have completed our review of "The State Factor: Pension Liberation: A Proactive Solution for the Nation's Public Pension Systems" written by Peter J. Ferrara under the auspices of the American Legislative Exchange Council. Our comments follow.

The article is unabashedly pro-Defined Contribution Plans. As a result, we are providing some background information regarding the defined benefit-defined contribution debate before dealing specifically with the content of the article.

Background

Unlike SERS which is a defined benefit plan, defined contribution plans do not use a formula to determine a member's lifetime accrued benefit. Rather, DC plans use a formula to define the contribution to be made by the employer on the member's behalf. The lifetime benefit that the member receives is dependent upon the balance in his/her account at retirement.

The major attraction of a DC plan from the member's viewpoint is the individual account balance. It is a visible reminder of the employer's contributions, it is easier to understand than an accrued benefit under a DB plan, it can be "rolled over" if employment changes, and, in most cases, the member directs the investments. From the employer's standpoint it is easier to budget for DC contributions than DB contributions, and the risk that investments will not earn the anticipated rate of return and that retirees will live longer than expected are shifted to the employee.

Proponents of DC plans make some valid points regarding the advantages of these programs. The portability of benefits, individual control over investments and the ability to attract quality employees are all important issues that cannot be addressed through a defined benefit plan alone. But a DC plan alone raises a number of concerns, including:

- The shifting of investment risk to the participant is significant and often overlooked because recent investment experience has been favorable. We would argue that a DC plan actually increases investment risk. In a DB plan the employer is able to take the long view regarding investments and is almost always able to average good periods with bad. The individual in a DC plan does not have this ability because his/her benefit is dependent upon the investment situation at the time payouts are made.
- The shifting of mortality risk seems never to be addressed, but that makes it no less real. People seem to have a tendency to underestimate their remaining lifetime.

- Many individuals are more conservative when they have control over their retirement investments, resulting in lower rates of return than can be achieved by the professional money managers used by a DB plan.
- While the lump sum distribution feature of DC plans makes them more portable than DB plans, it is only of value in preserving retirement benefits if it is utilized. A survey of individuals receiving lump sum distributions in 1993 showed that only 41.5% rolled over all or a portion of their distribution, and of those, less than half rolled over the entire amount. And this despite a 10% excise tax imposed by federal law on amounts not rolled over.

We would argue that there is a need for both DB and DC plan coverage for a given workforce. If this were to occur, it would make the most sense for both plans to be administered and controlled by a single entity. In that way both plans can work in harmony rather than as opposing forces.

Specifics

The nature of the article results in a somewhat imbalanced presentation of facts, and an attempt in some instances to replace facts with opinions. The following addresses what we consider to be the most troublesome aspects of the article.

First and foremost is the comparison of benefit levels from a hypothetical defined contribution plan with a range of benefits payable from a defined benefit plan. The results of this comparison are presented in Table I of the article on page 14. We have several problems with these results.

- The 30 year accumulations using a 5.5% real rate of return are incorrect. They are overstated by more than 25%.
- In converting the account balances to annual benefits, several different annuity values or conversion factors are used even though all calculations are presumably done at the same age. The source of these annuity values is not disclosed.
- The figures are all purportedly in constant 1997 dollars, but no real salary increases are assumed at any point during the 30 and 40 years of work. In addition, by eliminating inflation's impact, the defined benefit plan numbers (which would be based on a final average salary) are more severely understated than the defined contribution results.
- A 5.5% real rate of return is offered as the most realistic assumption, with 4.0% as a conservative alternative. The author bases this on the market returns since 1926. Over the same period inflation averaged 3.1%, but the author chooses to assume no inflation.

- The 10% of payroll defined contribution level is somewhat arbitrary, and no attempt is made to demonstrate what that contribution level would support in a DB plan.

We believe the appropriate comparison to make is between identical cost DC and DB plans. We made this comparison using SERS as the DB plan. The DC account balances were developed using the normal contribution rate for service retirement pensions as determined by the June 30, 1997 valuation (9.63%), and the interest rate and salary increase assumptions that underlie that calculation. DC account balances were converted into annuities again using the current SERS interest rate and mortality tables assuming a 50%/50% male/female mix for mortality, and a retirement age of 65.

The results of these calculations are shown in the enclosed table. As can be seen, the DB plan provides a greater benefit at retirement than the DC plan, significantly more so when the COLA provided under SERS is factored into the calculation.

There are several other specific issues regarding the article that need to be addressed. They are:

- In the "Introduction" on pages 2 and 3, the author offers some statistics regarding growth in DC plan v. DB plan participation in the private sector, and argues it is time for the public sector to follow suit. The reason for the changing levels are left unexplored.
- In fact, DB plans are still extensively used in the private sector. According to the EBRI Databook on Employee Benefits (1997), 30% of full-time employees in medium and large private firms (firms with 100+ employees) were covered by DB plans in 1993 and 26% were covered by both DB and DC plans, while only 22% were covered solely by a DC plan.
- Most of the growth in DC plans has come from small private employers, the majority of whom had no previously existing plans. (As an aside, only 42% of employees in small private firms were covered by any type of employer retirement plan in 1994). Many other small employers did convert from DB to DC plans, but one of the main reasons for small employers to select or convert to DC plans is the onerous federal regulations and costs associated with DB plans. These regulations and costs do not apply to public sector plans.
- Under "Two Retirement Plan Models" the author states that the minimum vesting requirement is typically 10 years. In fact, of 85 plans in the Wisconsin Retirement Research Committee Staff Report No. 82 (1996), 47 had 5 year vesting or less, 34 had 10 years or more, and the most common vesting period was 5 years.
- In "Advantages of Defined Contribution Plans - Advantages to Workers" under the "Portability" section on page 4, the comment is made that if a participant in a DB plan "withdraws his or her own contributions even after vesting, the workers

will lose all retirement benefits...". This is a matter of plan design, but is certainly not universally true in the public sector.

- In the same area under "Immediate Vesting", the article implies that all DC plans have immediate and full vesting of employer contributions. This is completely false. In fact, the very example of a model plan used by the author, Michigan, has a vesting schedule that does not reach 100% until 4 years of service (see page 10 of the article).
- Again in the same area under "Personal Control" and "Freedom of Choice", the author argues that DC plans "maximize freedom of choice" with regard to investments, investment strategies, investment managers, and benefit structure. In fact, in DC plans, personal control is restricted within the range of options selected by the plan sponsors. However, even if the participants had complete control of their options, it is uncertain whether they would be able to direct and monitor their investments with the same skill as an investment professional. In addition, it is also unclear whether they would be able to negotiate investment fees with the same leverage as a DB plan.

The article rebuts some of these concerns by arguing that criticizing workers' investment skills underestimates their capacities and that the investment options can be easily structured to avoid the problem. Nevertheless, there is long-standing concern among pension professionals that individuals tend to be "risk-averse" investors, who often sacrifice investment return for safety. The text also implies that workers have "freedom of choice" about which plans they will enter. While this is usually the case for current DB plan participants at the time of transition to a DC plan, new hires are typically required to join the DC plan.

- Under "Fair Benefits", it is argued that DC plan benefits are not "skewed" to favor the longer term workers, but instead provide "fair, undistorted benefits to each worker". This is not true. Workers who enter the workforce later in life (e.g., women who have spent their early years as homemakers) will not benefit from the effects of compounding on their DC accounts and so will be at a disadvantage compared with other, longer-term workers.

This point is demonstrated by the figures in the enclosed table. While the DC benefits (including COLA) are 37% lower than the DB benefits after 40 years of work, they are 38% lower after only 30 years of work. The difference becomes greater with shorter working lifetimes.

- Under "Higher Benefits", the author states "In fact, there is good reason to believe that on average workers in defined contribution plans will receive substantially higher benefits than offered by defined benefit plans, to [sic] the same or lower contribution rate." The main proof offered for this statement is Table I, which is covered in detail above, but there are additional erroneous comments offered in support of this statement.

First, the article addresses the issue of higher returns under DB plans by stating: "The managers will not invest more aggressively to achieve higher benefits, even when that can be done safely. If they do attain higher investment returns where legally permissible, the employer will likely reduce contributions or withdraw the excess assets." It is difficult to know where to begin in dismantling this claim. Does the author really believe investment managers hired by DB plan trustees are allowed to hide their investment pool under their collective mattresses? And how does he link investing aggressively and safely? Finally, has he never seen benefit improvements in DB plans that were the result of excellent investment performance?

The author does concede: "To the extent workers can receive retirement benefits under the defined benefit plans at earlier ages [than 65-67], those plans would do much better compared to defined contribution plans." (Emphasis added). Having given some small credit to DB plans, he immediately provides this rationale: "But such defined benefit plans also require much higher contribution rates than 10 percent of salary...." SERS is, of course, just one example of the fallacy of this statement. Retirement can occur much earlier than age 65, and the normal cost for service retirement pension benefits is currently 9.63% of pay.

- In "Advantages For Taxpayers", under "No Investment Risk", the article concludes that DC plans free taxpayers from investment risk. To argue that shifting of investment risk from taxpayers to workers is an advantage of DC plans undermines the arguments regarding higher benefits and personal control. If it is onerous for a pool of people (the citizens) to share investment risk, why is it better that the risk should be shifted to individuals?
- Under "No Political Risk", the argument is made that DC plans free taxpayers from "political giveaways" regarding benefits and "political favoritism" regarding investments. We would argue that the size of the asset pool is what creates the political risk, not the form the benefit payment takes. There is no evidence to support the presumption that DC plans can avoid this risk any better than DB plans.
- Under "No Unfunded Liability" the article claims that DB plan unfunded liabilities are a danger to taxpayers. On the contrary, the funding of DB plans reduces their long-term costs over time. Depending on the funding method used, the employer's contribution can be established as a level percent of payroll, countering the author's argument that employers' contributions to DB plans tend to be erratic.
- Under "Greater Control Over Costs", the article states that, under DC plans, "There is no possibility that taxpayers will be surprised with a large, unexpected cost that will require increased taxes." Aside from the obvious increased taxes that would be needed to fund an increase in DC plan contributions from say, 7% to 10% of pay, there is also the potential for increased social insurance costs as more and more retirees receive inadequate benefits from DC plans.

- Under "Reduced Costs", DC plans are lauded as being able to significantly reduce costs. Since no evidence is provided to argue that overall administrative costs are lower for DC plans, the entire justification for this statement appears to be that the costs are shifted to the participants. (Of course, no comment is offered as to how this will affect benefit levels). In fact, a case can be made that administrative costs are no less for DC plans than DB plans, and investment expenses can actually be greater due to the individual account nature of the investments.
- Under "Improved Employee Recruitment", the author argues that DC plans would make working for the government more attractive to younger professional workers who do not expect to work in the public sector long enough to vest. Of course, the other side of this coin is that there is less incentive for workers to stay thereby creating a talent drain and increasing training expenses. A persuasive argument can be made that the current interest in DC plans is due in large part to the age distribution of the working population. In particular, as the Baby Boom generation ages, interest will shift to DB plans. By moving to DC plans now, we will simply set ourselves up for significant additional costs later as we try to fund DB benefits over a shorter period of time.
- The author does note that there are criticisms of DC plans. In "Unsophisticated Workers" he argues that "investment challenged" (our quotes) participants can be saved by simply selecting professional investment managers and allowing participants to choose. This, of course, ignores the entire asset allocation issue, among many others, and smacks of elitism.
- Under "Investment Risk", there appears to be a small concession to the problem of participants shouldering the investment risk, but then the smoke rises. First, the author attempts to show that DB plans without COLA provisions suffer the same problems. However, this would only be true post-retirement since DB plans based on final average salaries have pre-retirement protection built into the salary increases. Even in retirement, the problem is the same for both types of plans unless the DC account balance is not annuitized.

Second, the author ignores the timing problem with DC plans mentioned under Background above. For example, high inflation in the 1970's resulted in negative real rates of return on assets. DC plan participants retiring in that decade would have been severely disadvantaged.

Finally, there is the gratuitous comment that "... a worker's investments can perform well below market averages and still maintain adequate retirement support." This statement is ridiculous on its face.

- In "Reform Plans", the Michigan DC plan is used as a stellar example of how to move from a DB plan to a DC plan. We can only surmise that, when he notes that retiree health care benefits will be significantly reduced for DC plan participants, the author considers this another advantage of public sector DC plans.

It must be obvious to you by now that we consider this article one of the worst to-date in the DB/DC debate. This type of unreasoned, inaccurate information can do no good in furthering the study of the right mix of DB and DC features for public plans.

As always, we would welcome the opportunity to discuss this issue with you and any other interested parties.

Sincerely,

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Retirement Benefits Under DC and DB Plans

Annual Salary		DC Account Balance	DC Annual Benefit (without COLA)	DC Annual Benefit (with COLA)	DB Annual Benefit
Initial	Final				
40 Years of Work					
\$30,000	\$463,940	\$2,535,991	\$283,506	\$234,777	\$370,594
\$40,000	\$618,587	\$3,381,322	\$378,008	\$313,036	\$494,125
\$50,000	\$773,234	\$4,226,652	\$472,510	\$391,295	\$617,656
30 Years of Work					
\$30,000	\$202,473	\$811,655	\$90,737	\$75,141	\$121,301
\$40,000	\$269,964	\$1,082,207	\$120,983	\$100,189	\$161,735
\$50,000	\$337,455	\$1,352,758	\$151,229	\$125,236	\$202,168

Assumptions:

1. 8.25% Annual Return on Investments
2. DC Contribution equal to 9.63% of pay
3. DB Benefit equal to 2.1% x years of service x 3 year final average salary

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