

# W. Michael Carter Letter, Actuary

February 6, 1998

Dear Mr. XXXX:

**Subject: Comments on "Pension Liberation A Proactive Solution for the Nation's Public Pension Systems" by the ALEC**

Representative XXXX, Chairman of the YYYY Committee, has requested that you have Watson Wyatt review the publication entitled "Pension Liberation, A Proactive Solution for the Nation's Public Pension Systems." This paper, written by Peter J. Ferrara, has been released by the American Legislative Exchange Council (ALEC).

The paper argues that state and local governments should implement defined contribution programs as an optional alternative to existing mandatory defined benefit programs. As this paper is read and utilized by various interested parties, we would caution those users to take recognition of a number of inconsistencies and inaccuracies in the paper's analysis.

In our opinion the paper includes a number of "half truths," inconsistent comparisons ("comparing apples and oranges"), and failures to disclose the full impact of several plan features. Our comments below analyze the arguments in the paper, identify issues that paper should more fully discuss, and places where the paper should more fairly disclose the relative differences and advantages and disadvantages of the two types of plans.

To put our comments in context, we should state that we do not believe that either a defined benefit plan or a defined contribution plan is, by itself, the perfect retirement vehicle for all employees. Different employees have different needs. In some cases these needs are best met by a defined contribution plan, while in other cases they are best met by a defined benefit plan. We believe that a combination of both a defined benefit plan and a defined contribution plan often comes closest to meeting the needs of all employees, with adequate consideration for the taxpayer.

We have organized our comments and observations in the same order as they appear in the paper.

## INTRODUCTION

The paper begins its analysis by stating the often-cited statistic that "the private sector has shifted dramatically toward defined contribution pension programs." When taken at face value, the statement is true. There has been a significant decrease in the number of defined benefit plans ("DB plans") over the last 10 years. There has, at the same time, been an incredible increase in the number of defined contribution plans ("DC plans").

What the paper does not disclose, however, is that virtually all of the decrease in the number of DB plans has occurred among small and medium size employers (employers

with less than 1,000 employees). Large employers, particularly employers with 5,000 or more employees have continued their DB plans.

Whereas the smaller employers have indeed substituted DC plans for their old DB plans, the larger employers have added a DC plan to their existing DB plan. The addition of the DC plan may have been in conjunction with a modification of the existing DB plan. This modification may have taken the form of a reduction in benefits and/or the incorporation of a "hybrid" DB plan design feature.

Many of the DB plans terminated by small and medium size employers were terminated because of the expense of complying with onerous requirements of the Internal Revenue Service, the Department of Labor, and the Pension Benefit Guaranty Corporation. Larger plans find these requirements much less expensive to deal with (measured on a per employee basis), and in any case, the public sector is exempt from most of the provisions and rules that prove to be the most burdensome to small businesses.

Large employers in the private sector have retained their defined benefit plans because they serve an important function in the employer's overall human resource strategy and, possibly, their business strategy. As noted above, some of these employers may have made material modifications in the design of their DB plans in order to better align those plans with their business and HR strategies, but they have nevertheless made the decision to retain them.

By and large, public sector employers are much more comparable to large private sector employers in terms of the number of covered employees. Certainly the states, the colleges and universities, and the larger cities and counties are much more comparable to large private sector employers in their outlook and needs than they are to the small private sector employers.

The paper next cites the portability feature of DC plans and states that DB plans have no portability feature. While there is no doubt that DC plans provide full portability of benefits upon change in employment, there have been many improvements in the portability features of DB plans, particularly in the public sector.

A key ingredient to enhanced portability of DB plan benefits in the public sector is the widespread use of service purchase provisions in DB plans. This portability feature has been significantly enhanced by recent tax law changes that were included in the Taxpayer Relief Act of 1997 and which become applicable to PERS beginning July 1, 1998.

In addition, there have been several new plan designs incorporated into DB plans that provide portability features that are very comparable to DC plans. These are so-called "hybrid" plan design features in DB plans. They generally take the form of either a "cash balance feature" or a "pension equity feature." In the public sector, the cash balance feature is gaining increased popularity.

The paper states that public sector employees typically only work "for a few years" and then move on. We believe that this is an inaccurate portrayal of public sector employees. Based on our experience with public plans that cover over 1.3 million employees, there are substantially lower termination rates among public employees as compared to termination rates among private sector employees. The average age and average service in the typical public plan is consistently higher than in the typical private sector plan.

The perception that employees in general are more mobile today than they have been in the past is itself an inaccurate portrayal. Studies conducted by Watson Wyatt indicate that there has been very little change in average job tenure over the last 40 years. We have analyzed data by various age groups over that time period and found that the average time spent with an employer in each age grouping has varied very little during the 40-year time period.

Based on numerous experience studies which we have performed in this state and in other states, we have found in particular that termination rates have actually declined across all age and service groupings over the last ten - fifteen years. Particularly in the private sector, the termination experience seems to be more heavily influenced by involuntary job reductions rather than by voluntary terminations.

We are surprised by the statement made in the paper that, if DC plans are made available, then employees "do not have to worry about politicians mishandling the funds," particularly since this paper is addressed to politicians, i.e., legislators. The author seems to be implying that legislators themselves are not to be trusted with the money represented in the trust funds.

While there is no doubt that "bad" bills are introduced from time to time during legislative sessions in many states, the incidence of actual mishandling of funds is very rare. Whether a plan is a DB plan or a DC plan will have no impact on the opportunity to "mishandle" the funds. Therefore there is no decrease in the "worry" element by converting the retirement program to a DC plan.

The paper also references the danger and worry that plan participants may have about politicians cutting their benefits. Many states have constitutional prohibitions against cutting benefits for public employees once they commence participation in a retirement plan. In those states, the only way that a benefit can be cut is by reducing the benefit for future employees only (possibly also with an election by an existing employee to change to the lower level of coverage). The same will be true of a defined contribution plan as it is for a defined benefit plan. To the extent permitted by state law, there will always be a danger in a DC plan environment that the employer will reduce employer contribution rates to the DC plan, thereby cutting benefits.

The paper implies that the mere existence of a defined contribution plan will assist public employers in recruiting the "best employees." This may or may not be true for a DC plan compared to a DB plan. It will depend entirely on the age of the "best employee" being recruited.

In many cases, public employers are able to recruit mid-career employees and middle management employees from the private sector precisely because of the public employer's attractive defined benefit plan. This becomes particularly true in situations where the mid-career employee has already qualified for a retirement benefit in their private sector employer's defined benefit plan. Numerous surveys and studies have validated that mid-career and older workers (i.e., those ages 45 and over) are the employees who understand and value DB plans the most. It is often these employees that the public employer will be trying to recruit.

## **TWO RETIREMENT PLAN MODELS**

The paper says that the typical public sector DB plan has a 10-year vesting schedule. Based on survey material, however, a 5-year vesting period is very typical among public sector employers, just as it is in the private sector. Implications that all public sector DB plans have a 10-year vesting period (or worse) is simply an unfair representation of DB plans in the public sector. For example, the vesting period for PERS is 5 years.

The paper is quite correct in its statement that the long-term level of contributions to a DB plan will depend upon a wide range of factors that vary over time. It is correct in citing such factors as life expectancy, the growth of future earnings, investment performance, inflation, and other factors.

The paper implies, however, that all experience for DB plans is adverse, serving to increase contribution rates and create dangerous risks for the employer. This is simply not true. Most public plans have enjoyed substantial actuarial gains over the last 3-5 years, enabling them to either have reductions in contribution rates, increases in benefits, or some combination thereof.

In particular, many of these gains have been used to finance postretirement benefit increases for retirees. Such a capability simply does not exist in a DC plan environment. Once the employee retires, the public employer cannot provide any benefit enhancements for these retirees without contributing additional funds on their behalf.

The paper also implies that since in its view all experience is negative for defined benefit plans, then DB plans in general face increasing unfunded liability. This also is not the case over the last 3 to 5 years. Particularly because of the favorable investment climate, most public plans have substantially improved their funded status during the 1990's. Four of the state plans for which we are actuaries are either fully funded or nearly fully funded. These include PERS #1, PERS #2, PERS #3, and PERS #4.

Concerning the vesting issue, the paper clearly implies that there is full and immediate vesting in DC plans but substantially long periods of time for vesting in DB plans. Vesting is entirely a plan design issue. There is no reason that the vesting schedule in a DB plan must be less favorable than in a comparable DC plan. In fact, the one example of a DC plan's vesting that the paper cites (the Michigan plan) has no vesting until two years of service, partial vesting between 2 years and 4 years, with full vesting only after 4 years.

By contrast, PERS #4 provides full and immediate vesting upon commencement of participation in the DB plan.

The paper is quite accurate, however, in its assertion that there is no possibility of an unfunded liability in a DC plan. It is also quite correct in pointing out that the employer's costs in the DC plan are fixed and certain. Finally, it is correct in pointing out that the ultimate benefit for the employee is not guaranteed or fixed in a DC plan.

## **ADVANTAGES OF DEFINED CONTRIBUTION PLANS**

This section of the paper has several subsections, which we will address individually.

### **Portability**

While the paper is quite correct in pointing out the high degree of portability available in a DC plan, it does not disclose that portability features in DB plans are improving significantly. As mentioned above, portability is enhanced in DB plans through favorable service purchase provisions. Changes to the tax code made by the Taxpayers Relief Act in 1997 greatly facilitate the ability of employees to take advantage of these portability features in DB plans.

Another feature which is gaining popularity and recognition in the public sector is the introduction of so-called "hybrid" arrangements in DB plans. These hybrid features have thus far taken the form of "cash balance overlays."

Under the hybrid cash balance overlay feature, an employee's benefit is based on the greater of the formula benefit or the lump-sum value of a cash balance account. This cash balance account is based on a theoretical accumulation of employee contributions and all or some portion of the employer contribution. The account is credited with a stated rate of interest for each year.

The cash balance account looks and acts much like a defined contribution plan account, except that the rate of interest credited to the account is not directly related to the earnings of the trust fund. Therefore the plan is still a defined benefit plan, but it exhibits many of the characteristics of a defined contribution plan.

The two biggest advantages of the cash balance overlay feature are that it provides a higher benefit value for the short-term employee, while not reducing the value of the benefit for the long-term employee, and it mimics the features that a DC plan provides.

This cash balance hybrid approach has already been adopted by the Colorado Public Employees Retirement Association and by the Ohio State Teachers Retirement System. In addition, the California State Teachers' Retirement System has created a cash balance program for part-time teachers in the State.

### **Personal Control by the Worker**

The paper is correct in its assessment that under a DC plan, the investment of retirement funds may be under the direct control of the worker. The extent of that control is entirely dependent upon the design of the DC plan. The individual employee typically has more control of the asset allocation in a DC plan than in a DB plan. The individual employee has no control over the ultimate asset allocation for a DB plan. That allocation is entirely under the discretion of the trustees of the plan.

For some reason, the author of the paper believes that DC plan participants have less to worry about politicians taking away benefits, mishandling funds, or losing or squandering their retirement assets in a DC environment than in a DB environment. There is no less danger that politicians will reduce contribution levels in a DC plan environment than they are of reducing benefits in a DB plan environment.

The suggestion that politicians will mishandle funds or lose or squander assets seems to be a poor commentary on the quality of the politicians, the trustees, and the people charged with administering the program. The mere existence of the DC plan does not lessen the opportunity for mishandling funds. Those same opportunities exist whether the plan is a DB plan or a DC plan.

Based on our experience with public plans that have total assets exceeding \$220 billion, trustees and plan administrators take great care in assuring that funds are not mishandled or squandered.

### **Fair Benefits for Workers**

Much of the discussion of the nature of benefits being fair goes to the heart of the difference between a traditional DB plan and a DC plan: who is rewarded the most by the plan? A traditional DB plan definitely rewards the longer service employee. It provides a greater value of benefit to the employee who stays to retirement. The DC plan, on the other hand, typically favors the shorter service employee over the longer service employee. The employee who works 3 to 7 years and leaves in a DC plan environment will leave with a benefit of greater value than a similarly situated employee in a traditional DB plan environment. As we noted above, however, hybrid DB plans can accomplish the same rewards for shorter-term employees.

The suggestion that a traditional DB plan does a poor job of inflation protection is very incorrect. A traditional DB plan, by its very nature, will have a great deal more inflation protection for the long-term employee than a comparable DC plan.

This inflation protection in the traditional DB plan comes from two sources. First, the benefit is typically based upon a final 3-year average or a final 5-year average for the employee. Thus, if there has been substantial inflation during the employee's career, that employee's benefit under the traditional final average DB plan will reflect the higher, inflation-adjusted salary level of that employee at the time of retirement. That employee is not "penalized" by those prior years in which the salary was lower because of inflation.

By contrast, the DC plan is, in essence, a "career average" plan. In other words, the contribution made on behalf of an employee is entirely a function of the level of salary in effect in that year. To the extent there have been significant salary increases due to inflation, prior contributions are not adjusted on behalf of that employee.

A further advantage that a DB plan has for inflation protection is that it can include an automatic cost-of-living adjustment feature in its plan provisions. Alternatively, the employer (or the legislature, as the case may be) may periodically provide an ad hoc postretirement increase to help adjust for inflation. The cost of the automatic COLA feature is included in the ongoing employer contribution rate. The cost of an ad hoc retiree increase is often funded through accumulated investment gains, as opposed to requiring an additional contribution on behalf of the employer.

The same possibility does not exist in a DC plan environment. Once the employee retires, the account balance represents the entire amount available to support that retiree. To the extent the retiree "annuitizes" their benefit in the DC plan upon retirement, it becomes very difficult to provide any type of postretirement inflation protection.

As noted above, the hybrid plan design in DB plans is becoming a more popular approach for addressing the disparity in the level of benefits for the shorter term employee in a DB plan. We take exception, however, to the implication that it is somehow unfair that a plan will provide a larger total benefit to a worker who works longer than another worker who does not work as long as the first worker. In fact, even in a DC plan environment, the longer an employee works, the greater their benefit will be.

### **Higher Benefits for the Worker**

The paper does quite a bit of mathematical analysis intended to show that a DC plan will deliver a larger benefit to a career employee than a DB plan. We find this presentation to be highly flawed in its analysis. It falls prey to two common fallacies of similar presentations. In addition, it has several inconsistent calculations included within its analysis.

It is simply not true that a career employee will receive a "substantially higher benefit" in a DC plan than in a DB plan, at the same or lower contribution rate. While it projects glowing investment returns in the DC plan accumulation, it does not recognize that there could be a corresponding significant decrease in the contribution rate to the DB plan because of that same favorable investment performance.

It is correct that DC plans impose no limit on the amount of the ultimate benefit that a worker can accumulate. It fails to point out, however, that there are Internal Revenue Code limitations on the amount of the contributions that can be made to a DC plan on behalf of an employee. In any case, either of these limits only impacts the relatively few members in a public plan who are very highly compensated.

The paper makes the erroneous statement that the trustees who manage the assets of the DB plan are investing only to finance the targeted benefit levels. In performing their fiduciary duty, the trustees of a DB plan are investing their assets to maximize the return on those assets at an acceptable level of risk. While they are definitely trying to earn enough investment income to fully fund the benefits that are being promised by the DB plan, they do not constrain their investment return possibilities to only that level.

It is impossible for employers to withdraw excess assets out of the DB plan, even though the paper states that employers may do so. Withdrawing excess assets out of the plan would be a violation of the Internal Revenue Code and would subject the trustees and the employer to a breach of fiduciary responsibility with resulting significant civil penalties.

We are very confused as to why the paper says that better investment performance in a defined benefit plan generally cannot be used to pay higher benefits to current workers. In point of fact, most public plans have enjoyed benefit enhancements over the last several years with no increase in contribution rates. These benefit enhancements have been specifically because of favorable investment performance.

The paper then gives numerous mathematical examples that are intended to illustrate how the DC plan will produce substantially greater benefits than a comparable DB plan. There are two fallacies in this analysis.

The first fallacy is that it starts with a DB plan that it says costs 10% of pay, and it uses this same 10% of pay as the employer-provided benefit in a DC plan. The inconsistency is that the paper uses the entire 10% of pay to produce retirement benefits in the DC plan, while in the DB plan part of that contribution will be providing death, survivor, and disability benefits.

The second basic fallacy in the analysis is that if this favorable investment performance in fact occurs, one of two things has happened in the DB plan. Either the contribution rate to the DB plan has been decreased during this period of favorable investment performance, or benefits have been increased, or some combination of both has occurred.

The paper is comparing "apples to oranges" when it looks at a defined contribution plan with 10% of pay contributions and good investment performance and compares the resulting benefit to a defined benefit plan that has had that same favorable investment performance with no concurrent change in the contribution or benefit level. The DB plan in the examples will have had substantial decreases in its contribution rate.

For example, in the scenario of the worker who retires with 40 years of service and has enjoyed a 5.5% real rate of return on his/her investments, the defined benefit which is being compared to the 10% of pay DC plan will have only cost an average of 3% of pay. So the analysis is comparing a DC plan that has an employer cost of 10% of pay to a DB plan which would have a cost of 3% of pay in a comparable investment climate.

The numerical examples themselves are inconsistent when they shift from the 40-year employee to the 30-year employee. The paper indicates that the assumed real rate of return for all of the examples is 5.5% per annum. This is, in fact, the real rate of return which has been used in the 40-year example.

For the 30-year example, however, the author has increased the real rate of return from 5.5% to 7.18%. Such a real rate of return is highly unlikely, especially over a 30-year period of time and in a fund which is invested evenly between stocks and bonds, which is the allocation that the example cites. In the 30-year example, the comparable DB benefit will only cost 3% to 4% of pay, compared to the 10% of pay that the DC plan is costing the employer.

Using the examples of a 4% real rate of return, the comparable DB plans will cost 5% to 6% of pay under comparable investment performance.

The paper makes a key human resource-related point in favor of defined benefit plans, even though it implies that this is a disadvantage of DB plans. It indicates that DB plans can include provisions to subsidize retirement at earlier ages compared to DC plans. This is often an important feature of DB plans that facilitates the employer's ability to encourage retirements at desired ages and/or years of service. No such "carrot" exists in a DC plan environment. To encourage early retirement is often a key human resource feature in retirement plan design.

### **Freedom of Choice by Employees**

The plan being advocated by the paper would give both current and future employees the opportunity to choose between a DB plan and a DC plan. It correctly points out that in general the current employees with longer service will choose to stay in the DB plan and the employees with shorter service will move to the DC plan. To the extent this happens and to the extent that future employees have an option on which plan to join, the long-term cost of the DB plan will be significantly impacted in an adverse way.

The contribution rate for a DB plan represents the average cost of that DB plan for all plan participants. The cost of providing a given level of a benefit increases with age in a DB plan. So, to the extent that the option election results in most younger employees choosing the DC plan and most older employees choosing the DB plan, the average age of the DB plan, including the average age of new entrants to the DB plan, will increase, resulting in an increase in the aggregate relative cost of the DB plan.

### **ADVANTAGES FOR TAXPAYERS**

The paper provides its analysis of perceived advantages to taxpayers in several subsections. Our discussion will follow the same section organization as the paper does.

### **No Investment Risks**

The paper is quite correct in its statement that the DC plan eliminates investment risks for the employer. It continually implies, however, that DB plans are only going to have a risk of poor investment performance, while the DC plan will always enjoy the benefit of good investment performance. This is an unfair comparison since each plan is equally likely to have either good or bad investment performance.

In fact, public employers (and therefore taxpayers) have enjoyed the risk of good investment performance throughout the 1990s. For one state that we work with, the employer contribution rate has decreased from 7% of pay to under 3% of pay over the last 13 years, and this decrease is in spite of the fact that there have been numerous benefit enhancements provided through the DB plan over that same period of time, including substantial COLAs to the retirees.

Another state plan has seen its contribution decrease from 8.5% of pay to its constitutional-minimum contribution rate of 6% of pay. In the same period of time, it has provided very significant ad hoc increases for its retirees.

Therefore, in viewing investment risk, it is only fair to recognize that taxpayers have been enjoying substantial benefit as a result of the "risk" of good investment performance.

The risk that exists in the public sector from poor investment performance in a DC plan environment is what will happen if employees wind up with inadequate benefits because of that poor investment performance. (See the next subsection on Political Risk)

### **No Political Risks**

Since this paper is intended for legislators, it is surprising that the author takes the position that a political risk exists in DB plans because "short-sighted politicians" are likely to give in to the "danger of political giveaways." That the very legislators who are intended to utilize this paper need to be protected from themselves is ill-conceived and certainly not limited to the DB plan.

We will agree, however, that there are cases in which legislators have promised higher retirement benefits in DB plans without adequately funding those benefits. When they do this, they do, in fact, leave the problem of paying for those promises to future legislators and taxpayers.

The author also seems to imply that there is no political risk in a DC plan. If we accept the author's premise that legislators do make bad decisions, there is still a danger that those bad decisions could be made in conjunction with defined contribution plans. They will just be of a different nature.

The author also seems to believe that running a large investment pool only exists in a DB plan.

The DC plan will eventually have a large investment pool, and those very same investment dangers (if any) of political interference will apply equally to that DC plan. This could easily take the form of requiring the use of investment managers or mutual fund families which are not in the best interest of the plan participants.

The author says that there is a danger in a DB plan that legislators may seek to withdraw funds for other uses or use the funds for short-term added benefits. It would be a violation of Internal Revenue Code for the legislators to withdraw funds directly from the plan, regardless of the plan's funded status. In addition, as mentioned previously, many states have constitutional prohibitions against withdrawing funds. To the extent this were possible, however, it would be equally possible in a DC plan environment.

The paper states that there is an additional political risk with the DB plan. It says that "the government ends up owning large shares of private companies." The government does not own the investments. The trustees own those shares of stock in their capacity as fiduciaries for the fund.

The provisions of most public plans prohibit the trustees from owning more than some percent of the outstanding shares of any one given employer. This limit will typically range between 1% and 5% of the outstanding shares.

To the extent this is a danger or there is a danger inherent in this situation, it will continue to exist in the DC plan environment. Once the DC plan accumulates assets as large as those which exist in the current DB plan, the asset pools will be similarly composed, irrespective of the fact that those assets are allocated to individual employee accounts. The trustees will still vote the proxies for the assets in the DC plan, just as they vote the proxies for the assets in a DB plan.

Since the assets are typically invested in mutual funds in a DC plan, the trustees may be voting their proxy for the mutual fund itself, rather than directly for individual corporate proxies. They will still be able to put pressure, however, on the mutual fund managers if the mutual fund managers are not voting the proxies on the individual investments in a manner consistent with the wishes of the trustees. Further, many DB plans now invest directly in mutual funds, too, so the risk for abuse of the proxy power is the same for both DB and DC plans.

There is a political risk involved in a DC plan which heretofore has not existed and is not mentioned by the paper's author. The political risk that is not mentioned is what will happen once there is a substantial number of public employees covered by the DC plan and there is a sustained period of poor investment performance.

All of the paper's discussions are couched in terms of ongoing favorable investment performance. Obviously, a DC plan has very attractive features in such an environment.

If, however, DC plan participants were to see an extended period of time of low investment return (such as the decade of the 1960s, or the returns that were experienced

in 1973 and 1974), there would be a definite political risk that these employees would put pressure on the legislature to provide either increases in future contributions to make up for the shortfalls in investment performance, or to provide ad hoc benefits to make up for this bad performance. These additional, ad hoc benefits would only be available through additional taxpayer funds in a DC plan environment.

A worst case scenario for a sustained period of poor performance would be political pressure by the covered employees to allow them back into the DB plan. If the legislature gives in to that pressure, the taxpayers would be saddled with a very large unfunded liability. This political risk is often overlooked because we have been in a sustained period of historically high investment performance. Most proponents of DC plans have never seen a sustained bear market. Many of them were not even employed during the 1973/1974 bear market when stock market returns fell well below zero percent.

### **Reduced Costs**

In this subsection as well as in the "Introduction," the paper implies that the administrative costs of a DC plan are substantially less than for a DB plan. It includes references to requirements on actuarial calculations and investment policies. While it is true in the private sector that there are a number of actuarial calculations and investment policy restrictions that are required and which add to administrative expense, most of these requirements are simply not applicable to public sector defined benefit plans.

It is true that DB plans require actuarial calculations. Corresponding actuarial calculations are not required in a DC plan. It is false, however, to state that the DC plan has "negligible" administrative costs.

In fact, a comprehensive, modern DC plan may actually have higher administrative costs than a comparable DB plan. This DC plan would include such features as: multiple investment options, daily valuation of the account balance, loans, withdrawals, the presence of an interactive voice response system that provides access to account values and enables the participant to divide and make daily changes in the allocation of their contributions and/or account balances among the available investment options. This type of a comprehensive DC plan is very expensive to administer.

The distinguishing feature in the administrative expense of a DC plan versus a DB plan is that it is often not visible. Instead of directly itemizing and identifying these large DC plan expenses, they are "hidden" in the return that the participants receive on their investments. It is simply a shifting of expense from a visible expense of the DB plan to an invisible expense in the investment return credited to the plan participant.

In particular, if mutual funds or insurance products are used, the expense ratio will be much higher than in a DB plan. By expense ratio we mean the investment and plan administration expenses expressed as a percent of the assets. Again, the difference is that this expense charge is hidden in the plan's rate of return on the participants' account balances.

The Department of Labor is so concerned about this particular issue that it is beginning to investigate the level of these hidden expenses and may issue regulations concerning their disclosure to plan participants and employers in the private sector DC market. DOL's concern is that neither employees nor employers understand the true level of plan expenses being borne by the employees in the form of reduced investment returns. There are numerous SEC rules that allow plan expenses to be buried in expense loads which are rarely understood or adequately disclosed.

The net effect on the cost to the plan participant is a dilution of the employee's ultimate benefit through a reduced earnings rate. Even if the employee is invested in index funds, the employee may achieve a return of 0.75% to 1.25% less than the index return because of expense charges. This represents a real, but hidden decrease in plan benefits for DC plan participants.

### **No Unfunded Liability**

The paper is entirely correct that a DC plan eliminates the danger of any unfunded liability. This is the one great difference between a DB plan and a DC plan. Theoretically, it is not possible for a DC plan to develop an unfunded liability. If the DB plan is not funded properly, however, or if there is significant adverse investment experience or other experience, the DB plan can develop an unfunded liability. When ad hoc increases are granted to retirees or when benefit enhancements are made for active employees, those benefit enhancements give credit for prior service and thus create unfunded liabilities.

### **Greater Control Over Costs**

The paper is also correct in its statement that the employer, and therefore the taxpayer, has greater control over the cost of the DC plan than under the DB plan. It implies, however, that all experience is adverse in a DB plan environment. As we have stated above, such has not been the case over the last three to five years in public sector DB plans. They have, in fact, enjoyed very material investment gains. This has generally served to reduce the cost of the DB plans.

### **Improved Employee Recruitment**

We disagree with the blanket statement that it will help in all cases to recruit new employees. As we noted above, the existence of a DB plan may, in fact, facilitate recruitment of the mid-career hire, because these are the very people who are most aware of the value to them of a DB plan.

## **CRITICISMS OF DEFINED CONTRIBUTION PLANS**

### **Unsophisticated Workers**

The paper's premise is that the sophistication of the worker investing their defined contribution plan balances can be enhanced through adequate employee education. We agree with this statement. Surveys have consistently shown, however, that even with adequate investment education, the individual investor will consistently under-perform the market.

This is because of the psychology of investment risks. Irrespective of investment education programs, surveys have shown that unsophisticated investors will underperform professional money managers because of the "herd" mentality. This will result in the non-professional tending to "buy high" and "sell low." In other words, they will attempt to "time" the market, and will usually miss.

When the investment market starts going down significantly, they will sell. By contrast, when it takes off, or is at an all time high, the individual investor will typically increase their exposure to the riskier asset types.

Numerous surveys have shown that individual, non-professional investors will under-perform the market by as much as 2.00% (200 basis points). This is not a condemnation of the public employee. It is simply a consequence of the psychology of investment risks. If the employee (whether private sector or public sector) tries to time their investment decisions, they will invariably under-perform the investment manager.

### **Investment Risks**

The author does not seem to understand how a DB plan provides protection against inflation. As we have already discussed, the typical final average earnings feature of traditional DB plans and the presence of automatic or ad hoc COLAs provide a great deal of inflation protection in a traditional DB plan. Such similar protections are not available in a DC plan.

Also, as noted previously, a great deal of investment risk exists in a DC plan. Even though they are investing for their entire career, they often, in fact, become scared during a short-term market decline. As a result they sell out of these riskier asset classes at the very time that they should be holding onto them for the long-term aspect. Also, while they can invest in mutual funds, those mutual funds will generally return a lower total return than the underlying index because of administrative charges.

### **Survivors and Disability Benefits**

The paper is correct in stating that DC plans can provide survivor and disability benefits comparable to DB plans by making available optional life insurance and disability insurance. What the paper does not disclose, however, is that the only way employees can obtain this optional coverage is by diverting some of their contributions or investment income to pay the premiums on these contracts. The diversion of funds to these contracts will serve to reduce the amount available for investment purposes. This, in turn, will reduce the long-term benefits available to participants.

In other words, the survivor and disability benefits in the DC plan represent the same type of cost-shifting that typically occurs with plan administration expenses in a DC plan. While this may be the intent of the employer, it is usually not explicitly stated or communicated either to the participant or to the taxpayers. The end result is that the same amount of contribution may not be entirely available to provide a retirement benefit.

### **Transition Issues**

The availability of choice by existing plan participants has significant adverse selection implications for the long-term relative cost of the DB plan. This is often overlooked in studies which supposedly analyze the impact of moving to a DC plan.

Another frequently overlooked impact is the long-term implications of reduced plan participation in the DB plan. Very few DB plan participants who are eligible to retire or are nearing retirement will elect to change to a DC plan. Therefore, their liabilities are still present in the ongoing DB plan.

If the influx of new members is substantially reduced, but there is no concurrent material reduction in the expected benefit payouts of the DB plan (because the DB plan participants nearing retirement remain in the DB plan), a significant imbalance between the contribution inflow and the benefit outflow will occur. The result will be that the DB plan will, in a relatively short period of time, be unable to produce sufficient investment cash flow to pay benefits.

As a result, the DB plan trustees will need to take one or more of the following three actions: (1) increase the asset allocation to cash; (2) sell assets to produce cash to make benefit payments; (3) increase the asset allocation to fixed income securities which will produce more cash income through interest payments. Any or all three of these actions will have the long-term result of lowering the total, long-term return of the fund.

Once this happens, the value of the underlying liabilities will be increased and the investment income to cover those liabilities will be decreased.

This aspect of adverse selection is often overlooked in analyzing transition issues concerning a move from a mandatory DB plan to either a closed DB plan or an optional DB/DC arrangement.

### **Reform Plans**

We take issue with several examples provided under "Reform Plans". First, the DC plan for new employees in Michigan will no longer apply to public school teachers. Second, there has not been a movement to adopt defined contribution plans for local government workers in Texas.

Virtually all local government employees in Texas are covered under: (1) the Texas Municipal Retirement System (TMRS), (2) the Texas County and District Retirement

System (TCDRS), or (3) a DB plan sponsored by one of the major cities, such as: Houston, Dallas, Fort Worth, Austin, San Antonio, and El Paso. All of these plans are either traditional DB plans or hybrid DB plans. TMRS and TCDRS are communicated like DC plans, but they are, in fact, hybrid DB plans. In fact, they have had their statutes changed to specifically identify themselves as DB plans. The individual city plans are all traditional DB plans.

The paper states that DC plan options have recently been adopted for public employees in Colorado. This also is not the case. Colorado PERA has recently incorporated a cash balance overlay feature into its traditional DB plan. It has thus become a hybrid DB plan. In addition, employees may participate in a grandfathered 401(k) plan. [\[top\]](#)

### **Ending Comments**

Users of the ALEC's "Pension Liberation, A Proactive Solution for the Nation's Public Pension Systems" should be aware of the omissions and inconsistencies present in that document.

This document is correct in its general premise: DC plans provide a greater benefit to short-term employees than traditional DB plans provide. Traditional DB plans, by contrast, provide a much greater proportion of their total benefits to the long-term employee. It is simply not true, however, that the DC plan is going to produce a higher benefit than the typical traditional DB plan, given an identical investment scenario. Projections of DC plan benefits under high investment returns and comparing those balances with the DB plan's benefits under its current contribution rate is like comparing apples to oranges. The DB plan should experience a significant decrease in contribution rates if investment performance is continuously favorable, as assumed for DC plans.

While it is true that the employer assumes the investment risk in a DB plan and the employee assumes the investment risk in a DC plan, it must be recognized that investment risk is a two-way street. Favorable performance in a DC plan environment and simultaneous unfavorable investment performance in a DB plan environment is unrealistic. Plans will experience the same overall investment results.

Most public employers have witnessed the advantage of accepting the investment risk in DB plans over the last 20 years. During this period of time they have experienced declining contribution rates, the ability to provide additional benefits at no additional costs to taxpayers, or some combination of both.

Large employers in the private sector are not abandoning DB plans. The drop in the total number of DB plans has occurred primarily among small and medium size private sector employers. Governmental employers are generally employers of a large number of employees, and therefore they are much more similar to large private sector employers as opposed to the small and medium size private sector employers.

Full-featured, comprehensive, modern DC plans are not free of administrative expenses. The expense to administer these plans is just as great, and in some cases greater than, the expense to administer a traditional DB plan. The difference is that the administrative expenses become hidden in loads on the investment return that is credited to the individual members' accounts in the DC plan. While the explicit administrative expense of the plan may appear less, it occurs because there has been a shift of that administrative expense from the plan to the employee.

Defined contribution plans do have greater portability than traditional DB plans have had in the past. Portability in DB plans has, however, been enhanced through service purchase provisions. In addition, portability in DB plans can be enhanced through the adoption of hybrid plan features.

We hope the above discussion and information will be helpful when reviewing the aforementioned paper. For your use and information, we have attached a chart which recaps some of the major differences between a DB plan and a DC plan.

If you should have any questions or comments, please feel free to contact us.

Sincerely,

W. Michael Carter

Actuary

nlb

### **The Defined Benefit / Defined Contribution Debate**

#### Recap of Major Differences

	DB	DC
Control over employer expense	Perceived low - many states have prohibitions against reducing future benefits for current members	Perceived high - but same constitutional "impairment of contract" provisions will probably apply
Investment risk/reward	Employer assumes; but favorable investment climate of the 1990's has resulted in decreases in contribution rates, benefit enhancements, or some combination of both in many public plans.	Active members assume; will increase or decrease their benefit
Actuarial risk/reward	Employer assumes	None
Winners (due to design)	Career employee (15+ years of service)	Employee who leaves with 3-7 years of service and before retirement

Variability of benefits due to investment results	Not applicable, except that favorable results have enabled numerous benefit improvements, including COLAs, in many public plans	High (both positive and negative)
Ancillary benefits (death and disability)	Can be designed to meet needs	Account balance (may be inadequate for younger or shorter service members)  Can supplement through purchase of insurance, but this significantly reduces net investment return, which in turn reduces the members' benefits
Post-retirement increases	Available through COLAs (automatic, ad hoc, or based on excess earnings)	Not available
Service Purchase	May be allowed	Not available
Benefit increases for actives	May be applied to all service	Prospective only (and only by increasing contributions)
Portability	Poor (rollovers are possible, though)  Enhanced portability available through service purchase and by implementing a hybrid cash balance feature	High
Early retirement	Subsidies present. Can adopt early retirement windows. Can use to encourage retirement.	No subsidies possible. Not available to entice retirement.
Investment expenses	Perceived as high because they are more visible	May actually be higher than in DB if mutual funds are used. Expense is hidden as reduced return. Result is that member pays for these expenses through reduced benefits.
Administrative expenses	Perceived as high because they are more visible	May actually be higher than in DB if a full feature, comprehensive, modern DC plan is created. Expense is hidden as reduced return. Result is that member pays for these expenses through reduced benefits.

(DOL is beginning to look at this)