

# White Paper

WALKING THE LINE – FACTORS FOR EVALUATING POTENTIAL FREEZES OF DEFINED BENEFIT PLANS

# **NOVEMBER 1, 2006**

# **BY WILLIAM MOST**

When evaluating the merits of defined benefit (DB) pension plans versus defined contribution (DC) plans, it's important to look behind the curtain. There's much to consider, including pending accounting rules, investment strategies, and the short-term and long-term impact on benefits for all employees.

This discussion specifically examines:

- pension plan freeze options and surrounding issues
- replacement defined contribution plan considerations
- possible defined benefit plan solutions

Over the past few years several large, well-known companies have announced defined benefit plan freezes. Most of these companies have instituted some type of DC plan to replace their DB plans.

Although many employers continue to believe that DB plans are too expensive, the fiscal squeeze on defined benefit plans may not be as severe as popular sentiment holds. A Milliman study of 2005 pensions shows that over the last three years the return on pension assets exceeded their expected rates of return by an average of approximately 5.8% per year. Additionally, a switch to a DC plan does not necesarily result in lower cost. In fact, DC plans can be more expensive than DB plans. Furthermore, today's dilemma is in the context of many DB plan sponsors having gone numerous years without making any contributions to their plans. If they had sponsored DC plans, contributions likely would have been made each and every year.

Nevertheless, the volatility of pension expense, contribution requirements, and balance sheet amounts remains a significant concern to plan sponsors and almost insures that 2006 is a "reaction" year as pension plan sponsors decide how to minimize the impact of their pension plan on their balance sheet. In this environment, it is useful for employers to look before they leap out of DB plans ... or at least to understand the new world they're moving into. This is true for companies with underfunded plans as well as those with healthier, well-funded plans.

Not all freezes are the same. A good starting point is to distinguish the precise options for a DB plan freeze:

- *Hard freeze*. Benefit accruals in the pension plan are totally discontinued after a certain date for all employees: long-term, short-term, and new hires. This is the common understanding of a "benefit freeze."
- *Soft freeze.* Participation in the plan is discontinued for new hires. Benefits to new employees (who would have been enrolled) are stopped, effective by a certain date. The company then either offers another benefit plan (typically a DC plan) or no substitute plan. This type of freeze is also known as "closing" a plan.
- *Partial freeze.* This approach grandfathers certain employees, usually older, long-service employees, into the existing DB plan. For example, a company might prescribe that, as of a set date, employees 50 years and older and with 10 years of service will stay in the plan; all other employees will go into the new plan, along with new hires. Another way to partially freeze a plan is to discontinue service credits but continue to allow for pay increases in the determination of final average pay. This can be done for all employees or a grandfathered group.

Employers must take care with a soft or partial freeze to be aware of any potential plan qualification issues, such as nondiscrimination.

# **IMPACT ON BENEFITS**

If employers decide to freeze their plans, the typical replacement is a DC plan with employees contributing to and managing their own retirement investments. Companies that make this switch

# WALKING THE LINE – FACTORS FOR EVALUATING POTENTIAL FREEZES OF DEFINED BENEFIT PLANS

## NOVEMBER 1, 2006

may see different kinds of employees come out winners and losers. The resulting fallout may affect morale, employee retention, and employee recruitment.

Winners generally are younger, short-service employees who have more time to make investments and build their nest eggs. A 30-year-old employee has at least 35 years for his retirement investment to earn interest and grow, assuming retirement at age 65 or older.

The losers, generally, are long-service, older employees who have shorter investment horizons and less potential for accumulating contributions and interest. There's also another detrimental catch because of how DB plans work. Many are final average pay plans with the benefit paid based on average pay and service; employees receive these pay and service increases as they age and often accrue 50% or more of their benefit in the last 10 years of service. An employee who has to switch to a DC plan late in his career must reckon with a leaner retirement and unfulfilled expectations.

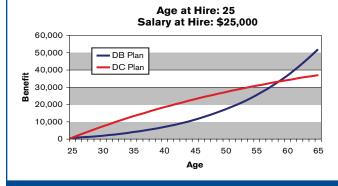
The "Winner"/ "Loser" analysis is depicted in the charts below, which show the benefit amounts over the career of four hypothetical employees based on a 1% of 5-Year Average Pay DB plan versus a 4% of Pay DC plan. (DC accounts are converted to annuities for comparison purposes). The benefits depicted are annual life annuities payable at age 65 and do not reflect any early retirement benefits.

In charts 1-A and 1-B you can see that the benefits for "full service" employees, (employees hired at younger ages, 25 and 35, respectively) are greater in early years under the DC plan. However, as they approach age 65, the DB plan benefits are significantly higher, over 60% greater at age 65.

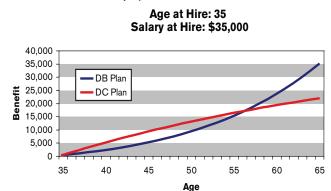
This is a critical point to consider for employers contemplating a DB plan freeze. Do you want to shift benefits dollars from your older employees to your younger employees?

Charts 2 and 3 show the benefits for mid- and late- career employees (employees hired at older ages, 45 and 55 respectively). For the mid-career employee, the DC plan is slightly larger for a few years and then the DB plan increases signifi-

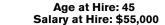
#### Chart 1-A: Full Service Employee

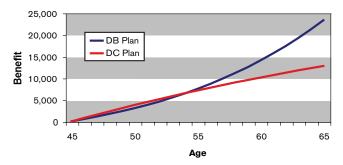


#### Chart 1-B: Full Service Employee

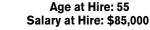


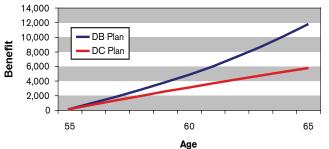
#### Chart 2: Mid-Career Employee





#### Chart 3: Late-Career Employee





#### Assumptions:

1. Defined benefit formula: 1% of final

average pay times years of service

- 2. Defined contribution plan: 4% of pay
- 3. Return on assets: 7%
- 4. Defined contribution plan account balance converted to an annuity payable at age 65 using 7% interest and the GAR2002 unisex mortality table.
- 5. Assumed increase in future salaries: 4.5% per year

## WILLIAM MOST

# WALKING THE LINE – FACTORS FOR EVALUATING POTENTIAL FREEZES OF DEFINED BENEFIT PLANS

## NOVEMBER 1, 2006

cantly as the employee approaches age 65. For the late-career employee, the DB plan is always greater, with the benefit at age 65 over twice as large.

# DEFINED CONTRIBUTION PLAN CHOICES

The impact of a freeze on employees also depends on the exact type of defined contribution replacement plan. Common options are:

401(k) match plans. These are the much-discussed employeefunded plans where companies make a matching contribution to the individual's account. What's often overlooked is the fact that employees who can't or don't contribute to their 401(k) plan receive no benefit. Many companies considering freezes say they will enhance their 401(k) match, but such a proposal is irrelevant for employees who opt out of contributions.

With the enactment of the PPA 2006, many employers will be looking at auto-enrollment to increase participation. Benefits include elimination of non-discrimination testing and the topheavy rule.

In order to guarantee that all employees receive a retirement benefit, companies instead can offer:

*Traditional profit-sharing plans* that allot a set percentage of pay—5%, 10%, whatever—into the employee's 401(k) account. At the discretion of the company, the amount can vary by year, depending on financial performance.

*Integrated profit-sharing plans* that allot a percentage of pay for all employees, plus another percentage of pay above the Social Security wage base. This integrates the company portion with the nation's Social Security system, which by design pays a greater percentage of pay to lower-paid workers.

Age-weighted profit-sharing plans that allot a different percentage of pay based on age, service, or job category to all workers. While such approaches require non-discrimination testing, these plans can effectively mitigate some but generally not all of the lost benefits for older employees. Another approach to reduce the impact of the transition from a DB to a DC plan is to provide a higher level of contributions to only a select group of employees (e.g. age 50 with 10 years of service) that were participants in the DB plan (sometimes referred to as transition credits.) Such plans may require non-discrimination testing.

*Money purchase plans* that resemble profit-sharing plans but the contributions are guaranteed. The prescribed, set contribution cannot vary at the employer's discretion.

Another increasingly popular option by employers is the concept of plan choice, which allows employees to select the type of plan in which they want to participate. Some companies even offer existing employees a one-time choice to either stay in the DB plan or switch to the DC plan/s. The former option is favored by older employees, while the latter is more attractive to younger (or upwardly mobile) employees.

# OTHER BENEFIT REPLACEMENT OPTIONS

Most overlooked in the discussion of frozen plans is that employers can redesign their defined benefit plan without entirely killing the pension plan approach. Current defined benefit accruals can be frozen and replaced with a new, scaled back DB formula – say, 1% of the standard average pay/service, versus the former 1.5%—as more affordable alternatives to DC plans. This approach will also serve to reduce the impact of the new FASB accounting rule (discussed below).

The replacement plan might be:

- *Final Average Pay*—sets the benefit based on an averaging period, typically 3-5 years, times percentage of pay and years of service.
- Career Average Pay—bases benefits on an average of all years' pay.
- Hybrid or cash balance—sets up hypothetical accounts which accrue benefits similarly to DC plans (and have the same look and feel of DC plans).

## **BIRD IN HAND**

Rather than going to a new DB plan design, employers may well take a second look at their existing benefit plans and address some of the possible exposures, including contribution volatility and expense volatility, or administrative burden.

One seemingly simple but powerful solution is for sponsors to contribute to the plan, even when contributions are not required. Employers can develop a funding strategy that prescribes a contribution determined as a level percentage of pay or a level dollar amount. These extra contributions will both increase a plan's funding percentage and decrease the pension expense. Naturally, if organizations had done this in the past—the 1990s come to mind— funding would be stronger today.

Another stabilizing approach is keener asset-liability matching that can calm plan expense volatility. This kind of matching defends against unpredictable interest rates, pension expense volatility, and other marketplace uncertainty. However, this will likely increase the long-term cost of the plan.

If an organization perceives that administrative requirements of pension plans are overly burdensome, sponsors may outsource that burden to an administrative services firm, as a growing number of employers have done recently.

# WALKING THE LINE – FACTORS FOR EVALUATING POTENTIAL FREEZES OF DEFINED BENEFIT PLANS

## NOVEMBER 1, 2006

# **ONE WAY OR ANOTHER**

As if juggling all these options and considerations weren't enough, it's also important to keep today's regulatory, legal, and investment environments in focus. This familiar litany includes:

New Pension accounting rules with the Financial Accounting Standards Board (FASB). Currently, companies report what's called the unfunded accumulated benefit obligation (ABO), or the minimum liability. ABO accounts for the pension liability as if the plan were frozen. The new rules prescribe accounting for the projected benefit obligation (PBO), or the liability assuming future salary increases.

*Pension funding reform* has recently been enacted that changes the method for determining the minimum required contribution for defined benefit plan. The changes include:

- Use of a modified yield curve for determining the plan's liability
- A single funding method for all plans
- Prescribed mortality assumption
- Limited asset smoothing
- Modified use of credit balances
- 7-year amortization of unfunded liabilities

Many employers are in the process of analyzing the impact of these changes on their plans

*Interest rate volatility* and uncertainty. Since the recession of 2001-2002, the discount rate—which dramatically impacts the fund liabilities—has dropped dramatically, but still remains somewhat unpredictable. Given that fact, it's relevant to note that since December 31, 2005, interest rates have risen almost 1%, which decreases pension obligations. Pension obligations are not necessarily reduced by using a yield curve.

*Conventional wisdom.* Infusing all the popular and media discussion lately is the worry that defined benefit plans are too expensive, that required contributions are unpredictable, and that plan administration is cumbersome. All this heightens the perception around plan freezes, "that everyone is doing it." Not surprisingly, CEOs and CFOs may see the issues differently than Human Resources leaders or even the company's institutional investment firm.

#### **OVERLOOKED FACETS**

Employers who go ahead with the freeze become responsible for managing funding, accounting, and investments in the defined contribution plan ... along with the old benefit plan. Unfunded liabilities don't go away just because the traditional plan is frozen.

Even if the long-term goal is to terminate the old DB plan, employers should proceed delicately. Such termination means employers must buy annuities (or offer lump sum payments) from insurance companies, perhaps at significantly higher cost than the liabilities held by the employer. Additionally, all employees must become 100% vested in their benefits. Thus, ending the plan may actually require a large cash outlay (sometimes, an unexpected expense) or, if the termination cost is too great, may require the maintenance of the frozen DB plan for a period of time.

WILLIAM MOST

Likewise, accounting for both DC and DB plans requires separate postures going forward. For the defined contribution plan, the expense equals the contribution. For the frozen DB plan, the accounting standard FAS87 still applies.

Managing the frozen plan investments also may require new thinking around the asset mix. If the goal is to terminate the plan, then the sponsor may want to rebalance the asset mix to reduce risk: Investing more in bond portfolios is one approach.

When implementing a plan freeze, companies should consider legal, employee communication, and plan termination strategy ramifications. Legally the freeze requires amendments to plan documents and notice to participants 60 days before the freeze date. If the plan is collectively bargained then the employer must negotiate with the union for the plan freeze. Most critical is employee communication, with employers explaining the implication of the changes to employees. Sensitivity is required.

After reviewing all these factors, one is left to consider the overarching impact of any such DB or DC changes on the firm's workforce. As the change takes affect, employee morale may shift, potentially resulting in retention and recruitment issues.

Hit hardest, long-term employees will not receive as generous retirement benefits as they anticipated and hopefully will hurry to invest in the new plan for as much time as they have before retirement. But maybe not. An unintended consequence of a plan freeze is that these employees—who might have been expecting a larger monthly pension, but now will get less—may actually work longer to further build that retirement kitty. By contrast, short-term employees may ultimately accumulate richer retirement investments.

However, there's no guarantee that any employee, from the mailroom on up, will soundly manage his own money, pick wise investments, or shepherd them over time. Whether a 401(k) or a profit sharing plan, studies have shown that employees on their own do a poor job of managing their investments. Further, some employees may simply not have, or be disciplined enough to save, the needed annual contributions—a problem not solved with company matching programs. To help alleviate the investment risk for employees, employers are looking into alternate investment options, such as "Target Funds," where the investment allocations are automatically adjusted based on a targeted retirement age.

# WALKING THE LINE - FACTORS FOR EVALUATING POTENTIAL FREEZES OF DEFINED BENEFIT PLANS

## NOVEMBER 1, 2006

Even if they successfully manage their investments before retiring, the management of the funds after retirement is even more difficult. Not only do employees have to worry about where to invest their money, they must also figure out how much of a distribution they can take each month. The big unknown in this equation is how long they will live. Even with careful planning, employees that outlive their life expectancy could exhaust their funds well before they die. Some employers are now looking into annuity options within DC plans to alleviate longevity risk.

Switching to DC plans may alleviate an employer's direct responsibility for paying their employees' retirement income, but it won't eliminate the need for retirement income. Some retirees are still going to need help. Government or taxpayers may ultimately have to pick up the responsibility. Society—through social service programs—will often take care of the needy, rescuing the bereft in their old age. Looking ahead, it's clear that more than defined contribution plans will be required as we move toward providing lifetime income programs.

William Most is a Principal and Consulting Actuary in the New York. office of Milliman. He has 25 years of pension and employee benefits consulting experience. Bill's areas of expertise include defined benefit plan funding issues, plan redesign, defined contribution plans, nonqualified plans, and defined benefit plan outsourcing. Bill's clients have included not-for-profit organizations, law firms, and corporations.