

New Retirement Plan Designs
for the 21st Century

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Abstract

The trend away from defined benefit (DB) pension plans to defined contribution (DC) plans has caused a significant shifting of investment and longevity risks from employers to employees. In addition, small employers have never embraced DB plans, due to their complexity and high administrative costs. As a result, most future retirees will have no DB plan and will bear significant investment and longevity risk through their DC plan benefits.

Currently, U.S. tax legislation militates against the sharing of these risks and encourages either employers or participants to bear both risks. While it may be argued whether employees or employers are better positioned to bear the investment risk, there are advantages to be gained by pooling longevity risk. Longevity risk is very predictable for large groups, but is a significant, unpredictable risk for individual retirees.

We present some ideas for new retirement plan designs that share one or both of these risks. These ideas are inspired by considerations of who may be better positioned to bear the risks and rewards, and a desire for more flexibility in how these risks are shared between employers and employees. As noted above, we think it makes sense to pool longevity risk. We also think investment risk may be more appropriately borne by higher income employees or employees who have a solid retirement foundation. Some of our ideas are possible under current tax legislation, while others would require relatively minor legislative changes. We also propose a multiemployer DB approach that small employers may find attractive.

1. Introduction

Congress added Section 401(k) to the Internal Revenue Code (IRC) in 1978, with little fanfare or notice. But that year may mark the beginning of the trend away from DB pension plans to DC plans. A more mobile workforce has embraced the portability of DC plan benefits, while employers view the liabilities associated with DB plans as too large and too volatile.

An aging workforce, declining interest rates and poor investment returns of the early 21st century have convinced many employers to terminate or freeze their DB plans. This reaction is not limited to companies in financially troubled industries. Continuing a trend that began in 1980, IBM recently announced the freezing of its DB plan. This announcement may signal the beginning of the end of the traditional DB plan as we know it today.

Small employers, in particular, see no advantage to maintaining a DB plan. Such plans are much more complex, both to administer and to communicate to employees. The administrative cost, on a per capita basis, can be much higher for a small DB plan than for a small DC plan. In addition, it is difficult for small employers to bear the longevity and investment risks in a DB plan. The swings in required annual employer contributions can be overwhelming for a small company with limited cash resources.

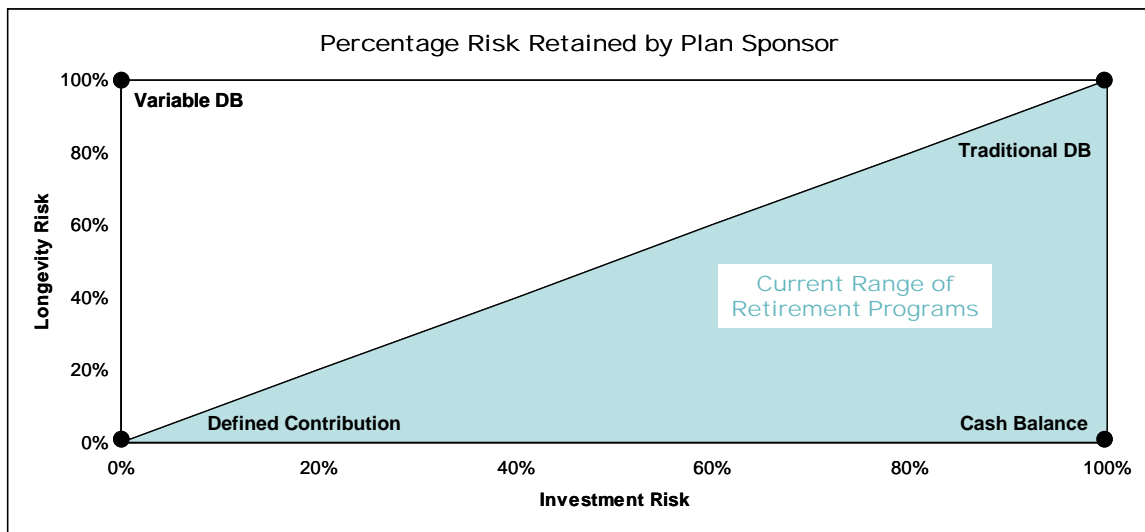
The result is that, currently, only 44 percent of the U.S. workforce is covered by a DB plan.¹ In the private sector, DB plan coverage is only 20 percent.² These percentages can be expected to shrink rapidly over the next decade, leaving most workers with no DB plan other than Social Security. Even the continued status of Social Security as a DB plan is not guaranteed.

What is troubling about this shift to a DC-dominated environment? Employees now bear the burden of risks that are difficult to manage as individuals. Both the longevity and investment risks are borne by the employer in a DB plan, and both are shifted to the employee in a DC plan. Employers who terminate or freeze their DB plans are aware of this shift, but employees are largely ignorant of it. Investment risk gained some attention during the Enron debacle. Longevity risk, however, is a difficult concept for most workers to grasp. It probably won't be appreciated fully until retirees with

¹ Craig Copeland, "Retirement Plan Participation and Retirees' Perception of Their Standard of Living," EBRI Issue Brief No. 289, January 2006.

² Jordan Pfuntner, "Percent of Private Industry Workers Participating in Retirement Plans, Selected Periods, 1990-2003," U.S. Department of Labor, Bureau of Labor Statistics, July 28, 2004.

primarily DC plan benefits begin outliving their retirement savings and are forced to rely almost entirely on governmental benefits like Social Security.



As shown in the chart above, traditional retirement programs place both types of risk on either the employer or the employee. By varying the relative weights of DB and DC plans, an employer can vary risk sharing anywhere along the line between traditional DB and DC plans. If 50 percent of the investment risk is shared, then 50 percent of the longevity risk is shared. Cash balance plans allow employers to shift the longevity risk to employees without shifting the investment risk, opening up combinations in the lower triangle of the graph above. The upper triangle, however, has been largely unexplored.

This concentration of risk is primarily a quirk of history, reinforced by our tax code. If employers design their plans in accordance with the tax code rules, they and their employees receive generous tax benefits. But the current demarcation between DB and DC plans in the tax code no longer functions well. The most common hybrid design, the cash balance plan, shifts the longevity risk to employees (assuming they elect the lump sum option) without shifting the investment risk. Can we design plans in which these risks are shared and in which the decisions of sharing investment and longevity risks are independent? Yes, a number of approaches are possible. Would new legislation be necessary to permit these approaches? Yes, for some approaches; but others can be adopted under current legislation.

Designing retirement plans that appeal to small employers is another challenge. Outside of sole proprietors and family businesses, DB plans have never been popular in this segment. Can we design a DB plan with simple, low-cost administration and with reduced cost volatility that would attract small employers? With appropriate enabling

legislation, we present one idea for a type of multiemployer DB plan that streamlines plan administration and allows risk pooling among unrelated employers.

Our paper outlines several retirement plan designs in which investment and longevity risks are shared between the employer and employees, including an alternative that would vary the proportion of risk shared based on income level. We also present a portability approach for DB plans. And, finally, we outline a multiemployer DB solution for small employers.

2. Cash Balance Design with Shared Investment Risk

A cash balance plan design is essentially a DB plan that is dressed up to look like a DC plan. It is easier to communicate to employees and, at least initially, appeared to receive greater appreciation from many employees than a traditional DB plan. By offering a lump sum at retirement, cash balance plans transferred the longevity risk from the employer to employees. However, depending on the interest crediting index, most, if not all, investment risk was retained by the employer. The interest crediting index has been confined to a few options due to issues related to current accrual rules and to regulations on lump sum benefit cashouts in DB plans. Ignoring these restrictions, cash balance plans could offer interest credits tied to a passive index (e.g., 50 percent S&P 500 plus 50 percent Lehman Aggregate). Employees could be offered a selection of different interest crediting indices, including some fixed interest crediting indices (e.g., 5 percent). Employers would still retain the investment risk, but could choose to match the employee-selected investments either wholly or in part, thereby reducing or eliminating the employer's investment risk. In fact, if no fixed interest option is offered and the employer chooses to completely match the employees' investment choices, the design essentially becomes a DC plan design. If, however, the employer believes the employees are investing too conservatively, a common observation of many DC plans, the employer could elect to invest more aggressively. Much like current cash balance plans, this approach would reduce the employer's cost, if the employer achieves better investment returns than employees' elections would produce.

We are aware of a couple of plans designed in this way that have been challenged in court. The challenges focus on the accrual and lump sum cashout rules mentioned above. We do not intend to comment on the legal issues in those cases, but believe from a public policy perspective that this type of design has value.

3. DB/DC Hybrid Design with Shared Investment Risk

This hybrid plan design would provide a DB benefit on compensation up to a predetermined level (e.g., 70 percent of the Social Security wage base). For compensation above that level, the employer would provide a DC benefit. Legislative changes would be necessary to permit this design because current laws would not allow a DC plan to ignore compensation below a set level. This approach, however, contemplates a single plan with both DB and DC elements, so that in the aggregate no compensation is excluded.

This hybrid design provides longevity and investment risk protection for low- and middle-income employees, while high-income employees bear investment risk only on the DC accounts. By indexing the compensation level at which the DC benefit begins, workers are automatically protected against preretirement inflation risk if the plan provides a benefit based on final average pay.

Upon retirement, the DB and DC portions would be combined into one annuitized benefit. As with traditional DB plans, the employer would bear the investment and longevity risk on the annuities. Alternatively, the plan could allow the DC portion to be cashed out or rolled over at termination of employment. While this option would reduce the participant's investment and longevity risk protection, only higher-paid participants who are better positioned to bear the risks would have a DC portion with the cashout option.

Instead of transferring both the investment and longevity risks to employees for benefits on pay above a certain level, it may be more desirable to transfer just the investment risk. For a relatively large group, the longevity risk is very predictable while it is very unpredictable for the individual. Under this approach, the plan would provide a traditional defined benefit on pay up to a specified level (e.g., 70 percent of the Social Security wage base) and a variable defined benefit on pay above that level. In the variable DB plan, investment performance is passed through to the participant by affecting the benefit level. Benefit units are earned much like a traditional career average pension plan. The value of those units, however, depends on investment performance, with the unit value increasing when investment performance exceeds a "hurdle rate" and decreasing when it falls short of the "hurdle rate." Upon retirement, the traditional DB portion of the plan would pay a fixed annuity and the variable DB portion would pay a variable annuity continuing the sharing of investment risk. To allow the participant to manage the investment risk, the variable portion of the plan could permit participant selection of the investments on which the variable benefit is based, like Mercer's Retirement Shares Plan.

Alternatively, instead of a variable DB plan or a DC plan, a cash balance plan could be used for the benefit on pay exceeding the specified threshold. Under this approach, the longevity risk for the cash balance benefit would be transferred to the participant and the investment risk would remain with the plan sponsor.

4. DC Design with Shared Investment Risk

This DC plan design would look much like a traditional profit sharing plan. However, the investment risk would be shared. The employer would bear the investment risk on the participants' DC plan accounts up to a predetermined level, with investment risks and rewards shared with employees above that level.

Let's assume the employer guarantees an "n" percent annual rate of return. If the actual rate of return exceeded "n" percent, the participant accounts would be credited with "n" percent plus half of the excess over "n" percent. The difference between the actual rate and the credited rate would be allocated to an employer reserve account within the plan, to be used to wholly or partially satisfy the guarantee in future years when returns are less than "n" percent. If the reserve account is not sufficient to fund the guaranteed amount, the employer would contribute the amount necessary to satisfy the guarantee.

The guarantee level must be determined in the context of the employer's investment allocation decision. If the employer desires to make the guarantee feature cost-neutral, then the guarantee level must be set below the expected mean return of the investment portfolio, because the returns exceeding the guarantee level are shared with the participants.

In order for the employer to meet the guarantee requirements, it would exercise full control over investment of plan assets. In most cases, investment direction would be through the use of professional investment managers.

Through rollovers to an individual retirement account (IRA) or another employer plan, or through cashouts of small balances, the DC accounts would be portable for employees who terminate before retirement. However, terminated employees who cash out or who roll their accounts would lose the employer's investment and longevity risk guarantees.

Prohibiting cashouts of larger balances protects the plan from adverse selection, which would increase the employer's longevity risk. Larger balances would be

annuitized, thereby protecting retirees from outliving their retirement savings. The annuities could be purchased by the plan from an insurance company. Alternatively, the employer could bear all of the longevity risk. The employer essentially would replace the insurer and contribute more to the plan if retirees live longer than expected. Or the longevity risk could be shared by the employer and the retirees through a reduction in the annuitized benefits if extreme departures from expected mortality occur.

The employer contribution allocations to satisfy the investment guarantee would be based on participants' account balances and not on compensation levels. Accordingly, the allocation formula would not satisfy any of the "safe harbors" in the current tax laws for demonstrating that it does not discriminate in favor of highly compensated employees (HCEs). Under current law, such allocations would have to be tested to show that they are nondiscriminatory. If they would be discriminatory, then allocations to HCEs would need to be reduced to a nondiscriminatory level in order to maintain the plan's tax-qualified status.

A change in the current laws governing nondiscriminatory contributions would be needed to avoid such testing requirements. Additionally, the maintenance of an employer reserve account within the plan does not fit within the current legal framework for DC plans and would probably require a legislative change.

5. Portability Approach for DB Plans

One of the issues raised against DB plans is the lack of portability. As the workforce has become more mobile, the traditional DB plan design that rewards long-service employees has become less attractive. Currently, employers can offer terminating employees a lump sum benefit that can be rolled into an IRA or another employer plan. However, the lifetime benefit characteristics are lost if the benefit is transferred. To retain those characteristics, either the benefit must be maintained in the existing plan or an annuity must be purchased.

To accommodate a more mobile workforce, direct DB plan to DB plan transfers could be managed without altering the cost or risk characteristics of either the transferring plan or the accepting plan. To accomplish this transfer, the transferring plan would transfer assets equal in value to the current liability attributable to the participant. The accepting plan would calculate a service credit under that plan's benefit formula such that the value of the assets transferred equals the projected unit credit (PUC) accrued liability attributable to the new participant. The PUC accrued liability

would be calculated using the interest and mortality assumptions used in the transferring plan's current liability calculation.

Depending on the types of DB formulas in the transferring and accepting plans, the participant might experience a reduction in their accrued benefit to facilitate this transfer. However, the participant would retain the leveraging of future salary increases on prior service if the accepting plan has a final average pay formula. This type of plan-to-plan transfer is relatively straightforward for variable DB plans with the same "hurdle rate." In this situation, the benefit units in one variable plan can be transferred to the other plan with no adjustment. In a variable DB plan, liabilities can always be valued using the "hurdle rate" as the discount rate because investment performance above or below the "hurdle rate" is passed through to the benefit. If the plans have different "hurdle rates," an adjustment to the benefit credits would need to be made based on the present values computed at each "hurdle rate."

6. DB Solutions for Small Employers

Small employers could be encouraged to enter the DB plan arena if plan administration were simple and inexpensive, and if contribution volatility were substantially reduced. Our solution would be a multiemployer DB plan sponsored by an investment or consulting firm, which would handle all plan administration and management of plan assets.

For simplicity, and to reduce administration costs, the plan would offer a very basic benefit design, e.g., a percentage of final average pay times years of service or a career average formula. Each participating employer would select the percentage that would apply to its employees, and would also select among a choice of vesting schedules. Eligible compensation definitions would be limited to one of the IRC Section 414(s) safe harbors. Or the sponsoring firm may further limit choice of eligible compensation to make administration easier.

We contemplate a multiemployer plan approach so that the employers could pool their investment and longevity risks. Pooling reduces the contribution volatility for the employers, giving them the benefit of large plan experience. Under current law, multiemployer plans must be maintained pursuant to one or more collective bargaining agreements, so legislative changes would be needed to permit unrelated employers to pool these risks without union involvement.

The sponsoring company would obtain a determination letter demonstrating the plan's qualified status from the Internal Revenue Service (IRS). Adopting employers would file an abbreviated registration form with the IRS. Thereafter, the sponsoring company would prepare and file the necessary IRS, Department of Labor (DOL), and Pension Benefit Guaranty Corporation (PBGC) disclosures, thereby relieving employers of these tasks.

The sponsoring company would administer the plan, invest and manage the assets, prepare the necessary government filings, calculate and pay benefits, and perform all necessary nondiscrimination tests. It would also calculate cost and liability disclosures for the employers' financial statements. Employers would contract with the sponsoring company to join the plan and receive these services, and would be able to terminate the contract and move to another sponsoring company or switch to self-administration. Contract termination would be in accordance with the contract terms, which could include limitations on termination (e.g., only at least three years following initiation). Withdrawal liability for employers who terminate their contracts would be determined similarly to current rules for multiemployer plans.

To attract employers as customers, sponsoring companies could offer continuation administration as an option. For a higher annual administration charge during the term of the contract, the sponsoring company would continue to administer the plan (with no further benefit accruals) for an employer who experiences bankruptcy. The contract would provide for continuation administration only for bankruptcies that occur after a substantial number of years following contract initiation.

7. Conclusion

The ideas we present in this paper represent just a few of the approaches that are possible for sharing investment and longevity risks between employers and employees. These ideas are not radical departures from current plan designs, but most require minor legislative changes to occur. Congress has been slow to permit more flexible plan designs, and the IRS has been unwilling to encourage departures from the legislatively approved standards. Some of the restrictions can be attributed to the discontinuity between rules designed for traditional DB and DC plans. Faced with the decline of the traditional DB plan and the legal uncertainty of cash balance plans, perhaps Congress will be ready to entertain some new solutions that better fit the needs of employers, the workforce and taxpayers.