

# Defined Benefit Pension Plans

## Creating Value for Employees and Employers

Once the cornerstone of private retirement security, defined benefit pension plans today face a number of severe challenges. They include complex funding rules, significant investment and interest rate risks, and looming accounting changes that will increase balance sheet volatility. Many employers question the need for pension plans with unfunded liabilities, and employees appear to prefer the portability, control, and transparency offered by 401(k) or comparable defined contribution plans. Since 1985 the number of defined benefit plans insured by the U.S. Pension Benefit Guaranty Corporation (PBGC) has declined from 114,500 to less than 32,000.

*By Donald E. Fuerst*

Despite the challenges and declining numbers, defined benefit pension plans can create value for employers and employees by providing the same benefit for a lesser cost than could otherwise be obtained or a greater benefit for the same cost. Employer-sponsored health and life insurance plans, for example, create value by pooling risk and purchasing power. Benefits are provided to all employees (many of whom may be uninsurable on an individual basis) at a lower cost than if individuals purchased the insurance. Pension plans have similar characteristics, but these features are often overlooked because of the deferred nature of the benefits.

Defined benefit pension plans can also create value directly for the employer, lowering overall employment costs and increasing workforce productivity. Pension contributions, which are allocated primarily to those employees who stay with the organization, encourage continued employment, thus lowering turnover costs and helping to retain intellectual capital. Moreover, well-designed defined benefit plans can overcome perceived shortcomings of pensions.



### **Bulls and Bears**

A successful retirement has always required a source of steady, dependable income to meet retirement needs and a source of capital to meet unexpected or unusual expenses. The traditional analogy for retirement security is “a three-legged stool” – social security, employer pension plans, and individual savings. The first two legs of the stool supply the steady income, while individual savings meets the need for capital and supplements the income. As social security gradually erodes and employer pension plans diminish, more pressure is placed on individual savings.

Americans now retire earlier, live longer, and use more medical care than any previous generation – all of which increases the financial resources necessary to assure a secure retirement. Yet individual savings are falling, and many workers contribute minimal amounts to their 401(k) plans. Social security, which was not designed to provide full retirement benefits, is less able to meet retirement income needs. Although many workers are well prepared for retirement, others are unlikely to be able to meet their retirement needs.

Defined benefit plans, most of which were established in the 1950s and '60s, are a key component of retirement security for 44 million Americans. Providing retirement income to long-term employees on a tax-effective basis, pensions helped organizations retain employees, provide workers a graceful transition to retirement, and lower direct compensation and

taxes. In some cases, corporate motives were paternalistic, helping employees save for retirement when they had few resources to do so on their own.

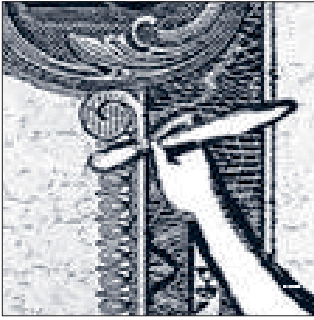
The retirement landscape changed dramatically with the passage of the Revenue Act of 1978, adding Section 401(k) to the Internal Revenue Code. When regulations were issued in 1981, employers quickly added matching 401(k) plans to their portfolio of benefits. During the bull market of the 1990s, many employees believed their 401(k) plan would provide a luxurious retirement at an early age. At the same time, pension plan assets grew significantly, and financial executives grew accustomed to “holidays” from pension funding.

The bear market early in this decade quickly changed these perceptions. Employees now face the prospect of working longer before their 401(k) plans can provide a comfortable retirement, and executives confront sharply higher contributions and expenses for their defined benefit plans.

Some companies have responded by freezing or eliminating pension plans and placing more emphasis on defined contribution plans through higher contributions and more incentives for employee savings. This approach has two shortcomings. First, despite significant incentives and the availability of tax-favored vehicles such as IRAs and 401(k)s, the savings rate of Americans has declined sharply over the past 15 years. Data show that the growth of assets in these plans is due more to a transfer of savings from after-tax accounts to pre-tax accounts than to a rise in net savings. Moreover, these retirement accounts tend to benefit those who can most afford to save (or transfer savings) and provide less benefit to lower-paid employees who often fail to participate at significant rates.

A second weakness is that employer contributions to defined contribution plans primarily transfer value from the employer to the employee. This places all the investment risk and longevity risk on the employee and does not generally create additional value.





## Creating Value

Pension plans create value by pooling both longevity and investment risk and by reducing expenses. Pooling longevity risk creates value in two ways, one rather easy to recognize and the other more subtle. First, consider how long an individual will need retirement income. If your retirement fund is adequate to last the average life expectancy, you stand a fifty-fifty chance of outliving your assets. These are not odds most people would choose for such a critical issue. But how much more is really enough? If you are satisfied with 2 to 1 odds that you will not outlive your assets, you will need approximately 11 percent more assets; 4 to 1 odds would need about 20 percent more; and 10 to 1, at least 26 percent more.

On the other hand, an employer-sponsored pension plan that covers thousands of employees can pool the longevity risk and fund for the average life expectancy with a high level of confidence that the funds will be sufficient. The value created by such plans ranges from 10 percent to 25 percent.

Second, pooling longevity risk in a pension plan allows a plan to fund benefits more effectively, even for a specific number of years. A pension plan will have some participants who die well before the average life expectancy and some who die much later. The benefits saved (not paid) to those who die early are invested and earn income that is used to pay the benefits to the participants who live longer.

This infrequently appreciated fact is evident when one examines the typical lump sum payment from a pension plan. A pension benefit of \$1,000 per month at age 65 converted to a lump sum would be about \$141,500 (determined at 5 percent, the current 30-year Treasury rate). If this amount is invested at 5 percent (ignoring all transaction costs), how long will it last? Approximately 17.5 years. But the average life expectancy (male/female blended) is about 19.5 years. In other words, the lump sum at the same investment rate will only last about 90 percent of the life expectancy.

## Investment Pooling

Investment pooling creates value in several ways:

- **Liquidity.** A retiree who needs a monthly income must keep some funds in liquid form, perhaps cash or money market instruments, thus lowering investment income. An employer-sponsored pension plan needs a much smaller percentage of funds in liquid form due to the mix of active and retired participants and the inflow of ongoing employer contributions.
- **Professional management.** Most defined contribution plans rely on the individual to make investment decisions. Employer-sponsored pension plans generally have a team of investment professionals making all decisions.
- **Asset allocation.** Individuals, particularly as they near retirement, tend to invest conservatively lest they lose their primary retirement assets.
- **Expense reduction.** Employer-sponsored plans are investing millions, often billions, of dollars compared to the thousands of dollars that individuals invest. Both transaction costs and investment management costs are significantly lower for employer plans.

Consider the factors above together, and it is easy to understand why the typical pension plan return exceeds the typical 401(k) return by 100 to 200 basis points and sometimes much more.

A simple way to combine the longevity and investment pooling effects is to look to the dozens of financial websites and software tools that help individuals plan for retirement. Most recommend that a retiree accumulate invested assets of 15 to 20 times the amount of annual income needed. But an employer-sponsored pension plan invested only in risk-free Treasury securities would only need 12 times the annual benefit. If the employer is willing to take equity risk and invest in a

diversified portfolio that might earn 8 percent, the requirement drops to only 9.4 times the annual benefit. In other words, an employer-sponsored pension plan invested in a diversified portfolio earning 8 percent over the long term can provide an annual benefit for about one half of what it would take the individual to fund the same benefit.

Pension plans also deliver more consistent benefits to employees. Participants who lack the knowledge, skill or simply the luck to be good investors are not disadvantaged in a pension plan and can plan on a level of retirement income that is not subject to the vagaries of the investment markets. Defined contribution plans, on the other hand, produce a large dispersion of benefits based on the investment choices of individuals.



### Why Critics Object

Despite the significant value creation of pension plans, there are many serious objections that critics of defined benefit plans raise, some real and some perceived:

*Volatile contribution requirements.* This is usually the result of making only minimum required contributions and investing in equities. Contribution requirements can be stabilized by using one of two solutions: higher contributions that create a cushion for contribution requirements or investing primarily in fixed income. The trade-offs here are obvious. Higher contributions require more cash in the pension plan rather than keeping the cash accessible to the employer. On the other hand, higher cash contributions may actually lower the long-term cost of the plan if plan assets experience a higher tax-adjusted return than the marginal use of cash within the organization (or if the return is higher than the marginal cost of borrowing for the employer). Fixed-income investments are likely to lower the long-term return of plan assets, thus raising the cost but generally reducing volatility.

*Volatile expense levels.* Current accounting methods allow many techniques to smooth volatile expenses. Potential accounting changes – for example, mark-to-market valuation of assets and liabilities – may reduce or eliminate this flexibility. Should this happen, the alternatives would probably be changing investment policy to match assets with liabilities, or living with volatile expense levels.

*Unfunded liabilities.* These can be minimized by better funding policies, plan design, and investment policies. Employers that fund plans at the absolute minimum should not be surprised when unfunded liabilities develop.

*Pension plans cost too much.* After years of funding holidays, many executives apparently thought there were no costs to a pension plan. Today, they know better. Pension plans have a significant cost. Providing a secure retirement is an expensive proposition whether it is done by the individual or through a pension plan. But as demonstrated above, the cost can be up to 50 percent less in a defined benefit pension plan. Those who believe that defined contribution plans cost less may fail to recognize that they also deliver much less retirement income.

*PBGC premiums.* This cost should be kept in perspective. If the plan is well funded, the premium is only \$19 per person. Higher variable premiums can be avoided by funding the plan well.

*Lack of portability.* Complete portability, which is usually the way a defined contribution plan works once a participant is vested, implies that people are indifferent to staying with or leaving an employer. Employers who want to lower turnover should view the lack of portability of a pension plan as an advantage.

*No early access to funds.* More than 60 percent of early distributions from qualified plans are not rolled over to other retirement vehicles. Pension plans that retain funds until retirement accomplish their goal much better than plans with early distribution.

*Complex administration.* For some plans, this is a valid complaint, but one that can be addressed by simpler plan design. Straightforward plan design can both simplify administration and enhance employee appreciation.

*Lack of understanding and appreciation.* The typical defined contribution plan provides quarterly print statements and online access to account balances so that employees can view and perhaps reallocate their account balances daily. The typical pension plan gives a once-per-year estimate of the benefit payable at age 65. Is it any wonder that most employees know more about their defined contribution plan? Defined benefit pension plans need to move into the Internet age and provide frequent and easy access to benefit accruals and projections.

## **Public Policy**

Employer-sponsored pension plans provide an important and stabilizing portion of retirement security. By creating value through the pooling of risks, they lower the cost of economic security in retirement, thus lessening the stress on both social security and individual savings. Incentives to establish and support these plans benefit our entire economy.

Policy and statutory changes that could help employers manage contribution, legal, and regulation risks associated with defined benefit plans include:

- Modifying funding rules for defined benefit plans to allow employers to contribute and deduct more in good years, which would produce asset cushions for bad years.
- Evaluating changes in the current “Rube Goldberg” funding regime based on their contribution to improving funding stability and predictability.
- Resolving open legal uncertainties relating to defined benefit plans – for example, the validity of “cash balance” and other hybrid plans.

- Reviewing all current Employee Retirement Income Security Act and tax qualification rules to identify requirements that can be simplified without sacrificing underlying policy objectives.
- Modifying existing laws and regulations to level the playing field between 401(k) plans and defined benefit plans – for example, allowing workers approaching retirement to receive “partial or phased retirement” distributions (exempt from 10 percent early distribution tax) while they are still working for their employer.
- Excluding from taxable income a portion – for example, 50 percent up to a specified dollar amount – of the annual distributions under a lifetime annuity option in a defined benefit plan.

In today's competitive labor market, most, if not all, employers need a competitive 401(k) or comparable plan. But relying on such a plan as the sole retirement vehicle will be expensive and inefficient for employers who want to encourage lower turnover, facilitate retirement of older workers, and create value for their employees. Employers who balance the two retirement plans well will see lower overall employment costs and a more productive work force. Well-designed and -communicated defined benefit pension plans can create value and promote lower overall employment costs.

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