Dear Actuary:

Milliman

We've seen headlines in the news about companies initiating pension buyout transactions, in some cases on multiple occasions. Should public plans consider annuity purchases?
– Curious in Canton

Dear Curious:

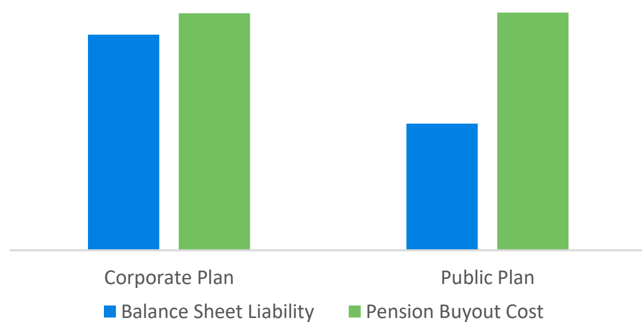
Your observation is on point! The number of corporate pension plans in the United States has shrunk over the years and, of those that remain, many have looked to de-risk through annuity placements or other pension risk management (PRM) strategies. With this shift to PRM, public plan sponsors may be looking for similar types of strategies. But do they make sense?

First, what is a *pension buyout*? A pension buyout is the transfer of liability from the plan to an insurance company for all or a portion of the pension plan population. The plan sponsor selects the population and requests bids or quotes from insurance companies in the market, and then pays a premium to the insurance company in exchange for the insurance company guaranteeing to make all future pension payments to the selected population. A pension buyout is often referred to as an annuity purchase because the plan is buying (purchasing) guaranteed monthly pension payments (annuities) from an insurance company.

One of the biggest factors that drives the cost of pension buyouts is the interest rate environment. Interest rates and pension buyout prices go in opposite directions. In other words, the lower the interest rate, the higher the cost of the buyout, and vice versa. For corporate pension plans, the pension plan's balance sheet liability is based on pretty much the same interest rates that drive pension buyout prices. This means that pension buyout prices are in the same ballpark as the balance sheet liability. So doing a pension buyout for some portion of the pension population can be attractive to corporate plan sponsors because they can achieve a fair premium cost relative to their balance sheet liability.

For public plans, this is usually a very different story. Most public plans measure their liability using the investment return that the plan's assets are expected to earn over the long term. Most public plan interest rate assumptions range anywhere from 6% to 8%. However, the interest rates that insurance companies are currently using to price pension buyouts are really low, in the neighborhood of 2% to 3% or even lower! As a result, the cost of pension buyout for a public plan is likely to be significantly higher than the plan's liability. See Figure 1.

FIGURE 1: LIABILITY VERSUS COST



There are also other factors besides interest rate differences to look at, such as plan provisions and mortality assumptions, that may result in higher pension buyout costs for public plans than for corporate plans. Many public plans have provisions that insurance companies would consider to be complicated, such as employee contributions or cost of living adjustments, so they might charge more for a buyout to cover the cost of administering the complexity. Public plans may also have mortality assumptions that differ from the mortality tables that insurance companies use for calculating a buyout cost. Insurers typically use the most up-to-date mortality tables that are used by corporate pension plans, whereas public plans may be using older or public plan-specific mortality tables, which could result in different assumptions on life expectancy for pension plan members.

All in all, in today's interest rate environment, a pension buyout is likely not very cost-advantageous to public plan sponsors, but there may be other popular de-risking strategies to consider. So what strategies can a public plan sponsor consider to manage pension risk?

While a pension buyout may not be attractive, a "buy-in" may be. Under a buyout, the liability is completely removed from the plan and transferred to an insurer. On the other hand, in a buy-in, the plan sponsor keeps the liability in the plan, but is reimbursed by the insurance company for the pension benefits that are paid each month.

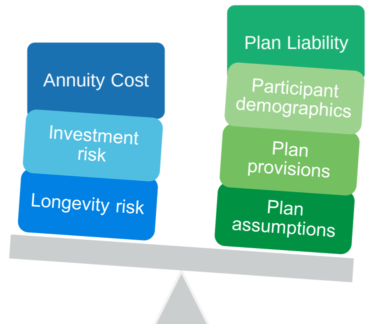
Investment risk (that is, the risk that investment returns will be less than expected) and longevity risk (that is, the risk that members will live longer than expected) are two important types of risk that public pension plans face. Both risks can be transferred through a pension buy-in from the pension plan to an insurance company. See Figure 2.

FIGURE 2: RISK TRANSFER

So would a buy-in strategy work for a public plan sponsor?

The cost of a pension buy-in depends on several factors—insurer interest rates, the demographic profile of the plan members, the complexity of the plan provisions, the mortality table, and other actuarial assumptions, to name a few. Both the immediate and long-term impact should be considered before determining whether a buy-in strategy would be beneficial. However, managing pension risk is an area that is gaining popularity, especially in light of market volatility and other factors that have been contributing to pension costs. See Figure 3.

FIGURE 3: BALANCING ACT



In summary, there are many factors to consider when weighing the cost versus the overall benefit of a pension buyout or buy-in strategy. With the proper analysis, a pension risk management strategy may be able to provide public pension plan sponsors with ways to manage risk within the pension plan.

Your Milliman Actuary

P.S. Thanks so much to Mary Leong, EA for providing technical assistance and some helpful visuals.

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Do you have a question about your defined benefit pension plan? Write to us at dear.actuary@milliman.com.