What is your funded status goal?

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ISSUE:
Given the number of funded status measures that can be calculated for a pension plan, there is often confusion on the question “What is my funded status goal?” or “What funded level should we be pursuing?” We believe this confusion makes it more difficult for plan sponsors and investment committees to make the funding and investment policy decisions that are essential to effectively managing a pension plan.

RESPONSE:
Given the magnitude of the differences in the dollar value of various liability measures, we believe it is critical that plan sponsors take a close look at these measures and decide which are relevant in light of the ultimate goals for their plans. Further, we believe it is best practice for plan sponsors to document the specific liability measures they are targeting, along with the economic rationales for the measures they choose.

We believe that having a clearly justified and documented funded status goal will make other plan-management decisions much easier. These include plan sponsor decisions about funding policy and investment committee decisions about how to manage plan assets – both while pursuing the goal, and after the goal has been reached.

This paper helps make the case for including a funded status goal alongside the plan’s benefit, contribution and investment policies. It also discusses a few examples of economic rationales for choosing one funded status goal over another, and why the goal may be very different for different types of plans.
Background

What is the measure of the liability on which I should base my funded status goal?

With the many measures and purposes of funded status, it is important that plan sponsors clearly articulate which measures they will use to set their goals.

An initial funded status goal might be for the plan to be funded on an ABO basis, meaning that plan assets would be sufficient to cover liabilities, were the plan to be terminated immediately. The economic rationale for this goal would be the ability to fund all benefits accrued to date, the elimination of Pension Benefit Guaranty Corporation (PBGC) variable rate premiums, or to limit the minimum required contribution to the plan’s normal cost.1

Plans that are not fully frozen to all future accruals (open or closed pension plans where some or all active participants accrue benefits) might have a higher funded status goal, because additional benefits are expected to accrue to active participants in the plan. For open or closed plans that are still accruing benefits, future benefit accruals will need to be funded by either contributions or growing assets above 100% of ABO.

Exhibit 1: Funded status goal - Accumulated benefit obligation (ABO)

The next funded status goal might be to fund to a PBO level. Being fully funded to this level would have all the benefits of being funded on an ABO basis, along with having prefunded benefit accruals due to future salary increases. Being 100% PBO funded would also have the additional benefit of being able to report, on the corporate financial statements, that the plan is fully funded. Again, for plans with ongoing benefit accruals related to future credited service (typically open and closed pension plans), this will not eliminate the sponsor making future contributions or rule out the taking of investment risk to grow assets to keep pace with growing liabilities.

Exhibit 2: Funded status goal - Projected benefit obligation (PBO)

Exhibit 3: Key terms and definitions

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<th>TERM</th>
<th>DEFINITION</th>
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<td>Liability measure</td>
<td>A present value of estimated future benefits payments to the plan’s participants. The future benefits payments are typically set out as a series of expected annual cash flows and are discounted by use of a yield curve, typically one comprised of high-quality corporate bonds.2</td>
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<td>Accumulated benefit obligation (ABO)</td>
<td>A measure of the plan’s liability, based on the assumption that the plan is to be terminated immediately. The estimated future benefit payments are based on salary and credited service as of the date of valuation.</td>
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<td>Projected benefit obligation (PBO)</td>
<td>A measure of the plan’s liability based on credited service to the valuation date, assuming future compensation increases beyond the valuation date. This value is most commonly seen in a company’s year-end accounting statements. For non-pay-based pension plans (and for frozen pension plans with no future accruals), PBO would typically be equal to ABO.</td>
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<td>Service cost (SC)</td>
<td>The increase in plan liability due to service credited during the valuation year.</td>
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<td>Present value of future benefits (PVFB)²</td>
<td>The sum of the plan’s PBO and the present value of future service costs. This liability includes both the impact of future compensation increases and expected future years of service (based on demographic assumptions such as those for employment termination, retirement, disability, mortality). Stated another way, this is the present value of all benefits current plan participants are expected to earn.</td>
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<td>Economic or “buyout” liability (EL)</td>
<td>Having a value of assets in the plan sufficient to settle all, or substantially all, liabilities via a risk transfer. These liabilities could be settled through either a lump-sum program or the purchase of annuities for plan participants, or, typically, by a combination of both. This value is typically higher than the value of liabilities mentioned above, especially when purchasing annuities.</td>
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FROZEN PENSION PLANS

In a frozen pension plan, the ABO, PBO and PVFB will typically be equal. In a closed pension plan, the PVFB will be greater than the PBO due to its inclusion of all expected future service costs. However, the PVFB and the PBO will converge over time as the future service costs come to be reflected in the PBO.

Farther along the funded status spectrum would be a plan that is to be fully funded on a PVFB basis. It is at this level that a pension plan has not only covered the benefits already earned to date; it has even covered all benefits they will ever be earned for current participants. It is at this point that a closed plan sponsor could reasonably think that they would never have to contribute again, since all liabilities (both past and future) for current participants have been funded. An open plan, however, still has additional participants that will enter the plan, which will grow PVFB further. So, even being 100% funded on a PVFB for an open plan does not mean that future contributions will not be required.

Exhibit 4: Funded status goal - Present value of future benefits (PVFB)

Funding to the level of being able to settle all liabilities via risk transfer would be the final funded status goal. It is commonly stated (though this varies from time to time) that before a pension plan can be completely terminated, it might need to be funded at 110% to 115% of liability measures calculated using financial reporting assumptions. The reason these extra assets are needed for a risk transfer, especially an annuity purchase, is that an insurance company would typically revalue the liabilities so as to include a margin of safety (an improved mortality table, or a more conservative investment policy), as well as to cover their own management expenses and assure the profit necessary to running a business. This level of funding would surely be the limit to any funded status goal; it would be hard to make a case for additional assets’ being of benefit to the organization.

Exhibit 5: Funded status goal - Economic or “buyout” liability (EL)
What keeps me from wanting to be even more funded?

Corporate defined benefit pension plans have some unique issues with regard to their economics and management, which may cause them to be managed differently than other pools of assets. One of these issues is known as “trapped capital.” Trapped capital refers to assets in the pension plan in excess of those needed to meet pension liabilities (typically known as surplus). Plan sponsors have limited ability to utilize their surplus. This is because the plan’s entire surplus does not revert to the sponsor upon a plan termination. Companies can create a realistic policy to overfund on a PBO basis. One obvious use of that surplus, relative to PBO, is to have it “pay” or “fund” the year-to-year accruals of service cost. It is more difficult to create an argument for overfunding on a PVFB basis, because the company has a decreased ability to recapture that surplus and use it within the company. Generally, any surplus upon plan termination, or any surplus after all liabilities have been satisfied, is taxed at the company’s corporate tax rate and with an additional excise tax of 50% before it reverts to the corporation. An exception exists, if the excess assets are contributed to a qualified replacement plan.

How does the funded policy goal interact with major policies of the pension plan?

We believe that having a clearly articulated funded status goal based on a clearly articulated economic rationale will make it easier for plan sponsors and investment committees to make the other policy decisions that are essential to effective management of a pension plan.

That said, the specific actions that a plan sponsor might undertake as funded status goals are being approached or reached will differ depending on the sponsor’s ultimate goals for the pension plan.

Interaction with the benefits policy – though it is unlikely that the benefits policy will be influenced by the funded status goal, the opposite will surely be the case. The higher the level of benefits provided and the stronger the sponsor’s commitment to those benefits the higher the funded status goal is likely to be. Plan’s that are open and ongoing to new benefits, and are committed to that policy, may consider setting their funded status goal to 100% of PVFB but those that are unsure of their future benefits policy may consider setting a lower target such as PBO (or perhaps somewhere in between PBO and PVFB).

Interaction with the funding policy – A plan sponsor needs to articulate the level of contributions they are willing to make to increase the funded status toward its funded status goal. It is likely that plans that are less well funded would need a very strict funding policy and that funding flexibility would increase with increased funded status.

Interaction with the investment policy – Once a funded status goal and investment policy has been determined, the final step would be to decide on the current asset allocation. Then the plan should decide on what the asset allocation policy should by as the plan approaches its funded status goal and, ultimately, what the end-game asset allocation should look like once the funded status has been achieved. A common change to the investment policy based on funded status was the subject of “Liability-responsive asset allocation” (Collie, Gannon 2009). This paper outlines a de-risking glide path approach where as a plan approaches their funded status goal they are reducing the allocation to higher volatility growth assets and increasing the allocation to liability hedging asset strategies. Effectively they are transition the asset allocation from one that is centered on return, to grow funded status, to one that is center around controlling risk, to maintain funded status.
Appendix

Exhibit 6: Additional definitions and uses of common liability measures

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<td>Funding target (FT)</td>
<td>A measure of the plan’s liability, based on the assumption that the plan is terminated immediately. The estimated future benefit payments are based on employee salary and service as of the date of valuation. The expected benefit payments for the FT are calculated similarly to those of the ABO (however, calculation may differ slightly due to the permitted use of different demographic assumptions). The FT liability is valued by use of the yield curve as defined by PPA and amended under MAP-21. This yield curve is segmented into three parts and is a 24-month average of the yield on high-quality corporate bonds, but not outside a corridor placed around a 25-year average of those same bonds. Certain elections allow for the use of a yield curve averaged only over the period of one month. The value of this liability is the basis for determining a plan’s minimum required contribution, eligibility for benefit restrictions, and designation of “at-risk” status. A similar measure that includes the impact of future compensation increases is used for calculating the maximum deductible contribution.</td>
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<td>PBGC premium funding target (premium FT)</td>
<td>The same as the FT, except that only vested benefits are included, and the yield curve is not constrained by the corridor around the 25-year average of yields on high-quality corporate bonds. The value of this liability is the basis for determining the PBGC variable rate premium.</td>
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Exhibit 7: What short-term thresholds related to funded status would create intermediate funded status goals?

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<td>Avoid benefit limitations</td>
<td>A plan may be subject to benefit limitations if the adjusted funding target attainment percentage (AFTAP) is less than certain thresholds. AFTAP is defined as the FT minus credit balance amounts, divided by the actuarial value of assets (AVA). If the benefits that a plan can pay in form of a lump sum distribution (or other accelerated form of payment) are limited if the AFTAP is between 60% and 80%, and these forms are prohibited if the AFTAP is less than 60%. Further, amendments to improve past benefits must not become effective if the AFTAP is between 60% and 80%, and benefit accruals must cease if the AFTAP is less than 60%.</td>
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<tr>
<td>Avoid “at-risk” status</td>
<td>A plan is determined to be at risk if it fails to pass both tests for “at-risk” status. Test 1 is failed if the FTAP, from the prior year, is less than 80%, and Test 2 is failed if the plan’s FTAP, determined by use of a special set of “at-risk assumptions,” is less than 70%. FTAP is defined as the FT minus the credit balance divided by the AVA. A plan that is determined to be at risk must value its liabilities by use of the mandated set of “at-risk assumptions,” possibly increasing the required contributions.</td>
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<tr>
<td>Avoid PBGC variable rate premiums</td>
<td>A plan whose premium FT is greater than its market value of assets as of the valuation date will owe a premium to the PBGC. This premium is equal to 1.4% of difference between the premium FT and the market value of assets for 2014. This amount is scheduled to increase to 2.3% in 2015, 2.8% in 2016, and beyond that point it will be indexed by wage base. Plans looking to avoid having to pay the PBGC premium will need to have a market value of assets in excess of the premium funding target.</td>
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<tr>
<td>Avoid a required pension contribution</td>
<td>A plan would avoid a minimum required contribution if its AVA is in excess of its FT liability minus credit balance amounts plus FT normal cost. However, the requirement to make a contribution could be avoided even if the plan was not funded to this level, if the credit balances are sufficient to cover any resulting minimum required contribution amount.</td>
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1 I am comparing the liability calculated for ABO to that calculated to arrive at the minimum required contribution and the PBGC variable rate premium, in that all three liabilities are computed on a plan-termination basis (i.e., no projection of service or compensation). However, both measures differ from ABO in that a different discount rate (smoothed) is used to determine the liability for minimum required contributions and the liability for the PBGC variable rate premiums. Furthermore, non-vested benefits are excluded from the PBGC variable rate premium calculation.

2 The liability measures listed in this section are considered "market-based" liability measures. Meaning they are valued by use of a yield curve comprised of high-quality corporate bonds as of the valuation date, as opposed to a yield curve "smoothed" over a period of time to reduce the volatility of the liability measure. Common "non–market based" liability measures are listed in the Appendix. For instance, accumulated benefit obligation (ABO) and funding target (FT) liability are designed to value the same level of benefits, but will have different values due to use of different interest rate methodologies and possibly different demographic assumptions. So when I mention that being funded on an ABO level would typically eliminate the minimum required contribution, I really mean the equivalent ABO-like measure. My desire is not to be lost in the technical details of the various liability measures, but to give an idea of what the various liability measures mean when more components are added. Some of these details are mentioned in the Appendix or in other of these endnotes.

3 The PVFB is often not a well known value of plan liability because it is not required to be calculated and disclosed on corporate financial statements or common filings such as the Schedule SB to the Form 5500. However, this amount should be able to be calculated by the plan’s actuary during their valuation process.

4 The actual percentage is beyond the scope of this paper however, it is typically higher that the liability stated on the corporate financial statements due to the insurance company using actuarial assumptions that reflects a more complete underwriting process than typical standard actuarial assumptions. Examples of differing assumptions would be a mortality table more reflective of the plan population or retirement assumptions reflective of the early retirement factors and incentives of the plan population.

5 Prescribed by Section 4980 of the Internal Revenue Code.

6 The AFTAP calculation also includes the value of annuities purchased within the last two years for non–highly compensated employees. This value is included in both the assets and liabilities parts of the calculation.

7 However, an amendment to improve past benefits can be made for a plan that is between 60% and 80% funded if the value is immediately funded.

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