International News

May 2013 – Issue 59

Zorast Wadia, FSA, FCA, EA, MAAA, is a principle and consulting actuary with the New York office of Milliman. He can be reached at zorast.wadia@ milliman.com.

Funded Status Measurements for U.S. Pensions

By Zorast Wadia

My mother recently received an annual funding notice from her former employer. That's the notice that U.S. defined benefit plan sponsors are required to send out each year to participants. The U.S. Department of Labor created it with the goal of informing plan participants about the general financial health of their pension plan by disclosing a measure of the plan's "funded status." Mom read the lengthy notice, tried to digest it, and then went on to ask her son, the pension actuary, a few questions. Her initials questions were fairly routine, and I was able to answer them quickly to her satisfaction. Finally, she asked me "So, son, what is the real funded status of my pension plan?" while emphasizing the word "real." I hesitated to give her the knee-jerk reaction that many actuaries may have done. Instead, I thought, perhaps her question could not be answered so quickly. Mom deserved a more thoughtful response.

I wasn't surprised by mom's question. Many plan participants and plan sponsors probably experience similar thoughts as they struggle to decipher all the numbers. It gets to a core problem of the annual funding notice—it offers too much information!

This information is hard to understand, counterintuitive, or ostensibly in internal conflict with other information presented in the same document. Several different measures of the pension plan's funded status are presented. And although one would logically think that information would be presented as of one snapshot date, the funding notice provides funded status details for multiple dates. It's no wonder there is no definitive answer to the question of what is the real funded status of the plan.

A plan's funded status is generally based on a comparison of plan assets and plan liabilities. Because several different ways can be used to measure a plan's asset and liability value, we end up with many types of funded status measurements applicable for U.S. pension plans. Understanding their definitions and what they are meant to represent is a key to understanding how "healthy" or "unhealthy" a pension plan is. This article offers a description of several types of funded status measurements and their applications under the rules mandated by the U.S. Internal Revenue Service (IRS) to fund private employer sponsored defined benefit pension plans.

Before getting into the various IRS funded status measurements, it is necessary to provide information on their three main components: (1) assets, (2) liabilities, and (3) credit balances.

ASSET MEASUREMENTS

The market value of pension plan assets is a snapshot value of a plan's financial balance sheet assets as of a particular measurement date. Under IRS funding rules, the market value of assets is allowed to reflect amounts receivable and payable for a particular plan year. Plan contributions for a given plan year can be deposited as long as 8½ months after the end of that plan year. Therefore, a plan's market value of assets determination can be subject to change during the plan year and not be made final until the plan's final cash contribution deadline has passed.

The market value of assets for a pension plan is subject to the behavior of the financial markets and therefore exhibits investment volatility. As a compromise, the IRS rules permit the use of a valuation method that smoothes the volatility over a selected period of time. The value is referred to as the actuarial value of assets. This measure, while also subject to investment volatility, is based on an averaged market asset value over a period as long as 24 months. The more data points used in the average, the smoother the asset measure will theoretically be. Some plan sponsors choose to use the actuarial value of assets to be their basis for measuring their plan asset value for IRS funding purposes. The actuarial value of assets is based on the market value of assets measure and is also allowed to reflect receivables and payables. However, the actuarial value of assets may not be less than 90 percent nor greater than 110 percent of the market value of assets. This last condition is somewhat of a reality check and meant to not allow a plan's actuarial value of assets to stray too far from its real market value.

LIABILITY MEASUREMENTS

The liability measure, or "funding target" as it is referred to under IRS funding rules for a pension plan, is defined as the actuarial present value of accrued benefits based on current pay and service data as of a valuation date. The funding target ignores future increases in salary or service beyond the valuation date. It is generally the measure of a plan's liability based on standard actuarial assumptions, but may at times reflect more conservative actuarial assumptions based on a plan's funded status. But wait, that's getting a little ahead of myself, so I'll return to this point later. The Pension Protection Act of 2006 (PPA) is the governing U.S. pension law and mandates the funding method for measuring plan liabilities and also, with some limited exceptions, mandates the mortality assumptions to be used. However, the specific interest rate method to be used to compute the funding target is dependent on the plan sponsor's election.

Interest rate assumptions are derived from monthly U.S. corporate bond yield curves, published by the IRS. The funding target may be based on the full (spot-rate) yield curve for the month prior to a plan's valuation date, or it may be based on 24-month averaged segmented interest rates. The 24-month averaged segmented interest rates come in the form of three interest rate time segments, which are meant to represent a simplified alternative compared to using all the interest rate time segments in an entire yield curve. Furthermore, under the 24-month averaged segment rate election, a plan sponsor can choose the interest rate basis up to four months prior to a plan's valuation date. The election of which interest rate method to choose is generally motivated by a plan sponsor's funding and investment policy.

CREDIT BALANCE MEASUREMENTS

A credit balance is generated when a plan sponsor funds the plan more generously than is required by the IRS funding rules. For example, a plan sponsor may want to fund a plan beyond minimum IRS-required levels to bolster the funded status of a plan and/or enjoy a higher a corporate tax deduction. (Pension plan contributions are deductible to the U.S. employer and reduce the company's profit, which is subject to U.S. corporate income tax.) The excess funding results in the creation of a credit balance that may be used to offset future IRS minimum contribution requirements. Credit balances under IRS funding rules come in two forms: a carryover balance and a prefunding balance.

The carryover balance is the name designated for the credit balance that existed prior to the passage of PPA, while the prefunding balance is the name designated for the credit balance created since the passage of PPA. Some ground rules apply. Carryover balances must be used before prefunding balances can be used,

"... it is easy to see how a plan participant or nonpension expert can be confused or unsure about a plan's true funded status."

and a plan sponsor can choose whether or not to create additional prefunding balance in the future based on any potential excess contributions over minimum requirements. There are also times when a plan sponsor may choose or be required to forfeit a portion of a credit balance.

Funded Status Measurements

Several funding status measurements can possibly be derived from reading an annual funding notice. Each of the following funded status measurements involves comparing a plan's asset measure to its liability measure, and often the comparison is made with and without respect to the inclusion of credit balances. Exactly which components are used within a particular funded status measurement is quite important. The various permutations on funded status measurements that exist can make this subject a little complicated and somewhat burdensome to explain to the nonpension practitioner.

MEASUREMENT NUMBER 1: ACTUARIAL VALUE OF ASSETS COMPARED TO THE FUNDING TARGET

These results appear on the first page of the funding notice and are shown for the last three years. If a plan's actuarial value of assets is greater than or equal to a plan's target liability, the plan is generally considered well funded and free of potential benefit restrictions. Depending on their nature, benefit restrictions may limit distribution options, benefit improvements, or benefit accruals. If a plan's actuarial value of assets is less than the target liability, then things start to get a little more complicated, and this often leads to a more refined measure of the plan's funded status.

MEASUREMENT NUMBER 2: ACTUARIAL VALUE OF ASSETS REDUCED BY THE CREDIT BALANCES COMPARED TO THE FUNDING TARGET

This funded status measurement is shown on the funding notice and often results in a highly skewed funding measure, depending on the size of a plan's total credit balance. A plan may be only slightly underfunded when comparing just the actuarial value of assets with the target liability, but may be greatly underfunded when one subtracts credit balances from the asset value. This key measurement often determines whether a plan faces benefit restrictions. This measure may also determine whether a plan will need to make minimum funding contributions on an accelerated basis in the following year. Lastly, it can also have a great impact on the calculation of the amortization cost or credit component of the minimum funding requirement.

MEASUREMENT NUMBER 3: THE ACTUARIAL VALUE OF ASSETS REDUCED BY THE PREFUNDING BALANCE COMPARED TO THE FUNDING TARGET

While the result of this funded status calculation may not directly appear on the annual funding notice, depending on whether a plan's carryover balance is nonzero, it is still quite significant. If a plan's actuarial value of assets offset for the prefunding balance is not at least 80 percent of the funding target, a plan is not allowed to use any of its credit balance, no matter how large it is, to offset contribution requirements in the upcoming year. Situations may arise where a well-funded plan is not allowed to use its credit balance or in some cases even has to forfeit its credit balance depending on this funded status measurement.

MEASUREMENT NUMBER 4: THE MARKET VALUE OF ASSETS COMPARED TO THE FUNDING TARGET

These relative components are noted on page 2 of the annual funding notice. If participants decided to compute their ratios, they may find them to be in stark contrast to the funded status measurements shown on the first page of the annual funding notice. That is because the measurement on page 2 is based on more recent asset and liability measurements (12 months later than the values shown on page 1). Furthermore, the market value of assets and liability measurements do not reflect any actuarial averaging. The market value is a snapshot measurement, and the liability is based on snapshot spot rates similar to valuing the target liability on a full yield curve approach compared to 24-month averaged segment interest rates. The comparison of the market value of assets to the funding target based on the current spot rates may perhaps give the most current picture of how well funded a pension plan is. This measure is going to be the most volatile because by definition it changes year to year depending on the plan's investment experience and the prevailing corporate bond interest rate environment.

The above four measurements can differ greatly from plan to plan, depending on individual circumstances and a plan sponsor's interest rate and asset valuation method. In addition, there is no requirement to reflect or not reflect receivable plan contributions in the plan's current market value of assets that appears on page 2 of the annual funding notice. Furthermore, depending on the results of some of the above funded status measurements where the funding target was based on standard funding assumptions, the annual funding notice may also disclose a plan's funding target based on more conservative funding assumptions known as an "at-risk" funding target. The at-risk liability measure has the potential to introduce more permutations of funded status measurements.

But that's not all. For very eager pension plan participants who look forward to reading about their plans in their companies annual financial statements, they will find even more funded status measurements. These measurements could include a comparison of the plan's market value of assets excluding all receivables to the projected benefit obligation on a U.S. Generally Accepted Accounting Principles (GAAP) basis. The projected benefit obligation is a liability measure that would reflect current service and *projected* pay. The projected pay component could render this measurement completely different from a liability measure based on the present value of accrued benefits such as the funding target measure mandated by the IRS. Moreover, the interest rate basis for determining the funded status for employer accounting requirements on a U.S. GAAP basis is based on a spot-rate basis without respect to any interest rate averaging or smoothing. This can result in a plan simultaneously showing a well-funded ratio on the annual funding notice while showing a large funding deficit on its employer's financial statement balance sheet.

Yet another funded status measurement that may be available to a plan participant within an employer's financial statement is the required U.S. GAAP accounting results for the pension plan itself. For this measurement, the plan's market value of assets may reflect receivable contributions. Here the plan's liability measure is based on an interest rate equal to the expected rate of return on plan assets. Therefore, a plan that is more aggressively invested in equities may be permitted to use a higher interest rate assumption to determine its liability. The resulting measurement may provide an overly optimistic funded ratio compared to its PPA or U.S. GAAP balance sheet counterpart measurements. I suppose one takeaway here is that the annual funding notice is not the only participant disclosure that may contain conflicting or obscure funded status measurements; financial statements have been doing so since the beginning of time!

In conclusion, based on the bevy of funded status measurements that exist for a pension plan, it is easy to see how a plan participant or nonpension expert can be confused or unsure about a plan's true funded status. Focusing back on mom's quandary about the "real" funded status of a pension plan, the answer is simply that there is not a single measure that can generally be cited and equated to the overall health of a pension plan. Instead, it is important to understand what components are being used in a funded status measurement and what implications a particular funded status measurement may have for plan participants. It may also be instructive to look at the various applicable funded status measurements of a pension plan before coming to an opinion on the overall funded status. Moreover, it makes a significant difference whether one is viewing a pension plan under the lens of an ongoing plan or that of a plan with the potential to terminate; the assumptions used for either of those determinations are vastly different. Thus, the resulting funding status determinations will be quite apart as well.

Mom's pension plan turned out to be decently funded with no imminent concerns of having benefit restrictions. Having learned this and also having a better understanding of the content thanks to our discussion, mom was no longer feeling so bad about the funding notice. Well, that was until I gave her a final thought regarding the new format of the annual funding notice she could expect to be receiving next year.

Last June, President Obama signed the Moving Ahead for Progress in the 21st Century Act (MAP-21), which brought about some much needed funding relief for plan sponsors. If plan participants were confused by the various funded status measurements in the annual funding notice in the past, they had better hang on to their seats, because next year's funding notice will be even more challenging. That's because of the reflection of the additional funded status measurements under MAP-21. MAP-21 may have brought about pension funding relief, but there is no relief in terms of understanding what is conveyed in participant notice requirements! Hopefully, the IRS will provide some guidance on exactly which funded status measurements are necessary for disclosure in this new participant notice, which is due to be sent to plan participants by Apr. 30 for calendar year plans. A word of advice: less is more. And, mom, you can call me anytime. □