MAP-21 and De-risking Considerations

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MAP-21

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law last year on July 7. Its intention was to bring about temporary contribution funding relief for sponsors of single- and multiple-employer defined benefit plans. Until MAP-21, the low interest rates that have dominated U.S. markets for the last four consecutive years were resulting in escalating plan liabilities. Plan assets, in spite of having above-expected returns in three out of the last four years, simply could not keep up with rising liabilities without the need for higher sponsor contributions. MAP-21 allowed the interest rates used to determine minimum required plan contributions to be based upon a 25-year average interest rate, subject to an interest rate corridor, instead of a two-year average.

In 2012, the MAP-21 segment interest rates were 5.54%, 6.85%, and 7.52%. The three interest rates are used to discount a plan's expected benefit payments based on the various time periods in which they occur. For example, the first segment interest rate applies to discount payments during the first five years, the second rate applies to discount payments during the next 15 years, and the third applies to discount payments beyond 20 years. The resulting sum of those discounted expected benefit payments forms the plan's liability measure. Before reflection of MAP-21, a typical plan using a four-month interest rate look-back period would have had to measure plan liabilities based on segment interest rates of 2.06%, 5.25%, and 6.32%. Using the second segment interest rate as a proxy for the amount of interest rate relief granted, we see that MAP-21 resulted in an interest rate increase of 160 basis points. This could translate into a 20% to 25% reduction in plan liabilities, depending on a plan's duration.

The interest rate corridor around the 25-year average under MAP-21 in 2012 was 10%. This corridor is set to expand by 5% in each subsequent year until reaching a 30% interest rate corridor in 2016. Therefore, the interest rate relief brought about by using a longer averaging period to include the higher interest rates that existed during the 1980s is designed to gradually wear off each subsequent year. This translates into temporary contribution funding relief for plan sponsors. In fact, plan sponsors should expect higher contributions each subsequent year under MAP-21. This is due to both the widening of the interest rate corridor and the nature of the moving average interest rate calculation.

The 2013 MAP-21 interest rates based on a 15% corridor are 4.94%, 6.15%, and 6.76%. Comparing the second segment interest from 2012 to 2013, we see an interest rate drop of 70 basis points. This could imply a liability increase of 9% to 12% over 2012 liabilities, based on interest rate movements alone. Based on data collected from the 2013 Milliman Pension Funding Study for the top 100 U.S.-based pensions with the largest asset sizes, the average rate of return during 2012 was 11.7%. In spite of strong asset performance during 2012, the funded status for many plans in 2013 will worsen compared to 2012. This will result in higher required plan contributions compared to 2012 requirements. The lower funded status can also have benefit restriction implications for some plans.

Besides provisions for interest rate stabilization, MAP-21 also contained provisions that would shore up funding for the Pension Benefit Guaranty Corporation (PBGC) by way of higher insurance premiums. This legislation calls for increases in both the flat rate premium (a dollar amount multiplied by the plan's participant count) and the variable rate premium (a percentage multiplied by the plan's underfunding amount, taken in multiples of $1,000). The flat rate premium changed from $35 in 2012 to $42 in 2013. It is scheduled to increase to $49 in 2014 and be further adjusted by an index tied to inflation stating in 2015. The variable rate premium in 2012 and 2013 is $9 for every $1,000 of unfunded vested benefits. The $9 amount will increase to $13 in 2014 and $18 in 2015. It will also be subject to further increases based on an inflation index similar to the flat rate premium. The only item of relief starting in 2013 is that the variable rate premium is subject to a limitation of $400 per participant. These increases wouldn't be so ominous if plans were allowed to use the MAP-21 interest rate basis to determine PBGC plan liabilities. But that would be wishful thinking. PBGC plan liabilities are not permitted to reflect the MAP-21 interest rate relief; they must be based on pre-MAP-21 interest rates.

De-risking

So given the passage of MAP-21, how are plan sponsors responding? A key buzzword prevalent throughout 2012 and continuing into 2013 is "de-risking." Many plan sponsors want to de-risk their pension plans but this is easier said than done. For sponsors to properly de-risk, they have to understand the risks that are out there and which ones in particular are affecting their pension plans. Next, plan sponsors must understand and become comfortable with their own risk tolerance positions. That is, which risks they are comfortable taking versus which risks they are not willing to entertain given an adverse circumstance. Once a risk tolerance level is set, the goal of the de-risking exercise becomes clear—make changes to the

Continued on page 6

pension plan in such a manner as to bring the level of the plan's risk exposure within the plan sponsor's desired tolerance range. Once this didactic approach is followed, the question no longer becomes should a plan sponsor de-risk, but rather, when should they de-risk.

Given the high sensitivity of plan liabilities to interest rate movements, some plan sponsors have focused on the asset side of the balance sheet. Many asset- liability studies have been conducted since the inception of the Pension Protection Act of 2006. A fairly common outcome is recommendations to plan sponsors to move more investments toward fixed income and away from equity classes. While this measure is driven by risk reduction, it is also flawed in that it serves to lock in a plan's funded status. If a plan is underfunded, a shift toward fixed income essentially means that the plan sponsor must make even larger plan contributions.

Some plan sponsors are considering cash-borrowing strategies to fully fund their pension plans and then move into all fixed income investments. Borrowing strategies during a low interest rate environment may have their appeal, but it essentially comes down to how a company views its corporate debt versus its pension debt. Companies have to go through this internal accounting exercise before deciding whether it makes sense to borrow cash to fully fund their plans. It is also important to note that full funding in this sense really means on a pre-MAP-21 basis. Then only will a plan no longer have to pay variable rate PBGC premiums, which would amount to a cost savings. Also, once fully funded, it is important to lock in that fully funded status. That is where a liability-driven investment strategy comes into play; an asset strategy that is designed to mimic liability movements. The downside to this strategy, besides the borrowing costs, is that plan sponsors are taking themselves out of the market. Should interest rates rise, plan sponsors will miss out on the improvements in funded status and the associated lower required costs to fund their plans. Let's not forget one of the original appeals of a defined benefit plan: the possibility for investment earnings to lower sponsor benefit costs.

Another de-risking move that has gained some momentum since MAP-21 passed involves extending lump sum distribution offers to terminated vested participants. This move is motivated by the potential to reduce the size of the pension plan. A smaller plan will be subject to lower PBGC premiums and less subject to longevity risk associated with the participants who are no longer in the plan. It is also motivated by the current declining interest rate environment. The interest rate basis to determine lump sum options is generally known prior to the plan year in which the distributions occur. After observing how interest rates were falling throughout most of 2012, many plan sponsors decided to offer participants lump sum windows (essentially a limited one-time take it or leave it opportunity) during the final quarter of 2012. The 2012 lump sum payouts would be based on higher 2011 interest rates and thus be lower than they would have been had the lump sum payout occurred in the following year.

While this transaction ostensibly seemed to generate a cost savings, the mathematics behind the transaction proves that it is quite the opposite. Given the higher 25-year average interest rates under MAP-21, the liability that pension plans are carrying for participants is lower than what the lump sum calculation would amount to based on current interest rates. Thus, pension plans end up releasing more assets than liabilities during a lump sum window and this in turn lowers their funded status. A lower funded status implies higher contributions, at least in the short term. There is also the opportunity cost of greater than expected investment earnings, which a plan is forgoing by releasing assets. Moreover, because lump sum offers are optional, a plan sponsor opens itself up to anti-selection and thus may end up taking on greater mortality risk in the future, not to mention greater interest rate risk.

Given the historic low interest rate environment that we are all experiencing, any de-risking measure that involves defeasance of plan liabilities is likely to have an increased price tag associated with it. Yet some of the largest U.S. pension plans, such as Ford and General Motors, have engaged in this activity. There could be some compelling business reasons to de-risk in spite of having to pay higher short-term costs. For companies such as General Motors, which have unfunded pension liabilities close to their market capitalization levels, reducing the size of the pension plan is a necessary step to maintain a viable business operation.

Still, other large pension plans that have taken steps to curb certain risks within their desired tolerance ranges may choose to forge ahead without taking any steps to reduce their plan sizes. Companies that haven't extended the duration of their fixed income portfolio or moved more towards fixed income investments are likely to have taken up equity tail-risk hedging strategies. Their plan sponsors want to still be active in the market but don't want to experience another "black swan" event at the same time, based on past lessons learned. Yet other plan sponsors may be interested in strategies to hedge the interest rate risk present in their U.S. GAAP accounting liabilities, because no relief similar to MAP-21 is present in that space.

Whether plan sponsors are presently de-risking or planning to do so in the future, many realize that the funding relief brought about by MAP-21 is only temporary. Beyond 2013, the widening corridor and slow-moving average of the MAP-21 interest rates will lead to convergence with the pre-MAP-21 interest rates. The bad but generally expected news for plan sponsors is that contribution levels will again rise to levels before interest rate relief was granted. The bit of good news from this eventual interest rate convergence is the notion of less interest rate volatility in 2014 and future years.

The impact of current interest rates is greatly muted under MAP-21. Thus, future interest rates and required contribution levels are more predictable. That is why many plan sponsors since the onset of MAP-21 have had multiyear contribution projection studies performed. The purpose of these studies is to understand the level contribution amount needed to smooth out contribution requirements over several years instead of dealing with the contribution spikes inherent with MAP-21 minimum requirements. Given the unknowns ahead, it is more important than ever before for pension actuaries to provide both technical MAP-21 assistance and risk management support to plan sponsors to guide them in their management of pension plans. The actuary must be a trusted business advisor to the plan sponsor and live up to his or her qualifications as a true risk expert.

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