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Lump Sum and Risk Transfer: Why Defined Benefit Plan Sponsors Should Consider Risk Transfer as Early as 2012

By Sean Brennan

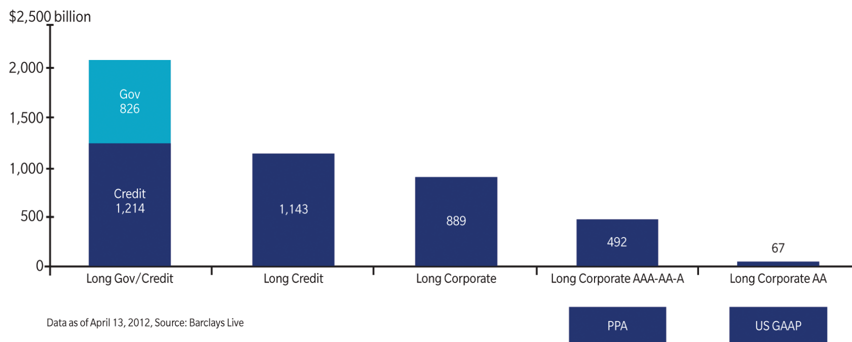
MARKET CONTEXT

The past six months have illustrated that the inflationary pressures have yet to materialize into upward pressure on interest rates. Market turmoil–including uncertainty around the European debt crisis, the lackluster recovery in the U.S. followed by the downgrade of U.S. debt and the increasing duration of the Federal Reserve's balance sheet–has kept long-maturity interest rates historically low and suggests that there is no near-term end in sight to the low-rate environment. U.S. pension liability values for funding, accounting and annuity purchase purposes are not directly linked to Treasury rates, but are generally valued based on high investment-grade corporate bond yields. While Treasury yields declined in the second half of 2011, the overall negative economic outlook had the effect of widening corporate spreads. The end result was an overall decline in corporate rates, although by an amount less than the decline in Treasury yields. The impact for pension plans included pension discount rates that were starkly lower at the end of the year than before the U.S. downgrade, which resulted in further erosion of funded status and increased required cash contributions for 2012 and 2013.

Sean Brennan, ASA, EA, MAAA, is a principal in Mercer's New York office. He can be reached at *Sean.Brennan@mercer.com.*

Of course, the decline in Treasury and corporate bond yields drove up bond values as well as pension liabilities. The most commonly used benchmarks for pension plans experienced returns during the same time ranging from 4% (Barclays Capital Aggregate Bond Benchmark) to as high as 13% (Barclays Capital Long Government/ Credit Bond Benchmark).

Supply becomes a more acute issue as you target a progressively closer hedge to PPA and US GAPP curves
Market Value ($ billions)



U.S. CORPORATE BOND MARKET VIEWS

Historically, the relationship credit yields have maintained with Treasury rates of similar maturity has been relatively consistent outside of highly volatile market downturns and recoveries. If this pattern were to continue, the prevailing view on U.S. Treasury yields would lead us to conclude that credit yields would rise to a similar degree. Recent headlines in the pension industry have reflected the commitments of several sponsors of large pension plans to acquire liability-like bond portfolios. These sponsors have indicated publicly that as their plans' funded statuses improve, they expect to reduce their investment risk by selling equities and buying bonds.

As a result, we see two primary reasons why a more optimistic outlook for long corporate benchmarks (and hence, a pessimistic outlook for liabilities) may be appropriate than for U.S. Treasury portfolios:

- Credit spreads are currently carrying a higher yield by 140 bps–250 bps than Treasuries, which will help avert declining values due to rising rates.
- Due to the limited issuance of long corporate debt, the trend toward de-risking for DB plan sponsors may offset, partially or completely, the inflationary pressures on corporate yields.

Supply becomes a more acute issue as you target a progressively closer hedge to PPA and U.S. GAAP curves

To provide some context, defined benefit plan assets for nonpublic plans totaled roughly $2.2 trillion[1] at year-end 2010. A shift in asset allocation of only 20% of those assets from equity into fixed income would match the total amount available in the Barclays Capital Long Corporate AAA-AA-A benchmark shown at left. The increased demand in corporate bonds will make it harder for some plans and insurers to build their ideal "lowest risk" bond portfolios. That additional risk will be borne by plan sponsors either directly, if they maintain the liabilities on the balance sheet, or indirectly through increased costs for annuity purchases.

> "The ability to look back to more favorable interest rates alone may not compel plan sponsors to pay out lump sums during 2012."

WHY LUMP SUMS MAY PROVIDE AN ARBITRAGE OPPORTUNITY

Effective from the beginning of a plan's 2012 plan year, corporate bond yields have been fully phased in as the basis for minimum participant lump-sum calculations under Section 417(e) of the Internal Revenue Code. For plans that do not currently allow for a lump-sum option to certain participants, many are considering amending their plan to allow TVs to take their benefit immediately as a lump sum. When the plan is amended for this purpose, plan sponsors have some flexibility in the interest-rate basis they elect to use in the calculation of lump-sum amounts at the time they amend the plan to allow for lump sums. As shown in the chart to the right, there are two elements of the lumpsum interest-rate basis plan sponsors can elect.

As mentioned earlier, the sharp decline in corporate bond yields began during August 2011. As a result, plan sponsors electing to use a five-month lookback, that is, relying on the average corporate bond yields during July 2011, will likely use higher interest rates for determining lump sums than were used to determine the accounting liability at year-end accounting disclosure. The result would see plan sponsors settling liabilities through lump-sum cashouts at amounts less than what was held on the balance sheet at year-end for these same participants, and that is also less than the economic value of the liability at today's rates.

The ability to look back to more favorable interest rates alone may not compel plan sponsors to pay out lump sums during 2012. If a plan sponsor expects corporate bond yields to rise to a yield higher than those during July 2011, then it may be prudent to opt to do nothing. This is where the investment considerations should not be ignored. The potential arbitrage opportunity depends on which assets are liquidated in order to pay lump sums.

The typical plan sponsor holds approximately 30%–40% fixed income, and that portion of the portfolio should have had positive returns since July 2011, although it may have underperformed the mark-to-market plan liabilities. Paying lump sums out of fixed income assets now would essentially negate the liability returns during the reference period, while capitalizing the fixed income returns before rising yields could

Lookback Period		Stability Period			
Plan sponsors can choose to "look back" to discount rates up to 5 months prior to the beginning of the stability period. Once set, elections can be changed but lump sums are subject to a "better of" formula for 1 year following any change.		The stability period determines the frequency of updating lump-sum interest rates; plan sponsors can choose among monthly, quarterly and annual stability periods. Once set, elections can be changed but lump sums are subject to a "better of" formula for 1 year following any change.			
Q3	Q4	Q1	Q2	Q3	Q4

erode those losses. This is the equivalent of "selling high and buying lower." A reasonable reaction to this approach may be to ask, "If we sell fixed income to de-risk, how is there any risk reduction?" In many cases, this will actually still result in reduced risk for plan sponsors, in addition to being a savvy investment move. Liquidating fixed income assets to pay lump sums could result in as much as a 3% –15%[2] reduction in the funded status volatility (measured in dollars), depending on the characteristics of the fixed income assets used. Additionally, plan sponsors will save on Pension Benefit Guaranty Corporation premiums, administrative expenses and potentially other costs.

OTHER CONSIDERATIONS

Thus far, we have only discussed investment-related reasons, but there are other reasons for plan sponsors to act immediately. The Society of Actuaries recently developed and proposed a new mortality table to be used as the standard table for U.S. actuarial valuations, which assume longer expected lifetimes for both males and females. If adopted as anticipated by the IRS, the enhanced tables could add 2%–4% to TV liabilities as early as 2014. This would increase lump-sum costs for this population or result in increased contribution requirements if lump sums are not offered, thus providing more incentive to plan sponsors to consider a cashout ahead of the change in standards.

CONCLUSION

The decision on if and when sponsors should pay lump sums, and out of what assets, involves many considerations in this discussion but which are important to

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take into account. These considerations include participant security, plan administration, data quality, legal issues and overall logistics of executing the lump-sum offering. The appropriateness of an investment- and risk-management strategy in the plan, both before and after lump sums are paid, requires detailed analysis and will vary by plan sponsor. However, for plan sponsors looking to reduce risk, we feel that the factors outlined above suggest that sponsors may benefit from considering risk-transfer opportunities much sooner than they may have anticipated.

About the Author

Sean Brennan is a Principal in Mercer's New York office and is a member of Mercer's Financial Strategy Group. He is responsible for strategic asset allocation/risk budgeting, asset/liability modeling, funding, accounting policy, and risk transfer diagnostics for domestic and multinational corporate clients seeking integrated financial risk management advice for their pension plans.

Recently, Sean has worked with large plans to implement dynamic de-risking strategies, including detailed analyses of the following components: identifying and planning for target funding and risk appetite, building an investment glide path based on funded status and/or interest rate triggers while incorporating liability settlements, and selection of custom liability fixed income managers. In addition, his responsibilities include monitoring investment performance, funded status monitoring/attribution, risk budgeting monitoring for defined benefit plans and portfolio structure.

Sean holds a BA in mathematics and political science from Emory University. He is an Associate of the Society of Actuaries and an Enrolled Actuary under ERISA. He holds the Chartered Financial Analyst (CFA) designation and is a member of the CFA Institute and the New York Society of Security Analysts. ■

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END NOTES

[1] Mercer estimate from publicly available information.

[2] Results above are based on Mercer's Capital Market Outlook, January 2012.