INSIGHTS

Bulk Terminated Vested Lump Sum Offerings

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EXECUTIVE SUMMARY

* Bulk terminated vested lump sum offerings have become a hot topic and important tool in pension risk management over the past few years. Many plan sponsors who have not yet made a lump sum offer to their terminated vested participants are considering a program. A lump sum offer is typically a one-time event where terminated vested participants in the plan are given the option to take the entire value of their benefit in the form of a lump sum, though in some cases lump sums may be offered to different participants at different times.
* Recent regulatory changes have increased the interest of plan sponsors due to increased PBGC flat rate (per participant) premiums and anticipated changes to assumed participant mortality rates.
* A terminated vested lump sum program settles a portion of the plan liability. This could impact the funded status of the plan, shrinking the size of the plan and reducing future PBGC premiums. The nature of these impacts are influenced by a number of nuances.
* The impact of the program on the asset allocation policy should be considered before a program is initiated. Determining where the assets will be taken from to fund lump sums and understanding how the risk exposures of the plan will change after the lump sums are paid are important factors which will impact the plan's risk management strategy post-lump sum.
* A cost/benefit and a risk analysis of the program are essential steps to take when making the decision to offer a terminated vested lump sum program.
* It is critical to remember that, for most defined benefit plans, there is still a need to manage the assets associated with the remaining participants in the plan following a lump sum program.

Introduction

Over recent years, lump sum offers to terminated vested participants have gained popularity as a pension de-risking initiative. This is largely because of a greater focus on reducing overall pension risk by plan sponsors, regulatory changes, and to some extent market conditions. A terminated vested lump sum offering is often the first step that a plan sponsor might take in the overall risk management of a plan to settle a portion of the plan's liabilities. In order to determine whether a terminated vested lump sum program is appropriate, sponsors must be aware of the sources of risk and the cost of the program. This paper seeks to help plan sponsors understand the potential reasons for a terminated vested lump sum program, the effects such a program can have on key pension costs and measures, and the potential changes in a plan's risks after the program is executed.

Regulatory Background

The Pension Protection Act of 2006 (PPA) changed the interest rate basis by which liabilities were calculated for minimum funding purposes and for lump sums. Prior to PPA, interest rates used for lump sum calculations were based on a one-month average of 30-year Treasury yields. As early as 2012 (once PPA interest rate changes were fully phased-in), plan sponsors had the ability to use lump sum rates that reflect corporate bond rates. Corporate bond rates more closely reflect the interest rates at which a plan sponsor can effectively settle plan liabilities and on which they must base the reported fair values of liabilities for accounting purposes. This alignment of interest rates has helped spark discussions of lump sum offerings as a way to settle a portion of the liabilities of the plan at rates that more closely reflect the market value of liabilities.[1]

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and the more recent Bipartisan Budget Act of 2013 increased current and future per participant PBGC premium rates, directly impacting the potential cost savings from a lump sum offer (see table below). Many plan sponsors are choosing to counteract the increases by reducing the plan size with terminated vested lump sum programs. A more indirect way of increasing variable rate premiums has also come from the funding relief components of MAP-21 and subsequently the Highway and Transportation Funding Act of 2014 (HATFA), which have increased interest rates used to determine minimum required contributions, having the effect of reducing required contributions. With lower required contributions, plans funded status on a PBGC-basis (which is not based on the higher rates used for funding relief) will take longer to improve and will lead to higher variable rate premiums.

Beginning this year, the PBGC has asked plan sponsors to provide information regarding any lump sums made during 2014 and up to 60 days before the 2015 filing. This information will allow the PBGC to evaluate the loss of premiums due to terminated vested lump sum programs and other pension settlements (i.e. annuity purchases).

Table 1: Schedule of PBGC Premium Rates

Plan Years Beginning in:	Per Participant Flat Rate for Flat-Rate Premium	Variable Rate Premiums Rate per $1,000 of Unfunded Vested	Variable Rate Premium Per Participant Cap
2014	$49	$14	$412
2015	$57	$24	$418
2016	$64	$29 (Subject to indexing)	$500
2017+	All future years rates are subject to indexing		

Source: PBGC

1 Note that interest rates for funding purposes do not match the rates used for lump sum calculations.

The Society of Actuaries (SOA) recently released updated mortality assumptions which will recognize greater expected lifetimes and thus meaningfully increase the value of liabilities for most plans. Currently, accounting liabilities in the most recent disclosure likely reflect the new mortality assumptions. However, the IRS has yet to publish regulations on when any changes would affect funding liabilities and lump sum calculations[2]. If terminated vested participants take a lump sum before those increases have an impact, future funding liabilities and contributions may be reduced.

A confluence of these regulatory factors as well as some individual plan considerations has led to an increase in terminated vested lump sum offerings by plan sponsors.

Individual Plan Considerations

When deciding whether to offer a lump sum program to terminated vested participants, plan sponsors should review the individual plan considerations that may make lump sum programs more or less attractive. For example, the plan sponsor may need to amend the plan to allow for lump sums. This plan change can bring further unintended complications in plan funding[3] and administration. Additionally, if the plan has a cash balance formula there may be complications in the valuation of the lump sums that will increase the complexity of the program.

Important behavioral considerations related to a lump sum offering that are often overlooked are the take-up rates and communication challenges plan sponsors face with these types of programs. The overall communication of the program to participants must be clear since participants in the plan are sensitive to benefit communications. Because communication with participants is so important, human resources, legal, and outside consultants are likely to be involved in a terminated vested lump sum program which can drive up the costs of a program. Overall, the total cost of the lump sum can vary widely, and evaluating this cost can be a more complex exercise than a plan sponsor might initially anticipate.

2 It is unclear when and in exactly what fashion the IRS will change mortality assumptions for funding purposes, but it could be as early as for 2016 plan years.

3 Plans that offer lump sums have to maintain certain funding ratio requirements in order to continue paying lump sums from the plan.

Financial Impact

When evaluating the potential impact of a lump sum offering there are many key measures that can provide insight into the decision. The following table provides a summary of the potential impact and considerations for a number of key metrics.

Table 2: Potential Impact and Consideration on Key Valuation Metrics

Key Metric	Potential Impact	Considerations
Funded Ratio	Without additional contributions, the funded ratio will likely decline following a lump sum	Consider contributing to the plan to maintain the current funded ratio. A lower funded ratio could trigger additional funding requirements or accelerate required contributions.
Contributions	The impact on future contributions depends on the asset allocation policy (before and after the transaction), underlying interest rates (and other economic factors) and the funded status. Contribution volatility over the long-run is expected to be lower.	Accelerating contributions can increase the funded ratio and will reduce variable PBGC premiums
PBGC Premiums	Per participant PBGC premiums will be reduced after a lump sum program. Impact on Variable Rate Premiums (VRP) is less predictable depending on plan specifics.	Plan participants have the option to decline the lump sum and therefore the take rate is important to understanding how much the premiums would be reduced.
Accounting (Settlement cost)	Settlement accounting (US GAAP) occurs when service cost plus interest cost for the year is less than the settled obligation. Settlement accounting requires a portion of the unrecognized losses to be recognized immediately on the P/L ("Pension Risk Transfer", SOA and Deloitte, 2014)	Consider whether there are unrecognized losses on the balance sheet and determine if settlement accounting would be triggered.
Cost of Administering Program	Terminated vested participants may be harder to find and communicate with, leading to higher administration costs.	The benefits of the program must be weighed against the costs of the program. The benefits of the program depend largely on the take rate and interest rates.
Funded Status Volatility	The remaining assets and liability will still be subject to the same risks (interest rate, equity, credit spreads, etc.) that were present before the lump sum, although total risk (measured in dollars) is likely to be reduced.	The makeup of the plan is far different when a select portion of the liability is settled. A review of the plan after lump sums is warranted.
Liability Duration	May decrease the overall liability duration and change the key rate durations of the plan.	May make hedging the liability easier.

The impact of lump sums on funding and accounting liability metrics are different largely in part to interest rates and mortality assumptions used in each calculation. For funding liabilities, rates are typically 24-month average segment rates subject to a corridor based on a 25-year average of rates as opposed to the discount rate methodologies for accounting purposes which reflect a more marked to market approach. As mentioned previously, liabilities used in the most recent disclosure will likely incorporate the increases in mortality released by the SOA, while the IRS has yet to require changes in mortality assumptions for funding liabilities and lump sum calculations. Rates used to value lump sums are one-month averages based on the plan's lookback/stability period[4].

4 The plan's specific lookback and stability period can be found in the plan documents.

Occasionally the timing of the lump sum can lead to favorable outcomes. As illustrated in the below table, in 2012 and assuming a September 2011 lookback month, a plan that offered a lump sum settled the cost for less than the liability held on the disclosure (due to the difference in the stability rates and the discount rate). Similarly, as shown below, rates dropped at the end of 2014, but lump sum rates are higher assuming a September lookback. Additionally, the accounting value incorporates updated mortality assumptions that increased the accounting liability as compared to the lump sum cost. It is important to note that the calculation differences due to interest rates are driven by the interest rate environment at the time of the distribution which will likely not be known in advance of the lump sum distribution date. The differences due to mortality assumptions is currently known but could change if and when the IRS updates the mortality table used to calculate lump sums. Clearly, there is a breakeven point where the difference from mortality assumptions could be offset by the interest rates at distribution. Plan sponsors need to understand the interest rates and mortality assumptions used for each calculation and their potential outcomes in order to make a well-informed decision.

Table 3: Accounting and Lump Sum Rate Cost Example

Distribution Date	Accounting Value At Lastest Disclosure For Age 53 TV	Citigroup EIR At Latest Disclosure	Applicable Lookback Month	Lump Sum Cost for Age 53 TV	Lump Sum EIR	Difference in Valuation
1/1/2015	$105,519 Updated Mortality*	4.00%	Sep-14	$86,256 IRS Mortality*	4.62%	($19,263)
1/1/2014	$78,553	5.09%	Sep-13	$76,523	5.23%	($2,030)
1/1/2013	$95,270	4.13%	Sep-12	$91,966	4.30%	($3,304)
1/1/2012	$88,980	4.46%	Sep-11	$76,167	5.25%	($12,812)
1/1/2011	$69,521	5.72%	Sep-10	$72,757	5.48%	$3,236

Source: Barclay's Capital, IRS, Citigroup, Rocaton. Data through December 31, 2014. Lump sum interest rate is the estimated single effective interest rate (EIR) for an average age 53 terminated vested participant. Estimated accounting discount rate based on single participant cash flows and the Citigroup Pension Discount Curve.

*The price is an estimated cost of a lump sum for every $1,000 payable monthly at age 65 for the life of a participant who is currently age 53. Assumes current interest rate regulations for a hypothetical plan with a September lump sum look-back and a calendar year plan year and fiscal year. The 1/1/2015 accounting value reflects the SOA updated mortality assumption (RP-2014) which increases the liability by about 8%, all other calculations and years assume constant lump sum mortality. The actual lump sum value will depend on various factors including age, starting date, and the applicable month for interest rates.

Although the expected cost of paying a lump sum in 2015 is higher compared to 2014 (as a result of lower discount rates), the cost is lower relative to the accounting liability due to different interest rates and mortality table assumptions.

Asset Allocation Considerations

In order to execute a lump sum, a significant portion of the assets are paid out of the plan. There are two main questions to consider before performing a lump sum: First, how will the assets be taken out of the plan? Second, what should the asset allocation of the plan look like going forward?

It may seem straightforward to pay lump sums by reducing the allocation to liability hedging assets such as long bonds, since those assets are there to match liabilities that would be removed from plan. What may not be as intuitive is why this will likely introduce more risk into the plan. Typically the funded ratio of the plan decreases as a result of the lump sum, therefore the liability hedging assets will need more of an allocation to maintain the same hedge ratio. This may be true even if you were to fund the plan with contributions, because the duration of the plan most likely is similar to the duration before the lump sum was paid. Given these complicating factors, the risk profile of the plan before and after lump sums should be reviewed and are not covered in detail in this paper. An asset allocation review should be performed to make sure that the interest rate hedge and other liability tracking measures are in line with any dynamic asset allocation policy or de-risking glide path.

Conclusion

A terminated vested lump sum offering involves a cost benefit analysis of the program and a thorough review of the plan's risks pre- and post-lump sums. The potential benefits of a lump sum program include a reduction in the size of the plan and associated risks, expenses, and contributions. Of course these benefits must be weighed against the cost of the program, which may be larger than anticipated because of the complex nature of the program. Reviewing the risk structure of the remaining plan is pivotal because the lump sum program only settles part of the liability and leaves a plan sponsor with a different plan to manage in the future.

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Disclosures

Performance Information and Return Expectations

The analysis contained in this document may include projections of long-term return and risk expectations. There is no guarantee that the projected returns or risk will be realized. The projections are based in part on historical performance of various asset classes, and past performance is no guarantee of future performance. The projections include assumptions, including those regarding risk and return. These assumptions are used for modeling purposes only and may not be realized. Because the analysis is based on assumptions and projections, there can be no warranties or guarantees.

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