



# TERMINATED-VESTED LUMP SUM PAYOUTS

NEPC examines the investment challenges of terminated-vested lump sum distributions, a popular form of risk transfer for US corporate pension plans.

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## INTRODUCTION

In recent years, US corporate defined benefit pension plans have increasingly chosen to transfer risk through lump sum payouts to terminated-vested plan participants. We expect this trend to continue—although at a slower pace—given the number of payments that have already occurred. These payouts allow plan sponsors to directly reduce liabilities and associated costs, such as PBGC premiums. These programs can also be popular with participants favoring a financial windfall or those looking to consolidate their retirement earnings.

US corporate pension plans are permitted to offer lump sum distributions to former employees who have a future vested annuity benefit. These participants are usually called deferred-vested or terminated-vested. While small lump sums—usually up to \$5,000—are commonly paid at the time an employee leaves an employer, larger lump sum offerings to groups of former employees have become pervasive. Results from our 2016 Corporate Defined Benefit Plan Trends Survey show that 73% of respondents had implemented a terminated-vested lump sum payout and another 10% are currently considering one.

While a lump sum payout can benefit the plan sponsor and the participant, the

economic, administrative and logistical undertaking of such an exercise can be challenging. At NEPC, we possess experience consulting on the issues that arise from pension plan benefit changes and advise plan sponsors and fiduciaries on the investment implications of lump sum payments. We also actively work with our clients on the risk management of pension plans through risk transfer and long-term hibernation.

## THE APPEAL OF TERMINATED-VESTED LUMP SUM PAYMENTS

The decision to offer terminated-vested lump sums is a settlor function; it is a business decision taken by the plan sponsor and not by fiduciaries, for instance, the investment committee. Lump sum payments need participant and spousal consent, so offerings require sound data, individualized communication and, often, development of websites and call centers. There are many reasons behind the recent widespread adoption of terminated-vested lump sum, or TVLS offerings.

We discuss the important ones below:

### 1) Discount Rates

Lump sum amounts are calculated by discounting back expected monthly annuity benefits. Since terminated-vested annuities are deferred—often for many years in the future—the duration of the

liability (the variability of the lump sum calculation to changes in interest rates) can be quite long, usually 15 to 20 years. As a result, a 1% decline in discounting rates will increase a lump sum payout by 15%-to-20%, making lower discount rate lump sums more attractive for terminated-vested participants but more expensive for sponsors.

Although interest rates have broadly fallen for decades, two factors have fueled relatively higher lump sum discount rates (Exhibit 1):

**(a)** Beginning in 2008, the discount rates required by the Internal Revenue Service for minimum lump sum payouts gradually moved from using the 30-year Treasury yield to using Pension Protection Act (PPA) rates by 2012. The PPA uses segment rates and triple-A-, double-A-, and single-A-rated credit yields. Over this time period, the triple-A-to-single-A spread over the 30-year Treasury yield was around 2.0%, so the lump sum rate went up by 40 basis points annually for each of the five years, all else equal. Since overall yields fell during the period, the trend was mitigated, such that the third segment rate of 5.24% in December 2011 was not

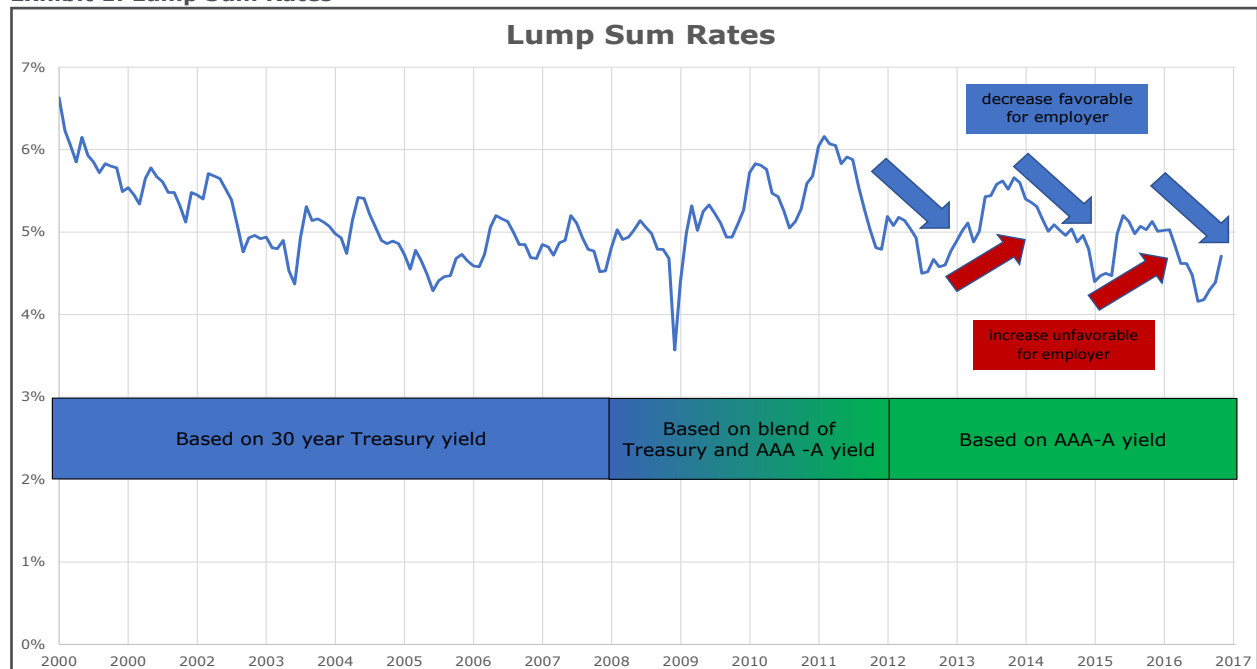
much higher than the December 2007 Treasury-based rate of 4.53%.

**(b)** Since lump sum payout discount rates are usually based on a lookback rate, a single rate from the prior year (see sidebar on Terminology), plan sponsors had opportunities for gains in 2012, 2014 and 2016 when rates fell during the year. That is, during these years, sponsors offered and paid lump sums using a higher rate (and lower value) from the previous year, typically from October. Conversely, fewer sponsors offered lump sums in 2013 and 2015, which were periods of relatively higher rates, when the required lump sum payout based on the previous year was higher than the “current value.”

**2) Costs**

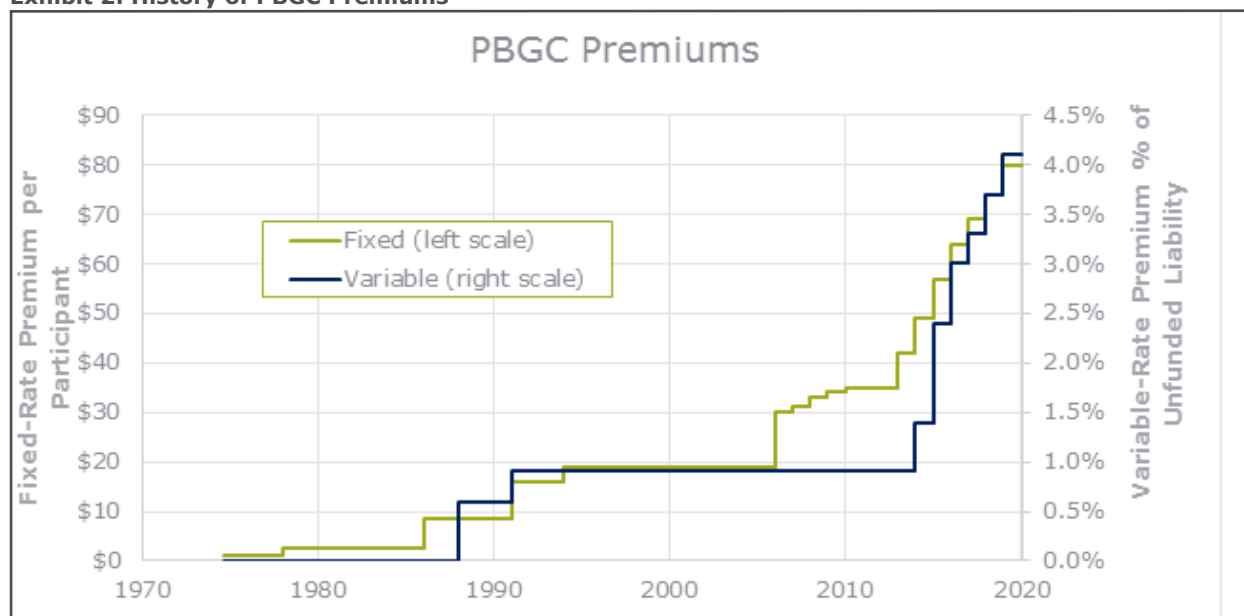
Pension Benefit Guarantee Corporation (PBGC) charges pension plans annual premiums (Exhibit 2), which includes a fixed premium per participant, including active employees, retirees, beneficiaries and deferred-vested participants. Rising premiums have bolstered the administrative costs for each participant. These premiums will increase to \$80 per person in 2019 from \$19 in 2005, as PBGC premium increases (and pension

**Exhibit 1: Lump Sum Rates**



Sources: Internal Revenue Service, NEPC

Exhibit 2: History of PBGC Premiums



Sources: PBGC, NEPC

relief) are used as a source of revenue for the government. Clearly, lowering a plan’s participant headcount will reduce fixed PBGC premiums.

The second PBGC premium—variable rate—is based on plan underfunding. These premiums have also been raised from 0.9% in 2005 to 4.1% in 2019, an annual charge based on plan underfunding. Reducing liabilities and assets through lump sum payments may actually increase plan underfunding. However, since PBGC variable premiums and other administrative costs are broadly based on plan size and complexity, there may be residual-cost savings from eliminating liabilities through lump sum distributions.

### 3) Longevity/ Mortality

Higher life expectancies are a cost and risk for plan sponsors of annuities such as pension plans. Paying lump sums eliminates this longevity risk.

The IRS is expected to require an update in 2018 to the mandated mortality tables used to calculate liabilities, which will increase lump sum payout amounts by 5% to 10%. In contrast, for pension accounting, most auditors required updated mortality tables for fiscal years ending in 2014.

## INVESTMENT IMPLICATIONS

NEPC advises fiduciaries on the investment implications of lump sums and other policy decisions, for instance, acquisitions/divestitures or annuity purchases. We don’t offer legal, actuarial or audit services. That said, we have significant experience working with clients and vendors on lump sum offerings.

Once a lump sum payout has been approved by the settlor, NEPC works with the plan sponsor and actuary to understand the timing of the lump sum offering and payment, the demographics of the group being offered the lump sum, and key assumptions such as the expected “take-up” of the offering. From this data, we then develop recommendations on the timing of changes to asset allocation and the provision for liquidity.

Lump sum payments reduce assets and liabilities. They also tend to reduce the overall liability duration. In the case of small offerings, we would expect to reduce specific assets dollar-for-dollar with the lump sum payouts. For larger lump sum distributions, the asset allocation mix, the liability hedging structure and liquidity needs can each be adjusted, depending

on the particulars of the remainder of the group and alignment with the plan's long-term objectives.

For the asset allocation, we need to adjust for the assets and interest-rate duration expected to be "freed" by the lump sums, especially if the plan has a glide path or other form of liability-driven investing. The value of each lump sum can be calculated precisely because the discount rate is typically already known since it is usually based on the previous year. This means that the liability from participants electing lump sums is not sensitive to interest rates.

Timing is a consideration for changing liability hedges. Usually, the decision to go ahead with a lump sum offering is made well into the year it will be made, meaning that the hedged assets have experienced changes based on the movement of interest rates, while the lump sum amount has not. If rates have fallen during that time, the assets have experienced a gain. These gains can be locked in by removing the unneeded TVLS hedge and aligning the asset duration with policy hedging. If the plan has an overlay or completeness manager in place, the duration can be quickly adjusted after a decision is made.

If rates have risen during the year, the assets show a loss. In such an instance, the client may decide to retain the original hedge instead of locking in the loss. Others may decide to remove the hedge because the funded status will usually improve when rates rise. In 2013 and 2015, some settlors decided to postpone an offering to the following year.

Occasionally, the decision to offer lump sum payouts is made the year before they will be paid, and also before the lookback month that will determine the discount rate used. In this case, the lump sum total will continue to fluctuate with interest rates, and any liability hedging should not be changed. Once the month of

the discount rate is determined, the asset duration for the lump sum amount can be reduced. Since the IRS-published discount rates are based on the average rates for each business day of the month, the plan could reduce asset duration through the course of the month to match the effective exposure of the lump sum distributions.

The level of precision in any of these recommendations can be adjusted based on the risks and objectives of the plan. Interest rate risk is volatile but it can also be hedged. In contrast, variation in the take-up rate cannot be hedged and represents a source of additional risk.

The final investment need is the actual liquidity required to pay all of the lump sums in cash. Initial planning should focus on a broad range of liquidity needs instead of the single take-up point estimate, with a plan to raise liquidity at the high end of the range if needed. We have seen terminated lump sum offerings in excess of 30% of assets, so it is vital to plan. In large offerings, most asset classes will be impacted in order to maintain the policy allocation before and after the payments. As in any large liquidity event, policy ranges, over- and under-weights, and transaction costs play a role.

For instance, a current prevailing issue is the high transaction costs of 1.0% to 1.5% associated with long-credit bonds. This is due, in large part, to the limited dealer inventory stemming from Dodd-Frank regulatory reforms. For plans on an explicit or implicit glide path, selling long-credit only to buy bonds back in the next few years should be avoided. Instead, fixed-income liquidity can be created through Treasury mandates, collective trusts, and/or mutual funds.

Since plan participants are given a window of time to make their decision, the actual take-up usually consists of many elections at both the start and end of the window, with fewer in-between, and some mailed-



in elections that could be received several weeks later. The lump sum payments could be paid over several weeks because of these administrative issues.

After all the lump sum distributions are paid, NEPC will request an updated benefit payment projection from the actuary to adjust any hedging and key-rate durations.

## CONSIDERATIONS

While the settlor's decision to offer terminated-vested lump sum distributions can be based on the interests of the sponsoring company, it is important to note that each participant is made an offer. Every person can decide to take the lump sum based on their life and health situation. They can choose to look at the amount as a windfall for a big purchase. One anecdotal observation on whether these offerings are good or bad for participants is how insurance companies price annuities for terminated-vested participants that had a lump sum offering but refused it. In general, insurance companies have an anti-selection charge, suggesting that those that choose to keep the annuity are expected to live longer than those that elected the lump sum.

Lump sum offerings to other classes of employees have been made, notably to participants in annuity payment status, for instance, by General Motors. The Department of Labor has generally frowned on these offerings and the IRS curtailed their use in 2015. Sponsors are allowed to make a one-time lump sum offer to active employees in the event of a plan termination, and this approach is often used.

## CONCLUSION

Terminated-vested lump sum distributions remain a popular form of risk transfer for corporate pension sponsors. At NEPC,

we have significant experience advising fiduciaries on the investment implications of such an undertaking. We work with plan sponsors and actuaries to develop recommendations around the specifics of each offering. We also possess substantial knowledge on the investment issues that arise from pension plan benefit changes, including soft- and hard-freezes, lump sum payouts, and annuity purchases. For more information, please contact your NEPC consultant at 617.374.1300.

### *Terminology*

***Take-up: The percentage of terminated-vested plan participants who elect to receive a lump sum distribution. A key assumption in deciding whether to do an offering, and measuring its success.***

***Stability period: The period for which lump sum discount rates are stable, usually one calendar year.***

***Lookback rate: The month chosen prior to the stability period used for determining the discount rate, usually October.***

## DISCLAIMERS AND DISCLOSURES

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.
- The information in this report has been obtained from sources NEPC believes to be reliable. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

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