

Borrowing to Fund – Is it Right for Your Plan?

It is not news that borrowing money when interest rates are low costs less than when rates are high. Low interest rates have increased the measurements made of pension plan obligations on financial statements, generated increased pension contributions, and increased PBGC variable rate premiums. There is, however, an opportunity for plan sponsors to benefit from these low interest rates: borrow money to fund pension obligations.

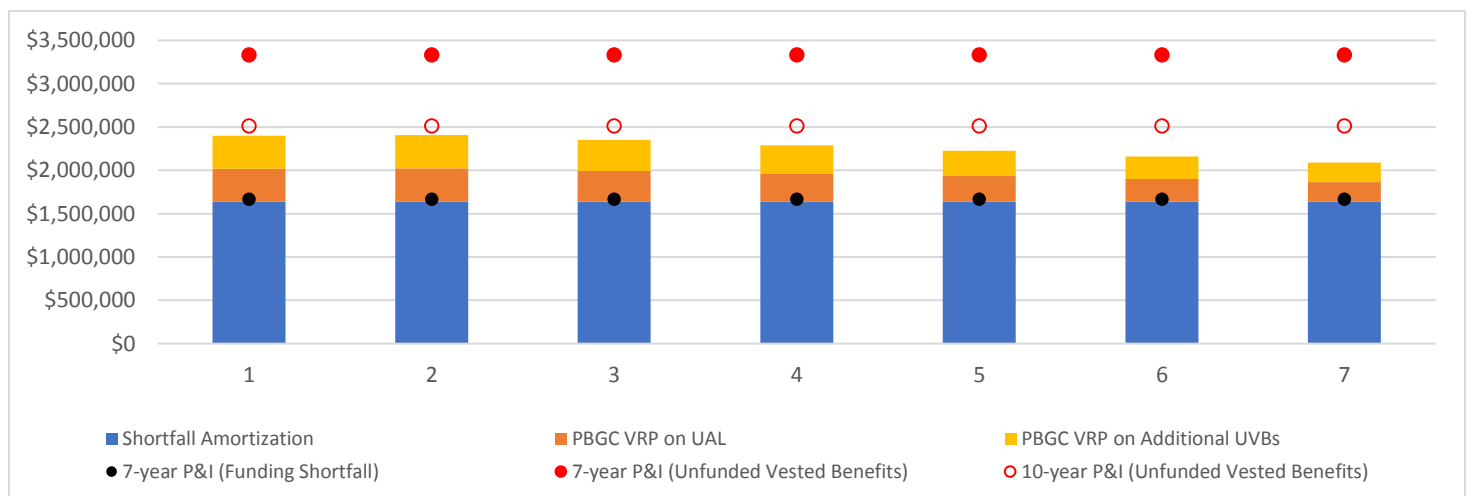
Why would a plan sponsor want to exchange one form of debt (unfunded pension obligations) for another (principal and interest payments on the bond or loan)? The answer is simple – reducing risk.

Pension plan contributions and PBGC premiums are floating costs that vary in proportion to the plan's unfunded liabilities. By comparison, debt service on a loan or bond issue is a fixed cost that is locked in at the time the debt is assumed. Using the proceeds of that debt issuance to fund pension benefits effectively swaps the floating costs – which by their variable nature reflect a measure of risk to the plan sponsor – for a known, fixed cost that will not vary with changing economic conditions and participant demographics. While this swap will not eliminate all pension plan risk, it affords plan sponsors an opportunity to take further actions that will reduce the level of remaining risk in the plan (and by extension, in their overall finances).

Comparing Plan vs. Borrowing Costs

Let's look at an illustration of how this can work for a plan sponsor.

Consider a plan with a \$10 million funding shortfall and \$20 million unfunded vested benefits. For purposes of this illustration, we're going to ignore the normal cost component of the minimum required contribution and focus just on the funding target shortfall amortization charge (which pays down the existing unfunded target liability), plus the PBGC variable rate premium (VRP).¹ If the plan sponsor can borrow money at 5.5% for the same 7-year period over which it amortizes unfunded liabilities, the relative relationship of the floating plan costs compared to fixed principal and interest (P&I) payments are illustrated below.



¹ The flat-rate portion of the total PBGC premium is based on headcount and does not vary with funded status. It will remain the same before and after a borrow-to-fund transaction.

The 7-year amortization charge for the \$10 million of funding shortfall is \$1.64 million (blue bars), while annual variable rate premiums (orange and yellow bars) vary from a high of \$0.77 million to a low of \$0.45 million – for a total plan cost of \$2.1 - \$2.4 million per year over the next 7 years.²

By comparison, the principal and interest payment for 7 years on a loan of \$10 million would be a flat \$1.67 million (black dots). As expected, in our simple example this is about the same as the shortfall amortization charge because the borrowing rate in this illustration is close to the effective interest rate reflected in the amortization calculation.³ There is one significant difference, however – the loan payment will not vary in future years based on actual plan experience, including investment returns and changes in plan demographic experience. While higher than expected investment returns will reduce the total shortfall amortization charges, lower than expected returns will increase the charges. Those investment gains and losses will similarly increase or decrease the PBGC variable rate premiums.

It is also important to note that by contributing \$10 million to the plan, the PBGC unfunded vested benefits will be cut in half (from \$20 million to \$10 million), so the PBGC variable premium will also be reduced by half, eliminating the yellow bars in the chart above. Thus, plan costs have been cut by \$0.25 million to \$0.38 million each year for the 7 years the loan is in place, and beyond that until the plan is terminated.

To eliminate all PBGC variable premiums, the plan sponsor needs to borrow and fund \$20 million, doubling their principal and interest payment on the loan (the solid red dots) to \$3.34 million. This exceeds the cost of the original shortfall amortization charge and PBGC premiums, but increases the opportunity to take further risk reduction actions within the plan. If the plan sponsor increases the period of the loan to 10 years at the same 5.5% interest rate, the loan payments reduce to \$2.52 million per year (the clear red dots).

Yet another option is to borrow enough money to fully fund and terminate the plan, swapping all future cost uncertainty for a fixed loan repayment. Extending the loan repayment period, where possible, makes the loan payments more closely match the pre-termination contribution levels.

Effect of Corporate Income Taxes

The simple analysis presented above shows the potential to take risk off the table through a fixed loan payment at a cost that is roughly equivalent to the combined cost of amortizing existing unfunded liabilities and PBGC premiums associated with those unfunded liabilities. The analysis did not take in to consideration the effect of corporate taxes. For plan sponsors subject to taxation, pension contributions are a deductible expense in the year for which they are made. Thus, the principal amount of the contribution is deductible up-front, while interest payments on the loan are deductible as accrued.

The amount of any tax savings that factors in to the analysis depends on the plan sponsor's marginal tax rate, and how they anticipate their tax situation may change over the life of the loan. Plan sponsors that are not currently generating taxable profits may operate more like a tax-exempt organization unless they anticipate a turnaround that will trigger taxable profits during the life of the loan.

Starting in 2018, there are two notable changes to the corporate tax structure that will affect the borrow-to-fund decision. After 2017 the deduction on income expense is limited to 30% of EBITDA (earnings before interest, taxation, depreciation and amortization). For highly leveraged companies already carrying substantial debt, this may limit or eliminate the tax savings on a loan being taken to secure accelerated pension funding. However, the more significant change is the

² The portion of the PBGC VRP attributable to the IRC Section 430 target liability funding shortfall is identified separately for illustration purposes only. It is not calculated or treated any differently than the portion attributed the use of the pre-relief interest rate basis for PBGC unfunded vested benefit calculations.

³ The effective interest rate in the amortization calculation is lower than the plan's overall effective interest rate derived from the target liability calculation because it relies only on the first and second segment rates.

reduction in the marginal corporate tax rate to 21% (from, for most taxpaying corporations, 35% in 2017 and earlier).⁴ The lower the tax deduction available on borrowed funds the lower the cost of borrowing that a sponsor will need to achieve to see a net cost savings from a borrow-to-fund strategy.⁵

There are other potential cost savings in addition to corporate income taxes that we will discuss later.

Other Key Variables to Consider

Each pension plan sponsor needs to evaluate the decision of whether borrowing to fund pension deficits makes sense in their own situation. In addition to the tax implications of pension funding and interest deductions, plan sponsors should consider:

- **Cost of capital** - Plan sponsors that incur higher interest costs to borrow may find that they can't borrow enough money to eliminate pension deficits for a cost that is roughly comparable to their current 7-year amortization payment and variable premium costs. The 5.5% borrowing rate in our example produces a principal and interest payment of \$1.67 million payable over 7 years to pay off the \$10 million underfunding (compared to the \$1.64 million of funding target shortfall amortization). Reducing the borrowing rate to 4.5% drops the principal and interest to \$1.62 million, while increasing it to 6.5% yields a principal and interest payment of \$1.71 million borrowed.
- **Available financing period** – Plan sponsors able to borrow to finance pension contributions over a period longer than 7 years may be able to borrow greater amounts for a comparable payment, more rapidly reducing unfunded liabilities and PBGC premium costs. For example, extending the financing period from 7 years to 10 years decreases the annual principal and interest payments by about \$0.40 million financed. Plan sponsors will also want to consider other financing needs, both current and future, and how the potential borrow-to-fund strategy will affect their ability to do so.
- **Form of financing** – The example used above assumes that borrowed funds are in the form of a loan from a financial institution that will require interest and principal payments throughout the life of the loan. Plan sponsors could also consider borrowing in the form of a bond issuance that requires only periodic interest payments with principal repaid at maturity. The repayment structure will impact the cost of financing relative to paying funding amortization payments and PBGC premiums.
- **Restrictive covenants** – Plan sponsors must be cognizant of how the proposed borrow-to-fund transaction may affect any covenants associated with existing debt. Although borrowing to fund essentially swaps one type of debt for another, covenants could treat one of these types of debt more favorably than the other.
- **Effect on credit rating** – Credit rating agencies are typically aware of the level of pension deficits and take this into account when evaluating an entity's creditworthiness. Borrowing to fund pension deficits is usually a credit neutral or positive event from a rating perspective, because of the increased certainty of the annual payment amounts.

⁴ Bolton recently published an article discussing how plan sponsors may want to take advantage of this reduction in the corporate tax rate to increase their tax savings by pre-funding future year's contributions in early 2018 and attributing them to their 2017 plan year. The article can be found on our website: BoltonUSA.com

⁵ In this context we are ignoring the cost of risk. Sponsors may be willing to swap a higher fixed cost for a currently lower floating cost driven by uncertain economic and demographic forces outside their control, as well as potential future legislative increases in PBGC premium rates.

Taking Risk Off the Table

Borrowing to fund can be a means of reducing a plan sponsor's risk within a pension plan and, more broadly, within their overall corporate finances. However, when making a significant change to the plan's funded status it is important for plan sponsors to take a look at how to protect their investment. This includes evaluating all the risks associated with plan sponsorship and how those risks have changed because of the accelerated funding transaction.

With respect to the borrowed assets, there is an asymmetric risk to the plan sponsor, with far greater downside consequences related to investment losses than there is upside potential from investment gains. Investment losses could trigger unanticipated contribution requirements, effectively creating a double payment on a portion of the borrowed funds. On the other hand, if a plan has been funded to eliminate funding shortfalls or PBGC variable premiums, investment gains could lead to overfunding and trapped surplus that may be difficult or costly to recover.

Plan sponsors should consider modifying the plan's asset allocation to put the contributed funds in duration matched investments that will move in tandem with the portion of the plan's liabilities that they are meant to defease. A similar shift in asset allocation for the remaining plan assets may also be a prudent move to avoid generating losses on the original underfunding that must be amortized and contributed to the plan concurrent with the repayment of the borrowed funds.

Mortality and other demographic risks are also the responsibility of the plan sponsor in a defined benefit plan, and can wreak havoc on plan funding if not well managed. One way to handle both the investment and demographic risks concurrently is to use some of the newly invested plan assets to execute a pension risk transfer transaction, such as a voluntary lump sum window or annuity contract purchase from an insurance company. Both options transfer risk away from the plan sponsor to another party. In the case of a lump sum offer the plan participant assumes all future risks, whereas in the case of an annuity contract purchase those risks are transferred to the insurer.

Other Potential Cost Savings

Thus far we have focused primarily on two specific costs – the shortfall amortization charge and the PBGC variable rate premiums. Accelerating funding through a borrow-to-fund strategy can have other beneficial effects on plan costs. For example:

- While evaluating the investment policy, plan fiduciaries may also consider whether there are opportunities to reduce investment-related fees, either through a shift from active to passive management, or through use of different investment vehicles with lower expense ratios. Asset selection is at least as important as asset allocation.
- Investment advisory fees, if scaled by total assets managed, may decrease as a percentage of assets if the additional funds cross into a different tier (e.g., fees for the first \$20 million are 15 basis points, while the next \$20 million are charged at 13 basis points). Plan administrators should review their fees to make sure that the investment advisor adjusts their compensation accordingly.
- Plans that eliminate severe underfunding may reduce or eliminate the need for certain administrative and regulatory filings, such as IRC Section 436 benefit restrictions, PBGC 4010 reporting, and certain PBGC reportable event filings.⁶

Borrowing to fund may not be the right decision for every plan sponsor. Those with a low cost of capital, whether financed externally through a loan or bond issuance or internally by borrowing from a parent company or other related business, and those with taxable profits, may find this an attractive approach to reduce risk, reduce plan expenses, simplify plan administration, and provide increased benefit security for plan participants. Plan sponsors should work with their actuary and other plan advisors to do a comprehensive analysis and develop a solution customized to their circumstances.

⁶ Each of the noted requirements may be eliminated when a plan reaches a certain funding threshold, which differs for each of the requirements. The funding target thresholds are all tied to a measure of target liability, either with or without the relief granted under MAP-21 and subsequent legislation to apply 25-year averaged interest rates in place of the standard 24-month averaged interest rates.