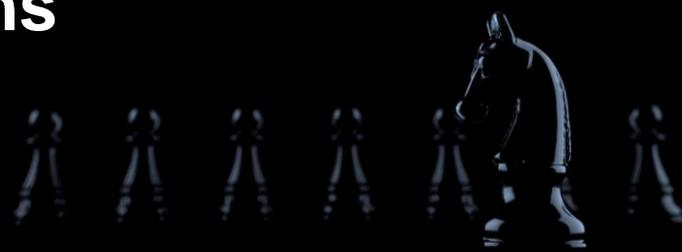


Risk transfer options and considerations

For defined benefit plan sponsors

Russell Investments Research



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In 2012, Ford, GM and Verizon took action to reduce the size of their pension plans, which served as the watershed moment for pension risk transfer. While we have not seen another year with quite the headline magnitude since then, lump-sum offerings have become ubiquitous. Annuity purchase transactions have taken more time to catch momentum, but each year, the volume increases, with more sponsors open to offloading liabilities to insurers. Termination, once a rarity among larger defined benefit (DB) plan sponsors, has started to become more common and has become a short-term goal for many sponsors.

In this paper, we cover the risk transfer options available to DB plan sponsors and the considerations of pursuing this type of strategy.

Why risk transfer?

The most common rationale for pursuing risk transfer is to reduce expenses and risk.

Expenses

Sponsors can reduce expenses by lowering headcounts – this directly affects Pension Benefit Guaranty Corporation (PBGC) premiums. It can also incrementally decrease some other administrative costs (e.g., annual notices, record retention, etc.). The present value of these cost savings is often measured against the one-time expense to carry out the risk transfer transaction paid to plan actuaries, administrators and other advisors.

Risk

Sponsors can reduce risk by having a smaller plan footprint. Both liabilities and assets decrease after risk transfer, reducing the size of the plan relative to the sponsoring organization. However, it should be noted that the dollar value of deficits does not necessarily decline after a risk transfer, and that funded ratios commonly decline unless the plan contributes at the same time. In addition, liability duration may increase as a result of a risk transfer, reduced interest rate hedge ratios (unless adjustments are made). Still, reducing future benefit payments typically means less overall risk in absolute terms.

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Risk transfer options

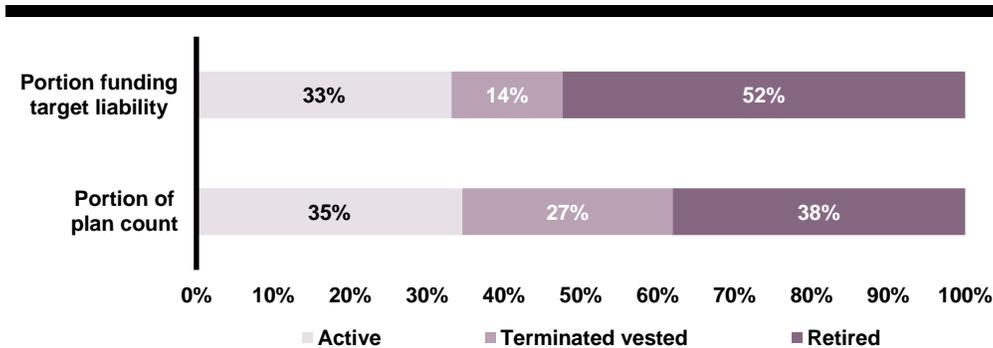
1. Lump sum cash-outs: Transfer risk to participants

In accordance with U.S. statutes, qualified DB plans must offer a life annuity option to all plan participants. Offering a lump-sum payment option is optional. When a sponsor offers and a participant accepts a lump sum, the sponsor transfers longevity (i.e., life expectancy) risk to the participant. Sponsors can either offer lump sums on a temporary basis or a permanent basis.

When considering a temporary lump-sum offer via a lump-sum window, the terminated vested participants (TVs) are often the most logical group on which to focus.¹ These participants are no longer employed by the sponsoring organization and have not retired directly from the sponsor. In other words, the participant and sponsor have parted ways, but the sponsor is still required to pay fees associated with the participant. They also typically have the lowest average benefit when compared to active or retired participants. Thus, transferring risks for the TVs can be a particularly attractive option.

TVs often represent a large percentage of plan participant counts, but a smaller percentage of participant liabilities. Exhibit 1 demonstrates this inconsistency.

Exhibit 1: Comparison of participant counts and funding target for single-employer DB plans



Source: Based on Form 5500 filings of single-employer plans for the 2018 plan year for plans with over 100 participants and over \$10 million in plan assets.

Terminated vested participants represent less than one-sixth of total plan liability in single-employer pension plans, but they make up over one-quarter of total participant counts. This disconnect can create a disproportionate drag on ongoing plan administration expenses. For example, each year, DB plan sponsors must pay a PBGC insurance premium for each plan participant, regardless of that participant's current employment status or associated liability. Since 2012, legislation has increased this premium from \$35/year per participant to \$83/year per participant in 2020. Further increases with inflation will continue thereafter. These premium increases have further strengthened the case for lump sum cash-outs as the present value of cost savings is more significant than ever.

TVs also require other ongoing costs, such as mailing of annual funding notices and periodic benefit statements. These would be eliminated in the event of a lump-sum payout.

To help contain and predict costs, sponsors could offer lump sum payouts to only a select group of TVs, which is often based on the level of lump-sum values, or the participant group. Multiple phases of cash-outs have also been used based on this criteria.

When offered a choice, many TVs will readily choose a lump sum payout, particularly if the election process is simple. To further simplify the process, sponsors may consider offering direct rollovers to employer-sponsored defined contribution (e.g., 401k) plans. Moreover, plan participants are permitted to roll over cash-outs from their qualified DB plan to a qualified IRA without tax penalty. Sponsors concerned about retirement adequacy for these participants should advocate such rollovers.

These [PBGC insurance] premium increases have further strengthened the case for lump sum cash-outs as the present value of cost savings is more significant than ever.

Sponsors would typically be required to pay large one-time administrative and legal costs associated with lump-sum payouts. In addition, all benefits will need to be certified as accurate, which can take a significant amount of internal resources, particularly if the data is difficult to access. The cost of this effort should be balanced against the long-term benefits, cost savings and risk reductions.

Alternatively (or in addition), sponsors may gradually reduce risk by offering lump sums as a standard form of payment in the plan. Note, however, that lump sum options without election windows cannot be removed from a plan and will add to future volatility in cash flows.² This feature could also affect the plan's asset allocation.³ A permanent lump-sum option will also make it more challenging to attain favorable annuity purchase pricing as insurers will be taking on additional risk of the timing and amount of benefit payments.

2. Annuity purchases: Transfer risk to an insurance company

As we have mentioned, qualified U.S. DB plans must offer a life annuity option to all plan participants, regardless of the plan's benefit formula. However, the annuity does not necessarily need to be paid by the plan. Under certain conditions, sponsors may purchase annuity contracts from an insurance company to cover future annuity payments. The cost of annuity contracts can be higher than the current liabilities of the affected group, since sponsors are effectively hiring the insurance company to take on the firm's administrative role and assume all the associated risks. But the advantage to plan sponsors is that they shed the longevity risk represented by these plan participants. They may also experience the cost savings of reduced headcounts, depending on which type of annuity purchase they pursue.

In general, two options for purchasing annuity contracts exist:

1. **Buy-out** – The purchase of annuity contracts from an insurance company to pay all future annuity payments for select participants. This irrevocable arrangement includes full administration by a third party and removes the obligations of participant's future pension concerns from the plan sponsor.
2. **Buy-in** – Similar to a buy-out option, except that the plan sponsor maintains the assets and liabilities on the corporate balance sheet. The insurance contract is treated as an asset. The insurance company reimburses the sponsor for annuity payments made. Longevity risk is transferred to the insurer but the expenses (e.g., PBGC premiums, annual notices, etc.) are not transferred. This solution has been used more internationally than in the United States in recent years.

The premium that an insurance company will charge the plan sponsor depends on several factors, most importantly the demographics of the participant base and the complexity of the plan.

While sponsors can technically purchase annuity contracts for any group of participants (e.g., actives, TVs or retirees) within the plan, retirees are the most efficient group on which to focus. This is due to the typically shorter time horizon and higher certainty of the benefits being paid out. This creates far more favorable pricing from insurers.

Sponsors are increasingly becoming comfortable with annuity purchases, particularly when they focus on those with smaller benefits. Retirees with smaller benefits have been associated with shorter lifespans, leading the lower annuity purchase premiums relative to plan liabilities.

A potential disadvantage to purchasing annuities for retirees is the associated increase in liability duration. Retirees' liabilities have a lower duration profile than those of any other participants.⁴ Removing retiree obligations from the plan will probably increase duration and decrease hedge ratios, which may necessitate an update to the asset allocation in order maintain the liability hedge.

Internationally, longevity swaps are often used to hedge against longevity risk. In this derivative instrument, the plan sponsor pays a fixed cost in exchange for an insurer covering mortality losses (i.e., benefit payments lasting longer than expected). At this time, longevity swaps are not widely used in the United States.



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3. Plan termination: Shift all risk to others

Plan termination is almost always a combination of lump sum cash-outs and annuity purchases. For cost efficiency, sponsors will often seek to cash out as many non-retired participants as possible, then purchase annuities for the rest.

Sponsors may choose to terminate their plans at any time, assuming they are sufficiently funded.⁵ Sponsors pursuing “voluntary” terminations must follow a rigorous, lengthy and often pricey process. When the process is complete, the sponsor is free of all funding, accounting and administrative requirements related to the plan.

Many plan sponsors have no immediate need or desire to terminate their plans. While becoming fully-funded is the goal of nearly all plan sponsors, some are content to maintain the plan in a hibernation state until the economics of plan termination makes sense.

While some have a near-term goal to terminate, many others do not for reasons including:

- The sponsor values the plan as an employee attraction and retention tool
- The plan includes collectively bargained agreements that restrict any plan freeze or termination measures
- The plan is underfunded, and the sponsor cannot (or chooses not to) fully fund it
- Current interest rates may require a high insurance premium that would prevent or dissuade the sponsor from terminating the plan
- The sponsor does not have the internal resources needed to navigate the plan termination process
- The complexity of the plan or the quality of historical data may impede a termination process
- The sponsor may not be able to justify the required cost or effort to terminate

Some of these factors will change with time. Other factors, such as collectively bargained agreements, tend to be more permanent and may delay a plan termination process indefinitely.

Considerations

While any of these solutions (i.e., lump sum cash-outs, annuity payments, and/or plan termination) can reduce ongoing administrative expenses and overall company risk, sponsors should carefully consider the timing of any transaction. Interest rates still hover near historical lows, contributing to high annuity purchase prices, large lump-sum values and low funded status in plans. Moreover, poor funding ratios may disallow any risk transfer transactions unless the funded ratios (e.g., the AFTAP) improves. In addition, these solutions may trigger settlement accounting, which is likely to increase current pension expense.

1. Interest rate timing

We first observed significant market activity for lump sum cash-outs in 2012. This was due in part to the five-year phase-in to corporate bond rates as the underlying basis for lump sums had been completed.⁶ In addition, many sponsors were able to use relatively high corporate bond rates from fall 2011 for cash-outs that took place in 2012. With most plans, the rate used to determine lump-sum values is set near the end of the year and is fixed for the entire following calendar year.

Lump-sum values are inversely related to discount rates – meaning that, as rates fall, lump-sum values increase. Therefore, if rates fall during the year, the lump-sum values, which are fixed for the year, will be lower than the liability in place at the time of the transaction – leading to a potential funded-status gain when accounting liabilities are settled. Significant drops in the discount rate during the calendar year occurred in 2012, 2014, 2016 and 2019.



Sponsors pursuing 'voluntary' terminations must follow a rigorous, lengthy and often pricey process.



Lump-sum values are inversely related to discount rates...

Trying to tactically time a lump sum cash-out opportunity can be challenging. Still, prudent sponsors will want to be aware of how the current environment influences the cost of any risk transfer option.

Annuity contract timing is quite different from lump-sum options. Unlike lump sums, which can have fixed rates for up to one year, annuities are priced by the issuing insurance companies on the basis of the rates effective at the date of settlement, which can change frequently, exposing the plan sponsor to the risk of falling rates during the planning and preparation phase.

2. Funded status percentage and cash demands

If the Adjusted Funding Target Attainment Percentage (AFTAP) falls below 80%, the sponsor cannot offer certain accelerated forms of payment to participants, including full lump sums and annuity purchases.⁷ This is to avoid a drawdown on assets when the plan is poorly funded (thus exacerbating the funded status problem). Therefore, plans in this category must either wait for the AFTAP to rise above 80% or contribute the necessary additional cash before considering one of those risk transfer options.⁸

Due to the passage of various funding relief measures since 2012, the AFTAP has not been much of a barrier for risk transfer due to the high discount rates plan actuaries are allowed to use in determining the AFTAP. When this funding relief phases out, many more sponsors could be subject to risk transfer restrictions. These new AFTAP measures are not based on a market-based measure of liability, and while risk transfer may technically be allowed, sponsors should consider the long-term effects of risk transfer on their plans, particularly if they are severely underfunded.

Sponsors should note that transferring plan liabilities could lead to reductions in overall funded status. In general, if a plan experiences a loss due to risk transfer, the funding deficit (if any) will likely increase. More severely underfunded plans will see a relatively larger dip in funded percentage after a risk transfer event. It is particularly important that sponsors recognize this, given that plan funded status determines minimum contribution requirements, quarterly contribution requirements, benefit restrictions, the use of carryover/pre-funding balances and a host of other results.

For underfunded plans, the funded ratio in accounting terms will almost certainly decrease after a risk transfer transaction due to the effect of benefit payment drag. Consider for example a plan with \$100 million in liabilities and \$80 million in assets – this makes it 80% funded. Now let's assume it completes a \$15 million lump-sum payout where the lump sums equal the liabilities. This leads to having \$85 million in liabilities and \$65 million assets, or 76% funded – a 4% drop in funded status percentage.

3. Settlement accounting

Plan sponsors considering risk transfer through annuitization or cash-outs should understand the accounting implications. Due to accelerated recognition of gains or losses, the effects of settlement accounting on pension expenses can be significant.

Under U.S. accounting standards, plan settlements are among the few infrequent events that can trigger special pension expense treatment.⁹ To be considered a settlement, the arrangement must be an irrevocable action, relieve the employer (or the plan) of primary responsibility for a pension obligation and eliminate significant risk related to the obligation and the assets used to affect the settlement.¹⁰

Settlements usually follow large lump-sum payouts or buy-out annuity contract purchases. Because buy-in annuity purchases are revocable and the employer maintains primary responsibility for the obligation, they probably will not trigger settlement accounting. This is one of the key advantages to annuity buy-ins.

When a settlement occurs, the firm must immediately recognize a portion of the pension plan's unrecognized gain or loss.¹¹ It would otherwise amortize the unrecognized gains or losses over a longer period (unless the plan uses a mark-to-market approach for pension expense). The settlement amount recognized in pension expense is the unrecognized gain or loss, prorated based on the cash-out/annuity purchase size relative to the DB plan's total liability.



Sponsors should note that transferring plan liabilities could lead to reductions in overall funded status.



Plan sponsors considering risk transfer through annuitization or cash-outs should understand the accounting implications.

Settlement accounting is required only when the settlement cost exceeds interest cost plus service cost.¹² Consequently, fully frozen plans are more likely to trigger a settlement, as they have minimal service cost. The increased likelihood of settlement accounting for frozen plans, along with the recent large pension losses, have exacerbated the pension expense impact of certain risk transfer options.

Final thoughts

We advise DB plan sponsors to pay careful attention to these and the other matters we've discussed in this paper, as they seek to determine whether risk transfer solutions are appropriate for their organizations. When planned and carried out effectively, risk transfer can hold many advantages and fit well within a sponsor's long-term pension plan risk-management goals.

¹ While some sponsors have offered lump sums to retired groups, this is a more complex undertaking that has not been utilized nearly as much in the industry.

² IRC § 411(d)(6) restricts plan sponsors from amending the plan to remove optional forms of payment (except de minimis changes).

³ See Owens, "LDI for DB plans with lump sum benefit payment options"

⁴ A possible exception to this would be with plans that pay lump sums to new terminations but still have significant numbers of legacy retirees receiving annuities.

⁵ In some limited cases, where a company is not financially capable of funding pension benefits, the PBGC may initiate a "distressed termination." For every 12 standard terminations since 2000, there was about one distressed termination, based on the 2017 PBGC pension insurance data tables.

⁶ Prior to the Pension Protection Act (PPA), lump-sum rates were based on Treasury rates. Between 2008 and 2011, lump sum rates were a mixture of Treasury and corporate rates.

⁷ There are a few exceptions to this rule, such as de minimis lump sums and level income options.

⁸ This is due to investment returns, favorable increases in discount rates, minimum required contributions and some combination of these. See the appendix for AFTAP ranges and corresponding consequences.

⁹ The other accounting events that trigger special termination benefits and curtailment.

¹⁰ See paragraph 3, Statement of Accounting Standards No. 88 (now ASC 715).

¹¹ A portion of the transition obligation/asset would also be immediately recognized, but this is now zero for most plans.

¹² Service cost and interest cost are two components of pension expense.

Appendix

AFTAP ranges and Implications¹³

PPA imposed restrictions on underfunded plans, as determined by the adjusted funding target attainment percentage (AFTAP). The AFTAP is the plan's actuarial value of assets (smoothed up to two years), minus any credit balance, all divided by the plan's funding target. This ratio is then adjusted for annuity purchases made for non-highly compensated employees in the prior 24 months.

The plan's actuary must certify the AFTAP each year, typically by the last day of the ninth month. Exhibit 2 summarizes the key restrictions.

Exhibit 2: AFTAP ranges and restrictions

	FULL LUMP-SUM PAYMENTS	ANNUITY PURCHASES ¹⁴	ACCELERATED FORMS OF PAYMENT ¹⁵	ONGOING BENEFIT ACCRUALS	LIFE ANNUITIES
AFTAP ≥ 80%	Allowed	Allowed	Allowed	Allowed	Allowed
60% ≤ AFTAP < 80%	Restricted	Restricted	Partially Restricted	Allowed	Allowed
AFTAP < 60%¹⁶	Restricted	Restricted	Restricted	Restricted	Allowed

Source: Internal Revenue Code Section 436

Comparison of risk transfer options

Plan sponsors ought to consider many different factors when deciding which risk transfer option will most effectively meet their objectives. Exhibit 3 summarizes the key considerations for the risk transfer options discussed in this paper.

Exhibit 3: Comparison of risk transfer options

	ANNUITIZATION BUY-IN ¹⁷	ANNUITIZATION BUY-OUT	TV LUMP SUM CASH-OUT
Avoid Settlement Accounting	Yes	Possible	Possible
Revocable	Yes	No	No
Allowed if AFTAP < 80%	No	No	No ¹⁸
Fixed Stability Rate Period	No	No	Yes
Avoid Annuity Contract Premium	No	No	Yes
Reduced Hedge Ratio	No	No	Yes
Reduced PBGC Premium	No	Yes	Yes
Reduced Ongoing Admin Expenses	Possible	Yes	Yes
Reduced Investment Expenses	Possible	Yes	Yes
Reduced Longevity Risk	Yes	Yes	Yes

¹³ Note that plans fully frozen prior to September 1, 2005 may not be subject to the same restrictions.

¹⁴ Plans in the termination process may be allowed to purchase annuities and offer lump sums. Also, annuity "buy-in" purchases may not be restricted, as they can be viewed as investment transfers to insurance companies.

¹⁵ This is defined as any benefit greater than a single life annuity plus social security supplement.

¹⁶ The same restrictions would apply if the plan sponsor is in Chapter 11 bankruptcy.

¹⁷ Assumes that buy-in option is considered a revocable investment product.

¹⁸ An exception is made for small lump sums (i.e., fewer than \$5,000).

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