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Investment strategies for the current pension regulatory environment

Funding relief gives plan sponsors the option to defer contributions to their plans, but high PBGC premiums punish those who take it.

5.74%

January 2023
third segment rate **with** relief

3.93%

January 2023
third segment rate **without** relief

The variable premium rate has increased fivefold in the last decade (from 0.9% in 2013), effectively making the VRP headcount-based for many plans.

5.2%

2023 PBGC Variable Premium Rate on Unfunded Liabilities

$748

Annual per Participant PBGC Premium for Plans at the VRP Cap

This paper illustrates how the U.S. pension regulatory environment, characterized by significant funding relief and high Pension Benefit Guaranty Corporation (PBGC) premiums, influences the optimal investment strategies for pension plans. The America Rescue Plan Act (ARPA) funding relief significantly reduces funding requirements, while dramatic increases to the PBGC variable rate premium impose a meaningful headwind for many plan sponsors seeking funded status improvement. Prior to 2022, strong investment returns were helpful, but stubbornly low interest rates have prevented most plan sponsors from seeing large improvements to their plans' funded ratios. In 2022, those trends reversed, but most plans' funded ratios continued to stagnate as plan assets and liabilities fell together.

These recent changes to the regulatory environment have had a particularly meaningful impact on relatively poorly funded plans. Those plans benefit from the funding relief the most, but they also pay the highest PBGC premiums.

This paper will explore the actions plan sponsors can take to best position themselves to succeed in this challenging market environment, with a focus on the implications for developing prudent pension investment strategies.

Investment products:

Are Not FDIC Insured	Are Not Bank Guaranteed	May Lose Value

Key takeaways

	Funding relief	PBGC premiums
Basics	• Allows higher interest rates to be used for valuations that determine funding requirements. • Lengthens the amortization period for funding shortfalls. • Lowers funding requirements for the next 10+ years and makes those requirements more predictable.	• All plans pay a flat-rate premium of $96 per participant. • Underfunded plans pay variable rate premium of 5.2% of shortfall, but capped at $652 per participant. • The rates above are effective for 2023, and indexed for inflation. The variable premium rate is no longer indexed due to a change in the 2023 Omnibus spending bill.
Insights	• Lengthens time horizon for many plans to enable more risk-on investing, even in some less liquid asset classes. • Could enable tactical under-hedging since funding liabilities are not closely tied to market interest rates.	• PBGC premium structure is generally supportive of glide paths because it creates asymmetric risk profiles. • For plans at VRP cap, settlement strategies that reduce headcount can be an effective way to mitigate premiums, but there are trade-offs.

Funding relief background

Pension funding relief has been a major factor in the pension landscape practically since the application of the Pension Protection Act (PPA) back in 2008. PPA was designed to push plan sponsors into funding their plans more aggressively than before. The great financial crisis arrived later that year, however, and the combination of falling equity markets and interest rates presented a perfect storm for plan sponsors. PPA exacerbated those issues by forcing many plan sponsors to make large cash contributions at a very challenging time, so Congress was forced to act. The first iteration of funding relief appeared with the Moving Ahead for Progress in the 21st Century Act of 2012 (MAP 21). Since then, funding relief has been modified and extended several times, most recently in 2021 with the ARPA and the Infrastructure Investment and Jobs Act (IIJA).

Every variation of funding relief has had similar qualities, centered on allowing plan sponsors to use higher interest rates for minimum required contribution calculations.

Relief is implemented through complex mechanisms looking back at interest rates over 25 years and applying corridors, rather than simply reflecting current market interest rates. With higher discount rates used, liabilities are lower, funded statuses are higher, and contribution requirements are either reduced or eliminated. There's always been a phase-out mechanism included for the relief to wear away at some point in the future, but every time we've gotten close to that phase-out's having a significant effect, a new extension of relief has been passed.

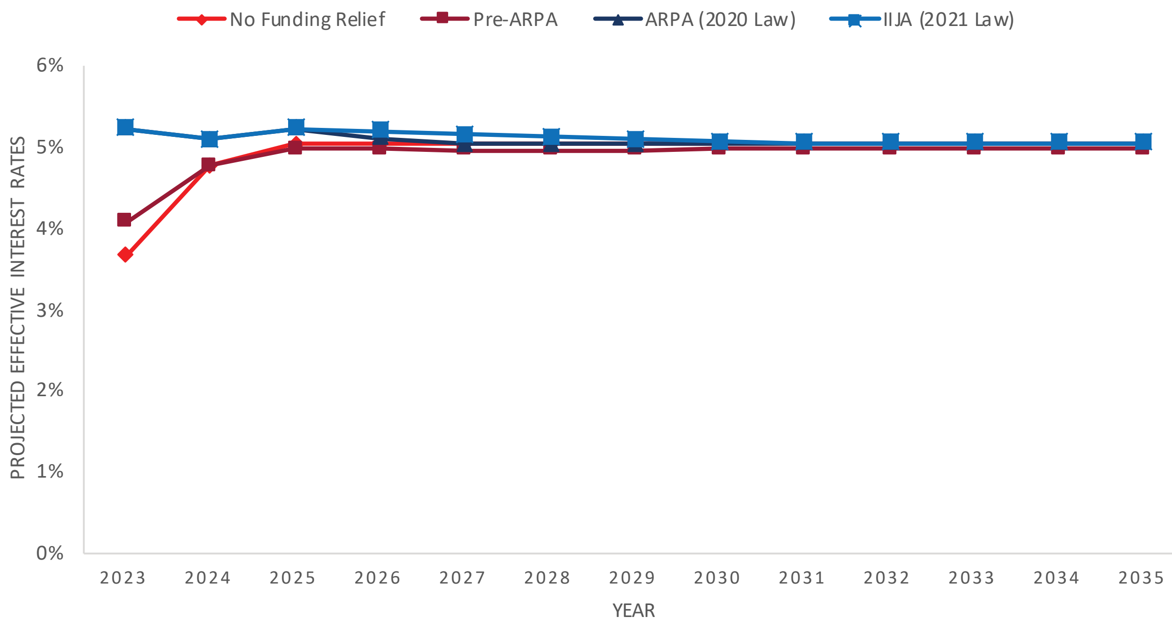
The intention of this paper is not to explain the specific mechanisms by which funding requirements are determined for pension plans reflecting funding relief. If you'd like those details, please refer to our existing funding relief whitepapers. Instead, this paper is intended to explain the impact that funding relief has on plan sponsors, with a focus on how it may change investment-related considerations and provide support for specific types of investment strategies.

Two primary mechanisms by which ARPA reduces funding requirements

a) The relief imposes a floor on the **interest rates** used in funding valuations, which has resulted in lower funding liabilities and thus lower minimum required contributions over the last several years. Following the very significant increases to market interest rates in 2022, those interest rates are now at a similar level to the floor imposed by funding relief. For 2023 plan years, funding interest rates ignoring relief are well below current market interest rates and the IIJA floor because of the 24-month smoothing mechanism built into PPA. If market interest rates stay at these elevated levels (as of December 2022 reflected in the exhibit here), then funding relief will have little impact on the interest rates used in funding valuations beyond 2024.

b) The relief also prescribes a **longer amortization period** (15 years rather than seven) for amortizing funded status shortfalls. The extended amortization period also reduces funding requirements and limits the short-term volatility of funding requirements.

Funding relief extended again (and again)



Effective interest rates are calculated for a hypothetical plan with a duration of about 12 years at a 5% discount rate. Projections assume market interest rates remain at levels observed during December 2022, based on the published applicable interest rates under IRC 417(e) for that month (1.16% for 5 years, 2.72% for next 15 years, and 3.10% beyond 20 years).

For illustrative purposes only.

Impact of funding relief on future funding requirements

The impact of the relief varies widely from plan to plan. Plans with larger funding deficits will see dramatically reduced or eliminated funding requirements. Well-funded plans (which already had minimal funding requirements) will be largely unaffected.

a) For those affected, this relief will significantly lower contribution requirements and the risk associated with contribution requirements increasing in the near term. The fact that future contributions will be lower and less volatile will have significant implications for the plans' investment strategies.

b) For other plans that were already well funded or where the plan sponsor was already contributing more than minimum required amounts, the relief may have little impact.

Investment Implications

For plan sponsors that benefit significantly from the relief, the main implications for investment strategy are:

a) The expected time horizon for the plan is lengthened as the relief delays funding requirements significantly, making a near-term plan termination considerably less likely.

b) The impact that asset losses have on near-term funding requirements has been significantly dampened, which may allow some plan sponsors to tolerate more risk.

c) Funding liabilities are no longer closely tied to changes in market interest rates, particularly if interest rates fall, so plan sponsors may have even less reason to hedge interest rate risk. This is especially true for plans that are not pursuing settlement strategies in the near term or those that are not sensitive to changes in the plan's liability on the balance sheet.

For plan sponsors who were concerned that poor investment results might lead to large near-term contribution requirements, funding relief may help and allow for more aggressive asset allocations.

Strategic implementation

Longer time horizons and a greater risk tolerance could enable some modifications to a plan's investment strategy:

a) They could allow for a more aggressive asset allocation/glide path generally, targeting higher returns with a greater reliance on return-seeking assets.

    (1) Absent funding relief, one or two bad years in the markets could result in a sharp increase in required cash contributions. The extended amortization period significantly dampens the impact of a poor performance year.

    (2) Over the long run, equities are very likely to outperform bonds. For plan sponsors that can accept the short-term volatility, staying invested in a well-diversified return-seeking asset allocation should pay off.

b) A longer time horizon could also allow for a greater use of illiquid private assets such as private equity, private debt, real estate and infrastructure.

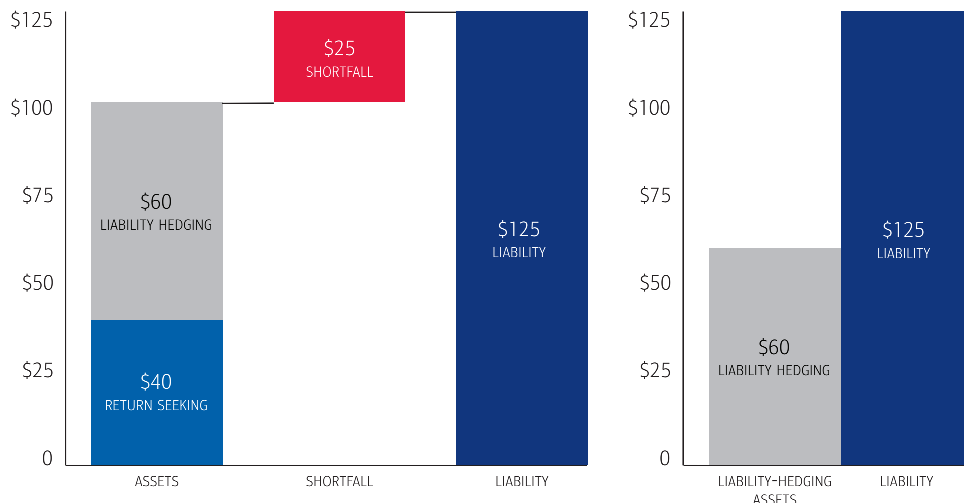
    (1) Adding alternatives to the return-seeking asset lineup may be particularly important if the overall allocation to return-seeking assets is being increased. They may mitigate some of the additional risk through greater diversification.

    (2) In a low-interest-rate environment, being able to capture some illiquidity premium could be particularly impactful.

    (3) For more on alternative investment strategies, please refer to *Merrill's AI Digital Brochure*.

c) Liability hedging strategies could be reevaluated to allow for more tactical under-hedging of interest rate risk in the immediate term. On the next page, we'll explore the trade-offs associated with such an approach.

Hedge ratio illustration



The **hedge ratio** is the portion of the liability's interest rate risk that is hedged.

Assuming fixed income assets are invested to match liability duration, the hedge ratio is the funded ratio times the liability allocation.

For example, for a plan that is 80% funded with a 60% allocation to LDI, the hedge ratio is 48% = 80% x 60%.

Liability-hedging assets could be invested at durations that are longer (or shorter) than the duration of the liability itself to target a higher (or lower) hedge ratio.

For illustrative purposes only.

Funding relief and interest rate risk

Funding relief could support the under-hedging of liabilities for plan sponsors with the necessary risk tolerance.

- Absent funding relief, a plan sponsor may be concerned with the risk that declining interest rates could lead to high cash contribution requirements.
- With funding relief, this is a nonfactor because the application funding interest rates that apply for the next 10+ years are not very sensitive to changes in market interest rates.
- The 5% floor on interest rates makes it so that each segment rate can't go below 4.75% through 2030 and below 3.5% once relief is fully phased out in 2035.
- Plan sponsors with higher risk tolerances could use some of that risk budget to take more interest rate risk.
- Plan sponsors with longer time horizons have more time for the strategy to play out.
- Adopting a policy with a larger return seeking asset allocation and therefore a smaller liability-hedging allocation will result in a lower interest rate hedge ratio naturally. Allows higher interest rates to be used for valuations that determine funding requirements.

But there are reasons many plan sponsors will decide to maintain a robust Liability Driven Investment (LDI) strategy.

- Reducing funded status volatility may be important to stabilize financial accounting results, satisfy debt covenants or enable settlement strategies.
- Following the very meaningful interest rate increases in 2022, bond yields provide fairly attractive returns. Future interest rates are inherently difficult to predict, but this at least provides an opportunity for LDI strategies to produce strong absolute returns going forward, especially if interest rates trend lower again.
- Long-duration government bonds usually benefit from a "flight to quality" that coincides with a sharp sell-off in equity markets. Holding some amount of long Treasuries usually reduces equity risk.
- Tactically under-hedging will also only be attractive for plan sponsors with conviction that long-term interest rates are more likely to rise than to fall.

Elevated PBGC premiums and the application of the VRP cap

PBGC premiums have increased significantly in the last decade and thereby became a central consideration in strategy setting for pension plans. There are two components of PBGC premiums: flat rate and variable rate. The flat rate premium is a simple head count-based premium. At $96 per participant for 2023, it is more than double the rate from 10 years ago. The VRP is more complex, determined as a percentage of the unfunded liability, but not to exceed a per-participant cap.

This section of the white paper will demonstrate how the PBGC premiums should be considered in the development of prudent investment policies for pension plans. It will show how the structure of the PBGC VRP creates asymmetric risk profiles, where the upside and downside associated with taking risk may be unbalanced. In general, this risk profile is supportive of the use of de-risking glide paths. The paper will also explore how targeted settlements can be effective for reducing PBGC premiums for plans at the cap, though not without trade-offs.

Increases to PBGC premium rates

	2013	2023
Per-participant flat-rate premium	$42	$96
VRP – rate on PBGC shortfall	0.9%	5.2%
VRP – per-participant cap	$400	$652

More on the PBGC VRP

The basic VRP works essentially like a tax on shortfall of plan liabilities less plan assets. At 5.2% for 2023, the rate has increased more than fivefold in the last decade. The VRP represents the largest portion of premiums paid by most plan sponsors, though well-funded plans can avoid it entirely.

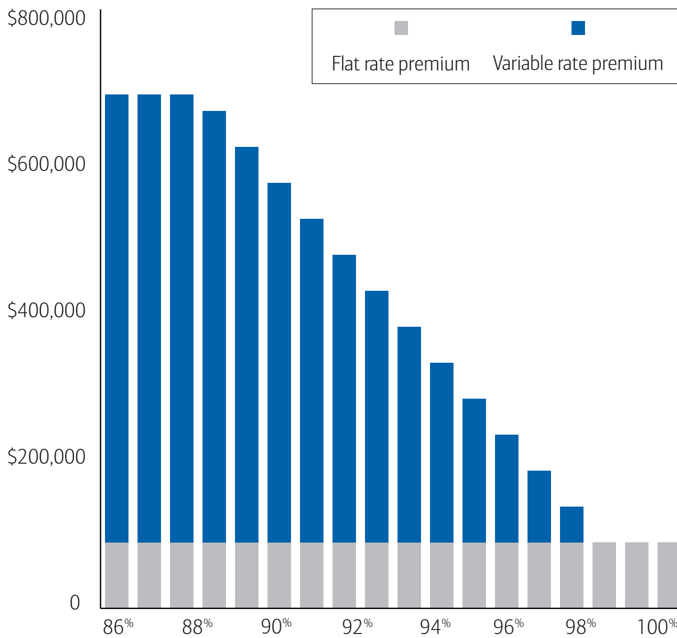
i) The VRP cannot exceed the variable rate premium cap ("the cap"), which is $652 per participant for 2023.

ii) Since 2013, the VRP rate has increased over 500%, whereas the cap has increased about 60%. Due to this disconnect, many plans are benefiting from the cap now that weren't several years ago.

iii) The PBGC liability is calculated using one of two interest rate measures available. The standard method is based on corporate bond rates at the beginning of the plan year, while the alternative method involves smoothing over 24 months and a small look-back. Whichever method is used, the applicable interest rates are much lower than funding interest rates and generally more closely related to market interest rates.

iv) The assets are calculated using the market value of assets with no smoothing. Contributions made up to 8.5 months into a plan year can be included in the assets, though.

PBGC premiums by funded ratio example



The plan shown in this illustration has a PBGC liability of $100 million and 1,000 participants (so the average participant's benefit is worth $100,000).

For illustrative purposes only.

Observations:

- The flat rate premium is unavoidable and independent of the funded ratio.
- The variable rate premium is eliminated at a 100% funded ratio.
- The cap applies here at a funded ratio of 87%.
- The funded ratio at which the cap applies is a function of the average liability per participant:
  - For plans with higher average liabilities, the cap will apply at higher funded ratios.
  - For plans with lower average liabilities, the cap will apply at lower funded ratios.
  - Thus, underfunded plans with lower per-participant liabilities (higher head counts) will be subject to the highest PBGC premiums as a percentage of assets.
- Plans subject to the cap stand to benefit from funded status volatility, while plans that are fully funded can only see premiums increase if their funded ratio changes.

Implications for pension investment strategies

The influence of PBGC premiums on a plan's investment strategy depends on that plan's funded status and is best addressed through an asset-liability study based on a stochastic projection of a plan's financials (including funding requirements and PBGC premiums).

The asymmetric risk profiles created by the structure of the VRP are evident when considering two hypothetical plans:

A plan that is very well funded (100% on a PBGC basis) has no VRP, but if the plan's funded status worsens, any new shortfall will be penalized at over 5% in PBGC premiums annually. There's no corresponding benefit from further improvement to the plan's funded status. This plan has asymmetric downside risk, meaning improvements receive no benefit but declines are significantly punished.

A plan that is poorly funded on a PBGC basis and subject to the cap would not see their PBGC premiums increase even if its funded status worsens because of the effect of the cap. However, achieving funded status improvement could reduce PBGC premiums significantly. This plan has asymmetric upside risk, meaning improvements are rewarded but declines are not consequential.

As those hypotheticals illustrate, poorly funded plans are rewarded for taking risk whereas well-funded plans are penalized. The structure of the PBGC premiums is supportive of de-risking glide path strategies whereby risk is reduced as a plan's funded status improves. Moreover, we believe a glide path should be designed for a pension plan only after modeling the plan's PBGC premiums under various economic scenarios, since they represent the largest annual expense for many plans.

PBGC premiums and settlements

Settlement strategies, including lump sum windows and annuity purchases, can be used to reduce PBGC premiums. Settlements are particularly effective at reducing PBGC premiums for plans at or near the VRP cap, where the annual PBGC premium savings are on the order of $750 per participant removed. It's important that settlements be considered as part of a broader pension risk management strategy, where the plan's investment strategy is the centerpiece.

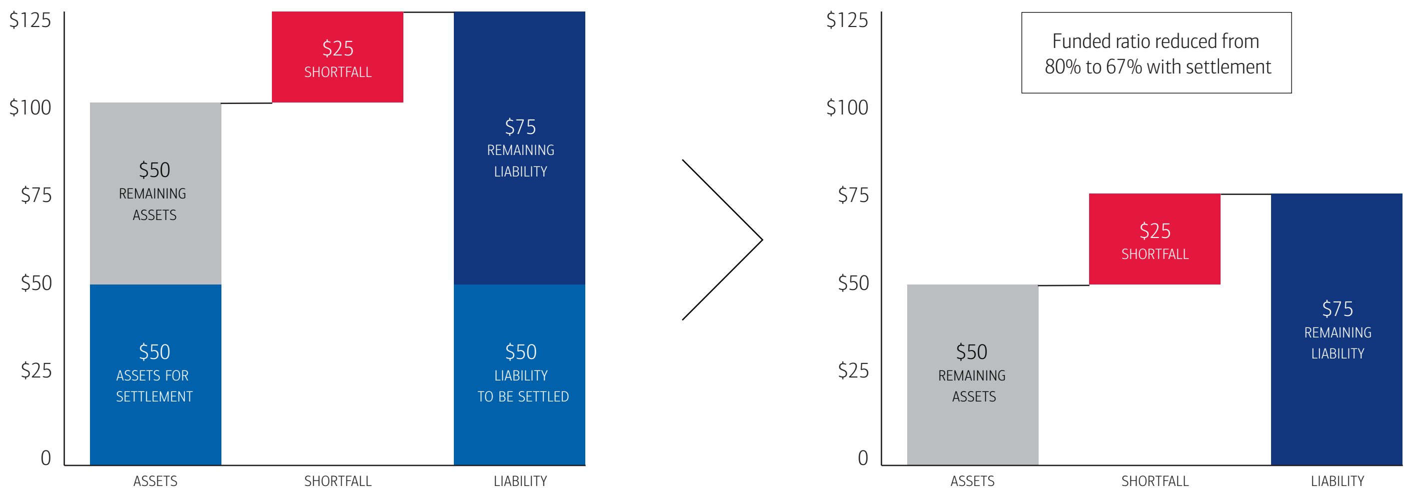
1) There are important trade-offs associated with settling liabilities, especially in a low-interest-rate environment where settlement costs are high.

2) Settling liabilities in an underfunded plan will further worsen the plan's funded status, even if liabilities are settled at book value. This could make it challenging for assets to keep pace with liabilities post-settlement.

3) Settling liabilities at a discount rate well below the expected return of the portfolio is financially equivalent to investing in an asset that perfectly hedges those liabilities, but with a lower return locked in. This means a plan sponsor could be "settling" for 4%–5% when they'd expect long-term returns of 7%–8% by continuing to invest those same assets.

Bank of America can help you evaluate settlement opportunities within the broader context of your long-term pension risk management strategy.

Settlement illustration



For illustrative purposes only.

Observations:

- Assuming liabilities can be settled at cost, a settlement will reduce the funded ratio of an underfunded plan, though the shortfall in dollar terms will be unaffected.
- A lower funded ratio could trigger cash contribution requirements, though funding relief could mitigate this effect.
- A lower funded ratio may make it harder for a plan to achieve investment-related goals, with fewer assets remaining to match or exceed the growth on the liability.

Conclusion

This paper addressed two defining aspects of the current regulatory environment for U.S. pension plans, funding relief and PBGC premiums. As described earlier, ARPA significantly reduces funding requirements, while dramatic increases to the PBGC variable rate premium impose a meaningful headwind for many plan sponsors looking for funded status improvement.

These recent changes to the regulatory environment have had a particularly meaningful impact on relatively poorly funded plans. These plans benefit from funding relief the most, but they also pay the highest PBGC premiums. Notably, the investment-related implications of these regulatory changes are somewhat similar for these plans, too. For most poorly funded plans, the relief extends time horizons and increases the tolerance for short-term negative results, while the structure of PBGC premiums creates an asymmetric risk profile whereby taking more risk may be well compensated with potentially reduced PBGC premiums.

Therefore, we believe these plan sponsors should be reassessing their pension risk budgets and exploring ways to increase expected returns going forward to combat this challenging environment. There is an opportunity here for plan sponsors to make sound decisions to drive funded status improvement in the years ahead without having to fund their deficits through contributions. We believe those plan sponsors delegating investment decisions to a sophisticated investment advisor with a proven Chief Investment Office are most likely to succeed.

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