



**BlackRock**<sup>®</sup>

# Reopen the plan

Key themes for U.S. corporate  
pensions in 2024

# Summary

- The average funded ratio for the top 200 U.S. Corporate pension plans is now 105.2%, the highest level in 15 years.
- As a result, we encourage sponsors to consider reopening plans or increasing benefits.
- Despite the improvement in funded status, compulsory contributions are kicking in for many plans.
- Current yields provide an attractive entry point to build or customize liability-driven investment (LDI) programs, but sponsors also need to be mindful of the shape of the yield curve.
- Even with the increase in funded ratios, some plans may still benefit from, or even *need*, private market allocations to achieve their funded ratio goals.



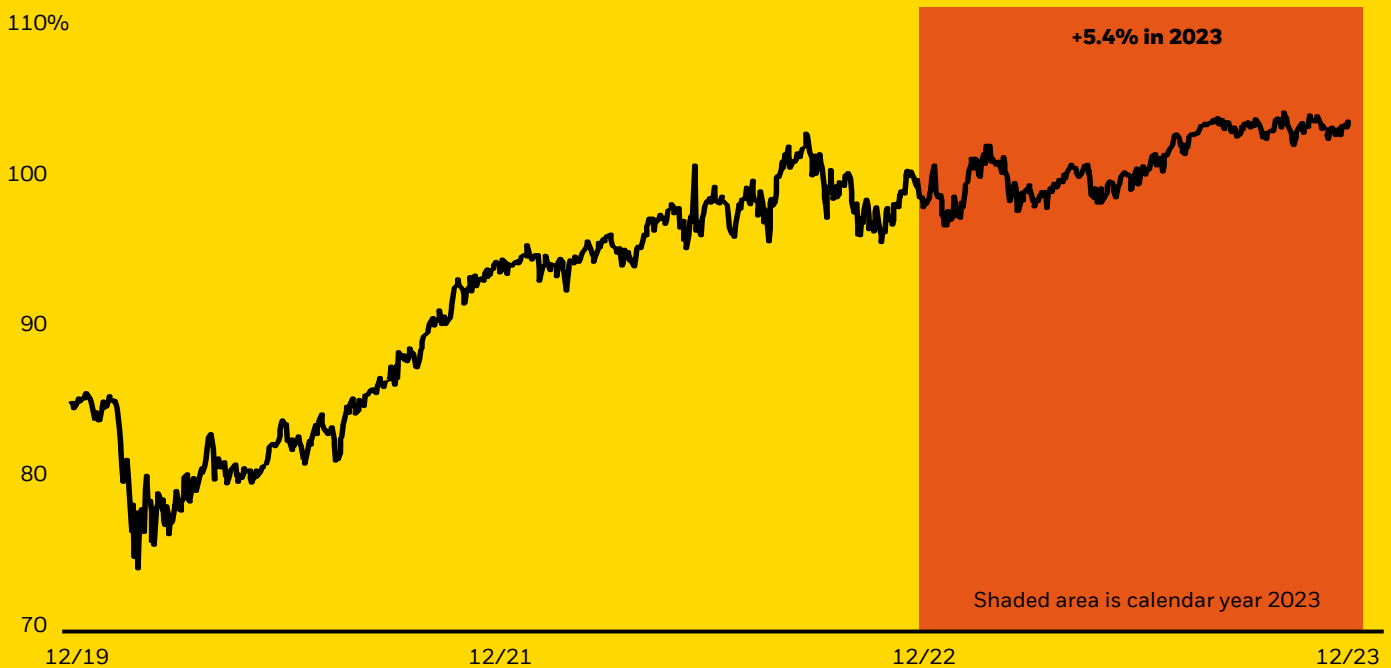
# Introduction

Despite volatile markets, the Projected Benefit Obligation (PBO) funded ratios of U.S. corporate pension plans rose approximately 5.4% in 2023, according to the BlackRock U.S. [LDI Pension MarketWatch](#). This improvement was largely attributable to a tech-dominated equity market rally that contributed to asset growth. The average funded ratio for a top 200 U.S. Corporate pension plan, shown in Exhibit 1, is now 105.2% – the highest level in 15 years. As a result, many plans are evolving their investment conversations away from finding ways to achieve full funding and towards investing to preserve strong funded ratios and planning optimal ways to use a surplus.

In last year’s U.S. Corporate Pensions Themes [paper](#), we encouraged clients to use their well-funded plan to their advantage. This year we are taking that same thought one step further by advocating that sponsors reopen their plans or increase benefits.

Below, we discuss the investment implications of reopening the plan, as well as our other key themes for 2024: The return of compulsory contributions for some plans, the implications of higher rates and an inverted yield curve on LDI programs, and the role of private markets for well-funded plans.

**Exhibit 1: The average corporate plan is now over funded on PBO basis**



Source: [BlackRock U.S. Pension Funding Update as of 12/31/2023](#).

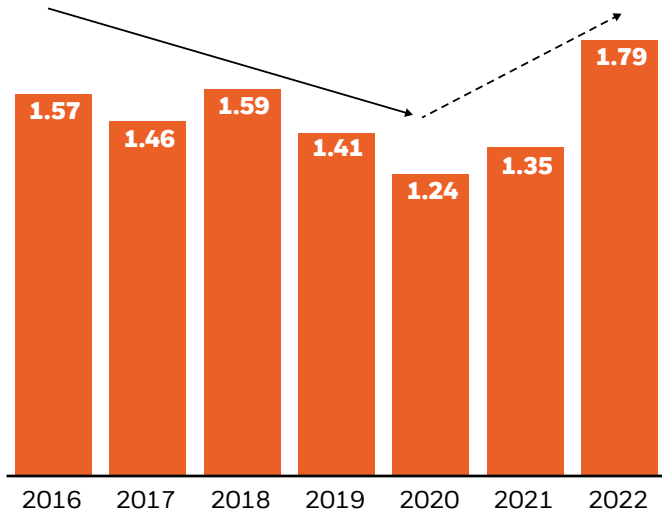
# 1 Reopen the plan or increase benefits

Continued labor market tightness makes it important for U.S. corporations to find cost-effective ways to retain employees and recruit new talent. Overfunded defined benefit (DB) plans offer a potential solution. Instead of paying greater cash compensation, companies can reopen frozen plans or increase benefits in well-funded ones to provide higher total rewards for employees while preserving precious capital for other uses. The rise in service cost as a percentage of the PBO since 2021, as shown in the left panel of Exhibit 2, is a potential indication that some sponsors may have already taken this initiative.

Depending on the pension plan's asset allocation and contribution strategy, increasing service costs may not hurt a strong funded ratio, and, in some cases, it may help

## Exhibit 2: Some sponsors are already leveraging their overfunded plan to increase benefits...

Service cost as a % of PBO

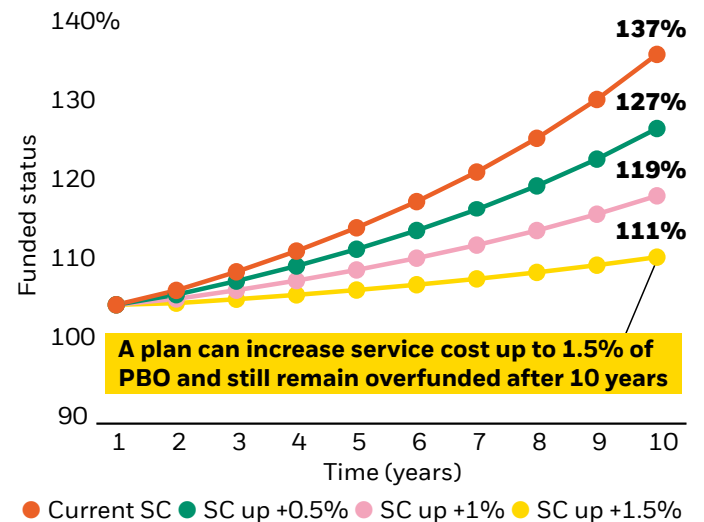


**Source:** S&P Capital IQ, Federal Reserve, BlackRock analysis as of 12/31/2022. Depicts the service cost as a % of PBO of Top 100 U.S. corporate defined benefit pension plans by size from 12/31/2016 to 12/31/2021 as represented by public disclosures. 2022 is estimated based on press releases and other company announcements. Charts are for illustrative purposes only. There is no guarantee that any forecasts made will come to pass.

avoid stranded surplus. As shown in the right panel of Exhibit 2, some well-funded plans, where the PBO funded ratio is projected to grow north of 130%, could add up to 1.5% per year in service cost as a percentage of the PBO liability and remain overfunded for the next 10 years.

IBM's recent decision to unfreeze the company's \$25.1bn<sup>1</sup> overfunded DB plan and leverage its \$3.6bn surplus is a real-world example of this idea in action. Starting in 2024, IBM will replace its matching contribution into employees' 401(k) plans with a 5% contribution into a retirement benefit account within the DB plan. Under the plan, notional balances within the DB plan would then grow at 6% for a few years and would earn the 10-year Treasury yield thereafter, with a 3% yearly minimum, through 2033.

## ... and help avoid stranded surplus while remaining overfunded



**Source:** BlackRock analysis as of 11/30/2023. Represents the projected PBO Funded Ratio evolution for a sample plan where starting funded ratio is 105% per BlackRock U.S. Pension Funding Update, at different levels of Service Cost ("SC") change. The asset class weights are based on 10-K data from the top 200 public corporate pension plans as of 12/31/2022 (32% long credit, 21.4% us 10+ Treasury, 17.7% U.S. equity, 10.3% Intl Equity, 7.5% Global Equity, 3.1% RE, 3.6% PE, 0.3% Private debt, 2.6% HF, cash 1.3%).

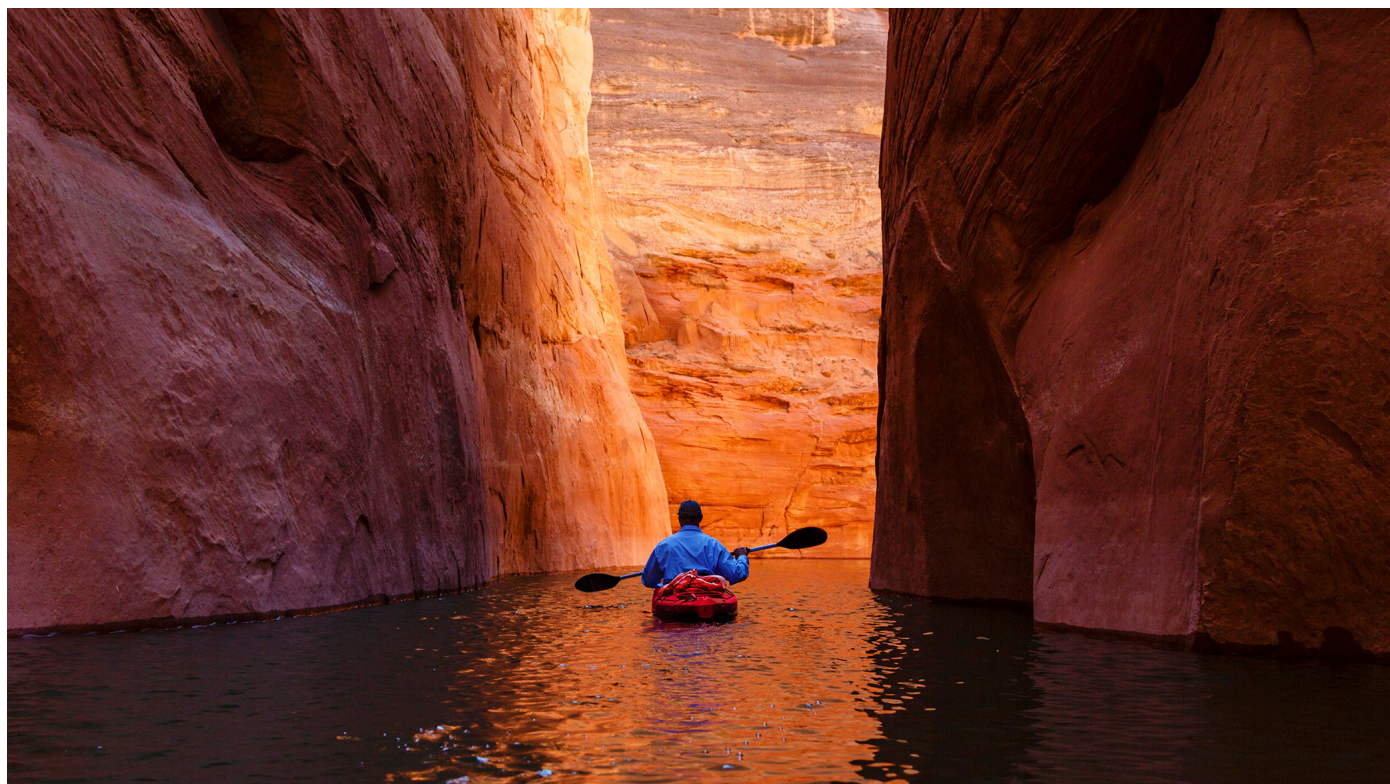
<sup>1</sup> IBM 2022 10-K; 2024 IBM U.S. Benefits Guide. Reference to companies should not be construed as investment advice or a recommendation.

There are a variety of tradeoffs between DB and 401(k) plans from the participants' perspective, with one potential positive being arguably more certainty in how the DB benefit would grow relative to a 401(k) balance, the latter of which is entirely subject to market volatility. The potential benefits for IBM are twofold: it will no longer need to pay the roughly \$500m annual cash contribution into the 401(k), and it will also likely not need to contribute cash to the DB plan for at least a few years because it is already in surplus.

The investment implications of this decision depend on the specific dollar size and growth rate of new benefit accruals. Assuming these accruals are roughly the same size as the cash contribution previously made into the 401(k), we estimate that IBM's required rate of return<sup>2</sup> would increase by around 2.6% per year to maintain a PBO funded ratio level above 110% in 10 years. This

change likely implies a material re-risking if IBM wants investment returns to do most of the work to remain overfunded and avoid future contributions once the surplus is depleted.

Other potential ways that sponsors can take advantage of overfunded plans include generating pension income to improve non-operating earnings, lowering leverage ratios as an asset on the balance sheet and generating a surplus for other uses (e.g. to fund retiree medical expenses<sup>3</sup> or facilitate mergers and acquisitions<sup>4</sup>). However, we would caution investment decision-makers that the ERISA fiduciary responsibility to focus on preserving benefits remains the ultimate priority when designing investment strategies for DB plans. For plans that are fully funded and do not intend to increase benefits, it is likely that an 80% or higher LDI allocation is necessary to preserve that strong funding level.<sup>5</sup>



<sup>2</sup> Required rate of return is defined as the return required by a plan to achieve a given funded ratio over a given time horizon net of contributions. <sup>3</sup> Under the Internal Revenue Code (IRC) Section 420(f), employers may use surplus pension assets to prefund retiree health and life insurance benefits. Only "excess pension assets" defined as assets (minus credit balance) above 125% of the plan's PPA funding target plus target normal cost may be transferred. <sup>4</sup> Surpluses can be monetized when merging an overfunded plan with an underfunded plan, noting that the merger cannot reduce or eliminate protected benefits. <sup>5</sup> BlackRock November 2023; based on an analysis of a sample DB plan that is 100% funded, closed, and frozen.

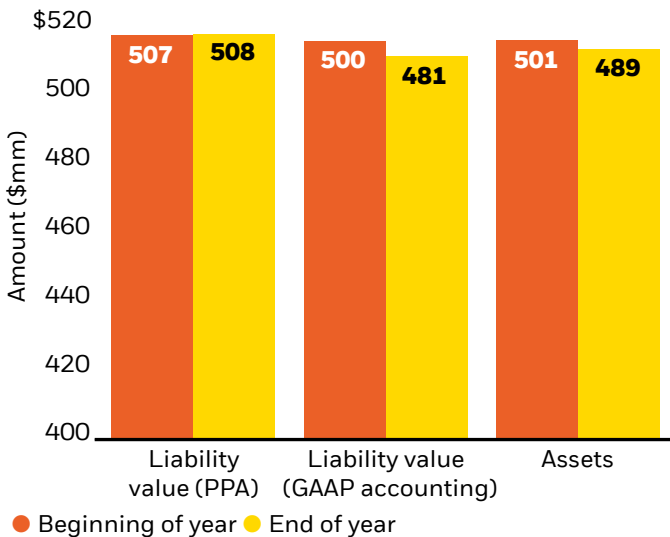
## 2 Compulsory contributions kick in

Many corporate plans are now well-funded on a marked-to-market basis and have been on contribution holidays for many years, thanks in part to relief provided by the [Infrastructure Investments and Jobs Act](#). It could potentially come as a surprise to some treasurers and CFOs, therefore, that contribution holidays are now largely over for many corporate plans.

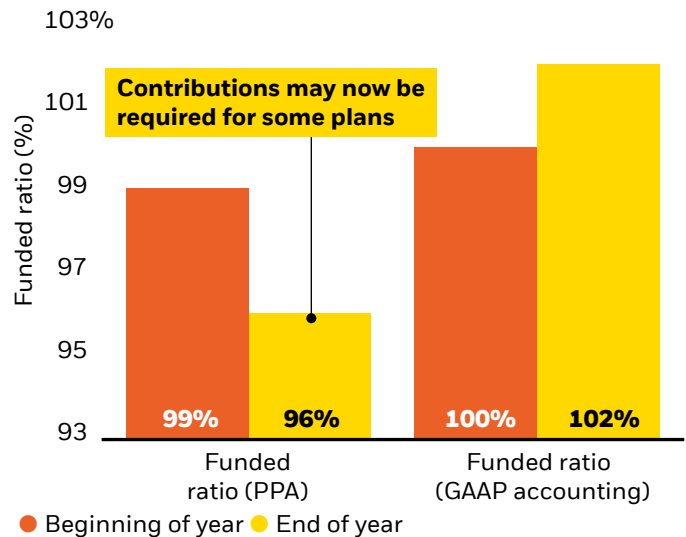
The end of contribution holidays has to do with the vagaries of how liabilities are valued on a [PPA-funding basis](#) versus a GAAP accounting basis. In the former, sponsors can choose to use a 25-year smoothed discount rate that, as market rates fell, meant PPA discount rates were higher, and liabilities were much lower, than they were from a GAAP perspective. This translated to (somewhat artificially) overfunded positions on a PPA basis and the relief from required contributions that many sponsors had been enjoying.

In 2022, however, market rates used to value liabilities on a GAAP basis rapidly increased, but smoothed PPA discount rates didn't move much, resulting in stable PPA liabilities and falling GAAP accounting liabilities. When combined with dramatic losses in asset values in 2022, PPA-funded ratios fell dramatically, moving them effectively in line with GAAP-funded ratios. Exhibit 3 shows that a similar pattern occurred in 2023. PPA liabilities calculated using smoothed discount rates were again largely static, but GAAP accounting liabilities fell along with assets. The right panel of Exhibit 3 shows that PPA-funded ratios may now be below GAAP ratios, and contributions could now be required for underfunded plans.

**Exhibit 3: In 2023, PPA liabilities were largely static, but accounting liabilities fell along with assets**

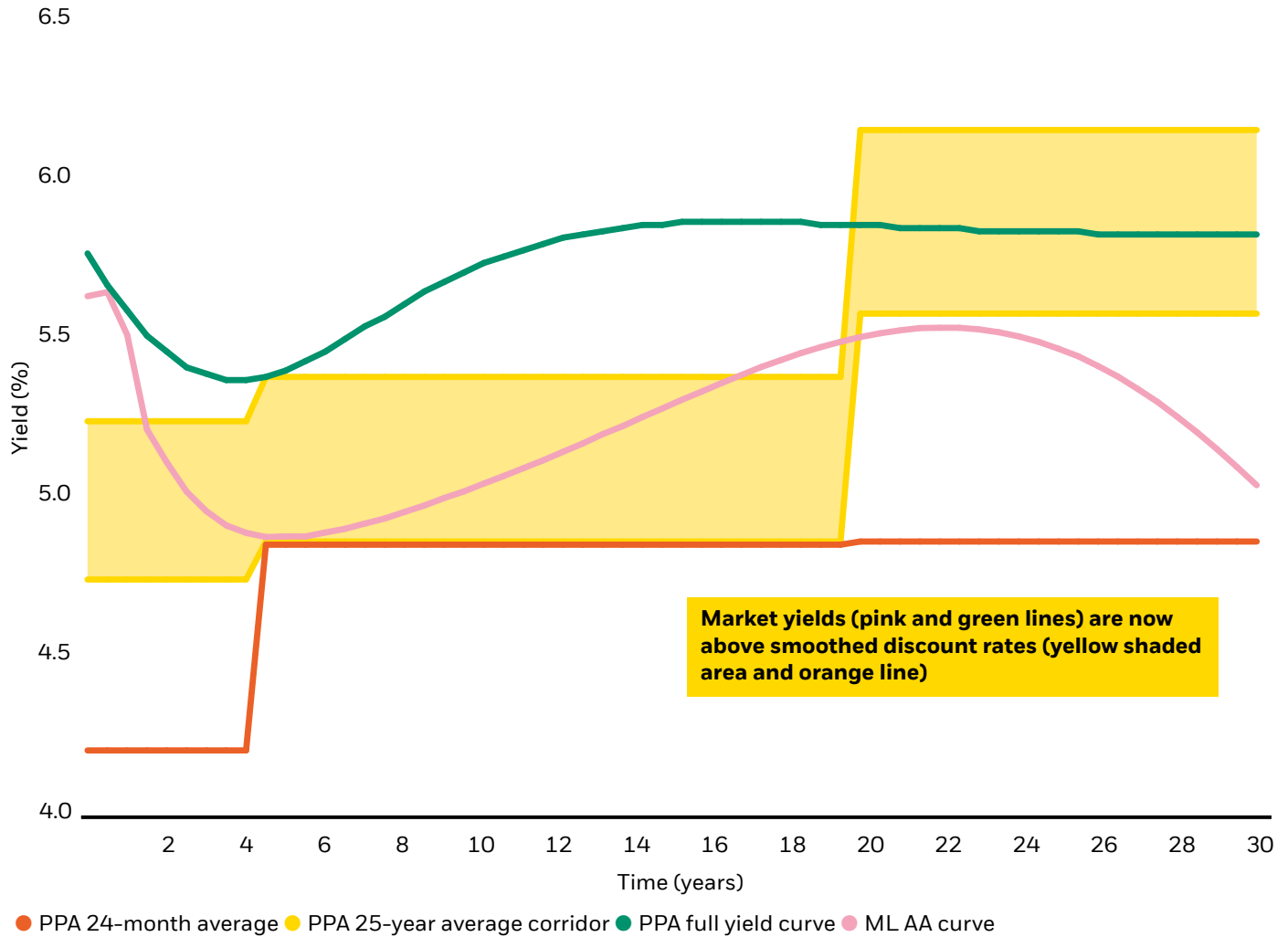


**PPA-funded ratios using smoothed discount rates are now below accounting-funded ratios**



**Source:** BlackRock, for illustrative purposes only. Liabilities valued using generic sample client cashflows with 12-year duration and ~\$500mm PBO as of 12/31/2022. Funding liability value calculated based on IRS Pension Plan Funding Segment Rates with 4-month lookback and accounting liability values calculated using ML 6A corporate discount curve as of 12/31/2022 and 11/30/2023. Asset value is market value of assets as of 12/31/2022 and 11/30/2023 based on initial funded status of 100% on an Accounting basis and initial allocation of 25% global equities and 75% long gov/credit rebalanced monthly.

**Exhibit 4: Market rates have increased and converged with PPA-smoothed discount rates**



**Source:** BlackRock Investment Institute. Chart shows projected market and 24-month smoothed discount rates relative to PPA 25-year average corridors through 2025, as of 11/30/2023. PPA discount rates have floor and ceiling based on corridors, but rate can vary within these bands.

As shown in Exhibit 4, a primary driver of the changes in PPA and GAAP liabilities has been the convergence of market rates with PPA-smoothed discount rates. In some cases, market rates are now above smoothed discount rates. As we wrote in a recent [paper](#), this presents plan sponsors with a unique opportunity to consider changing their PPA discount rate methodology from a 25-year smoothed method to a full yield curve method, thereby bringing the two methods for valuing the liability between GAAP accounting and PPA funding much closer together.

Since most LDI programs hedge the GAAP accounting liability to reduce the volatility of the PBO-funded ratio and other pension-related measures on the balance sheet,

this change would essentially kill two birds with one stone because LDI programs would also hedge the PPA funding liability, resulting in more stable cash contributions. Note that there may be some minor basis risk as the two discount curves for accounting and funding will not be exactly the same, but they will both be market-based. The accounting discount curve varies between plans and is often specific to their actuary’s proprietary bond-selection method, but it is marked-to-market as of the date of the valuation and typically based on AA-rated corporate bond yields. The PPA funding target full yield curve is an average of A-AAA corporate bond yields that is published monthly by the IRS.

# 3 Understand the implications of higher interest rates on LDI programs

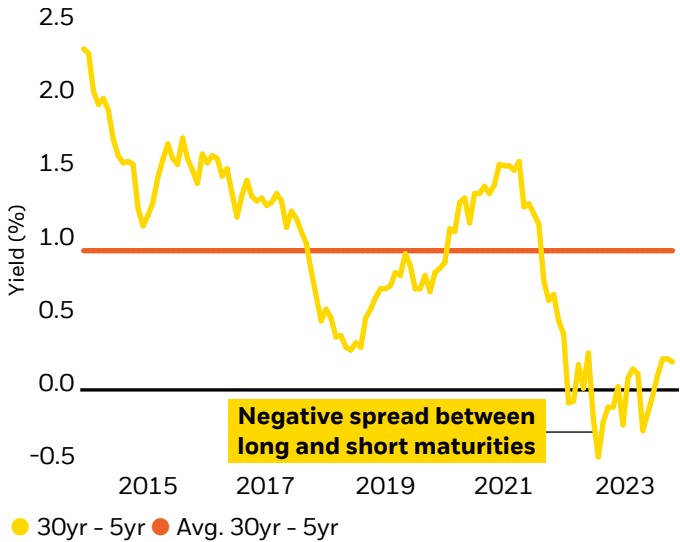
Higher interest rates have improved PBO-funded ratios for most U.S. DB plans (see Exhibit 1). All other things equal, current yields provide a more attractive entry point to build or customize LDI programs. But drilling down below headline interest rate levels, the *shape* of the yield curve has also changed substantially over the past few years.

As shown in the left panel of Exhibit 5, the term premium between 30-year and 5-year Treasury bonds is now at its lowest point in a decade, and the yield curve is close to inverted, as of December 31, 2023. This is important for pension plans not only because liabilities have most of their interest-rate sensitivity at the longer end of the curve, but also because some sponsors have “over-hedged” longer-term liabilities in an attempt to close the gap in interest-rate sensitivity between assets and liabilities. If the yield curve normalizes and longer-term bonds yield more than shorter-term ones, longer-term exposures will likely underperform, potentially leading to unintended funded-ratio outcomes.

Capital-efficient instruments such as extended-duration Treasuries can help sponsors avoid these unintended outcomes by enabling plans to target specific interest-rate and credit-spread hedge ratios across the curve. The right panel of Exhibit 5 illustrates how different LDI building blocks can be combined to achieve a 90% interest-rate hedge ratio at each key rate point. Being mindful that the cost of leverage is higher with higher short-term yields, and that collateral requirements when using derivatives continue to become more stringent, we believe the current interest-rate environment requires this extra level of precision in LDI programs.

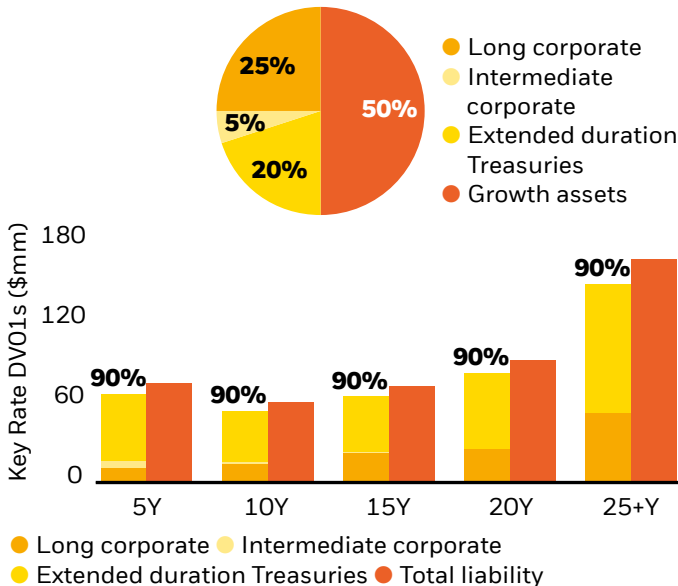
The shape of the yield curve has also created some attractive investment opportunities at the shorter end of the curve. Intermediate credit bonds are now yielding around 5%, as of December 31, 2023 and offer a very similar yield to long credit. As DB plans further mature and the duration of their liabilities declines, we believe intermediate credit will also have an increasing role to play in matching shorter-dated liabilities, while providing valuable diversification by issuer and sector relative to the long credit universe.

**Exhibit 5: Term premium is at its lowest point in a decade due to an inverted yield curve...**



**Source:** BlackRock, Bloomberg, Treasury yield data from 12/31/2013 through 12/31/2023. The figures shown relate to past interest rate yields. **Past performance is not a reliable indicator of current or future results.**

**... hence use capital efficiently and hit key rates precisely**



**Source:** BlackRock. For illustrative purposes only, not meant to depict actual results.



# 4 The role of private markets for well-funded plans

Many institutional investors have turned to private markets in search of higher returns, in exchange for decreased liquidity. When most DB plans were underfunded and had long investment horizons, private markets were a natural fit.

However, the majority of overfunded plans are less likely to *need* the additional return from private markets to maintain an overfunded level, even if they reopen closed plans or increase benefits. Closed and frozen plans (which make up roughly two-thirds<sup>6</sup> of all corporate plans in the U.S.) that are also overfunded have relatively low required rates of return, so they would likely invest 80% or more in

an LDI program and the remainder in a diversified range of liquid growth assets to maintain an overfunded position. The market has also seen increasing pension risk transfer (PRT) activity, which often shortens a portion of the plan’s investment horizon from years to months, creating an added preference for liquidity.

However, some plans may still benefit from, or even *need*, private market allocations to achieve their funded ratio goals. Such plans tend to exhibit one or more of the following characteristics.

<b>Underfunded</b>	Hence need a higher return to improve the funded ratio
<b>Open to new entrants</b>	Which implies higher service cost as a percentage of the PBO, hence the need for higher returns to maintain or improve the funded ratio
<b>Not contributing cash</b>	Meaning the plan needs investment returns to do most of the work to improve the funded ratio
<b>Not planning a PRT</b>	Which lends itself to a longer time horizon and less need for liquidity
<b>Have size and/or scale</b>	Larger plans, and/or plans that are supported by a well-resourced advisor or OCIO, tend to have more freedom to seek portfolio and manager diversification beyond listed asset classes

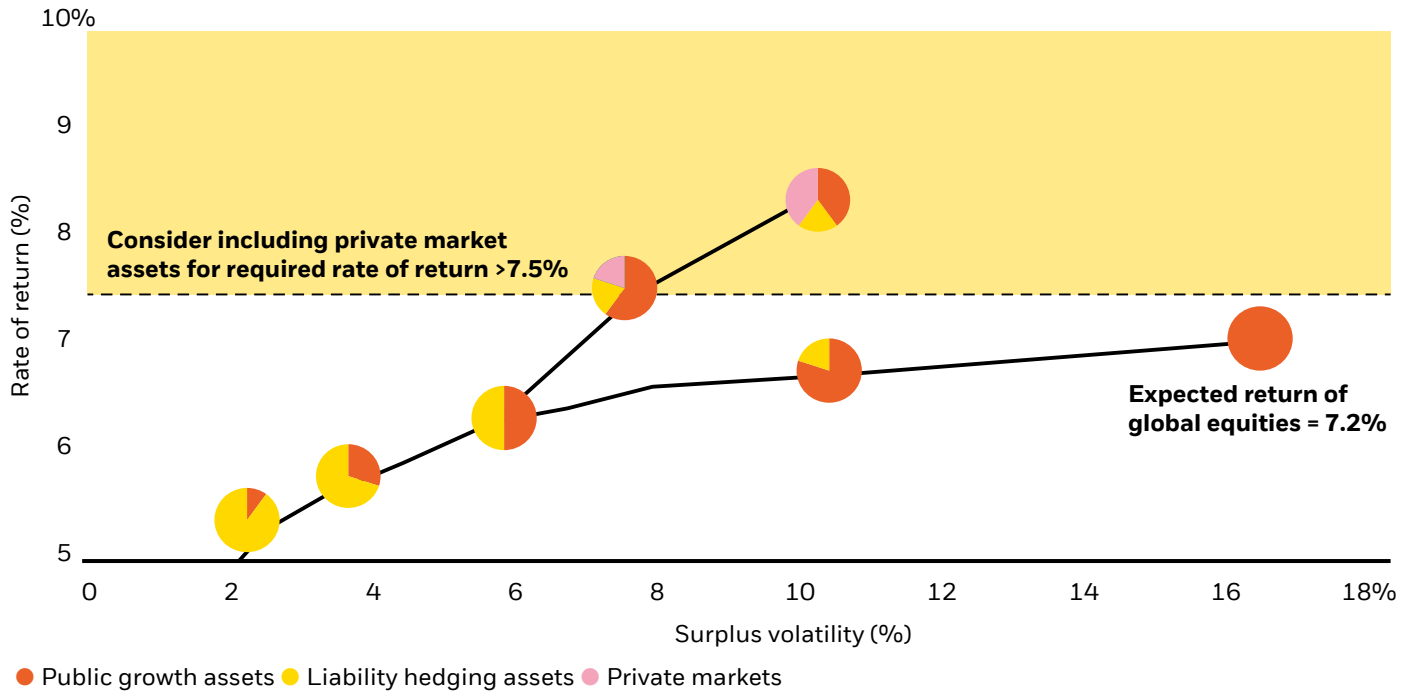
To quantify return goals where a plan might *need* to consider private market asset classes, Exhibit 6 shows the expected return of different illustrative portfolio mixes of public growth assets, liability hedging fixed income and private market assets.

Based on BlackRock’s capital market assumptions, the expected return of a 100% global equity portfolio with a 15-year horizon is 7.2%. Pension plans would be

extremely unlikely to implement a 100% equity portfolio, so they would likely need allocations to private markets if their required rate of return were above, say, 7.5%. That same return can be achieved with a portfolio with 60% in public growth assets, 20% in liability hedging assets, and 20% in private market assets, with a notable improvement in portfolio efficiency (i.e. return per unit of surplus risk) relative to a portfolio invested in only listed asset classes.

<sup>6</sup> As of year-end 2019.

**Exhibit 6: 100% listed equity portfolio is not expected to achieve 7.5% required rate of return**



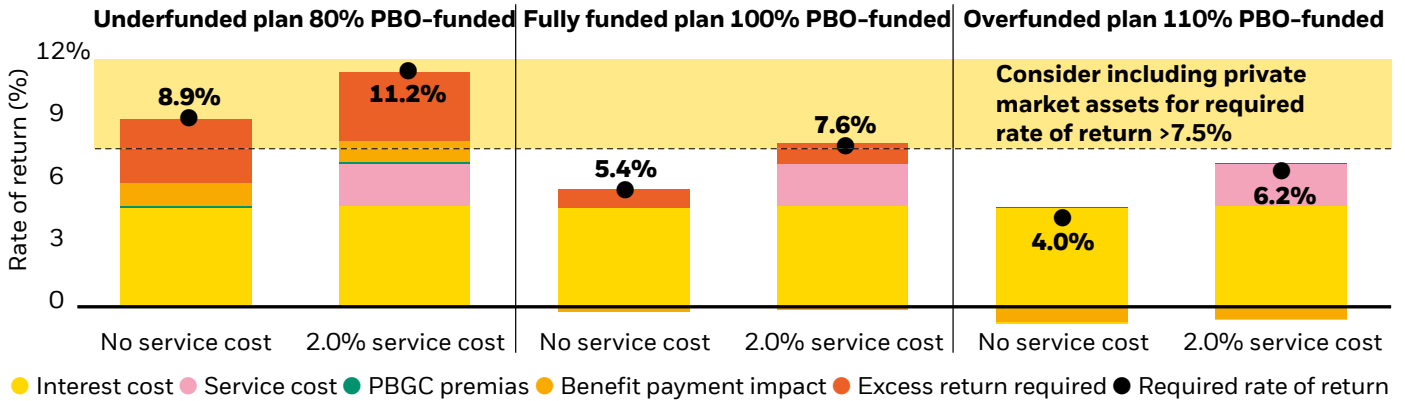
**Source:** BlackRock as of 9/29/2023. Based on BlackRock’s CMA and Aladdin Risk Model. All investing is subject to risk, including possible loss of money invested. The hypothetical returns shown are not a guarantee of future results. Returns are net of fees which include a deduction of advisory fees and asset class/product level fees. Neither asset allocation nor diversification can guarantee profit or prevent loss. Returns reflect the reinvestment of dividends, capital gains and interest but do not reflect the impact of taxes. Had those expenses been included, returns would have been lower. There is no guarantee that BlackRock’s CMA or the Aladdin risk model will achieve results shown, and actual volatility and returns could be significantly higher or lower than presented. The hypothetical results shown are for illustrative purposes only. No representation is being made that any account, product or strategy will achieve results shown. The results are based on criteria applied retroactively with the benefit of hindsight and knowledge of factors that may have positively affected its performance and cannot account for factors that may affect actual portfolio performance. The hypothetical expected returns should be interpreted based upon the inherent limitations and risk of the model and assumptions used to calculate results. **Please read CMA, Aladdin®, and other disclosures in the Appendix.**

In Exhibit 7, we look at illustrative required rates of return to reach or maintain 110% PBO-funded for three plans with different starting PBO-funded ratios. We see that plans that are ~80% PBO-funded – whether frozen or open – would likely *need* to consider private markets in almost every situation, because their required rates of return are well above 7.5%. Plans that are ~100% PBO-

funded are a mixed bag – frozen plans at 100% funded are unlikely to *need* private markets, while open plans at 100% funded with service costs above 2% of the PBO that are not planning a PRT might consider them. Plans that are ~110% PBO-funded and higher are unlikely to *need* private markets exposure unless they are still open and have annual service costs above 2% of the PBO.

## Exhibit 7: Underfunded plans and plans that are still open with high service cost may need private market assets

Required rate of return to reach/maintain PBO-funded ratio of 110%



**Source:** BlackRock, data based on BlackRock's Q3 2023 CMAs. Hurdle rate calculated by BlackRock using proxy mid-duration liability as of 9/29/2023. Required rate of return is defined as the return required by a plan to achieve a given funded ratio over a given time horizon net of contributions. Liability hurdle rate is comprised of service cost (annual benefit accrual rate), interest cost (yield on the liability), PBGC premiums, and benefit payment drag. Service cost calculated based on average service cost of top 200 U.S. DB corporate pension plans (data as of 12/31/2022). PBGC premiums calculated by summing the fixed rate premium (\$101 participant count) and variable rate premium (minimum of 5.2% deficit and \$686 participant count) per PBGC guidelines. Additional return required for PBGC premiums calculates expected return required keep funded status stable in ten or three years given the ongoing decrease in as set value due to PBGC premiums. Benefit payment drag calculated as Liability Cash Flow (1/Starting Assets 1/Starting Liability). Additional return required for benefit payment drag calculates expected return required keep funded status stable in 10 years given the ongoing decrease in asset value due to the benefit payment drag. Excess return to reach full funding target calculated as additional return needed to reach 110% funded status given that the liability growth rate is higher than the asset growth rate. Service cost calculated based on average service cost of top 200 U.S. DB corporate pension plans (data as of December 31, 2022).

Given the size and scope of private markets, the breadth of opportunities is too vast for us to cover here, but BlackRock's [2024 Private Markets Outlook](#) offers in-depth analysis. For those that want or *need* private assets, we have seen increasing interest from corporate DB plans in:

- **Private debt:** We forecast the size of the market to more than double in the next five years, primarily due to a material contraction in credit availability and tightening of lending standards from public lenders. The asset class also tends to exhibit spread characteristics that are attractive to corporate plans, which value their liabilities using a corporate yield curve.
- **Private equity:** We believe private equity remains attractive from a total return standpoint, and 2024 vintages may prove particularly fruitful given the lag in

valuation declines following the 2022 drawdown in listed equity markets. Secondary markets also look attractive given well-below-average deal volume in primary exits, resulting in an oversupply of motivated sellers and steeper discounts to investors willing to provide liquidity.

- **Infrastructure:** Higher inflation, coupled with volatility in stock and bond markets, has highlighted the value of infrastructure investments. Because infrastructure is essential to the economy and our daily lives, it offers cashflows that are less tied to economic cycles and are long term in nature, like pension liabilities. New and emerging investment opportunities include digital infrastructure, and, as supply chains have been onshored, investment is needed in key logistics infrastructure such as railways and ports.

## Looking ahead

Reopening plans or increasing benefits are important decisions that should be weighed carefully. But given the current strong funded status of many plans, we believe they are steps worth considering. If you'd like to learn more about how reopening or raising benefits could affect your plan's investment strategy, or about any of the other themes discussed in this paper, please reach out to us [here](#).

# Authors



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**Co-Head of Americas Pensions group within Multi-Asset Strategies & Solutions**

Martin Jaugietis, CFA, Managing Director, is Co-Head of Americas Pensions within BlackRock's Multi-Asset Strategies and Solutions (MASS) group. In this role he is responsible for co-leading the team that delivers outsourced chief investment officer (OCIO) and custom investment advisory solutions to corporate and public pension clients in the Americas.

Before joining BlackRock in 2018, Martin was Managing Director of Multi-Asset Solutions at Russell Investments in New York where he led client portfolio management activity for U.S. institutional clients and built custom portfolio solutions across pension, non-profit and defined contribution channels. In 2012, he was recognized by CIO Magazine as one of the "Top 25 Most Influential Investment Consultants in the World," and he also led the team that developed and launched the Bloomberg Barclays LDI Index Series.

Martin graduated from the Australian National University in 1997 with a Bachelor of Commerce degree (with Honors) and a Bachelor of Arts degree majoring in Political Science. He is also a CFA charterholder, member of the New York Society of Securities Analysts, and actively involved in the American Australian Association — a non-profit organization dedicated to strengthening and developing ties between the U.S. and Australia in the Arts, Business, Education, and Veterans Affairs.

Martin's interests include representing BlackRock in industry and client events and outside of work, he enjoys golf, travel, snow skiing, and spending time with his young family.

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**Isha Bansal**  
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Isha Bansal is an investment professional in the Americas Client CIO team within Multi-Asset Strategies and Solutions (MASS). Multi-Asset Strategies & Solutions (MASS) is the investment group at the heart of BlackRock's portfolio construction, asset allocation, and active management ecosystem. MASS draws on the full toolkit of BlackRock's index, factor, and alpha-seeking investment capabilities to deliver precise investment outcomes and cutting-edge alpha insights. MASS constructs active asset allocation strategies and whole portfolio solutions across a wide spectrum of commingled funds, separate accounts, model portfolios, and outsourcing solutions in the wealth and institutional channels.

Prior to joining BlackRock, Isha was working as an Equity Research Associate at Goldman Sachs, where she was responsible for conducting cross-sector quantitative and fundamental tactical research covering Asia and European Equity Markets.

Isha earned a Masters in Management from London Business School in 2017 and BA (Hons) in Economics from Shri Ram College of Commerce, Delhi University in 2016.

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