LOOMIS | SAYLES

MANAGER INSIGHT

An LDI Playbook for 2024

WRITTEN BY

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Corporate pensions currently sit in a reasonably comfortable place relative to recent history.

The Milliman 100 Pension Funding Index shows a pension surplus of $29 billion as of the end of 2023, a level not seen since before the global financial crisis in 2008.[1] Equity markets delivered double-digit returns in 2023, while higher fixed income yields continued to provide what we consider a relatively attractive entry point. Plan sponsors who are considering pension risk transfers (PRT) will likely continue to see favorable pricing and increased insurer capacity, and IBM's recent decision to reopen its defined benefit (DB) plan may prompt others to follow suit.

With this positive backdrop, how might plans navigate the coming year? Below we take stock of where we think corporate pensions should focus in 2024.

KEY TAKEAWAYS

- PRT and pension plan reopening don't have to be mutually exclusive. We think plans exploring these trends should reassess end-game strategy in the context of employee retirement security.
- For plan liabilities, the cost of falling rates has generally gone up relative to the benefit of rising rates. Increased interest hedge ratios and completion management strategies could potentially help mitigate this asymmetric risk.
- As plans continue to mature and assuming they increasingly allocate to illiquid private investments, we believe cash flow matching solutions can help ensure adequate liquidity in nearly all potential market environments.

PRT – Pension Risk Transfer or Pension Revival Trend?

Perhaps the answer is not either but both. We believe IBM's decision to reopen its plan is broadly positive from a retirement security standpoint. While 401(k) plans have cemented themselves as the retirement plan of choice for most companies, increasing access to DB plans would help reduce the onus on 401(k) plan participants to prudently invest their assets over many decades and draw them down carefully during retirement. DB plans certainly come with their own complexities, but in our view they can be a valuable tool for employee recruitment and retention, and when managed effectively, may provide more certainty around retirement income. DB plans already exist within many companies and can be "switched on" without significant effort. We expect plans that have a DB surplus to show continued interest in this option, especially since it can benefit company financials and participant well-being. For plans just reaching fully funded status, we consider IBM a prominent forerunner toward this approach.

We think a dual strategy that utilizes PRT and pension offerings can be a reasonable way to balance employee well-being and prudent financial management.

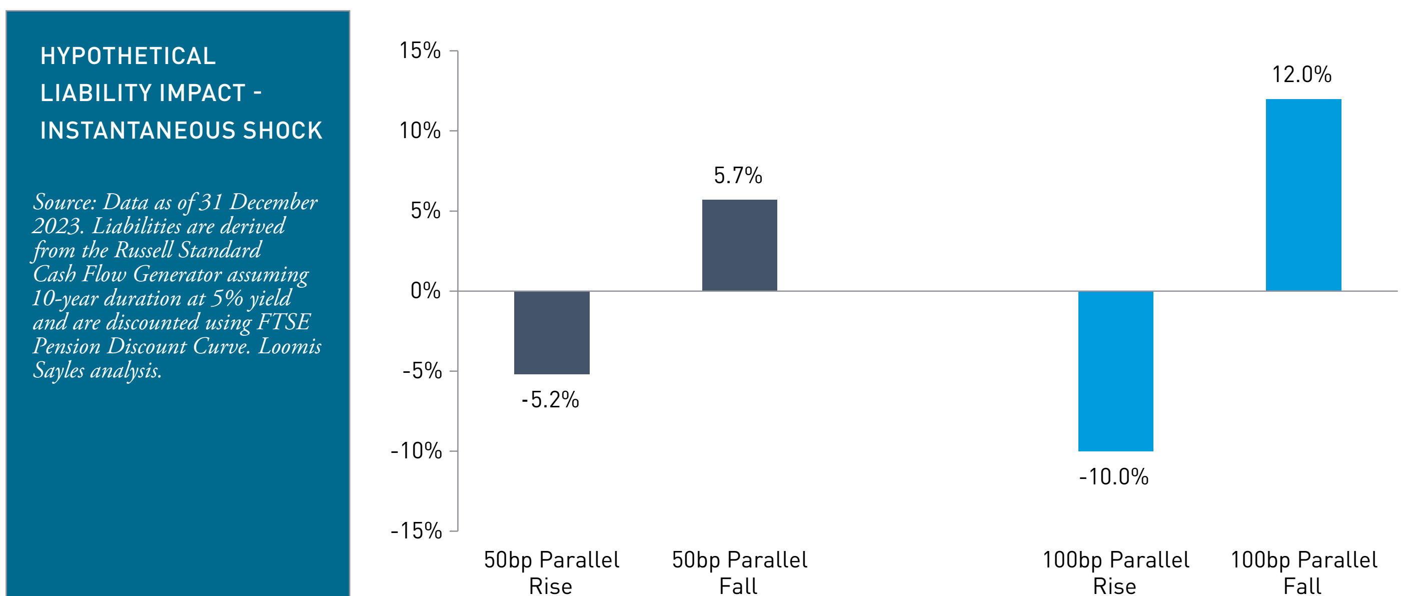
At the other end of the spectrum, 2022 was a record-breaking year for PRTs, and 2023 saw continued activity based on currently available transaction data.[2] We expect pricing to remain attractive to plan sponsors as more insurers enter the market and plans continue to look for ways to reduce costs. However, even companies that do reopen their plans may continue to utilize PRTs on

an opportunistic basis when pricing appears favorable. For example, an open plan may consider a dual strategy of offering a pension to new hires as a recruiting or retention tool while simultaneously managing existing retiree liabilities via opportunistic PRTs. We see this as a reasonable way to balance employee well-being and prudent financial management. In these instances, we consider it especially critical to ensure that the investment strategy adapts as the liability side of the equation changes over time.

Let the Hedges Grow

Despite falling during the fourth quarter of 2023, long-term Treasury yields remain elevated relative to recent history. While many plans have already increased their target interest rate hedge ratios, we still see many plans with a large portion of unhedged interest rate risk. We believe plans should consider using all available tools to continue to reduce as much interest rate risk as is feasible. Even the most carefully crafted interest rate outlook is ultimately a best guess. Instead of relying on these estimates, we believe it makes sense to tilt funding ratio risk budgets toward risks that offer a reasonable expectation of corresponding return potential (e.g., equities, credit and illiquidity) as opposed to unhedged interest rate risk.

One factor worth considering is how liabilities would behave in different rate shock scenarios. Below, we show how a generic hypothetical pension liability[3] would behave in both rising and falling shifts of 50 and 100 basis points.



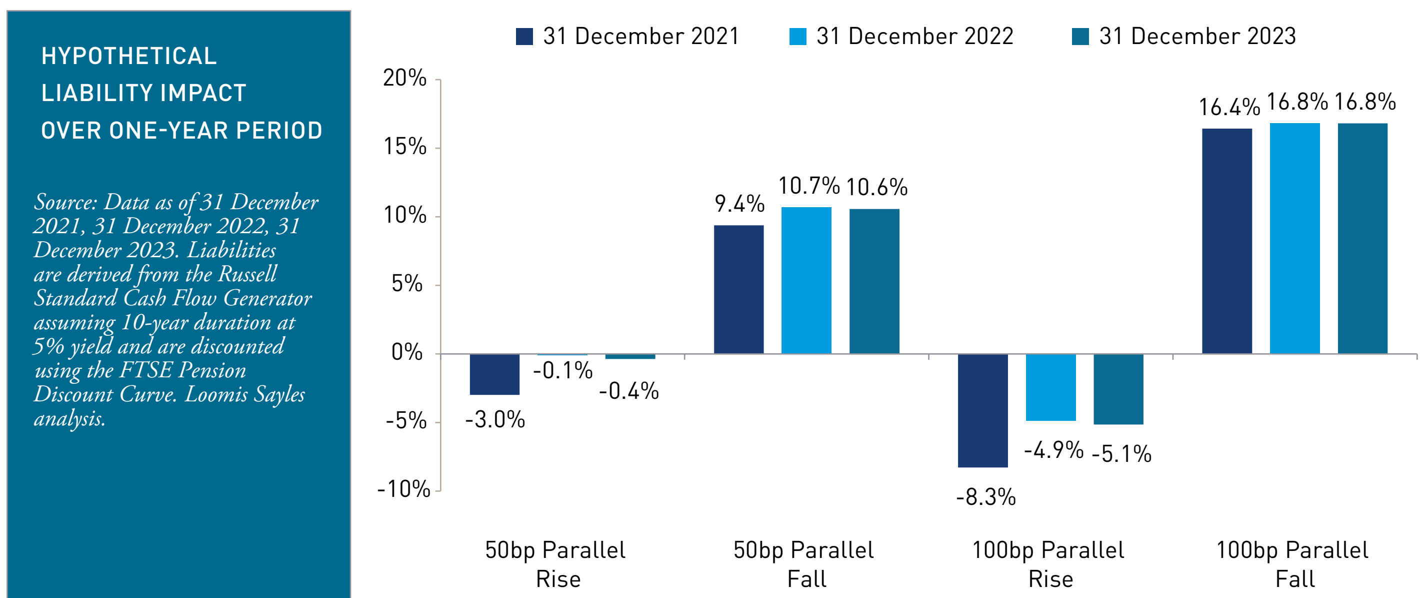
HYPOTHETICAL LIABILITY IMPACT - INSTANTANEOUS SHOCK

Source: Data as of 31 December 2023. Liabilities are derived from the Russell Standard Cash Flow Generator assuming 10-year duration at 5% yield and are discounted using FTSE Pension Discount Curve. Loomis Sayles analysis.

The scenarios shown are hypothetical only and are not predictive of future events. The use of hypothetical scenarios and forecasts has inherent limitations, including but not limited to their inability to reflect the impact of actual trading on a portfolio or economic and market factors on investment decisions. They rely on opinions, assumptions and mathematical models, which can turn out to be incomplete or inaccurate. These opinions and assumptions are often based on past events and do not consider unforeseen events or developments. The information is not intended to be representative of any investment product or strategy managed by Loomis Sayles. ***Please reference the end of this material for additional important disclosure. Past simulated market experience is no guarantee of future results.***

On the previous page, we show the effect of hypothetical instantaneous parallel shifts on liabilities as of 31 December 2023. Due to their high positive convexity, liabilities in this scenario would increase in a falling rate environment by more than they would decrease in a rising rate environment. This demonstrates the asymmetry of liability impact and may lead more plan sponsors to consider increasing hedge ratios using high-convexity assets such as long-duration Treasurys, Treasury STRIPs and Treasury futures. These may be implemented in a completion mandate targeting a specific hedge ratio or within existing long-duration accounts altered to allow for duration extension.

In the chart below, we show how these parallel shifts would have hypothetically played out over a one-year period as compared to 31 December 2022 and 31 December 2021. While the effect of a falling rate scenario does not differ materially across the three time periods, rate rises produced a more significant benefit for the 2021 liabilities. For example, a 100-basis-point rise at 31 December 2021 would have reduced liabilities by 8.3%, while the same rate rise at 31 December 2023 would only reduce liabilities by 3.9%. On the other hand, the increase in liabilities from a rate fall would be fairly similar at 16.4% and 17.0%, respectively. In other words, the cost of falling rates has gone up relative to the benefit of rising rates. The primary reason for this is the potentially higher carry component (i.e., liability interest cost) over the one-year holding period today compared to two years ago. We reiterate our view that this should lead plan sponsors to consider increasing their hedge against falling rates via increased allocations to long-dated Treasury exposure through either physicals or futures.



HYPOTHETICAL LIABILITY IMPACT OVER ONE-YEAR PERIOD

Source: Data as of 31 December 2021, 31 December 2022, 31 December 2023. Liabilities are derived from the Russell Standard Cash Flow Generator assuming 10-year duration at 5% yield and are discounted using the FTSE Pension Discount Curve. Loomis Sayles analysis.

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A final point on managing interest rate risk: we advise plan sponsors to ensure that interest rate hedging changes can be implemented in an efficient way. We saw the 30-year US Treasury yield peak at 5.11% on 19 October 2023 before falling below 4.00% a mere two months later. A completion manager with an interest rate hedge target can typically increase the hedge in a matter of hours, whereas moving physical capital can take days, weeks or even longer if decision-making sits with an investment committee that meets quarterly. Regardless of each plan's situation, we think it is prudent to hire a completion manager so the plan can potentially be positioned to take advantage of the next dislocation.

We believe it makes sense to prioritize long-duration fixed income in seeking to increase interest rate hedge ratios and help preserve any recent funding ratio gains.

Make a Difference With Your Contributions

In our opinion, one underappreciated aspect of higher yields is that the funding relief provisions of various recent legislation (MAP-21, ARPA AND IIJA) have become less relevant.[4] While the nuances of these calculations fall outside the scope of this piece, the takeaway is that minimum funding discount rates are now roughly equivalent to market-based discount rates, which is likely to lead to higher required contributions for many plans. In light of this, we believe plan sponsors should be dusting off required contribution projections with their advisors and budgeting for potential pension cash needs to limit surprises at the investment committee or board level.

If these projections show that required contributions are expected going forward, we believe incoming capital can offer a good opportunity to adjust allocations and fine-tune liability-hedging exposures. As stated in the prior section, we believe it makes sense to prioritize long-duration fixed income in seeking to increase interest rate hedge ratios and help preserve any recent funding ratio gains.

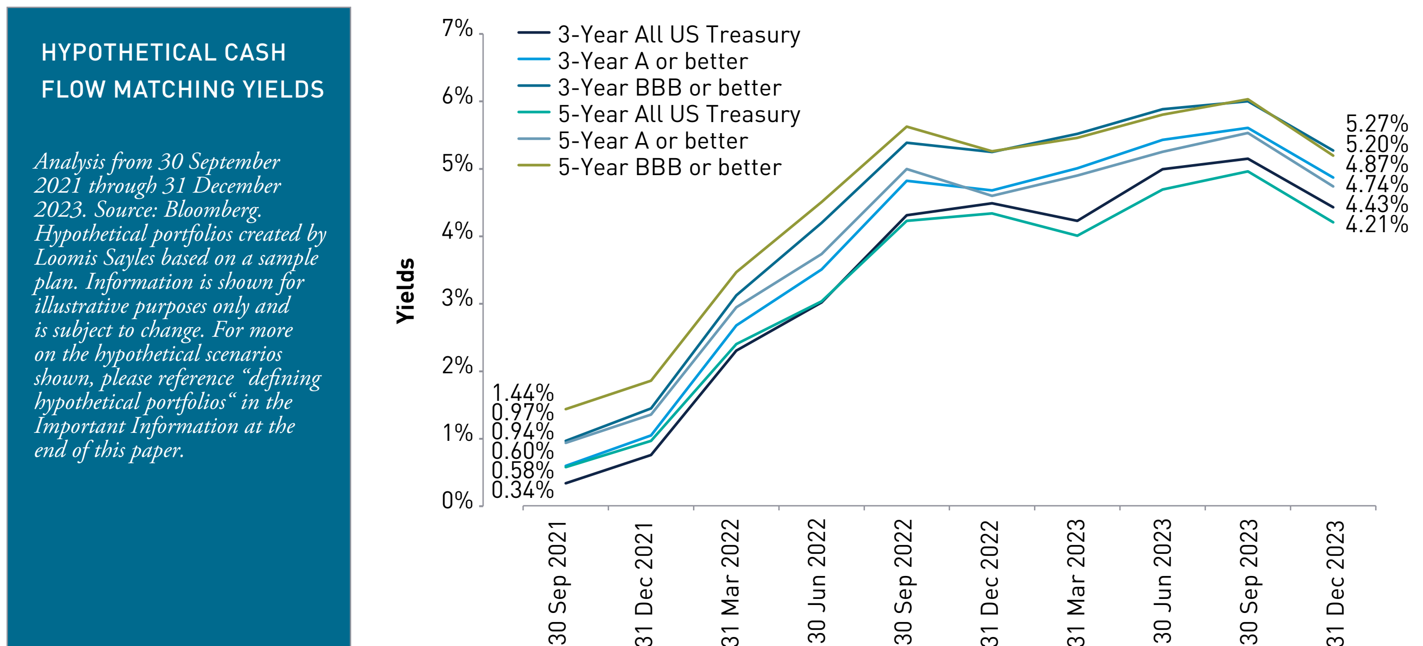
Strike a (Cash) Match

We continue to believe that cash flow matching is an underutilized strategy within corporate pension asset allocations. This is time-sensitive with potential Fed cuts coming in the near term, which could make this approach less attractive. As plans continue to mature and assuming illiquid private investment allocations grow, we believe plans need to

ensure there is enough liquidity to meet monthly benefit payments in all potential market environments. A cash flow match strategy focused on high-quality corporate bonds with 3-7 years of maturity could help reduce the burden of continuously redeeming from other areas of the portfolio, especially in a market selloff scenario as a dreaded forced seller.

In addition, while we believe a cash flow matching solution can be a structural part of nearly any portfolio, we believe it is particularly attractive now relative to recent history. Despite a dip in all-in yields in the fourth quarter of 2023, 3-year and 5-year hypothetical cash flow matching portfolios (shown below) currently offer yield near or above 5% when including high-quality investment grade credit (BBB or better). We view the hypothetical yield generated as a reasonable proxy for estimated forward-looking return and, in our opinion, it could be competitive with public equity returns (based on publicly available industry-wide capital market assumptions[5]) with potentially less assumed volatility.

We took a deeper dive on cash flow matching for corporate pensions **here**.



The use of hypothetical scenarios has inherent limitations. They are heavily dependent on the assumptions used and do not take into account actual trading or market conditions. The portfolios constructed were created by projecting cash flows from the universe of bonds available on the date of analysis which includes assumptions about bonds cash flows that may not materialize in actual accounts. The hypothetical portfolios are intended to convey one measure of the characteristics of an asset class or combination of asset classes, and a different analysis may yield different results. Material market and economic factors may affect investment decisions differently when managers are investing actual client assets. The sample plan was created using the Russell Cash Flow Generator which produces a generic set of pension liabilities. Analysis was done using the assumptions of a plan size of $1 billion, discount rate of 5.29% which is the discount rate for the calendar fiscal year end, using a three-year and five-year vintage cash flow matching scheme.

The ability of an actual portfolio to deliver the required cash flows is not guaranteed and is subject to a variety of factors including, but not limited to, the availability of bonds, active management, and trading, transaction costs, default risk, reinvestment risk, rebalancing risk and liquidity risk.

Any investment that has the possibility for profits also has the possibility of losses, including the loss of principal. Please see the Disclosure Statement and Model Description at the end of this paper for additional important information.

Putting It All Together

Ultimately, we believe most plan sponsors can approach 2024 with a positive outlook and reasonable flexibility to work toward strategic goals—whether that means shoring up risk, offloading liabilities or reviving closed or frozen plans.

While many plans have a sensible investment strategy and a diversified asset allocation, we believe the following areas can be additive to plan outcomes:

1. Reassess end-game strategy in the context of employee retirement security.
2. Consider how to increase the interest rate hedge ratio to help mitigate the asymmetric risk of falling rates and take advantage of future interest rate dislocations (via a completion manager).
3. Develop a plan for investing forthcoming contributions (if any).
4. Consider a front-end cash flow match structure to help increase the likelihood of paying monthly benefit payments regardless of the market environment.

At the end of the day, each plan sponsor must consider a multitude of plan- and company-specific factors when developing an investment strategy. We believe that investment strategy should also align with the benefit strategy, especially if PRT activity continues at its current rate and discussions around reopening plans emerge. We look forward to helping plan sponsors navigate what is likely to be an interesting year for pension plans.

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THE LOOMIS SAYLES INSTITUTIONAL ADVISORY GROUP partners with clients to provide advisory expertise, investment solutions, asset-liability modeling, thought leadership and cutting-edge analytics, with a focus on pensions and insurers.

Endnotes

[1] The Milliman 100 Pension Funding Index measures the funded status of the 100 largest corporate pensions in the US.
Source: https://us.milliman.com/en/insight/pension-funding-index-january-2024
[2] Source: https://www.plansponsor.com/market-conditions-continue-to-fuel-pension-risk-transfers/
[3] Liabilities are derived from the Russell Standard Cash Flow Generator assuming 10-year duration at 5% yield and are discounted using the FTSE Pension Discount Curve.
[4] Liabilities are derived from the Russell Standard Cash Flow Generator assuming 10-year duration at 5% yield and are discounted using the FTSE Pension Discount Curve.
[5] Sources: https://am.jpmorgan.com/us/en/asset-management/institutional/insights/portfolio-insights/ltcma/
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https://www.capitalmarketassumptions.com/

Important Information on Hypothetical Liability Scenarios:

For purposes of generating a sample liability, we use the Russell Cash Flow Generator and discount the liability using the FTSE Pension Liability Index. The FTSE Pension Liability Index is published by FTSE on a monthly basis. Liability data is based on a sample set of liability cash flows using the Russell Cash Flow Generator discounted using the FTSE Pension Discount Curve.

The scenarios shown are not predictive of future events. The use of hypothetical scenarios and forecasts has inherent limitations, including but not limited to their inability to reflect the impact of actual trading on a portfolio or economic and market factors on investment decisions. They rely on opinions, assumptions and mathematical models, which can turn out to be incomplete or inaccurate. These opinions and assumptions are often based on past events and do not consider unforeseen events or developments.

Past simulated market experience is no guarantee of future results.

Important Information on Hypothetical Cash Flow Matching Portfolios:

Defining Hypothetical Portfolios

We have defined three portfolios based on quality^ (in descending order, highest quality to lowest):

1. All US Treasury: invests only in US Treasurys

2. A or better: consists of bonds rated A or better

3. BBB or better: allows only fixed income securities rated BBB or better

^Credit Quality reflects the highest credit rating assigned to individual holdings of the portfolio among S&P, Moody's or Fitch; ratings are subject to change.

Disclosure Statement

We have produced this analysis using a cash flow sufficiency algorithm. This material is for informational purposes only and it should not be construed as investment advice. Investment decisions should consider the individual circumstances of the particular investor. Any opinions or forecasts contained herein reflect subjective judgments and assumptions of the author and do not necessarily reflect the views of Loomis, Sayles & Company, L. P. Investment recommendations may

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The use of hypothetical portfolios has inherent limitations. They are heavily dependent on the assumptions used in construction and do not reflect actual portfolios that could have been implemented during the time periods shown. The portfolios constructed were created by projecting cash flows from the universe of bonds available on the date of analysis, which includes assumptions about bond cash flows that may not materialize in actual accounts. The hypothetical portfolios are intended to convey one measure of the characteristics of an asset class or combination of asset classes, and a different analysis may yield different results. Material market and economic factors may affect investment decisions differently when managers are investing actual client assets. The construction of model portfolios does not reflect the impact of actual portfolio trading which may impact the price and availability of securities. An actual portfolio will be impacted by the market conditions at the time of funding and other factors. Past experience is not indicative of future results. The analysis does not take into account the deduction of any advisory fees, brokerage or other commissions or other expenses that would apply to actual accounts.

Scenarios do not deduct trading costs and other fees and expenses.

Certain information uses comparisons to one or more market indexes which are unmanaged and are generally unavailable for investment. Individual accounts are actively managed, will have different investment guidelines, and carry expenses and fees, all of which would negatively impact results.

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The ability of an actual portfolio to deliver the required cash flows is not guaranteed and is subject to a variety of factors including, but not limited to the availability of bonds, transaction costs, default risk, rebalancing risk, liquidity risk and management risk.

The analysis reflected in this presentation is limited to certain recent periods for which data is available. We make no representation that the experience of any other periods is comparable.

Past performance and experience are no guarantee of future results. Please see model description and portfolio construction assumptions that follow for additional important information.

Model Description

Cash flow sufficiency study involves modeling the cheapest model or hypothetical portfolios (based on bond prices) for six different lower-rating cutoffs where liability cash flows past 30 yrs, if any, are rolled up to the 30 yr point based on an assumed discount rate. Investable universe includes STRIPS. Detailed constraints used for the construction are as follows:

Securities Universe: *IG corporate bonds, Universal, Treasury securities*
Liquidity: *Average traded volume over past month: > $15 M, Amount Outstanding > $250M*
Diversification: *Max Entity Wt(Mkt Value)*
Corporate: *2%*
Max Ticker Wt(Mkt Value)
Corporate: 2% Max Industry Wt(Mkt Value)
Bloomberg's level 3: 15%
Bloomberg's level 4: 15%
Eliminations: *Loomis Sayles Credit Trend: Limited Coverage, Negative Trend and Negative Trend with event risk*
Loomis Sayles risk rating : Speculative
Loomis Sayles research recommendation : 4
Callable (call filter), Sinkable, Putable

Bond proceeds between cash flow payment dates were reinvested at 0% and residual cash flows (post liability cash flow payments) were reinvested at 0%. Once the portfolios were constructed based on nominal projected cash flows, the portfolio cash flows were recomputed based on a scenario of "Mean Defaults", "3x Max Defaults". Recovery rate has been assumed at 40%. We assumed all securities are available and can be purchased at the Bloomberg index's price. The model assumes bonds are held throughout the period without being traded which would not be the case with an actively managed portfolio. As such, the model does not take into account the impact of market liquidity of actual trading, among other things. Actual default experience including recovery rates will differ and would impact the analysis.

Default Adjusted Cash Flows

Individual bond cash flows based on historically observed default cohorts as provided by Moody's. For cash flows extending beyond 20 years, the annualized default rate from year 15 to year 20 was used to extend the cumulative default cohorts. For the "mean" default scenarios, the average cohorts from 1983 to 2022 (Average Cumulative Issuer-Weighted Global Default Rates By Letter Rating, 1983-2022 from Moody's Annual Default Study) were used. For the "3x mean" default scenarios, the average cohorts from 1983 to 2021 were used (Average Cumulative Issuer-Weighted Global Default Rates By Letter Rating, 1983-2022 from Moody's Annual Default Study), where the implied annualized default rates were multiplied by 3 so as to construct a "3x" mean default cohort. On each coupon/principal pay date, a bond could either default and pay recovery or pay the coupon and be revisited on the next coupon date. Actual default experience, including recovery assumptions and timing of payments, could be worse which would impact the analysis.

Portfolio Construction Assumptions

Cash flows and payment dates are based on a sample plan created by Loomis Sayles.

The universe of securities used in constructing the example portfolio includes securities that are available for purchase.

All securities are available at the Bloomberg index's price.

There is no market impact assumed as a result of transactions in these securities.

Analytics for all securities, including but not limited to key rate duration, yield, convexity, option-adjusted duration, option-adjusted spread, rating, maturity and coupon is provided by Bloomberg.

The example portfolios are constructed using a standard search algorithm, which iterates the weight distribution in the universe of available securities to achieve an objective function within the specified set of constraints.

As indicated above, the example portfolios assume that portfolio securities are purchased at the current benchmark price and held for the period, whereas an actual portfolio would be actively managed according to its own guidelines and expected liabilities. As a result, an actual portfolio would be impacted by additional factors which could negatively impact the portfolio, including the costs and pricing impact of actual trading, the risk that replacement securities with comparable yields and characteristics are not available and the impact of market liquidity.

The example portfolios are constructed based on assumptions about the expected liquidity and availability of securities, which is dependent upon market conditions and other factors. There is no guarantee that a portfolio with similar characteristics can be created or that securities could be purchased at the expected price.

Analysis comparing cash flow match to the Bloomberg US Aggregate Index uses a hypothetical liability of $10 million per month. Hypothetical cash flow match portfolios are constructed using historical yield data of the Bloomberg US Aggregate Index. For each cash flow match structure, both portfolios are projected forward with returns (using the yield of the cash flow match portfolio and actual return of the Bloomberg US Aggregate Index) while also taking out $10 million cash flow each month. If the Bloomberg US Aggregate Index becomes depleted during the period, it is classified as a failure.

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