

# Buy and Maintain Credit Strategies – Transforming the LDI End-game

## Buy and maintain strategies may reduce cost and risk during the last stage of a pension plan's journey

Investment objectives evolve over time for plans using liability-driven investing (LDI). In the early stages of a plan's de-risking journey, the primary objective with respect to funded status is to close the funding gap gradually through some blend of cash contributions and investment returns. Strong investment returns require efficient exposures to diversified investment risk premia and may involve the use of active management and/or high allocations to diversified growth assets.

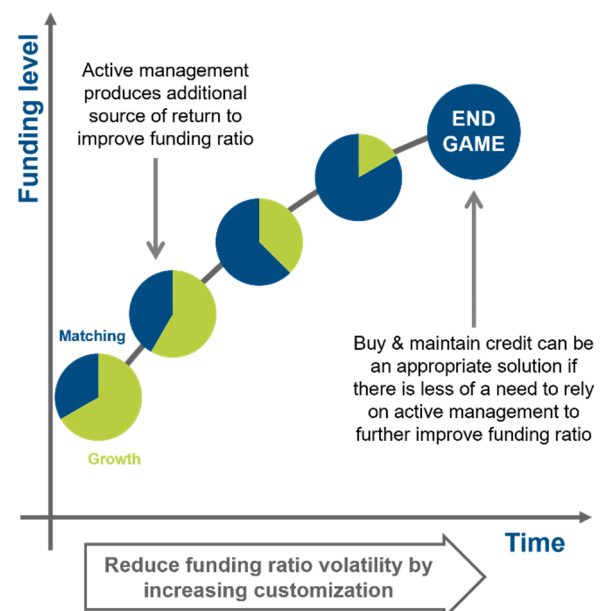
The fixed income allocation may be separated into a credit component and a Treasury component:

- Active management of the credit component is designed to add alpha investment risk premium to the overall return.
- The Treasury component can be customized to deliver an efficient overall interest rate hedge against the plan's liability profile.

As the plan's funded status approaches full funding, its primary investment objective shifts more toward stability and less toward growth, calling for corresponding shifts in allocations to growth and fixed income assets. As the need to deliver incremental active alpha return declines, plans may reduce exposure to active management to rationalize future long-term costs. Some may consider designing and implementing a buy and maintain credit portfolio to pursue this objective as they approach their end-game.

Buy and maintain credit portfolios hold well-diversified collections of bonds that are intended to provide payments when a plan needs them. The matching of asset and liability cash flows may be suited to a plan's end-game. These strategies emphasize fundamental research to underwrite the long-term credit risk of each bond, and de-emphasize shorter-term trading intended to optimize mark-to-market fluctuations or to maintain evolving benchmark requirements. The goal is for the plan to be insulated from factors that impact the market price of its bonds, as long as the bonds do not default; as a result, there generally is no need to buy and sell securities.

**Figure 1: The de-risking journey**



Source: LGIM America. For illustrative purposes only.

Plans have two potential end-game paths, and buy and maintain credit strategies may align well with both:

- Pension risk transfer: Insurance companies in a pension risk transfer event value receiving a well-diversified, high-quality, fixed-income portfolio because it may reduce risks and cost associated with the transition. This benefit may reduce the plan sponsor's premium by close to 1%.<sup>1</sup>
- Self-immunization: A buy and maintain credit strategy may deliver efficient credit spread exposure, match future liquidity needs and rationalize long-term costs.

Costs matter for end-game portfolios in self-sufficiency run-off mode; strategies that reduce costs must exceed a smaller performance objective hurdle. A buy and maintain mandate can be consistent with the pursuit of lower costs, because it reduces both transaction costs and portfolio turnover, and can reduce ongoing investment management fees.

## Buy and maintain credit strategies versus indexing

Buy and maintain credit strategies may address various challenges presented by index-based approaches to investing in credit:

1. **Fixed income indices weight allocations based on each bond's percentage of the overall index's market value.** Weighting in this way has a perverse result: greater exposure to bonds of more indebted companies and smaller exposure to bonds of less indebted companies.
2. **Fixed income indices are subject to arbitrary index construction rules.** These rules are generally reasonable for building a portfolio at a point in time, but adhering to them over time can introduce significant risks and drag into a portfolio. Changes in the index rules can force selling, as can credit downgrades. Further, forced sales often occur at inopportune times, notably immediately after a bond has been downgraded. Not having to trade downgraded bonds

based on these rules may save a custom buy and maintain credit strategy as much as 30 to 35 basis points per year.

3. **Transaction costs from bid/ask spreads on corporate bonds can cause significant drag on investment returns.** Forced buying or selling to mirror systematic index rule changes in the long duration credit universe can increase costs for the plan sponsor. Figure 2 highlights the annual cost of rebalancing a purely passive portfolio that tracks the Bloomberg Long Credit Index back to the new benchmark each month.<sup>2</sup> This rebalancing would have cost between 9 and 18 basis points each year in the period analyzed. Combined with the savings mentioned in item 2, we estimate a buy and maintain credit strategy solution has the potential to save as much as 50 basis points per year.

Buy and maintain credit strategies may eliminate the need for transactions that result in the plan paying the bid/ask spread on new purchases. The coupons received are used to make the plan's benefit payments, and there is no need to sell a 10-year bond just because it has only nine years left to maturity.

## The problem of fallen angels

Forced selling of fallen angels – securities that fall below minimum credit quality criteria – can compound losses when the sale occurs at an inopportune moment or price. In fact, over the 20-year period from 1990 through 2009, the common index constraint of automatically selling bonds that are downgraded from investment grade to high yield cut the earned credit spread risk premium in half.

Fallen angels are created when credit rating agencies change a bond's rating to below investment grade. The bond's price typically has already fallen, often to near fair value, by the time a downgrade occurs. At the point of the downgrade, standard index rules and other institutional frictions force fund managers and institutions to sell the bonds, initially causing their prices to fall further. Prices then tend to revert to or near their pre-downgrade levels.

**Figure 2: The cost of rebalancing**

Bloomberg Long Credit Index	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Average market value (\$ B)	\$838	\$982	\$1,194	\$1,264	\$1,461	\$1,622	\$1,786	\$1,831	\$1,852	\$2,178	\$2,758	\$2,963	\$2,469
Average # of issues	1,194	1,381	1,509	1,674	1,841	2,059	2,152	1,982	2,074	2,259	2,618	2,878	3,108
Estimated transaction cost for universe changes	0.17%	0.12%	0.16%	0.16%	0.14%	0.18%	0.16%	0.15%	0.13%	0.15%	0.25%	0.15%	0.09%

Source: Bloomberg. Data as of December 31, 2022.

According to Bloomberg, fallen angels’ prices tend to underperform peers by about 16% in the year before the downgrade, then recover about half of that underperformance, on average, over the next year. Fewer than 4% of fallen angels default.<sup>3</sup>

A buy and maintain strategy may allow plans to maintain exposure to bonds that are downgraded from investment grade (although portfolio managers may sell the bonds due to concern about potential default). This approach minimizes the trading and associated transaction costs related to fallen angels. Portfolio managers switch investments only when they believe long-term fundamentals warrant it and try to make the switch well in advance of any downgrade.

**Figure 3: Forced sales of fallen angels have detracted from value**

Index Rule	Approximate Annualized Drag (basis points)
Sale of bonds downgraded to high yield	(32)
Selling bonds whose maturity drops below 1 year	(3)
Estimated transaction cost for universe changes	(6)

Source: Kwok-Yuen Ng & Bruce D. Phelps (2011) Capturing Credit Spread Premium, Financial Analysts Journal, 67:3, 63-75, DOI: 10.2469/faj.v67.n3.4. Data as of 1990 - 2009.

**The buy and maintain investment process**

The buy and maintain credit strategy investment process has two distinct phases:

- The buy process, which determines initial portfolio construction.
- The maintain process, which includes portfolio monitoring, decisions about when to sell securities and when to hold them, and judgments about how to replace the value of bonds that have matured or been sold.

LGIM America’s investment process offers a framework for the ways a buy and maintain credit process may be executed. Credit analysts, strategists, economists and other researchers contribute their perspectives throughout the buy process, and when investing any additional cash contributions or cash flows.

LGIM America’s starting point for constructing a new buy and maintain credit portfolio is the US investment grade credit universe. The process initially focuses on top-down considerations, such as economic trends, the outlook for US credit, political and regulatory risk, liquidity

considerations and event risk. These inputs ultimately produce target asset allocation, credit quality and industry weights.

Next, portfolio managers construct a diversified portfolio to meet the strategy’s duration and quality requirements, giving the largest weightings to the securities in which researchers have the highest convictions. Position sizing is absolute, rather than relative, with sector and issuer caps to ensure proper diversification. All positions must be suitable to be held to maturity.

Positions are intended to be held to maturity but may be sold if managers become concerned about severe downside risk in a specific security, sector, or region. In that event, portfolio managers seek to replace the sold security with a new one that offers similar duration and spread. The principles of the buy process also govern the reinvestment of sales proceeds or other cash flows.

LGIM America can complement the credit portfolio within a buy and maintain credit strategy with a customized Treasury portfolio. The Treasury portfolio will be designed to hedge the remaining key rate duration profile, and to provide collateral support for other strategic derivative exposures within a total pension risk management context.

**Defining the success of a buy and maintain credit portfolio**

A buy and maintain credit portfolio is customized to a plan’s liability profile. For example, it is constructed with the intent to match the liability’s duration and, in some instances, even the associated cash flows. Its primary objective is to hold bonds and collect the cash flows as they come due, while the portfolio ages and the duration declines over time.<sup>4</sup> This approach is inconsistent with standardized market bond benchmarks, which apply rules each month that add newly issued bonds and remove bonds that fail to meet the index’s criteria –for example, due to minimum credit quality or maturity requirements.

A secondary objective of a buy and maintain credit portfolio is to generate strong risk-adjusted investment returns consistent with those of the overall credit universe, while emphasizing stability of principal by avoiding defaults and downgrades. Given these long-term objectives of buy and maintain credit, short-term mark-to-market valuations lose relevance, except in the event of losses caused by a credit default that impairs cash flow payouts.

The differences between buy and maintain credit strategies and index-based strategies make familiar short-term performance dashboard frameworks less than ideal for evaluating buy and maintain portfolios, which assess recent portfolio performance relative to a standardized fixed

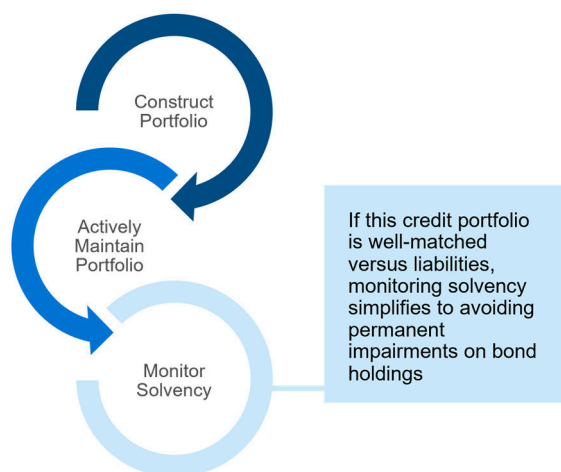
income benchmark. A new performance framework is required.

The performance framework illustrated in Figure 4 should work to evaluate the overall solvency funding level, as well as the two key components of the investment process:

- How well was the initial portfolio constructed?
- Is the portfolio manager making appropriate proactive switches in the portfolio?

**Figure 4: How to measure success of a buy and maintain strategy**

Performance framework should evaluate three key metrics



Source: LGIM America. For illustrative purposes only.

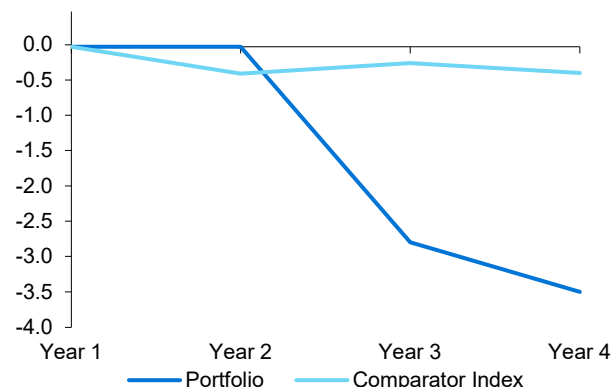
To answer both of these questions, two key metrics can be monitored:

- **Weighted average credit quality rating factor (WARF).** Comparing the WARF of the portfolio with that of a comparator index can verify that our trading activity is not lowering the average credit quality of the portfolio. A portfolio with a lower WARF indicates improving credit quality (see Figure 5).
- **Risk-adjusted return.** These portfolios may buy bonds with the intent of holding to maturity, but circumstances may develop where we need to replace the security due to deteriorating credit fundamentals. By actively managing the portfolio to avoid defaults and downgrades, the portfolio should be expected to give it better downside characteristics compared to a comparator index.

Reporting can include a reference or comparator index that mirrors the duration and target credit quality of the portfolio. For example, if the portfolio has a longer duration profile and a target credit quality of A or better, a potential comparator index may be Bloomberg Long Credit A+. This

can help illustrate if the portfolio is performing in line with client expectations.

**Figure 5: Illustrative example of cumulative WARF impact due to ratings changes**



Source: LGIM America. For illustrative purposes only.

## Buy and maintain credit strategies from LGIM America

Buy and maintain credit strategies can offer an attractive risk/reward profile for many end-game solutions, because they are constructed with the intent to deliver efficient exposure to the credit spread and illiquidity risk premia. Both a fully active and a buy and maintain credit strategy approach provide mitigation of the downgrade and default risk that is paramount when managing a pension solution. Buy and maintain credit strategies generally should provide a lower-risk path to funding long-term liabilities than passive strategies and exchange the return targets pursued by active management for liability matching and cost control.

There is no magic formula to determine whether or when buy and maintain credit strategies or a fully active approach is right for a plan. The following questions may help determine if a plan has reached the point to consider buy and maintain credit strategies:

- Looking ahead, is the plan less reliant on excess returns to improve funding ratios?
- Has it become more attractive to reduce costs in order to improve net-of-fee risk-adjusted returns?

If the answer to both questions is yes, buy and maintain credit strategies may be an attractive option.

At LGIM America, we aim to thoughtfully and effectively manage the risks that pension plans face as they ensure that they will be able to pay the benefits they have promised to their participants. In the spirit of long-term partnership, we build custom solutions that leverage our investment capabilities in ways that best fit clients'

individual context and look constantly for ways to improve the management of their liabilities.

Buy and maintain credit strategies are already providing companies around the world with more efficient and secure LDI solutions. LGIM America has a well-established track record in managing client funds in buy and maintain credit strategies. If you are interested in learning more about using buy and maintain credit strategies to reduce risk and costs in your plan, please contact LGIM America. ■

**For further information about LGIM America, find us at [www.lgima.com](http://www.lgima.com)**

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<sup>1</sup> Based on third party insurer/consultant conversations; subject to market environment and competition at the time of transfer.

<sup>2</sup> Assumes a bid/ask spread of 5 basis points on any new purchases in the index while assuming all sales were executed at bid.

<sup>3</sup> Source: Altman and Kuehne. NYU Stern.

<sup>4</sup> No reinvestment assumed, as cash is used to fund overall liquidity needs.

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