

Expanding the Liability-Driven Investing Toolkit Using Agency Mortgage-Backed Securities

Key Takeaways

- Mortgage-backed securities (MBS) are often overlooked as a source of long-duration exposure in corporate defined-benefit plan portfolios, where long government and long credit bonds typically dominate.
- Investors can diversify their traditional long-duration exposure by allocating to long-duration securitized assets including Agency MBS and Agency collateralized mortgage obligations (CMOs).
- These asset classes have historically exhibited spread over U.S. Treasuries, favorable liquidity profiles and no credit risk.¹
- To see the data and charts behind these points, please see: [Alternatives to Corporate Bonds for Liability Hedging](#)



How can an allocation to Agency MBS potentially improve a liability-driven investment (LDI) portfolio?

Historical evidence shows Agency MBS can act as a complement to the traditional long-duration toolkit of government and corporate bonds by:

- Enhancing return potential relative to long government bonds with similar credit quality.
- Diversifying a long corporate bond allocation while mitigating potential impacts of credit migration.
- Potentially improving risk-adjusted returns and reducing funded-status volatility.

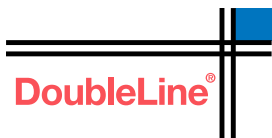
How can Agency MBS play a role in long-duration fixed income portfolios designed to hedge pension plan liabilities?

The process of structuring Agency MBS cash flows creates a series of CMOs in which cash flows from the underlying pool of mortgage loans are allocated to individual tranches following a set of payment rules.

These tranches can vary by maturity, coupon and payment priority, allowing investors to better match asset and liability needs. Long-duration CMOs are inherently created to fit LDI portfolios through the availability of long-maturity cash-flow structures to better match asset-liability needs.

How do long-dated CMOs complement existing long-dated corporate exposure?

A blended portfolio of 50% long-duration CMOs and 50% long-duration corporate bonds provides a higher Sharpe ratio than a standalone long-duration corporate portfolio as well as a lower maximum drawdown.² This blended portfolio also protects a plan's funded status during crisis events. Additionally, Agency CMOs can have higher credit quality than corporate bonds.



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What is the size and liquidity of the Agency MBS and Agency CMO markets?

The size of the Agency MBS market is approximately \$9 trillion, with Agency CMOs accounting for nearly \$1.5 trillion. Typically, the average daily trading volume for Agency MBS broadly is roughly \$220 billion and Agency CMOs roughly \$3 billion.³

How do long-dated Agency CMOs perform during equity sell-offs?

Historically, Agency CMOs have outperformed corporate bonds and kept pace with Treasuries during periods of significant S&P 500 Index drawdown.⁴

How have clients implemented a long-duration Agency CMO strategy into their asset allocations?

Agency CMOs would typically be characterized as out-of-benchmark exposures relative to traditional liability-hedging benchmarks. However, DoubleLine believes they can and should be included as a structurally defined component of an LDI allocation.

What does DoubleLine have on offer for LDI investors seeking exposure to Agency MBS?

DoubleLine's Long Duration Total Return strategy employs a blend of primarily long Agency MBS and some long government securities to complement traditional LDI investments.

Why did DoubleLine launch a long-duration-focused Agency MBS strategy?

Our team recognized early on that a low-correlated alpha source could be added to the conventional stable of hedging assets, helping investors potentially reduce volatility, lower drawdowns and improve a plan's overall funded status.

We were pioneers in offering a long-duration Agency CMO-focused strategy in 2014 for the purpose of helping plan sponsors hedge their liabilities via an alternative to corporate and Treasury bonds.

What is the goal of the DoubleLine Long Duration Total Return strategy?

In general, our long-duration portfolios seek attractive risk-adjusted returns versus traditional long-duration benchmarks such as the Bloomberg US Long Government/Credit, Long Corporate or Long Government indexes while accommodating the longer-duration needs of investors.

What is DoubleLine's competitive advantage?

Our investment team has exploited inefficiencies in the Agency mortgage market through many market cycles and various interest rate environments, and has been recognized as a leader in the space.

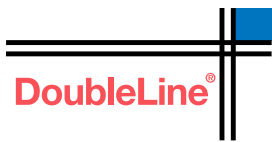
DoubleLine's seasoned investment professionals have decades of experience investing in the Agency mortgage market and have worked together for an average of 15 years and average 23 years of industry experience. ■

¹ 10-year U.S. Treasury note

² The corporate bonds portion is represented by the Bloomberg US Long Corporate Index. The MBS portion is represented by a combination of the ICE BofA U.S. Agency CMO 10-Year-Plus Index and the Bloomberg US Treasury 20-Year-Plus Index; the weights of these two indexes are set, at the end of each month, such that the duration of the overall portfolio equates to the duration of the Bloomberg US Long Corporate Index. Observation period: Dec. 31, 2004, to May 31, 2022.

³ FINRA analysis of securitized asset liquidity

⁴ ICE BofA U.S. Agency CMO 10-Year-Plus, Bloomberg US Long Corporate Index, Bloomberg US Long Treasury Index



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Definitions

Agency – Mortgage securities whose principal and interest are guaranteed by a U.S. government agency such as Fannie Mae (FNMA) or Freddie Mac (FHLMC).

Alpha – Term used in investing to describe a strategy's ability to beat the market, or its "edge." Alpha is thus also often referred to as "excess return" or "abnormal rate of return," which refers to the idea that markets are efficient, and so there is no way to systematically earn returns that exceed the broad market as a whole.

Bloomberg US Long Corporate Index – This index measures the investment grade, fixed-rate taxable corporate bond market. It includes U.S. dollar-denominated securities with a maturity of 10 years or longer publicly issued by U.S. and non-U.S. industrial, utility and financial issuers.

Bloomberg US Long Government Bond Index – This index is a specially weighted version that tracks bonds with a maturity of 10 years or longer within the Bloomberg US Government Bond Index. It includes investment grade, U.S. dollar-denominated, fixed-rate U.S. Treasuries and government-related securities.

Bloomberg US Long Government/Credit Index – This index measures the nonsecuritized component of the Bloomberg US Aggregate Bond Index. It includes investment grade, U.S. dollar-denominated, fixed-rate U.S. Treasuries, and government-related and corporate securities with a maturity of 10 years or more.

Bloomberg US Long Treasury Index – This index measures U.S. dollar-denominated, fixed-rate nominal debt issued by the U.S. Treasury with a remaining maturity of 10 years or more.

Bloomberg US Treasury 20-Year-Plus Index – This index measures U.S. dollar-denominated, fixed-rate nominal debt issued by the U.S. Treasury with a remaining maturity of 20 years or more.

ICE Bank of America (BofA) U.S. Agency Collateralized Mortgage Obligation (CMO) 10-Year-Plus Index – This index tracks the performance of U.S. dollar-denominated, fixed-rate Agency CMOs publicly issued in the U.S. domestic market with a maturity of at least 10 years. Qualifying securities must have a fixed coupon schedule, an original deal size for the collateral group of at least \$250 million and a current outstanding deal size for the collateral group that is greater than or equal to 10% of the original deal size.

Liability-Driven Investment (LDI) – Liability-driven investment (and liability-driven investing) is primarily slanted toward gaining enough assets to cover all current and future liabilities. This type of investing is common when dealing with defined-benefit pension plans because the liabilities involved quite frequently climb into billions of dollars with the largest of the pension plans.

S&P 500 Index – This unmanaged capitalization-weighted index of the stocks of the 500 largest publicly traded U.S. companies is designed to measure performance of the broad domestic economy through changes in the aggregate market value of the 500 stocks, which represent all major industries.

Sharpe Ratio – Used to help investors understand the return of an investment compared to its risk. The ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Volatility is a measure of the price fluctuations of an asset or portfolio. Subtracting the risk-free rate from the mean return allows an investor to better isolate the profits associated with risk-taking activities. The risk-free rate of return is the return on an investment with zero risk, meaning it's the return investors could expect for taking no risk. The yield for a U.S. Treasury bond, for example, could be used as the risk-free rate.

You cannot invest directly in an index.

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