# Alternatives to Corporate Bonds for Liability Hedging

**Phil Gioia, CFA, Product Specialist** | December 2020

**Key Takeaways**

- For liability-driven investors seeking alternatives to corporate bonds, Agency mortgage-backed securities can provide attractive diversification benefits.
- Agency MBS appear favorably valued relative to investment grade corporate bonds.[1]
- Agency MBS have historically provided strong downside protection in times of equity market volatility.
- The inclusion of Agency MBS can act to lower funded status volatility and increase a pension plan's overall funded status.
- With decades of combined experience, DoubleLine's portfolio management team has expertise within the Agency MBS space.

Investors can diversify their traditional long-duration corporate credit exposure by allocating to long-duration securitized assets including Agency MBS, Agency collateralized mortgage obligations (CMOs) and Agency commercial mortgage-backed securities.[2] These asset classes have historically exhibited spread over U.S. Treasuries, favorable liquidity profiles and little, if any, credit risk.[3]

## Diversification Benefits

Historically, Agency CMO option-adjusted spreads (OAS) have exhibited low correlation to corporate bond OAS over longer time periods. *(Figure 1)* As of September 30, the five-year daily correlation between the OAS of the two indexes below was 0.34. Generally speaking, the lower the correlation coefficient between assets, the more efficient the portfolio risk reduction through diversification will be.

**Trailing 5-Year Correlation Periods of U.S. Long CMO and Long Corporate Markets (Daily)**

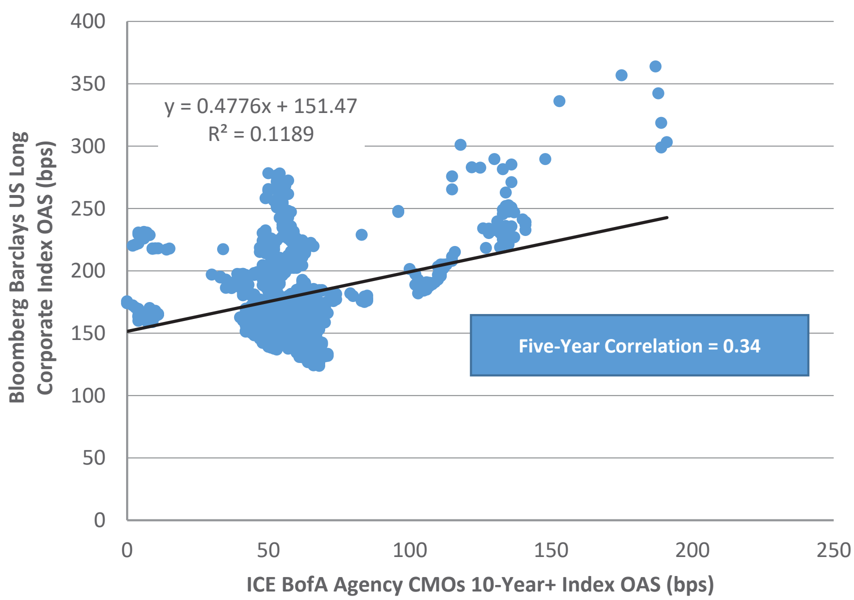


*Figure 1*
Source: Bloomberg, DoubleLine

[1] Agency MBS is represented throughout by the ICE Bank of America (BofA) Agency Commercial Mortgage Obligations (CMOs) 10-Year+ Index. Corporate bonds are represented throughout by the Bloomberg Barclays US Long Corporate Index.

[2] An Agency CMO is a type of MBS in which cash flows from the underlying pool of mortgage loans are allocated to individual bonds or tranches following a set of payment rules. The timely payment of principal and interest are guaranteed by a U.S. government agency, while the tranches can vary by maturity, coupon and payment priority, allowing investors to better match asset-liability needs.

[3] 10-year U.S. Treasury note.

## Valuations

Prior to the volatility in March and April due to COVID-19, the nominal spread for long-duration corporate bonds and corporate bonds rated Aa largely traded in a narrow range for much of the past five years. Agency CMO nominal spreads, however, trended higher during this time. *(Figure 2)* As of September 30, Agency CMOs offered a greater nominal spread over Treasuries relative to high-quality corporate bonds and a similar spread over Treasuries relative to long-duration corporate bonds, however, with little credit risk and generally lower price volatility.

**Nominal Spread in Basis Points (bps) of U.S. Agency CMOs 10-Year+ Index versus Long Corporate and Aa Corporate Indexes**

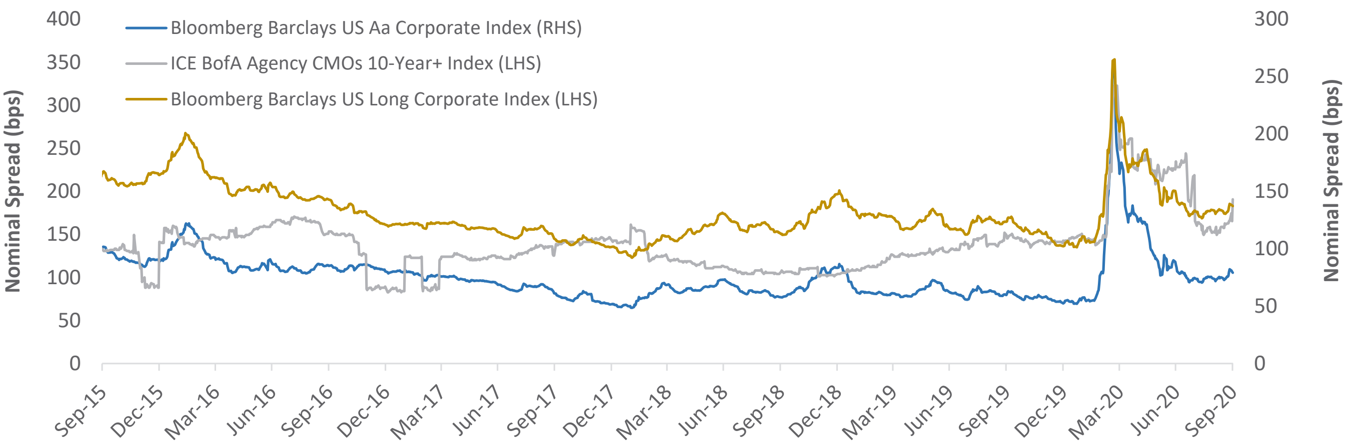


*Figure 2*
Source: Bloomberg, DoubleLine

## Downside Protection

Historically, Agency CMOs have outperformed corporate bonds and kept pace with Treasuries during periods of significant S&P 500 Index drawdown. *(Figure 3)*

**Fixed Income Index Performance During S&P 500 Index Drawdowns** | January 1997 through September 2020

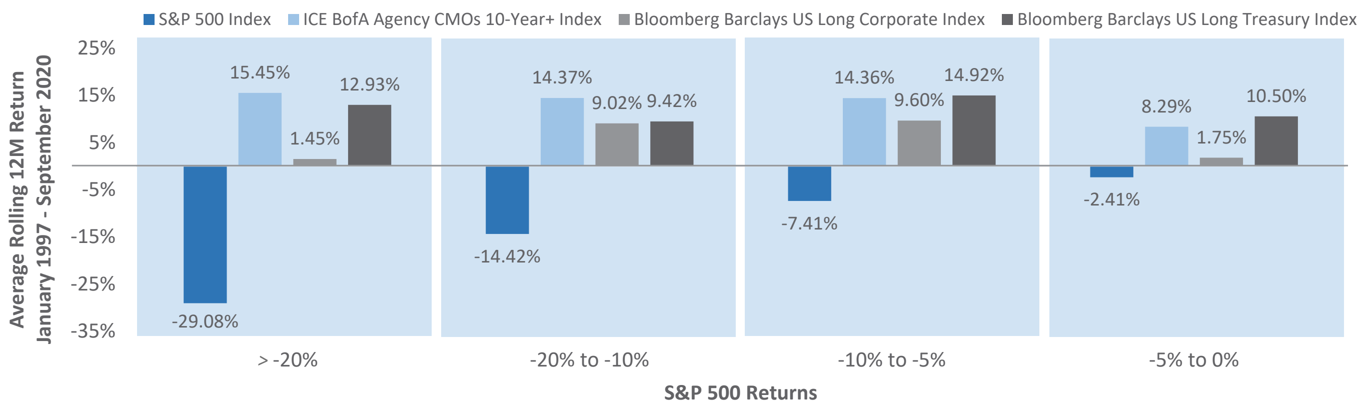


*Figure 3*
Source: Bloomberg, DoubleLine. Represents the returns of various asset classes when the S&P dropped by the percentage listed on a rolling 12-month time period.

## Funded Status

The inclusion of Agency MBS can act to lower volatility and increase a pension plan's overall funded status. *(Figure 4)* Both of these scenarios represent a pension that starts at a 100% funded status and is allocated to three different asset classes: 100% corporate bonds, a diversified mix of corporate bonds, Agency CMOs and Treasuries, and 100% Agency CMOs. Over the long term and through the Global Financial Crisis, a portfolio allocated to the above mix of diversified assets ended with a higher funded status relative to a portfolio of 100% corporate bonds while reducing volatility.

**Long-Term Analysis** | January 1, 2005 through September 30, 2020

| | Beginning Funding Status | Asset Return | Liability Return[4] | Tracking Error | Asset Volatility | Asset Sharpe Ratio | Asset Downside Volatility | Funding Status Volatility | Ending Funding Status |
|---|---|---|---|---|---|---|---|---|---|
| 100% Corporate Bonds[5] | 100% | 7.0% | 8.8% | 6.7% | 10.1% | 0.66 | 7.3% | 6.6% | 76% |
| 50% Corporate Bonds/50% MBS[6] | 100% | 7.3% | 8.8% | 7.4% | 8.3% | 0.83 | 4.7% | 7.2% | 84% |
| 100% MBS[7] | 100% | 6.5% | 8.8% | 10.8% | 7.9% | 0.77 | 4.5% | 10.4% | 78% |

**Global Financial Crisis Analysis** | January 1, 2008 through March 31, 2009

| | Beginning Funding Status | Asset Return | Liability Return[4] | Tracking Error | Asset Volatility | Asset Sharpe Ratio | Asset Downside Volatility | Funding Status Volatility | Ending Funding Status |
|---|---|---|---|---|---|---|---|---|---|
| 100% Corporate Bonds[5] | 100% | -9.8% | 1.6% | 13.6% | 20.7% | -0.49 | 12.8% | 13.6% | 92% |
| 50% Corporate Bonds/ 50% MBS[6] | 100% | 1.2% | 1.6% | 18.1% | 13.9% | 0.06 | 7.6% | 17.4% | 106% |
| 100% MBS[7] | 100% | 12.6% | 1.6% | 16.3% | 11.0% | 1.03 | 2.9% | 16.5% | 114% |

*Figure 4*
Source: Bloomberg, DoubleLine

4 Liability Return is represented by the FTSE Pension Liability Index.
5 The Corporate Bonds portion is represented by the Bloomberg Barclays US Long Corporate Index.
6 The Corporate Bonds portion is represented by the Bloomberg Barclays US Long Corporate Index. The MBS portion is represented by a combination of the ICE BofA Agency CMOs 10-Year+ Index and the Bloomberg Barclays US Treasury 20-Year+ 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 Barclays US Long Corporate Index.
7 The MBS portion is represented by the ICE BofA Agency CMOs 10-Year+ Index.

## DoubleLine's Competitive Advantage

DoubleLine's investment professionals have decades of combined experience investing in the Agency mortgage market. Our investment team has exploited inefficiencies in the Agency mortgage market through many market cycles and various interest rate environments. DoubleLine began to offer 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.

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 believe incorporating long-duration Agency CMOs can provide a complement to the traditional long-duration tool kit of government securities and IG corporate bonds, that:

- may help improve a plan's funded status over time;
- enhances return potential versus long-duration government bonds with similar credit quality;
- and diversifies a long-duration corporate bond allocation while mitigating the potential impacts of credit migration.

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

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Mr. Gioia joined DoubleLine in 2018. He is a member of the Product Specialist Team. In this capacity, he is responsible for various aspects of DoubleLine product marketing, investment strategy updates, portfolio communications and competitive analysis, with a focus on DoubleLine's Structured Product strategies. Mr. Gioia is also responsible for producing market commentary and dedicated strategy content. As part of the Product Specialist Team he attends the Fixed Income Asset Allocation, Macro Asset Allocation, and Structured Product meetings. Prior to DoubleLine, Mr. Gioia was an Investment Product Manager for Fidelity Investments. He holds a BS in Financial Management and Business Administration with a minor in Accounting from Salve Regina University. Mr. Gioia is a CFA® charterholder and holds the Series 7 and 63 Licenses.