

Strengthen Your Core: The Off-Benchmark Benefit

May 7, 2021



After a long period of stubbornly low interest rates, interest rate volatility in early 2021 had investors questioning the role of their fixed income allocations. As interest rates climbed, investors experienced the negative impact on total return for their longer duration assets, as prices move inversely to rates and longer duration amplifies the impact. Therefore, the quandary investors may face is balancing the need for a core fixed income allocation to provide a stabilizing effect in overall portfolios against the potential for negative nearer-term returns in a rising rate environment.

Against such a backdrop, investors should evaluate their current core and core-plus allocations to ensure the strategies are likely to serve the volatility-dampening role they expect. We believe the increased risk of interest rate volatility also argues for a benchmark-agnostic approach to core that offers yield opportunities and a differentiated risk profile that may be unattainable for larger asset managers. Most important, investors should seek a transparent portfolio that allows them to understand what they own and the risk profile of the underlying securities.

Calendar year 2020 offered a compelling reminder of the critical role core can play. Consider the steep capital market volatility starting in February 2020 as it became clear the pandemic would be difficult if not impossible to contain, followed by widescale economic shutdowns starting mid-March 2020, leading to record levels of unemployment and overall market disfunction. Risk assets bore the brunt of the market dislocation while core fixed income fared better—playing the stabilizing role one would expect in portfolios. Exhibit 2 shows how core fared (using the Bloomberg Barclays U.S. Aggregate Bond Index as a proxy) relative to other risk categories. For long-term oriented investors, having tools that can help manage extremes of short-term volatility can be important, as such bouts can lead to an abandonment of longer-term discipline.

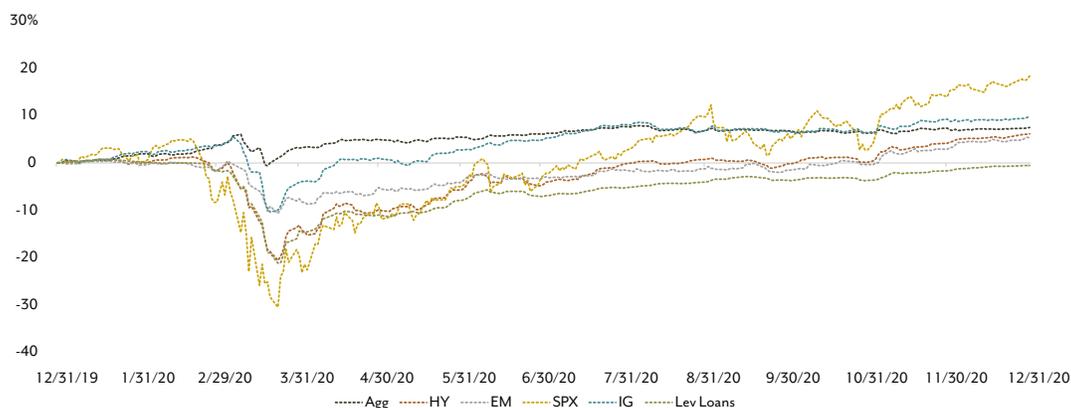
EXHIBIT 1: THE RISK ASSET SELLOFF

	FEBRUARY 2020	MARCH 2020	FEBRUARY - MARCH 2020
Core Bond	1.80	-0.59	1.20
High Yield	-1.58	-11.73	-13.13
EM Debt	-1.19	-6.04	-7.15
U.S. Investment Grade Corporates	1.27	-7.46	-6.28
Leveraged Loans	-1.95	-8.29	-10.08
U.S. Stocks	-8.23	-12.35	-19.57

Source: Bloomberg, from 1/31/2020 to 3/31/2020. Core is measured by Bloomberg Barclays U.S. Aggregate Bond Index. High Yield is measured by the ICE BofA U.S. High Yield Index. EM debt is measured by the Bloomberg Barclays EM Local Currency Government Total Return Index (unhedged). Investment grade corporates are measured by the ICE BofA U.S. Corporate Index. Leveraged Loans are measured by S&P/LSTA U.S. Leveraged Loan 100 Index. U.S. stocks are measured by the S&P 500 Index.

Of course, we know risk assets rebounded sharply after the Federal Reserve stepped into the fray with various support programs, Congress delivered the CARES Act, and progress was made on vaccines. Returns from the bottom for core bond were more muted, but for the year overall, core bond as a category still fared well because it avoided the steep selloff (Exhibit 2).

EXHIBIT 2: CATEGORY RETURNS IN 2020



Source: Bloomberg, from 12/31/2019 to 12/31/2020. Core is measured by Bloomberg Barclays U.S. Aggregate Bond Index. High Yield is measured by the ICE BofA U.S. High Yield Index. EM debt is measured by the Bloomberg Barclays EM Local Currency Government Total Return Index (unhedged). Investment grade corporates are measured by the ICE BofA U.S. Corporate Index. Leveraged Loans are measured by S&P/LSTA U.S. Leveraged Loan 100 Index. U.S. stocks are measured by the S&P 500 Index.

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Understanding the Benchmark

To understand the true opportunity for differentiation within a category, it is critical to understand what is included and excluded from common investing benchmarks. Among core bond strategies there are ample opportunities for an active, benchmark-agnostic, bottom-up manager to add value.

The core bond universe is massive—approximately \$50.0 trillion as of December 31, 2020 according to Securities Industry and Financial Markets Association (SIFMA) and includes a wide range of securities. However, the widely used Bloomberg Barclays Aggregate Bond Index represented just \$25.1 trillion as of December 31, 2020.

Why the discrepancy? The index follows specific rules and limitations meant to control inclusion and to conduct rebalancing in a specific manner. Additionally, each individual security eligible for inclusion must adhere to specific liquidity constraints based on each sector. Exhibit 3 shows the criteria for inclusion, which disqualify certain areas of the market that can add value in an active strategy. Exhibit 4 shows the index's categories and the opportunities outside of the benchmark.

EXHIBIT 3: THE LIMITS OF INDEX INCLUSION

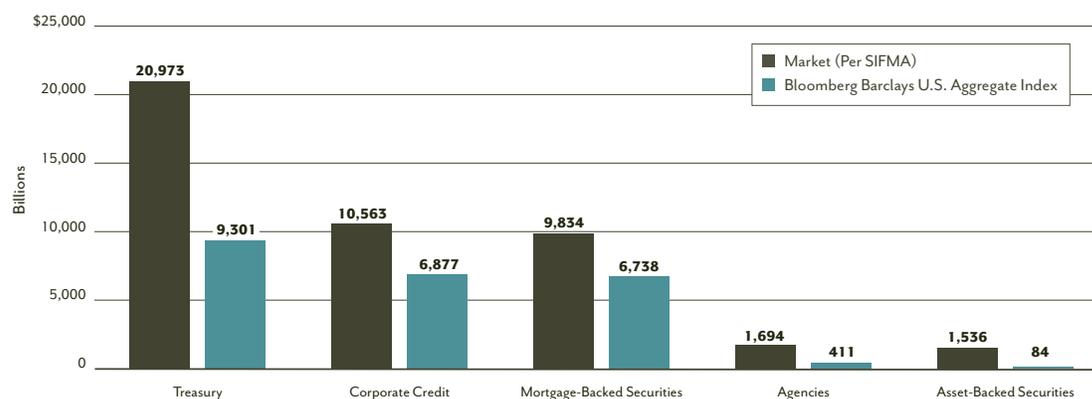
To be included in the Bloomberg Barclays Aggregate Bond Index, securities must meet these liquidity constraints:

- Treasury, government-related and corporates: \$300 million minimum par amount outstanding.
- MBS: pool aggregates must have \$1 billion par amount outstanding.
 - Additionally, only auto, credit card and stranded cost utility ABS are included in the index.
- CMBS: \$500 million minimum deal size with at least \$300 million amount outstanding remaining in the deal and \$25 million minimum tranche size.

All securities in the index must also meet these conditions:

- Must be rated investment grade by two of three nationally recognized statistical rating organizations (S&P, Moody's, Fitch).
- Have a fixed-rate coupon structure.
- Be SEC-registered (or Rule 144A with registration rights).
- Have at least one year until final maturity.

EXHIBIT 4: OPPORTUNITY VS. THE INDEX



Source: Securities Industry and Financial Markets Association (SIFMA) as of 12/31/2020. December 31, 2020, is the most recent data available from SIFMA.

Opportunities for Differentiation by Sector

The limitations of the index provide opportunity for active managers who have the flexibility to go off benchmark, including among Treasury, mortgage-backed and asset-backed securities.

Treasury Securities

The Treasury market is historically the most liquid fixed income market and is generally viewed as the conservative alternative to corporate and securitized debt in times of crisis or uncertainty. The Diamond Hill Core Bond strategy approaches the opportunity in this fairly commoditized sector in two ways—by allocating across the yield curve and investing in Treasury STRIPS (separate trading of registered interest and principal securities). While the strategy's Treasury allocation is typically

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considerably less than the index (15.9% v. 37.3% as of March 31, 2021), the contribution to duration from the Treasury allocation is very close (2.20 years v. 2.53 years). This is achieved through allocations in longer Treasury bonds compared to the index as well as the impact from longer duration STRIPS. STRIPS can provide an opportunity to pick up incremental option-adjusted yield as principal STRIPS represent the issuance's final payment and therefore are paid in full at the final maturity date. STRIPS, which are excluded from the Bloomberg Barclays Aggregate Bond Index, make up nearly 17% of the Core Bond strategy's Treasury allocation while Treasury bonds (which have a maturity of greater than 10 years) make up over 50% of the strategy's Treasury weighting, while in the index, bonds represent 19% of the Treasury exposure.

EXHIBIT 5: TREASURY MARKET SIZE VS. INDEX REPRESENTATION

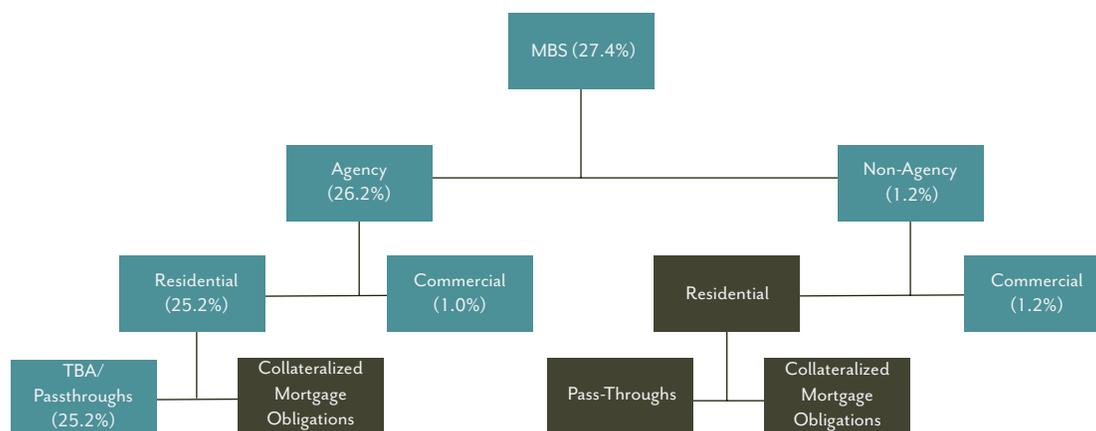
U.S. TREASURY (IN BILLIONS)	MARKET SIZE	BENCHMARK ALLOCATION
Bills (less than one year)	\$4,669	\$0
Notes (2-10 years)	11,597	7,481
Bonds (10+ years)	3,006	1,775
TIPS	1,582	1,230
STRIPS	0	0
FRN	526	0
Total	\$21,381	\$10,486

Source: Bloomberg, SIFMA, as of March 31, 2021. The market size of STRIPS is \$0 as these securities' values are already represented in the Bonds/Notes count.

Mortgage-Backed Securities (MBS)

The mortgage market is vast and well-diversified, and its securities offer additional yield opportunities and a differentiated risk profile. However, index rules exclude a significant portion of this sector. Exhibit 6 illustrates which areas of the mortgage market are included in (blue) and excluded from (gray) the index.

EXHIBIT 6: OFF-BENCHMARK OPPORTUNITIES IN MBS



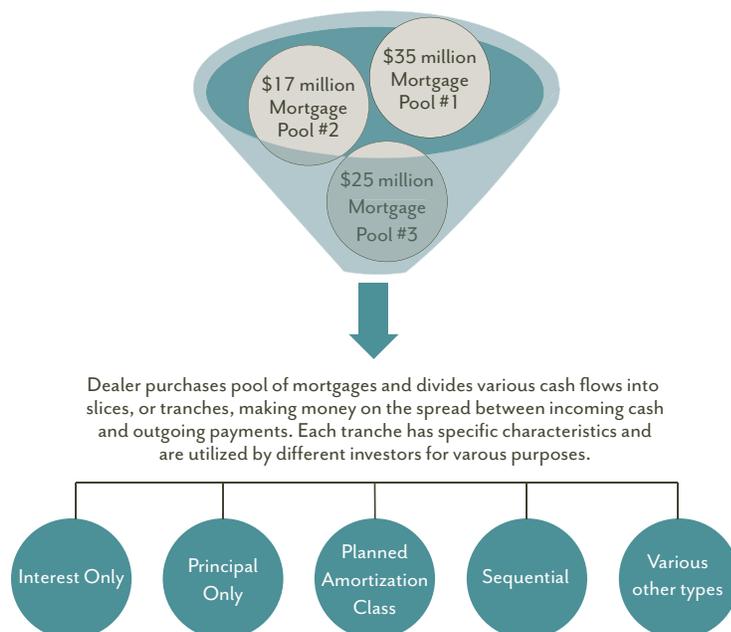
Source: Bloomberg, as of 3/31/2021.

In a "To Be Announced" or TBA mortgage transaction, the MBS seller agrees on a sale price without specifying which individual mortgages will be delivered on the settlement date. Basic characteristics are agreed upon, such as coupon rate and the face value of the bonds to be delivered, but not much else. This process ensures that the TBA market is typically the most liquid in mortgages by combining a variety of different pools into a standard format. Since these are highly liquid and readily tradable mortgage securities, they serve as the basis for pricing a variety of MBS. The cash flows in both TBA mortgages and specified pools implement the pass-through process, wherein investors receive a pro-rata share of both principal and interest for the mortgages included in the pool. Specified pools are unlike TBAs in that these securities are associated with specific mortgage pools rather than a generic market portion. Specified pools are not as liquid as the TBA market due to their relative heterogeneity, but they allow for more granular detail on the underlying mortgages and the opportunity to focus on specific attributes of the mortgage loan, such as seasoned mortgages, specific geographies or loans with maximum balances.

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While the Diamond Hill Core Bond strategy will invest in specified pools, the majority of the residential mortgage allocation comes from collateralized mortgage obligations (CMOs). CMOs were first introduced to the market in 1983, fueled by investors looking to split out various cash flows from specified pools. Investment banks dissected mortgage pools into various cash flows, each targeted to different tastes of risk/return for investors. CMOs were originally established as a sequential alternative to the pass-through market, as the cash flows in a mortgage pool were broken into tranches, each with an assumed weighted average life and each not paid until the bond ahead of it was paid off. As the market evolved, so too did the CMO market as investment bankers created more types of CMOs to address specific client needs. The combination of mortgage pools and subsequent breakdown into CMO tranches is illustrated in Exhibit 7. CMOs offer significant yield pick-up in exchange for some level of liquidity relative to TBA or specified pools, but they can also deliver protection from extension and prepayment risk.

EXHIBIT 7: COLLATERALIZED MORTGAGE OBLIGATION (CMO) STRUCTURE



Security selection is a key tenet of our investment process, especially when considering MBS. A valuation approach often used for bonds with embedded options is to decompose the bond into its component parts. For MBS, we conduct a creation-value analysis. We believe securities selected after applying this analysis offer better relative returns compared to similar securities. We use various tools in this analytical process, including Bloomberg and Citigroup Yield Book, as well as proprietary methodologies for valuation that provide a secondary verification of the primary analysis conducted with Yield Book.

Asset-backed Securities (ABS)

The ABS market remains the smallest subset within the investment grade fixed income market, with roughly \$1.5 trillion in outstanding issuance (March 31, 2021). The ABS market is particularly impacted by index inclusion rule—95% of the ABS market is excluded from the benchmark. The index rules state that only ABS securitized by automobiles, credit cards and stranded-cost utilities can be included. A decision to include securitizations backed by motorcycles, device plans (cell phones) and equipment was to be implemented in November 2020 but has been pushed back to April 2021.

The requirement of a credit rating from only S&P, Moody's and Fitch further limits inclusion of ABS and discounts the opportunity available in securities rated by Kroll, DBRS and other nationally recognized statistical rating organizations (NRSRO) outside of the big three. This component of the market has been growing substantially as issuers look to utilize rating agencies like Kroll that have a stronger focus in the ABS market.

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Market areas that have evolved since the financial crisis and are outside the benchmark include cell tower leases, consumer, property assessed clean energy (PACE), small business, whole business / franchise, timeshares, solar and structured settlements. Nearly half of the ABS sector is collateralized loan obligations or CLOs, though the Diamond Hill Core Bond strategy does not invest in this area of the market as these securities are more focused on corporate debt.

These index exclusions create opportunity as larger managers are typically unable to establish meaningful positions in this sector. At Diamond Hill, we believe certain areas of the ABS market offer a compelling investment opportunity with significant credit enhancements and opportunities for diversification at attractive valuations, most of which are outside of the benchmark.

Putting It All Together

The Diamond Hill Core Bond strategy takes a differentiated, transparent, bottom-up approach to investment management, focusing on finding relative value among the tens of thousands of securities in the investment grade fixed income market. This approach leads to allocations outside of the benchmark, with a focus on the securitized market driven by opportunities to add value.

From a high level, sector allocations may be similar to benchmark weightings, but when one looks under the hood and examines the underlying securities, the difference in the Diamond Hill philosophy is revealed. The Treasury allocation will deploy into STRIPS, the mortgage allocation is dominated by CMOs and the ABS allocation is diversified and unique. The utilization of cash bonds in lieu of derivatives provides the portfolio with transparency—one that investors can review and understand.

With alpha generation intended to come from security selection and sector allocation, duration (sensitivity to interest rate fluctuations) is managed to a range within +/- 10% of the benchmark duration. From a credit quality standpoint, the strategy is a true core approach, with no allocation to below investment grade securities—though the strategy can hold securities if they are downgraded.

We believe the best way to mitigate volatility inherent in riskier assets is by investing in a true core portfolio—one that focuses on higher quality securities that can serve to reduce the impact of market upheavals. Transparency is key, as investors need to understand what they own and how it can react in different environments.

Key definitions: **Agency MBS** are issued or guaranteed by an agency of the U.S. government such as Ginnie Mae, or by government sponsored- enterprise (GSEs), including Fannie Mae and Freddie Mac. **Non-Agency MBS** are issued by private firms, such as subsidiaries of investment banks, financial institutions, and homebuilders. **Treasury Inflation-Protected Securities (TIPS)** are U.S Treasury securities, indexed to inflation in an aim to protect investors from a decline in the purchasing power of their money. As inflation rises, TIPS adjust in price to maintain its real value. A **floating-rate note (FRN)** is a debt instrument with a variable interest rate tied benchmark rate.

The S&P 500® Index is a market capitalization-weighted index focused on the large-cap segment of the market. The index is comprised of 500 of the top companies in leading industries in the U.S. economy. The S&P/LSTA U.S Leveraged Loan 100 Index reflects the performance of the largest facilities in the leveraged loan market. Bloomberg Barclays EM Local Currency Government Total Return Index (unhedged) measures the performance of local currency Emerging Markets (EM) debt. The Bloomberg Barclays U.S. Aggregate Index is an unmanaged index representing the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through, and asset-backed securities. The ICE BofA U.S. High Yield Index tracks the performance of the U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market. The Bloomberg Barclays U.S. Corporate Bond Index is an unmanaged index representing the investment grade fixed rate taxable corporate bond market including USD-denominated securities publicly issued by U.S. and non-U.S. industrial, utility, and financial issuers.

Index data source: Bloomberg Index Services Limited and ICE Data Indices, LLC. See diamond-hill.com/disclosures for a full copy of the disclaimer. The ICE index data referenced herein is the property of ICE Data Indices, LLC, its affiliates (“ICE Data”) and/or its third-party suppliers and has been licensed for use by Diamond Hill Capital Management, Inc. ICE Data and its third-party suppliers accept no liability in connection with its use. ICE Data was not involved in the creation of the blended indexes. These indices do not incur fees and expenses (which would lower the return) and are not available for direct investment.

The views expressed are those of Diamond Hill Capital Management as of May 2021 and are subject to change. These opinions are not intended to be a forecast of future events, a guarantee of future results, or investment advice. Investing involves risk including the possible loss of principal.