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## Active Bond Management: Adding Value in a Shifting Market

Given the surging popularity of passive equity strategies—fueled by factors ranging from extraordinary global central bank accommodation to increasing fee pressures—it comes as little surprise that proponents of this style of investment would seek to replicate their success in the bond markets. As we discuss in our latest examination of the active/passive debate, however, there are a variety of factors—the significant outperformance history of active strategies, perhaps most notably—that suggest an active approach to fixed income is a preferred option. This may become even more evident as policy normalization continues and the long-lived credit cycle eventually turns.

## Executive Summary

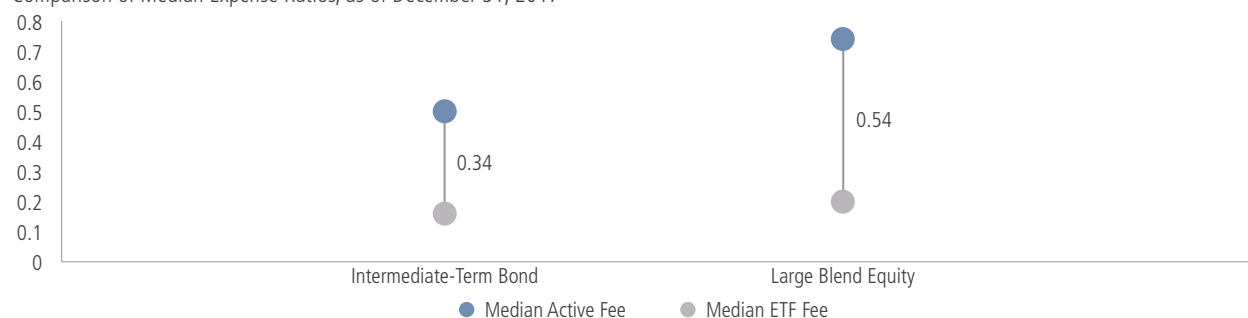
- Active bond managers have outperformed their passive counterparts across fixed income markets, with Morningstar category median active managers generating excess returns after fees relative to both the primary prospectus benchmark and the category excess median exchange traded fund (ETF) return over the past one-, five- and 10-year periods as of December 31, 2017.
- The difference in fees between active and passive strategies is much smaller in fixed income than it is in equity, which combined with after-fee outperformance suggests the marginal cost of active bond management is worth it.
- Years of extraordinary accommodation by central banks worldwide in response to the financial crisis have altered the composition of fixed income indexes, exposing passive strategies that track these indexes to greater levels of interest rate risk and credit risk without corresponding increases in compensation.
- The ongoing transition to more normal levels of inflation and interest rates may reawaken long-dormant volatility, with significant implications for fixed income markets. In such an environment, security analysis and thoughtful portfolio construction and management are likely to become even more important.

## Active Bond Managers Have Outperformed their Passive Peers<sup>1</sup>

- While there are a number of structural reasons for investors to opt for active fixed income investment management, the buying decision in many cases comes down to relative performance. Active management has shown a clear advantage here across bond markets, with median active managers in core Morningstar categories consistently delivering after-fee returns that beat their respective benchmark indexes, as well as the excess median return for category ETFs over one-, five- and 10-year periods.
- As shown in the table on page 3, the median ETF trailed its benchmark in all six core Morningstar categories over the past one-, five and 10-year periods. The median active strategy, in contrast, delivered above-benchmark returns after fees in no fewer than four of the six categories over each of these time periods, and outpaced the relative performance of ETFs across the board. **Over the cumulative 10-year period, the median excess return for active managers is greater than the median excess return for ETFs by at least 700 basis points in five out of six categories.**
- Not only have median active managers outperformed their passive counterparts on a relative basis across core Morningstar categories, but they have done so on a risk-adjusted basis as well. We examined the median Sharpe ratio of active managers versus their ETF counterparts and found that active managers in five out of the six Morningstar categories have achieved higher Sharpe ratios than ETFs across the one-, five- and 10-year periods.
- Investors have grown increasingly fee sensitive in recent years, and managers—both active and passive—have trimmed their fees in response to these concerns. While active bond managers continue to charge higher fees than their passive counterparts, their historical after-fee outperformance has more than compensated investors for this premium. It's worth noting, moreover, that the difference in fees between active and passive strategies is much smaller in fixed income than it is in equity. For example, while the median Intermediate Term Bond active manager charged 34 basis points more than the category median passive ETF provider as of December 31, 2017, the fee spread between active managers and passive ETFs in U.S. Large Blend equity stood at 54 basis points.

### LOWER FEE DISPERSION IN FIXED INCOME

Comparison of Median Expense Ratios, as of December 31, 2017



Source: Morningstar.

<sup>1</sup> Based on one-, five- and 10-year periods as of December 31, 2017.

## ACTIVE HAS OUTPERFORMED PASSIVE ACROSS CATEGORIES AND TIME PERIODS...

Excess Return (Net of Fees), as of December 31, 2017

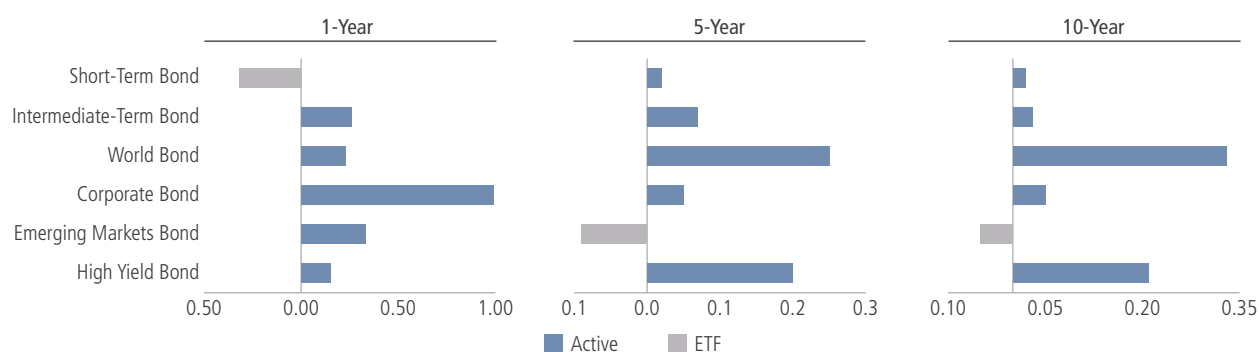
	EXCESS RETURN VS. BENCHMARK (NET OF FEES)		COMPARISON (NET OF FEES)
	ACTIVE	ETF	
<b>1-YEAR</b>			
Short-Term Bond	0.50	-0.14	0.64
Intermediate-Term Bond	0.47	-0.16	0.63
World Bond	0.39	-0.63	1.02
Corporate Bond	0.34	-0.15	0.49
Emerging Markets Bond	1.31	-0.56	1.87
High Yield Bond	-0.44	-0.60	0.16
<b>5-YEAR</b>			
Short-Term Bond	0.08	-0.25	0.33
Intermediate-Term Bond	0.16	-0.13	0.29
World Bond	0.19	-0.51	0.70
Corporate Bond	0.34	-0.26	0.60
Emerging Markets Bond	-0.58	-0.70	0.12
High Yield Bond	-0.75	-0.88	0.13
<b>10-YEAR</b>			
Short-Term Bond	0.27	-1.36	1.63
Intermediate-Term Bond	0.42	-0.12	0.54
World Bond	0.75	-0.63	1.38
Corporate Bond	0.23	-0.40	0.63
Emerging Markets Bond	-0.46	-0.89	0.43
High Yield Bond	-1.11	-1.34	0.23

■ Active Outperformance  
■ ETF Outperformance

Source: Morningstar. Represents passively managed U.S. domiciled ETFs and actively managed open-end U.S.-domiciled mutual funds versus primary prospectus benchmark. Performance based on funds' oldest share class. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

## ...AS WELL AS ON A RISK-ADJUSTED BASIS

Excess Median Sharpe Ratio Comparison, as of December 31, 2017



Source: Morningstar.

- You'll note that active emerging markets debt managers have underperformed their benchmarks in two of the measurement periods, while high yield managers have lagged in all three. These categories also represent the areas of greatest underperformance for ETFs. We attribute this circumstance to the following:

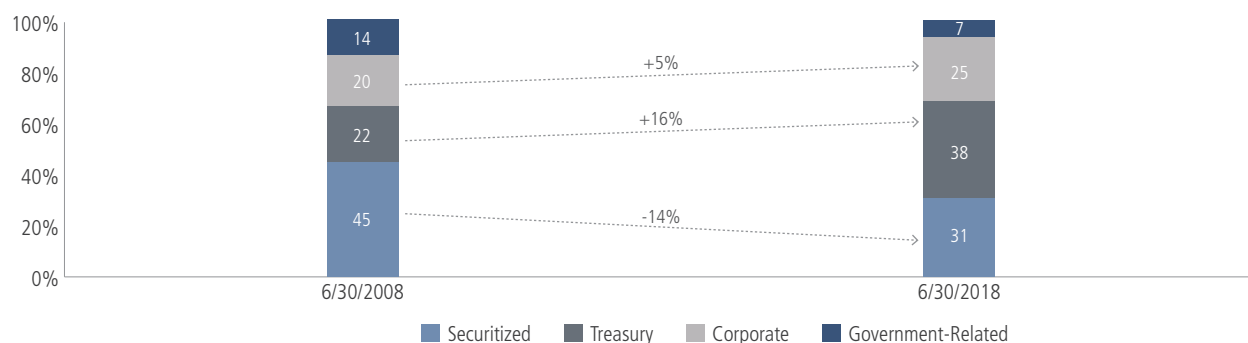
- The emerging markets bond category includes blend funds, which may contain substantial allocations to local-currency bonds and thus are exposed to currency risk. Local-currency bonds have been the poorest performing sub-class within the emerging markets debt segment four of the last five years and seven out of the last 10, as a variety of shocks since the financial crisis—the 2013 “taper tantrum” and the collapse of commodity prices in 2015–16 are but two examples—have hurt emerging currencies.
- Similar to EMD, the high yield bond category contains funds with a range of risk-return profiles. Recent underperformers include shorter-duration and higher-quality strategies, whose returns have lagged lower-quality and benchmark-like strategies through the recent low-default environment. An accommodative Federal Reserve combined with a strengthening economy and low issuance have enabled lower-quality bonds to outperform as their excess carry helps generate higher total returns during low-default environments. Through a full market cycle in which broad-based defaults rise, however, we would expect a reversal of these recent trends.

### A Changed Fixed Income Environment Can Mean Greater Risk for Passive Investors

- Passive investors in certain bond indexes may find that the risk-return profile of their investment has changed considerably since governments and central banks began to flood the financial system with liquidity in response to the 2008 financial crisis. In the U.S., for example, Treasury issuance was joined by extraordinary monetary policy from the Federal Reserve that included near-zero interest rates and trillions of dollars in asset purchases. Meanwhile, total outstanding corporate debt has increased to record highs near \$9 trillion, about 40% higher than its previous peak in 2008.
- The market impact of this activity can be seen in the pronounced shift in sector allocation within the Bloomberg Barclays U.S. Aggregate Bond Index (the “Aggregate”), the primary benchmark for core investment grade fixed income portfolios. The image below depicts the composition of the index, both just before the financial crisis and at June 2018. Most strikingly, the share of U.S. Treasury debt and corporate debt within the index increased 16% and 5%, respectively, over this period, while securitized debt fell 14%.

#### THE COMPOSITION OF THE AGGREGATE HAS SHIFTED POST-CRISIS

Bloomberg Barclays U.S. Aggregate Bond Index



Source: POINT.

- This shift toward low-rate, longer-maturity assets has increased the index’s duration, meaning that the index and portfolios seeking to replicate it have become more sensitive to changes in interest rates. Given the index’s extremely low yield, however, investors are not being compensated for this additional risk; in fact, as you can see in the following chart, the spread between the duration of the index and its yield to worst suggests the yield versus duration trade-off for the Aggregate is the worst it’s been in years. With interest rates potentially continuing to trend higher as central banks normalize, many investors are looking to either reduce their duration or receive a healthy yield in exchange for the risk; passive strategies benchmarked to the Aggregate cannot deliver either option.

## FIXED INCOME INDEXES—AND THE STRATEGIES THAT MIRROR THEM—HAVE GROWN MORE VULNERABLE

Duration and Yield to Worst of Barclays U.S. Aggregate Bond Index, as of June 30, 2018

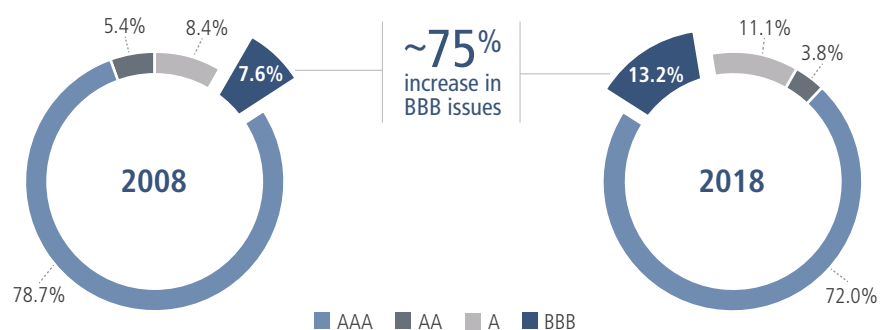


Source: Barclays.

- Credit risk in the index is trending higher as well, as more than 50% of it is represented by corporate issues and securitized assets. As they've expanded post-crisis, credit markets have deteriorated in quality, making the Aggregate much riskier than it was a decade ago. As shown below, 78.7% of the Aggregate was rated AAA in 2008; that figure now stands at 72.0%, while BBB issues rose from 7.6% to 13.2% over the same period. A decline in corporate issuer ratings is primarily to blame: the share of the Bloomberg Barclays U.S. Corporate Bond Index (a subset of the Agg) rated AAA or AA fell from 27% to only 11% since 2007 as BBB rated issues jumped from 37% to 49%.

## SHARE OF LOWER-QUALITY ISSUES HAS INCREASED OVER THE LAST 10 YEARS

Bloomberg Barclays U.S. Aggregate Bond Index



Source: Bloomberg. Data as of June 30, 2018.

- When the credit cycle does eventually turn, the broad exposure to heavily indebted companies that results from the market-weighted methodology of fixed income indexes may prove unfortunate, as quality business models are likely to be separated from those less able to withstand higher interest rates and slower economic growth. While weighting an equity index by the market value of its constituent stocks results in a bias toward those whose prices have increased the most—stocks that have been the most “successful,” independent of their fundamental merits—weighting a fixed income index by debt outstanding skews it toward the largest debt issues and by extension the most highly leveraged companies in the index.

## Conclusion

- Though passive fixed income strategies have increased their share within certain market segments, active portfolio management historically has outperformed across the bond spectrum and across a variety of time periods. The after-fee outperformance of active strategies suggest their marginal cost relative to ETFs is money well spent.
- Because of post-crisis market dynamics, many bond indexes—including the widely benchmarked Bloomberg Barclays U.S. Aggregate Index—have grown increasingly risky, in our view, without a corresponding increase in potential return.
- As the credit cycle turns and the availability of capital declines, highly leveraged companies may find their business models under pressure, leading to additional ratings downgrades and higher default rates.
- With highly accommodative interest rate and monetary policies by global central banks slowly returning to more neutral levels as the long-lived credit cycle draws to a close, a more nuanced, flexible approach to bond portfolio management—marked by the ability to discriminate among securities, issuers and sectors, and to manage risk exposures—may be required to generate positive total return in what is likely to be a more challenging market environment. Such an approach is available only to active managers.

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**Duration** represents the average duration of the portfolio. Duration of a bond is expressed as a number of years from its purchase date. It is a measurement of how long, in years, it takes for the price of a bond to be repaid by its internal cash flows. Instruments with higher effective durations often carry more risk and have higher price volatility than those with lower durations.

**Yield to Worst** is the lowest potential yield that can be received on a bond without the issuer actually defaulting.

**Sharpe Ratio** is a measure of risk-adjusted returns that can be used to compare the performance of managers. The ratio represents the return gained per unit of risk taken. Managers with the same excess return for a period but different levels of risk will have Sharpe ratios that reflect the difference in the level of risk.

**Morningstar Intermediate-Term Bond Category** invests primarily in corporate and other investment-grade U.S. fixed-income issues and typically have durations of 3.5 to 6.0 years. These portfolios are less sensitive to interest rates, and therefore less volatile, than portfolios that have longer durations.

**Morningstar Short-Term Bond Category** invests primarily in corporate and other investment-grade U.S. fixed income issues and typically have durations of 1.0 to 3.5 years. These portfolios are attractive to fairly conservative investors, because they are less sensitive to interest rates than portfolios with longer durations.

**Morningstar High Yield Bond Category** portfolios concentrate on lower-quality bonds, which are riskier than those of higher-quality companies. These portfolios generally offer higher yields than other types of portfolios, but they are also more vulnerable to economic and credit risk. These portfolios primarily invest in U.S. high-income debt securities where at least 65% or more of bond assets are not rated or are rated by a major agency such as Standard & Poor's or Moody's at the level of BB (considered speculative for taxable bonds) and below.

**Morningstar World Bond Category** invests 40% or more of their assets in foreign bonds. Some world-bond portfolios follow a conservative approach, favoring high-quality bonds from developed markets. Others are more adventurous and own some lower-quality bonds from developed or emerging markets. Some portfolios invest exclusively outside the U.S., while others regularly invest in both U.S. and non-U.S. bonds.

**Morningstar Emerging Markets Bond Category** invests more than 65% of their assets in foreign bonds from developing countries. The largest portion of the emerging-markets bond market comes from Latin America, followed by Eastern Europe; Africa, the Middle East and Asia make up the rest.



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