The Active Advantage: The Benefits of Active Fixed Income Management

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Over the past ten years, there has been a lot of ink spilt in the financial media about the demise of active management. The debate over whether an investor should pursue an active or passive approach began in the 1970s, with the release of books such as 'A Random Walk Down Wall Street' and the invention of the first index mutual fund – the Vanguard 500 Index Fund. However, following the financial crisis, and the wide adoption of Exchange Traded Funds (ETFs), the investing world has witnessed a seismic shift of over $1 trillion from actively managed to passively managed strategies. ETFs were able to take the benefits of index mutual fund investments to the next level by providing: intraday trading and pricing, more focused strategies, and better tax efficiency, while maintaining the benefit of lower fees.

This paper sets out the reasons why we believe that the unique nature of the fixed income market creates opportunity for actively managed strategies to outperform passively managed strategies, such as ETFs. The first section of the paper explores some of the challenges with taking a passive approach to fixed income investing, while the second section discusses some of the potential opportunities that an active approach seeks to exploit.

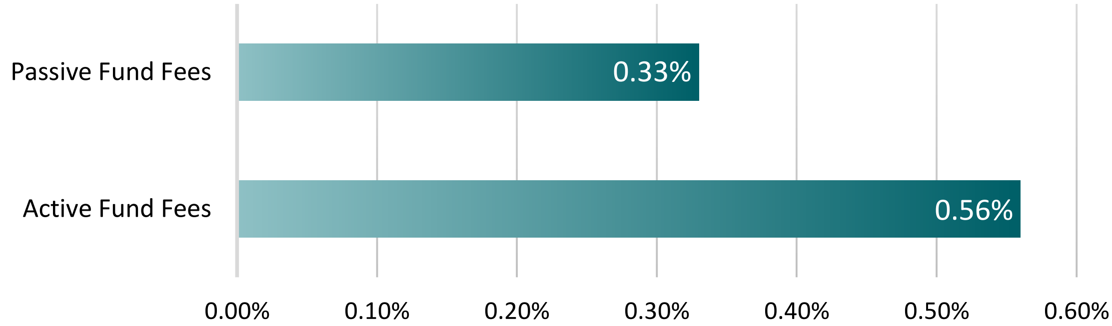
The Shortcomings of Passive Fixed Income Investing:

Performance:

We believe passively managed fixed income strategies are at a disadvantage as they aim to replicate indices. In fact, it is almost mathematically impossible for passive index-tracking strategies to consistently match the performance of the index, let alone outperform, as a result of fees and transaction costs. Additionally, indices generally have substantial structural shortcomings, which can further negatively impact an investor's return potential. We explore each of these topics in greater detail below.

Fees:

One of the primary reasons behind the shift in investor preference to passive funds is clear: fees. A passively managed strategy requires fewer resources, and, as a result, costs less to operate. However, there are still costs associated with the administration of these funds, and, unlike the sizable dispersion between the cost of active and passive management in equities, the dispersion in the expense ratio between active and passive management in fixed income is generally much less. The chart below compares the average expense ratio for active managers in the intermediate-term bond category against the average fee for passively managed strategies in the same category.



Source: Morningstar

Transaction Costs:

There are two primary reasons that a passively managed fixed income fund needs to transact: investor flows (either inflows or outflows) and changes to the index the fund is tracking. Both of these factors can and do adversely affect performance.

Indiscriminate buying and selling occur due to investor inflows or outflows. When flows into passive funds are high, the money must be put to work immediately by purchasing the bonds necessary to mimic the index. This gives pricing power to the sellers of these bonds, who are well aware that the passive fund needs to buy them. When redemptions are high, the reverse occurs, and passive strategies become forced sellers regardless of the current market environment.

Forced buying and selling also occurs due to changes in the underlying constituents in the index. Changes in index constituents not only affect transaction costs but also impact performance due to the timing of the buying and selling.

The unavoidable need to buy or sell securities creates transaction costs, often at a time when the conditions to transact are poor and liquidity is low. The liquidity cost is typically measured as the difference between the bid price (the price a buyer is willing to pay for a bond being sold) and the ask price (the price the buyer has to pay to buy the bond). The ask price is always higher than the bid price.

Unlike equities, the difference between the bid and ask price in fixed income can be sizeable, especially in markets such as bank loans, high yield, and emerging market debt.

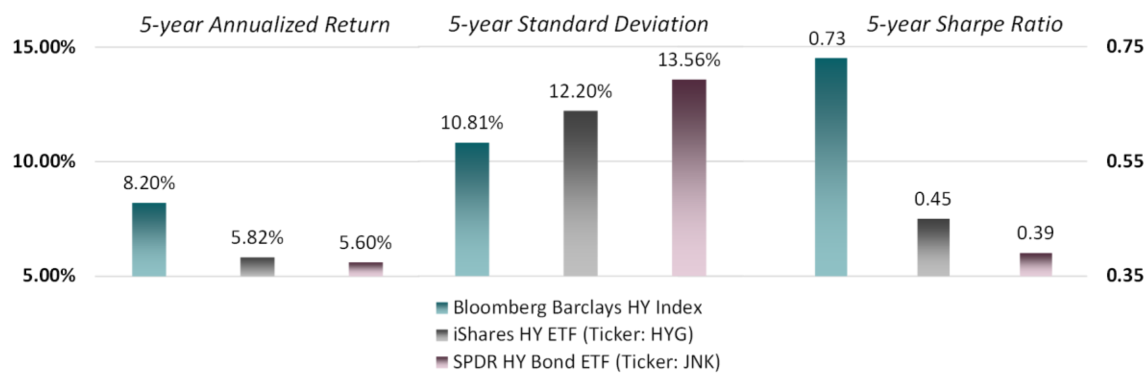
Index Related Issues:

There are several issues related to the index which can cause complications for passive investors including: the challenge in being able to track an index, the manner in which indices are constructed, market representation, and structural changes in both interest rate risk and duration risk.

Ability to Track an Index:

Unlike the equity market, the very nature of the bond market generally makes full index replication impossible. To replicate a large, liquid bond index, passive investment strategies will often use a sampling method to try to mimic the major risk parameters of an index, without holding the full range of securities.

In less liquid areas, passive strategies will track specialized indices containing only the most liquid issuers. An example of following a specialized index rather than the traditional market index occurs in the high yield (HY) asset class. The largest two ETFs track the Bloomberg Barclays High Yield Very Liquid Index (VLI) and not the full High Yield Index due to the higher levels of liquidity required by ETFs. The Bloomberg Barclays High Yield VLI consists of only 776 of the 2086 issues which make up the full Bloomberg Barclays High Yield Index. The result for passive investors has been one of missed opportunity, as the returns have fallen meaningfully short of the broad market index return, even on a gross-of-fee basis, while the standard deviation, or volatility, of the ETFs has been higher, resulting in a substantially lower Sharpe ratio.



Source: Factset. 06/30/2017. January 1st, 2008 represents the earliest date that monthly data is available for both ETFs. The Sharpe ratio is a measure of risk-adjusted returns. It is calculated by dividing the excess return over the risk-free rate by volatility. Returns assume that dividends were reinvested.

Index Construction:

The foundation of an index is its weighting scheme. The overwhelming majority of equity and fixed income indices are market-capitalization weighted. This weighting was originally developed for equity indices as a way to reflect the broad equity market.

By definition, in fixed income, the composition of capitalization-weighted indices is biased toward the biggest debtors, i.e. the greater amount of debt an issuer has outstanding, the larger its weighting in the index. The result of this 'debt concentration' created by index construction rules is that investors seeking to replicate the index will ultimately be lending more money to the most indebted companies. It does not intuitively make sense for an investor to have their largest holdings in the most leveraged borrowers as there is a greater risk that the most indebted issuers will borrow beyond their means.

Furthermore, in addition to the desire to generate income, investors hold bonds to provide diversification and price stability during periods of negative returns in the stock market. However, entities which have a large amount of debt outstanding may experience more challenges in the event of an economic/stock market downturn than companies with less leveraged balance sheets, thus not providing the diversification benefits that investors desire.

Lastly, even the broadest-based U.S. bond index - the Bloomberg Barclays U.S. Aggregate Index - represents just over 50% of the total taxable U.S. bond market.

Bloomberg Barclays U.S. Aggregate Index

Instruments Included	Instruments Not Included
Nominal Treasuries	Treasury Inflation-Protected Securities (TIPS)
Agency Mortgage-Backed Securities	Non-Agency Mortgage-Backed Securities
Investment Grade Corporate Bonds	High-Yield Corporate Bonds
Commercial Mortgage-Backed Securities	Floating Rate Bonds
Issue Sizes Over $300 million	Issue Sizes Under $300 million

Source: Bloomberg Barclays Indices. 07.31.2017

Changes to Index Constitutes:

Passive approaches can commonly suffer from the effects of ‘crowded trades’ as constituents of an index change over time. For example, investment grade indices typically stipulate that bonds must be rated at or above BBB- / Baa3 (as rated by the credit ratings agencies Standard & Poor’s and Moody’s, respectively) to be part of the index. This criteria can create multiple headwinds for passive investing that can negatively affect performance.

In the event of a ratings downgrade – where an investment grade bond has its rating downgraded to a high yield bond, implying a deterioration in its credit fundamentals – index rules typically require that the bond is removed from the index at the end of the month which the downgrade occurs. The removal from the index will force the index replicators to all sell the bond at the same time – creating a crowded trade – putting strong downward pressure on the price of the bond due to all of the forced selling. However, following the initial selling pressure, the price of these bonds often recover and the losses experienced initially following the ratings downgrade can often be partially recouped. In these cases, passive investors actually lose twice: by selling the bond during part of the crowd selling period and by missing out on any subsequent potential recovery.

The opposite occurs in the event of a ratings upgrade where a high yield bond becomes investment grade due to an improvement in credit fundamentals. At the end of the month where the bond receives an upgrade, it is added to investment grade indices. Passive investment vehicles then have to purchase the bond. The strong demand created by the need of passive investors to purchase the recently upgraded bond can result in price appreciation of the bond – but only for those investors who already owned it prior to the upgrade.

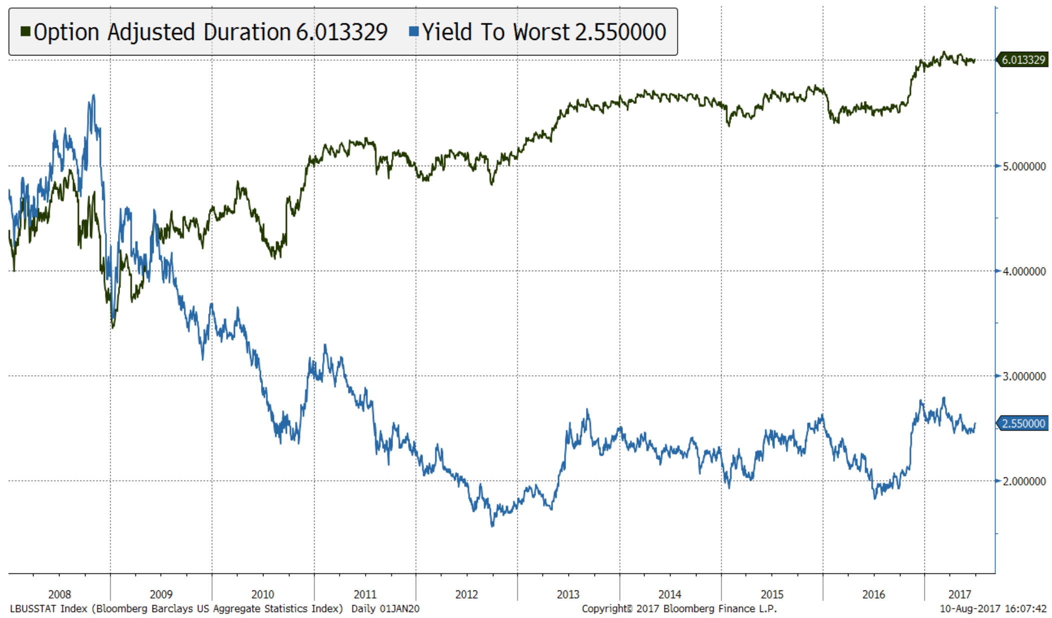
An active manager will attempt to anticipate credit ratings changes by selling a bond before a potential ratings downgrade or buying a bond before a potential ratings upgrade. A variety of approaches such as analysis of the issuer’s credit fundamentals and business model as well as management’s intentions towards balance sheet management, help to build a view towards potential future actions by the ratings agencies.

Where Passive Becomes Aggressive: Interest Rate Risk:

Since the financial crisis in 2008, the interest rate profile of the major global fixed income indices, such as the Bloomberg Barclays U.S. Aggregate Index, has increased substantially due to the decline in interest rates and issuers terming out their maturity profiles.

As the chart below shows, the option adjusted duration of the Bloomberg Barclays U.S. Aggregate index has increased from 4.41 years at the beginning of 2008 to 6.01 years at the end of the second quarter of 2017. Therefore, passive investors today who are tracking indices such as the Bloomberg Barclays Aggregate index are now taking on more interest rate risk – whether or not that is their intention.

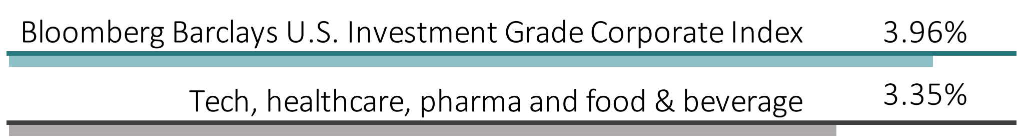
Over the same time period, the yield-to-worst of the index has fallen from 4.70% to 2.55%. This decline in yield per unit of duration indicates that investors are now taking on more interest rate risk and receiving lower compensation per unit of interest rate risk for their investments in the index.



Source: Bloomberg. 07/31/2017

Structural Issues – Credit Risk:

Since the financial crisis, many companies have used bond proceeds for 'shareholder-friendly' activities such as increasing dividend payments on common stock or buying back outstanding shares. This has resulted in the capital structures of many firms becoming more levered, which in some cases has led to their credit rating being downgraded by the ratings agencies. Over the past five years, the technology, pharmaceutical, healthcare, and food and beverage sectors have led the way in pursuing shareholder-friendly activities and have underperformed the Bloomberg Barclays U.S. Investment Grade Index over that time. This is in large part due to the high correlation between credit spreads and underlying fundamentals.



Source: Bloomberg Barclays Indices

A decline in the credit quality of an issuer is particularly important to fixed income investors who must focus on both the sustainability of income as well as capital protection. This differs from equity investing, which is often focused on capital appreciation. Bonds possess an asymmetric return profile, meaning that the maximum amount of principal an investor will receive at maturity is the par value, but in the event of a default, an investor can receive zero. Therefore, a single default can significantly impair portfolio returns. Passive investments, due to their very nature, do not attempt to steer clear of likely defaults or overvalued bonds.

The Active Advantage:

In addition to some of the shortcomings around passive strategies highlighted above, there are several reasons that active fixed income management can benefit an investor. These areas of opportunity include inefficiencies and dislocations that an active manager can exploit to potentially outperform a benchmark as well as the ability to customize a portfolio to an investor's needs.

Unlike the equity markets, where many active managers have struggled to beat their benchmarks and passive funds in recent years, active fixed income strategies have shown an ability to outperform. The results of a recent Morningstar study showed that nearly two-thirds of actively managed fixed income funds outperformed their passive counterparts over the past five years. Part of the reason that active fixed income managers are able to add value relative to the benchmark and passive funds is due to the complexities and inefficiencies that are present in the bond market.

Bond Market Inefficiencies:

Active Position:

The global fixed income market, which is nearly 50% larger than the global stock market, is the largest securities market and as a result is complex. Distortions can and frequently do occur. Active strategies allow a portfolio manager the ability to tilt factors of a portfolio such as interest rate duration, yield curve positioning, roll-down, sector allocation, individual credit analysis, and other fundamental and technical inputs. In addition, a manager can add out-of-index positions in sectors, such as high-yield and preferred securities, which can potentially provide sources of excess return.

Duration	Duration measures the sensitivity in a bond's price to a change in the level of interest rates. To express a view on and help manage the risk in interest rate changes, active managers can adjust the duration of the portfolio. If a rise in interest rates is anticipated, then active strategies may attempt to protect bond portfolios from a negative price impact by shortening durations, possibly by selling some longer-term bonds and buying short-term bonds. Conversely, to maximize the positive impact of an expected drop in interest rates, active managers can lengthen duration on bond portfolios.
Yield Curve Positioning	Active bond strategies can adjust the matuirty structure of a bond portfolio based on the expected changes in the relationship between bonds with different maturities, a relationship which is illustrated by the yield curve. While yields normally rise with maturity, this relationship can change, creating opportunities for active bond managers to position a portfolio in the area of the yield curve that is likely to perform the best in a given economic environment.
Roll Down	When the yield curve takes on its normal shape - where shorter-term interest rates are lower than longer-term rates - then a bond is valued at successively lower yields and higher prices as it approaches maturity or "rolls down the yield curve." An active manager can hold a bond for a period of time as it appreciates in price and sell it before maturity to realize the gain. This strategy has the potential to continually add to total return in a normal interest rate environment.
Sector Allocation	Although each sector has different historical return potentials and risk characteristics, there are opportunities throughout the economic cycle to produce value to a portfolio through identifying undervalued sectors. Based on the economic outlook, certain sectors that have historically increased in price during a particular phase in the economic cycle may be overweighted, while sectors which have underperformed may be avoided. As the economic cycle turns, active managers may sell bonds in one sector and buy in another.
Individual Credit Selection	Beyond controlling exposures to less-desirable or over-valued sectors, active credit analysis can inform individual security selection. Active managers can over-weight credits with improving credit fundamentals and avoid credits with weak management or deteriorating fundamentals. Credit analysis can also capture opportunities created by external factors, such as shifts in government fiscal plans, tax policy, and spending programs that affect companies differently.
Technical Factors	Active managers can buy or sell secturities whose prices may have been impacted by changes in supply and demand.
Out-of-Benchmark Positions	Active managers may decide to hold 'out-of-benchmark' allocations to certain sectors, such as high-yield or preferred securities, in an effort to produce excess returns.

Investor Goals:

Unlike equity markets, where the vast majority of investors are striving for total return, different participants in the bond market have a multitude of different objectives. The Bank of International Settlements estimates that around 54% of the $102 trillion global bond market is held by investors which are 'non-mark-to-market' or 'noneconomic' investors, meaning their goal is different than maximizing their economic benefit.

These investors include Central Banks, global commercial banks, and insurance companies. The differing objectives and constraints of these major investors in the fixed income market place can provide opportunities for active managers.

Investor	Invetsment Objective	Bond Holdings ($ trillions)
Central Banks	Implement monetary policy, stabilize exchange rates and inflation and full empolyment	15.3
U.S. Banks	Need to meet regulatory capital requirements	2.8
U.S. Insurance	Focus on book yield rather than total return due to accounting measures. Desire predictiable income. Treat the investment grade threshold as a perilous cliff to be avoided.	4.3
Global Banks and Insurance	Need to meet regulatory requirements and receive predictible income	33.0
Total		55.4

Source: SNF Financial, European Banking Authority, Bank of International Settlements and Bloomberg. 12/31/2016.

The New Issue Market:

The bond market is more heavily influenced by new issuance as compared to the stock market. The average turnover rate over the last three years for the Bloomberg Barclays U.S. Aggregate Index was approximately 40% per year, with around half of that due to new issues. This compares to an annual average turnover rate of 4% per year for the S&P 500, with new issues making up less than 1% of the market's capitalization. The reason for the difference is that equities are perpetual, whereas bonds have a finite life.

New issues are typically issued at a discount to existing bonds to attract investors, and allocations are achieved through negotiation. Being able to participate in the new issue market and purchasing a bond at a discount to existing bonds, represents a potential source of excess return for an active manager. Conversely, for passive managers, it often takes a week or more before the new securities enter the index at the start of the month, at which point all passive managers have to add the security to their passive strategies, often pushing up the price.

However, even though most new bonds come to market with a concession, active managers don't necessarily buy them if the deal appears to be overpriced. This is often true even after factoring in the discount, or if the underlying credit fundamentals of the issuer are of concern. In contrast, passive managers have an obligation to buy all bonds that enter the index, regardless of price or the issuers' underlying credit condition.

Over-the-Counter Trading:

An exchange works when the items to be listed are of a manageable number, and there is a high degree of standardization. Common stocks meet this criteria and are most often traded on exchanges such as the New York Stock Exchange or the NASDAQ.

On the other hand, there are hundreds of thousands of different bond issuers in a variety of sectors in the bond market. Each issue is generally unique in terms of maturity, yield, covenants and indentures. As a result of the market size and the diversity of characteristics for individual securities, bonds have to trade predominantly 'over-the-counter' (OTC), meaning that bonds are bought or sold in a one-off transaction through a bond dealer. An OTC market is generally much less transparent than an exchange, and the majority of buy or sell orders are not simple orders, as stocks trading on an exchange, but rather are negotiations with a bond dealer.

Most fixed income indices are rebalanced monthly which requires passive managers to trade securities. This need to rebalance is due to bonds maturing, new bonds being issued, and index inclusion / exclusion rules around credit ratings resulting in the securities entering or exiting the index. As passive managers buy or sell securities as indices rebalance, they may have to transact in the OTC market.

Active managers can attempt to use their knowledge to buy or sell securities at the appropriate price. Conversely, passive strategies are generally price takers in the fixed income markets.

Customization:

We believe that an investor's circumstances and goals should drive the composition of their portfolio, not an index provider's efforts to replicate a fixed income index. An active approach is constructed with the investor in mind. This enables an investor's portfolio to fit the type of credit risk, interest rate risk, sector allocation, debt concentration, and liquidity characteristics which the investor desires, in ways that are not possible in passive investing. Furthermore, the duration, credit quality, and sector exposures of indices, can change over time, subjecting investors to risks they might be unaware of, or which might not meet their objectives.

Conclusion:

Historically, active fixed income managers have been able to generate excess returns over time. This has been achieved by identifying and capturing inherent opportunities across the fixed income markets which are often not available to passive strategies. In today's environment of low interest rates, the future returns investors can expect from fixed income will be modest relative to the past 30 years. We believe the potential excess return from active investing can significantly boost an investor's overall fixed income return.

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