

April 2025

Active fixed income strategies: balancing risk and return



Anders Persson
CIO of Global Fixed Income



Tony RodriguezHead of Fixed Income Strategy

KEY TAKEAWAYS

Lower-cost active managers:

- Exhibited a better risk/return trade-off over the past 10 years
- Can expand the investment universe to broaden diversification across high grade sectors and incorporate higher yielding sectors to potentially enhance income and total return
- May reduce credit risk through fundamental and quantitative research; sector and security selection; and tactical trading
- Manage interest rate sensitivity through active duration and yield curve positioning

Active fixed income strategies may offer investors numerous advantages over passive index strategies, including the potential for alpha and enhanced risk-adjusted performance. Investors are still seeking risk-managed returns in the current higher-for-longer rate environment, and we believe active management for fixed income can better help investors pursue their goals. These advantages become more significant as we consider the flawed nature of issuance-based fixed income indexes and the long-standing segmentation of indexed markets.



Actively managed portfolios have historically provided higher total returns and improved risk-adjusted returns than passive portfolios.

ACTIVE MANAGEMENT MAY BE USED IN ANY ENVIRONMENT

We believe actively managed bond strategies can help manage portfolio risk while enhancing returns, particularly in today's environment of volatile interest rates and historically tight credit spreads. Active sector rotation, bottom-up security selection and interest rate management (duration and yield curve) may create opportunities for investors to add value that are simply not available in passively managed strategies.

Lower-cost actively managed core mutual funds outperformed the benchmark while only modestly increasing risk, on average, over the 10 years ending 31 Dec 2024 (Figure 1, top). We plotted U.S. mutual funds and exchange-traded funds in the Morningstar Intermediate Core Bond category. Active funds with fees below the category average naturally delivered higher returns than active funds with above-average fees. Passive mutual funds and ETFs delivered lower returns than the benchmark.

Fixed income investors also tend to be concerned with volatility. Return per unit of risk is represented by the Sharpe ratio (higher numbers indicate more return per unit of risk). Excess returns per unit of active risk can be measured by the information ratio, which divides excess return by the tracking error.

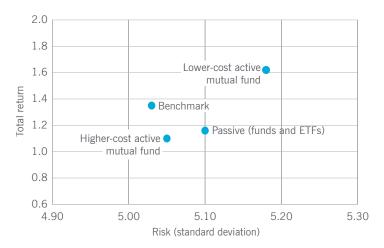
Lower-cost active funds generated more attractive risk-adjusted returns than both passive funds and higher-cost active peers (Figure 1, bottom). It's worth noting that the recently ended 10-year period spanned disparate environments, including zero and negative interest rate monetary policies, a global pandemic and a sharply rising rate period. Negative Sharpe ratios occur when yield curves are inverted, meaning rates at the very front end of the curve are higher than rates further out.

WHY IS IT DIFFICULT FOR INDEX FUNDS TO KEEP UP?

Fixed income index strategies may often have difficulty matching their benchmarks' performance due to the complexities of bond indexes. One of the

Figure 1: Actively managed core bond funds have offered better risk-adjusted returns

10 years ending 31 Dec 2024



	Sharpe ratio	Information ratio
Passive (funds and ETFs)	-0.11	-0.87
Lower-cost active mutual fund	-0.02	+0.20
Higher-cost active mutual fund	-0.13	-0.27
Benchmark	-0.60	NA

Data source: Morningstar Direct, 31 Dec 2024. Performance data shown represents past performance and does not predict or guarantee future results. Risk is measured by 10-year annualized standard deviation and return by 10-year total return. Representative universes and indexes: passive (funds and ETFs): open-end index funds in the Morningstar U.S. Intermediate Core Bond Fund category and ETFs in the Morningstar U.S. Fund Intermediate Core Fund category; lower-cost active mutual fund: funds in the active mutual fund category with fees lower than the category average; higher-cost active mutual fund: funds in the active mutual fund category with fees higher than the category average; benchmark: Bloomberg U.S. Aggregate Index.

most popular U.S. stock market indexes, the S&P 500® Index contains approximately 500 stocks. In contrast, the most widely quoted U.S. bond index, the Bloomberg U.S. Aggregate Index, contains more than 13,600 securities.¹

It is virtually impossible to buy all of those bonds given supply constraints, so an index manager must attempt to replicate the characteristics and performance of the benchmark using fewer securities.

HOW CAN ACTIVE MANAGERS ADD VALUE?

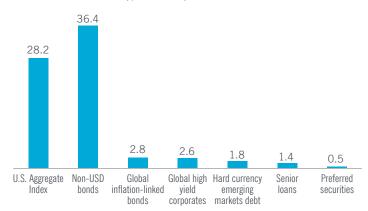
Commonly used broad market benchmarks like the U.S. Aggregate Index suffer from many drawbacks that offer active managers opportunities to generate excess returns and efficiently manage risk. These shortfalls include limited sector exposure, magnified credit risk due to market value weighting, fluctuating duration and a construction methodology bias that favors large, frequently traded instruments to ease index data publication. Active managers may add value to fixed income portfolios by taking advantage of these limitations. Let's look at each in turn:

Expanding the investment universe

By their very nature, bond indexes are exclusionary, meaning they limit themselves in terms of the opportunity set. For example, the U.S. Aggregate Index contains thousands of holdings with a market value of more than \$28 trillion.¹ But the index excludes bonds smaller than \$300 million and eliminates those with maturities of less than one year. Exclusions based on deal and tranche sizes – as well as collateral types – lead to minimal index exposure for select securitized sectors, such as asset-backed and commercial mortgage-backed securities. Based on JP Morgan estimates of market size, the Aggregate Index excludes nearly \$1.3 trillion of CMBS market value outstanding and \$929 billion of ABS outstanding.¹

Figure 2: The Aggregate Index misses out on many sectors

Index market value (\$ trillions)



Data source: Bloomberg, L.P., JPMorgan, 31 Dec 2024. Performance data shown represents past performance and does not predict or guarantee future results. Chart shows market value of various market indexes only and does not include the entire universe of outstanding securities. Certain securities may be represented in more than one index. Representative indexes: U.S. Aggregate Index: Bloomberg U.S. Aggregate Index: non-USD bonds: Bloomberg Global Aggregate ex USD Index; global inflation-linked bonds: Bloomberg Global Inflation-Linked Total Return Index Value Unhedged USD; global high yield corporates: Bloomberg Global High Yield Index; hard currency emerging markets debt: JPMorgan Emerging Markets Bond Index Global, JPMorgan Corporate Emerging Markets Bond Index; senior loans: S&P UBS Leveraged Loan Index; preferred securities: ICE BofA US All Capital Securities Index, ICE USD Contingent Capital Index.

The index also excludes major market segments like non-dollar denominated bonds (non-USD) and below investment grade corporate bonds and senior loans, as well as specialized markets like U.S. Treasury Inflation Protected Securities (TIPS) and preferred securities (Figure 2). While not all core funds include these extended sectors, we believe opportunistic and judicious use may help improve a fund's return profile without meaningfully changing its risk level or correlation to the U.S. Aggregate Index.

Active managers may also strategically allocate away from potentially lower yielding government bonds. They could supplement index-eligible bonds with off-benchmark investments that may offer higher yield, greater diversification and less sensitivity to rate increases (Figure 3).

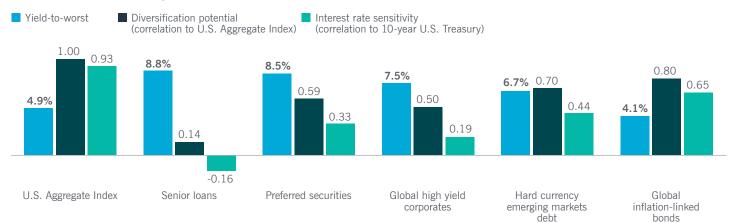


Figure 3: Off-benchmark sectors have offered potential for higher yield, greater diversification and less interest rate sensitivity

Data sources: Bloomberg, L.P., 31 Dec 2024. Correlation data are 10 years ended 31 Dec 2024. Performance data shown represents past performance and does not predict or guarantee future results. Representative indexes: U.S. Aggregate Index: Bloomberg U.S. Aggregate Index; senior loans: S&P UBS Leveraged Loan Index; preferred securities: ICE BofA U.S. All Capital Securities Index; global high yield corporates: Bloomberg Global High Yield Index; hard currency emerging markets debt: Bloomberg Emerging Markets USD Aggregate Index; global inflation-linked: Bloomberg Global Inflation-Linked Total Return Index Value Unhedged USD; 10-year U.S. Treasury: Bloomberg U.S. Treasury Bellwethers 10 Year Index.

Enhancing risk-adjusted returns

In fixed income indexes, securities are weighted by the market value of the outstanding debt, so the most indebted issuers make up more of the index. That means passive investors are, by the nature of the index, investing more in issuers that have the most index eligible debt. For example, U.S. Treasury exposure in the Aggregate Index grew from 22.4% at the end of 2007 (before the Global Financial Crisis) to 44.3% at year-end 2024.

The same is true for credit instruments. Passive investing may increase exposure to issuers with higher leverage (because they have issued more debt). Active managers, using rigorous credit research processes, can focus on the most compelling opportunities, rather than those companies that issue the most debt.

Managing downside risk is critical. Bonds have an asymmetric pay-off profile; a default can take price all the way to zero, while repayment of principal at maturity caps potential upside price appreciation. Equities, on the other hand, can theoretically appreciate without a limit, countering the risk of going to zero.

Therefore, fixed income portfolio returns can be hurt more by a bond not repaying its principal than they are helped by a bond repaying principal plus interest. Using in-depth research, active managers can seek to avoid issuers they believe may not repay their debt or may experience financial hardship that could cause bonds to decline in price before maturity.

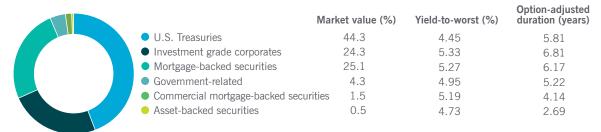
To be sure, avoiding or selling index-eligible securities before they are downgraded from investment grade to below investment grade may give active managers an edge. Passive portfolios are forced to experience price declines on a downgraded bond before it exits the benchmark at the end of the month (or subsequent rebalancing period).

Actively managing interest rate risk

The typical bond index is limited in its sector composition and sector weights tend to change over time. This makes it important for investors to know what they own, as the risk factors are not constant (sector, duration, default and prepayment), even for an index strategy.

The U.S. Treasury issued more debt in part to finance growing deficits following the financial crisis and pandemic, outpacing issuance in other USD-denominated sectors. The U.S. Aggregate Index breakdown highlights how index funds concentrate risk in the lowest yielding market segment (Figure 4).

Figure 4: The U.S. Aggregate Index has a high concentration of lower-yielding bonds



Data source: Bloomberg, L.P., 31 Dec 2024. Performance data shown represents past performance and does not predict or guarantee future results. Yield represents yield-to-worst.

Bond market participants may have investment objectives outside of maximizing income or earning risk-adjusted returns. Central banks focus on controlling inflation and stabilizing markets, while financial institutions often manage against book yield or regulatory constraints.

These entities make up more than half of the participants in the bond market, and their activities can sometimes suppress yields for certain sectors. They can also represent a bid for securities that might not otherwise come to market, yet issuance volumes will drive compositional changes of benchmarks. All of this leads to inefficiencies that may be exploited by active managers, while index investors are left holding whatever the market bears.

For instance, the index's duration fluctuates over time (Figure 5). Over the past decade, the observed increase is due to a higher weighting of Treasuries, increased issuance of longer-term corporate debt when monetary policy brought interest rates to zero, and mortgage duration extension due to slowing refinancing activity.

Longer duration means the bonds tend to be more sensitive to rising interest rates. Investors in passive fixed income strategies are, in essence,

Figure 5: Benchmark interest rate risk has not been static

Bloomberg U.S. Aggregate Index effective duration (years)



Data source: Barclays Live, Bloomberg, L.P., 31 Dec 2014-31 Dec 2024. **Performance data shown represents past performance and does not predict or guarantee future results.** Duration is expressed in years and measures the sensitivity of the price (value of the principal) of a fixed income investment to a change in interest rates..

forced to accept these risks. Active managers may reduce duration risk by favoring credit-sensitive securities to mitigate rate volatility, selecting mortgage pools with more stable duration profiles, and focusing on yield curve segments that are less affected by rate fluctuations, monetary policy and inflation.

ACTIVE FIXED INCOME MANAGEMENT OFFERS OPPORTUNITY

Investors have been increasingly drawn to passive strategies due to their low cost. However, the fee differential between lower-cost active funds and index funds and ETFs is wider in equities than fixed income, making the move from active to passive fixed income solutions less advantageous.

At the same time, shifting from active to passive fixed income investing forfeits potential alpha and risk management opportunities while exposing investors to construction methodologies biased toward borrowers that issue the most debt. Active managers can adjust their sector allocation, benefit from bottom-up security selection and position portfolios in an effort to minimize the impact from rising rates, while enhancing alpha potential, income and diversification with a broader opportunity set.

Actively managed portfolios have historically provided higher total returns and improved risk-adjusted returns than passive portfolios and we believe actively managed fixed income strategies should continue to add value.

For more information, please visit nuveen.com.

Endnotes

Sources

1 Data source: Bloomberg, L.P., JPMorgan, 31 Dec 2024. The Bloomberg U.S. Aggregate Index contained 13,630 securities with a market capitalization of \$28.19 trillion.

This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy, sell or hold a security or an investment strategy, and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Investment decisions should be made based on an investor's objectives and circumstances and in consultation with his or her financial professionals.

The views and opinions expressed are for informational and educational purposes only as of the date of production/writing and may change without notice at any time based on numerous factors, such as market or other conditions, legal and regulatory developments, additional risks and uncertainties and may not come to pass. This material may contain "forward-looking" information that is not purely historical in nature. Such information may include, among other things, projections, forecasts, estimates of market returns, and proposed or expected portfolio composition. Any changes to assumptions that may have been made in preparing this material could have a material impact on the information presented herein by way of example. Performance data shown represents past performance and does not predict or guarantee future results. Investing involves risk; principal loss is nossible

All information has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such. For term definitions and index descriptions, please access the glossary on nuveen.com. Please note, it is not possible to invest directly in an index.

Important information on risk

Investing involves risk; principal loss is possible. Debt or fixed income securities are subject to market risk, credit risk, interest rate risk, call risk, derivatives risk, dollar roll transaction risk, and income risk. As interest rates rise, bond prices fall. Foreign investments involve additional risks, including currency fluctuation, political and economic instability, lack of liquidity, and differing legal and accounting standards. These risks are magnified in emerging markets. Preferred securities are subordinate to bonds and other debt instruments in a company's capital structure and therefore are subject to greater credit risk. Certain types of preferred, hybrid or debt securities with special loss absorption provisions, such as contingent capital securities (CoCos), may be or become so subordinated that they present risks equivalent to, or in some cases even greater than, the same company's common stock. Asset-backed and mortgage-backed securities are subject to additional risks such as prepayment risk, liquidity risk, default risk and adverse economic developments. Non-investment-grade and unrated bonds with long maturities and durations carry heightened credit risk, liquidity risk, and potential for default.

Nuveen, LLC provides investment solutions through its investment specialists.

